UTILITY INFASTRUCTURE ANALYSIS

for

West Avenue
Residential Multifamily

1250 West Avenue
Miami Beach, FL 33141

Prepared for:

JDS Development

Prepared by

THOMAS ENGINEERING GROUP

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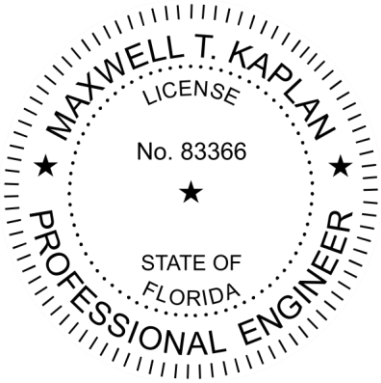

Maxwell T Kaplan

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Maxwell Kaplan, P.E.
Florida Professional Engineer License No. 83366
July 17, 2024

The purpose of this report is to provide a utility impact analysis for the proposed mixed-use commercial and multifamily development at the address 1250 West Avenue in the city of Miami Beach.

The 2.31-acre property is located on the southwest corner of the intersection of 13th street and West Avenue. The property is bordered to the north and south by multifamily residences. The existing site is currently developed with a parking lot and 14 story multifamily residential building. Access to the site is provided via 3 existing 2-way driveways along the east side of the property. Water service is provided to the site via water meters connected to the existing 6" DIP water main within West Avenue. Fire service is provided via a connection to the existing 20" water main within West Avenue per the as-built received from the city. Sanitary sewer service is provided via an existing lateral connection to the 12" gravity sewer main within West Avenue. The existing on-site drainage system consists of catch basins and French drain with no known off-site discharge.

The developer proposes to demolish the existing site and building to construct a multi-story mixed-use residential apartment building with 100 dwelling units and a 180-seat restaurant component. Access to the site will be provided at the Northeast and Southeast corner along West Avenue. Vehicular parking will be provided within a parking deck at the lower levels of the building.

Water and fire service to the building will be provided via connections to the existing water mains within West Avenue. The proposed sanitary sewer service will be provided via connections to the existing 12" gravity sewer main within West Avenue. The developer will try to implement the existing water and sewer connections as required. The downstream lift station City of Miami Beach Pump Station 0001 is currently under no moratorium and will not be compromised by the additional flow generated by the development. The results from the Pump Station Capacity Estimator Result are provided in the following pages.

The proposed drainage system will consist of catch basins, and exfiltration trench with a drainage injection well. The design will adhere to city of Miami Beach, Miami-Dade County DERM, and Florida Department of Environmental Protection standards. The minimum finished

floor elevation will be based on the most restrictive standards from the FEMA, Miami-Dade County, and City of Miami Beach requirements.

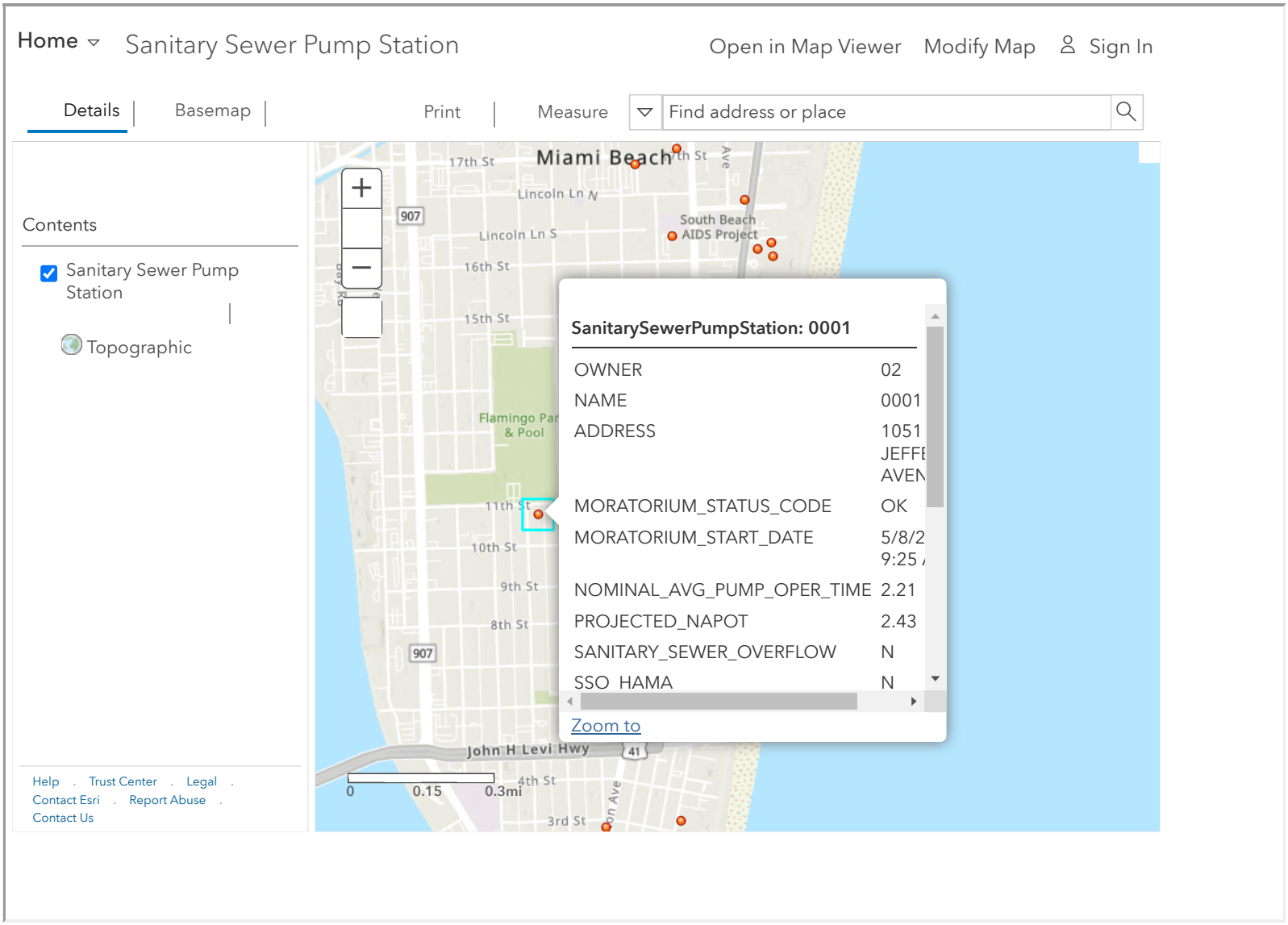
The demand requirements for the proposed development are provided in Table 1 on the following page. The Level of Service Standards provided in the 2040 Miami Beach Comprehensive Plan Infrastructure Element Policy 1.5.1 have been utilized for the demand calculations.

Table 1: Level of Service Standards

Facility/Service Area	**Standard Factor per Unit**	**Total**
Potable Water (Residential)	246 gpd/unit	24,600 gpd
Potable Water (Restaurant)	65 gpd/seat	11,700 gpd
Total Potable Water:		**36,300 gpd**
Sanitary Sewer (Residential)	140 gpd/unit	14,000 gpd
Sanitary Sewer (Restaurant)	65 gpd/seat	11,700 gpd
Total Sanitary Sewer:		**25,700 gpd**
Stormwater Utility	1 ERU/unit	100 ERU
Solid Waste	1.275 tons/year/unit	128 tons/year

A consultant for the city of Miami Beach Public Works Department will be providing a hydraulic analysis upon submittal of design plans for the project. Further analysis will be provided as the project progresses through the design and approval stages.

Pump Station Capacity Estimator



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Calculations are based on the criteria stipulated in Section 24-42.3, Miami-Dade Code, and Federal Consent Decree (Case: No. 1:12-cv-24400-FAM)

Please be aware that the information obtained with this Application is for general information only, and it is only correct as of the time and date in which the search was executed. Consequently, the information obtained with this application DOES NOT CONSTITUTE AN OFFICIAL DEPARTMENTAL DETERMINATION or APPROVAL for your project. For any additional information about the **Pump Station Capacity Estimator** application, please refer to the Application Guidelines or contact the **RER–DERM Wastewater Permitting Section** at 305-372-6600 or via email at PSO@miamidade.gov

* Required fields

Search Criteria	
Sanitary Sewer Utility *	02 - CITY OF MIAMI BEACH
Pump Station Number *	0001
Proposed Projected Flow (GPD) *	25700 GPD *(Only numbers are allowed)*
Project will require, or is part of, a Sewer Extension *	No
Submit Clear	

Pump Station Capacity Estimator Result
→ UNCONDITIONAL ALLOCATION ALLOWED ←

Search Criteria Detailed Result	
Sanitary Sewer Utility	02 - CITY OF MIAMI BEACH
Pump Station Number	0001
Proposed Projected Flow (GPD)	25,700 GPD
Project will require, or is part of, a Sewer Extension	No

Pump Station Downstream	Pump Station Owner	Pump Station Number	Moratorium Code	Projected NAPOT	Proposed Hrs (Δt)	Proposed Projected Hrs
Receiving PS	02	0001	OK	2.43	0.03	2.46
↓	30	CD	--	--	--	--

Treatment Plant Codes

CD	Central District Treatment Plant
ND	North District Treatment Plant
SD	South District Treatment Plant
TP	Homestead Treatment Plant
AV	Americana Village

Pump Station Acronyms

GDP	Gallons Per Day
HAMA	High Annual Monthly Average
NAPOT	Nominal Avg. Pump Operating Time
MART	Monthly Average Run Time

Moratorium Codes

AC	Approved And Corrected
AH	Approved And Corrected - HAMA Limited
AM	Absolute Moratorium - NAPOT Above 10. Plan Submitted
CH	Conditional Moratorium - HAMA Limited
CM	Conditional Moratorium
CN	Conditional Moratorium - New Collection System
DE	Decommissioned - Removed
FH	No Allocations - Last Mart > 10 Hrs. HAMA Limited
FN	No Allocations - Last Mart > 10 Hrs.
IM	Initial Moratorium
IN	Incomplete - Information Missing
OH	OK - HAMA Limited
OK	OK
RM	Restricted Moratorium
TH	No Allocations - Due To High Hours With HAMA
TM	Temporary Moratorium

For Additional Moratorium Code Details Select this Link

Miami Beach Water System

SITE

Water Service Connection

Fire Service Connection

14TH ST

MONAD TER

13TH ST

12TH ST

WEST AVE

ALTON CT

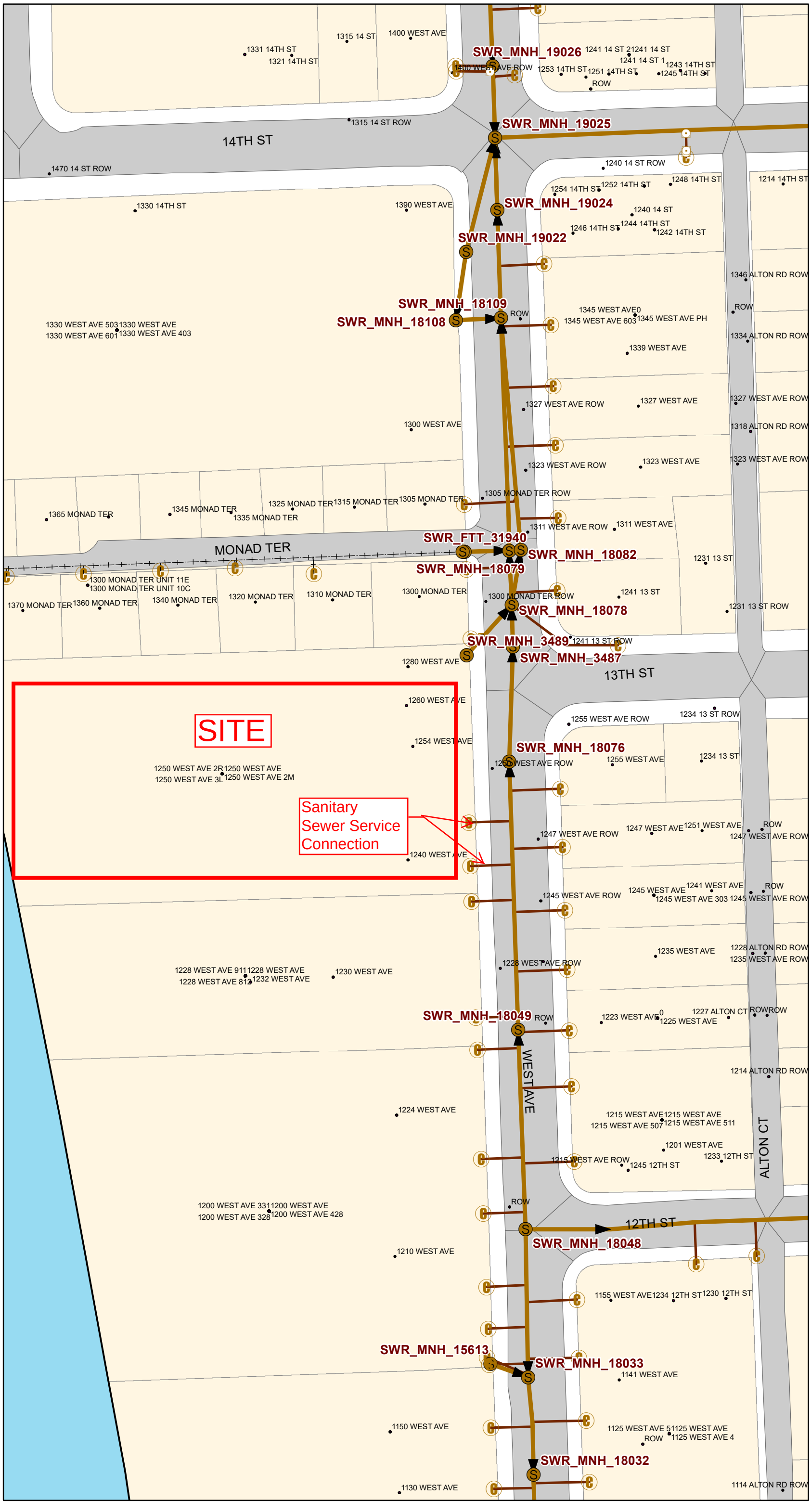
1 in = 73 ft

N

Legend

- Fire Hydrant
- Water Adapter
- Water Air Release
- Water Bend
- Water Blowoff
- Water Cap
- Water Corporation Stop
- Water Coupling
- Water Cross
- Water Gate
- Water Other
- Water Plug
- Water Reducer
- Water Sleeve
- Water Tap
- Wtare Tee
- Water Unknown
- Water Wye
- Water Flow Meter
- Water Pump Station
- Water Service Connection
- Water StorageTank
- Water Air Release Valve
- Water Altitude Valve
- Water Blowoff Valve
- Water Combination Valve
- Water Pressure Reducer Valve
- Water Simple Check Valve
- Water Ball Valve
- Water Butterfly Valve
- Water Cone Valve
- Water Gate Valve
- Water Plug Valve
- Water Casing
- Unknown
- Commercial Service Line
- Fire Service Line
- Hydrant Service Line
- Irrigation Line
- Meter Service Line
- Other
- Fire Service Line, Abandoned
- Hydrant Service Line, Abandone
- Meter Service Line, Abandoned
- Unknown
- Distributtion Main
- Transmission Main
- Distributtion Main, Inactive
- Transmission Main, Inactive
- Distribution Main, Abandoned
- Transmission Main, Abandoned
- Valve Chamber
- Other Structure
- PARKS
- EDGE_OF_PAVEMENT

Miami Beach Sewer System



Legend

- Bend
- Cap
- Fitting
- Lateral Wye
- Tee
- Wye
- Sewer Pump Station
- Sewer Pump Station Private
- Sewer Control Valve
- Sewer System Valve
- Sewer Cleanout
- Sewer Meter Station
- Sewer Manhole
- Gravity Main
- Siphon
- Abandoned In Place
- Pressure Main
- Abandoned In Place
- Lateral Line
- Abandoned In Place

1 inch = 76 feet

N
W E
S

GIS MIAMIBEACH