

**Venetian Parc Community Development District**

**Supplemental Engineer's Report**  
Infrastructure Improvements

Prepared for  
**Venetian Parc Community Development District**  
**Board of Supervisors**  
Miami-Dade County, Florida

Prepared by  
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## **I. Introduction.**

Venetian Parc Community Development District (the "District" or "CDD") was established by the enactment of Miami-Dade County Ordinance No. 08-76 on July 1, 2008. Such Ordinance became effective on July 11, 2008. The District is expected to encompass 418 single family units and 186 townhouses within 121.87 acres of land for a total of 604 residential units. The District is located in Miami-Dade County, Florida, and is generally bounded by SW 157 Avenue of the west, SW 172 and SW 173 Terraces on the north, SW 149 Avenue on the east and SW 178 and SW 177 Terraces on the south. Refer to Exhibit 1 for the location map of the District.

The District boundary comprises two tentative plats (the "T-Plats") named "Venetian Parc West" and "Venetian Parc". Each T-Plat has received approval from Miami-Dade County under T-Plat Numbers T-22904 and T-22849 respectively. The T-Plats are composed of road and landscape tracts, parks, a school tract, and single family and townhome lots. Together, Venetian Parc West with 79.35 gross acres, and Venetian Parc with 42.52 gross acres, make up the 121.87 acres of District land area (the "District Land"). Refer to Exhibit 2 for the District boundary map and the location of the T-Plats within the District.

The District Land will be developed by Venetian Lennar LLC ("Lennar") and Venetian by Luxcom, LLC ("Luxcom") (together the "Developers"). The portion of District Land to be developed by Lennar includes 207 Single Family lots and 96 Townhome lots for a total of 303 residential units. Luxcom will develop 211 Single Family lots and 90 Townhome lots for a total of 301 residential units. Refer to Exhibits 3 and 4 for the location of the residential units developed by each developer.

Since it is anticipated that the District will issue two separate series of bonds to finance the public infrastructure (one for each developer) (herein, the "Public Infrastructure"), then each of the groups of residential units developed by each developer will become a separate assessment area for the repayment of the bonds. For the purpose of this Engineer's Report, the assessment areas are labeled "Assessment Area One" for the portion developed by Lennar and "Assessment Area Two" for the portion developed by Luxcom. Refer to Exhibits 3 and 4 for the lot types and location in each assessment area.

The District will partially finance the construction of the public infrastructure (the "Public Infrastructure") that will allow the development of the residential units within the District. The Public Infrastructure consists of onsite and offsite public road improvements (including landscaping and entrance features), stormwater management, water and sewer systems and a public park. Refer to Exhibits 5 through 9 and the sections below for the location, description and estimates of cost of the Public Infrastructure.

The estimated construction costs of the Public Infrastructure presented in this Engineer's Report will be allocated to each of the residential units within the District in accordance with the proportional benefit received by each lot. This Engineer's Report presents a method for allocating the construction costs to each of the assessment areas. For a complete report on assessments, refer to the "Master Special Assessment Methodology Report" prepared by Special District Services, Inc.

## **II. Purpose of this Engineer's Report.**

This Engineer's Report was prepared for the purpose of describing the Public Infrastructure that supports the developments within each T-Plat within the District and to report as to its estimated construction cost, status of permits, schedule of construction and allocation of costs among the benefitted residential units. The Public Infrastructure is to be partially financed by the District and is to benefit the residents living within the CDD boundaries as well as the general public.

## **III. Composition of the District Land and its Use**

The District is composed of the tracts and lots listed in the following tables. They are located within the boundaries of the Venetian Parc West and Venetian Parc T-Plats. The tables identify the residential lots developed by each of the Developers.

<b>1. VENETIAN PARC WEST (T-Plat No. T-22904)</b>			<b>Developer</b>			
<b>Tract Designation</b>	<b>Proposed Land Use</b>	<b>Acres</b>	<b>Lennar</b>		<b>Luxcom</b>	
			<b>S.F.</b>	<b>T.H.</b>	<b>S.F.</b>	<b>T.H.</b>
A	CDD Road Tract	7.22				
B	CDD Landscape Tract	0.02				
C	CDD Landscape Tract	0.06				
D	CDD Landscape Tract	0.08				
E	CDD Landscape Tract	0.09				
F	CDD Landscape Tract	0.06				
G	CDD Landscape Tract	0.03				
H	CDD Road Tract	6.91				
I	CDD Landscape Tract	0.24				
J	CDD Landscape Tract	0.24				
K	Park	1.22				
L	CDD Landscape Tract	0.24				
M	CDD Landscape Tract	0.24				
N	Park	4.19				
O	CDD Landscape Tract	0.26				
P	CDD Landscape Tract	0.79				
Q	School Tract	6.72				
Municipal Roads	Dedicated County R/W's	8.86				
Block 1, Lots 1-40	Single Family Lots	41.88	40			
Block 1, Lots 41-50	Single Family Lots				10	
Block 2, Lots 1-24	Single Family Lots				24	
Block 3, Lots 1-23	Single Family Lots				23	
Block 4, Lots 1-23	Single Family Lots			23		
Block 5, Lots 1-24	Single Family Lots			24		
Block 6, Lots 1-27	Single Family Lots			27		
Block 7, Lots 1-8	Townhomes				8	
Block 8, Lots 1-8	Townhomes				8	
Block 9, Lots 1-8	Townhomes				8	
Block 10, Lots 1-8	Townhomes				8	
Block 11, Lots 1-8	Townhomes					8
Block 12, Lots 1-8	Townhomes					8
Block 13, Lots 1-8	Townhomes					8
Block 14, Lots 1-8	Townhomes					8
Block 15, Lots 1-8	Townhomes				8	
Block 16, Lots 1-8	Townhomes				8	
Block 17, Lots 1-8	Townhomes				8	
Block 18, Lots 1-8	Townhomes				8	
Block 19, Lots 1-8	Townhomes				8	
Block 20, Lots 1-8	Townhomes				8	
Block 21, Lots 1-8	Townhomes				8	
Block 22, Lots 1-8	Townhomes				8	
Block 23, Lots 1-19	Single Family Lots			19		
Block 24, Lots 1-14	Single Family Lots			14		
Block 25, Lots 1-14	Single Family Lots			14		
Block 26, Lots 1-19	Single Family Lots			19		
Block 27, Lots 1-18	Single Family Lots			18		
Block 28, Lots 1-9	Single Family Lots		9			
Sub-Total This T-Plat		79.35	207	96	57	32

<b>2. VENETIAN PARC (T-Plat No. T-22849)</b>			<b>Developer</b>			
<b>Tract Designation</b>	<b>Proposed Land Use</b>	<b>Acres</b>	<b>Lennar</b>		<b>Luxcom</b>	
			<b>S.F.</b>	<b>T.H.</b>	<b>S.F.</b>	<b>T.H.</b>
A	CDD Road Tract	3.85				
B	Park	0.93				
C	CDD Landscape Tract	0.06				
D	CDD Landscape Tract	0.08				
E	CDD Landscape Tract	0.07				
F	CDD Landscape Tract	0.08				
G	CDD Landscape Tract	0.07				
H	CDD Landscape Tract	0.03				
I	CDD Road Tract	6.16				
J	CDD Landscape Tract	0.55				
K	CDD Landscape Tract	0.14				
L	CDD Landscape Tract	0.15				
M	CDD Landscape Tract	0.11				
N	CDD Landscape Tract	0.06				
O	CDD Landscape Tract	0.06				
P	CDD Road Tract	0.20				
Q	CDD Landscape Tract	0.06				
R	CDD Landscape Tract	0.03				
Municipal Roads	Dedicated County R/W's	9.08				
Block 1, Lots 1-20	Single Family Lots	28.56			20	
Block 2, Lots 1-7	Single Family Lots				7	
Block 3, Lots 1-11	Single Family Lots				11	
Block 4, Lots 1-14	Single Family Lots				14	
Block 5, Lots 1-16	Single Family Lots				16	
Block 6, Lots 1-20	Single Family Lots				20	
Block 7, Lots 1-7	Townhomes					7
Block 8, Lots 1-7	Townhomes					7
Block 9, Lots 1-6	Townhomes					6
Block 10, Lots 1-6	Townhomes					6
Block 11, Lots 1-8	Townhomes					8
Block 12, Lots 1-8	Townhomes					8
Block 13, Lots 1-8	Townhomes					8
Block 14, Lots 1-8	Townhomes					8
Block 15, Lots 1-16	Single Family Lots				16	
Block 16, Lots 1-18	Single Family Lots				18	
Block 17, Lots 1-16	Single Family Lots				16	
Block 18, Lots 1-16	Single Family Lots				16	
Sub-Total This T-Plat		42.52	0	0	154	58
Total Both T-Plats		121.87	207	96	211	90
Total R.U. per Developer			303		301	
Total Residential Units in the District			604			

**IV. Description of the Assessment Areas**

The tables below identify the residential lots that belong to each of the two proposed assessment areas. Refer to Exhibits 2 and 3 for depictions of each area.

**1. Assessment Area One:**

<b><u>VENETIAN PARC WEST (T-Plat No. T-22904)</u></b>		<b><u>Lennar</u></b>	
<b><u>Tract Designation</u></b>	<b><u>Proposed Land Use</u></b>	<b><u>S.F.</u></b>	<b><u>T.H.</u></b>
Block 1, Lots 1-40	Single Family Lots	40	
Block 4, Lots 1-23	Single Family Lots	23	
Block 5, Lots 1-24	Single Family Lots	24	
Block 6, Lots 1-27	Single Family Lots	27	
Block 7, Lots 1-8	Townhomes		8
Block 8, Lots 1-8	Townhomes		8
Block 9, Lots 1-8	Townhomes		8
Block 10, Lots 1-8	Townhomes		8
Block 15, Lots 1-8	Townhomes		8
Block 16, Lots 1-8	Townhomes		8
Block 17, Lots 1-8	Townhomes		8
Block 18, Lots 1-8	Townhomes		8
Block 19, Lots 1-8	Townhomes		8
Block 20, Lots 1-8	Townhomes		8
Block 21, Lots 1-8	Townhomes		8
Block 22, Lots 1-8	Townhomes		8
Block 23, Lots 1-19	Single Family Lots	19	
Block 24, Lots 1-14	Single Family Lots	14	
Block 25, Lots 1-14	Single Family Lots	14	
Block 26, Lots 1-19	Single Family Lots	19	
Block 27, Lots 1-18	Single Family Lots	18	
Block 28, Lots 1-9	Single Family Lots	9	
Sub-Total		207	96
Total Residential Units		303	

**2. Assessment Area Two:**

<b>VENETIAN PARC WEST (T-Plat No. T-22904)</b>		<b>Luxcom</b>	
<b>Tract Designation</b>	<b>Proposed Land Use</b>	<b>S.F.</b>	<b>T.H.</b>
Block 1, Lots 41-50	Single Family Lots	10	
Block 2, Lots 1-24	Single Family Lots	24	
Block 3, Lots 1-23	Single Family Lots	23	
Block 11, Lots 1-8	Townhomes		8
Block 12, Lots 1-8	Townhomes		8
Block 13, Lots 1-8	Townhomes		8
Block 14, Lots 1-8	Townhomes		8
<b>VENETIAN PARC (T-Plat No. T-22849)</b>			
Block 1, Lots 1-20	Single Family Lots	20	
Block 2, Lots 1-7	Single Family Lots	7	
Block 3, Lots 11	Single Family Lots	11	
Block 4, Lots 1-14	Single Family Lots	14	
Block 5, Lots 1-16	Single Family Lots	16	
Block 6, Lots 1-20	Single Family Lots	20	
Block 7, Lots 1-7	Townhomes		7
Block 8, Lots 1-7	Townhomes		7
Block 9, Lots 1-6	Townhomes		6
Block 10, Lots 1-6	Townhomes		6
Block 11, Lots 1-8	Townhomes		8
Block 12, Lots 1-8	Townhomes		8
Block 13, Lots 1-8	Townhomes		8
Block 14, Lots 1-8	Townhomes		8
Block 15, Lots 1-16	Single Family Lots	16	
Block 16, Lots 1-18	Single Family Lots	18	
Block 17, Lots 1-16	Single Family Lots	16	
Block 18, Lots 1-16	Single Family Lots	16	
Sub-Total		211	90
Total Residential Units		301	

**V. Description of the Infrastructure.**

The Public Infrastructure, as described in this Engineer's Report, is a network of roadway, drainage, water and sanitary sewer systems, landscape and public park that will give service and access to 604 residential units located inside the District's boundary. The proposed infrastructure improvements, as outlined herein, are necessary for the functional development of the District and provide a direct and special benefit to the lands within.

**1. Roadway Improvements. Offsite and Onsite.**

The District can be accessed from the west at SW 157 Avenue and SW 176 Terrace and 174 street. From the north at SW 152 Avenue and SW 173 Street. From the east at SW 149 Avenue and SW 174, 175 and 176 streets and SW 176 and 177 terraces.

The Right of Ways for SW 174, 175, 176 Streets, SW 176 Terrace, SW 155 Avenue, and a portion of SW 157 Avenue in Venetian Parc West, in addition to the Right of Ways for SW 175/176 Street and SW 149 and 152 Avenues Venetian Parc, will be dedicated by plat to Miami-Dade County for ownership and maintenance (the "Municipal Roads"). The onsite right of ways will be dedicated to the CDD for ownership and maintenance. The onsite improvements consist of the roads that will be constructed within the District boundary, whether they are in municipal or CDD right of ways.

A more detailed description of the onsite and offsite improvements is as follows:

- a. **Onsite Municipal Roads.** The typical section of the Municipal Roads consists of a divided and undivided, 4-lane roads with landscaped swales and sidewalks. These roads will have a 12 inch stabilized subgrade, an 8 inch primed compacted rock base and a 2 inch asphaltic concrete surface course applied in two layers. The onsite Municipal Roads are available for use by the general public.
- b. **Onsite CDD Roads.** The typical section of the CDD roads located within the District road tracts consists of crowned or inverted crown pavements with landscaped swales and sidewalks on both sides, 12 inch stabilized subgrades; 8 inch primed compacted rock bases and 2 or 1 ½ inch asphaltic concrete surface courses applied in two layers. Public parking places and landscape tracts adjacent to the CDD or Municipal Roads will be included as part of the CDD roads. The onsite CDD Roads are available for use by the general public.
- c. **Offsite Road Improvements.** The offsite Improvements consist of:
  - a. Adding drainage, sidewalk and grading and landscaping the swale of the portion of SW 157 Avenue that abuts the District.
  - b. Constructing a roundabout at the intersection of SW 176 Street and SW 147 Avenue. Construction of this item is a County condition for developing the District Land.
  - c. Contribution of \$200,000 to Miami-Dade County for the installation of a traffic signal at the intersection of SW 184 Street and SW 157 Avenue. The contribution is a condition for the approval of the plat.
- d. **Entrance Features.** Development entrance features within public right of ways will be constructed as part of the Roadway Improvements.

The roadway earthwork and grading costs included in this Engineer's Report are for construction activities within the road rights of way and not for the activities related to the private lots.

See Exhibit 5 for a graphical representation of the roadway improvements. See Tables 1 and 2 for the estimated costs of the roadway improvements to be partially financed by the District.

## 2. Stormwater Management.

The stormwater management facilities included in the Public Infrastructure program consist of inlets, pipes and exfiltration trenches.

The stormwater management system has been designed so that it retains the storm runoff within the District at levels that provide flood protection for the roads and the residential units.

See Exhibit 6 for a graphical representation of the stormwater management system to be partially financed by the District. See Tables 1 and 3 for the estimated costs of the stormwater management improvements.



### 3. Water Distribution System.

The District's water distribution system is composed of variable pipe sizes ranging from 6 to 16 inch diameters for water service and fire protection. The water distribution system is being connected to existing water mains located on SW 157, 152 and 149 avenues. The existing facilities to which the water distribution system is being connected are owned and operated by the Miami-Dade County Water and Sewer Department (WASD).

The water distribution system will be conveyed to WASD for operation and maintenance, along with access easements granted to WASD by the owner of the land at the time of conveyance.

See Exhibit 7 for a graphical representation of the water distribution system. See Tables 1 and 4 for the estimated costs of the improvements.

### 4. Sanitary Sewer System.

The District's sanitary sewer collection system consists of gravity pipes, manholes, laterals and appurtenances. The system will be connected to existing facilities owned and operated by WASD.

The District's sanitary sewer collection system will be conveyed to WASD for operation and maintenance, along with access easements granted to WASD by the owner of the land at the time of conveyance.

See Exhibit 8 for a graphical representation of the sanitary sewer system to be partially financed by the District. See Tables 1 and 5 for the estimated costs of the improvements.

### 5. Public Park.

The park costs to be partially financed by the District are for the 4.2 acre public park located at the intersection of SW 157 Avenue and 174 Street (Tract "N" of Venetian Parc West). These improvements are related to the "Declaration of Restrictions in Favor of the Miami-Dade County Parks and Recreation Department" recorded in OR Bk 26318, Pg 2787, which may be amended from time to time.

See Exhibit 9 for the location of the park. See Tables 1 and 6 for the estimated costs of the improvements

### VI. Schedule of Construction of Venetian Parc CDD.

As of the date of this report, construction of the Development has not begun. It is estimated that construction of the Public Infrastructure will begin in the second quarter of 2013 and is estimated to be completed in the first quarter of 2014, with the exception of the final layer of asphalt for the roads which is estimated to be completed in the fourth quarter of 2017.

### VII. Ownership and Maintenance.

The District will partially finance the acquisition and/or construction of the improvements. It will then transfer the improvements to the following agencies for ownership and maintenance:

<b>Description</b>	<b>Future Ownership</b>	<b>Future Maintenance</b>
Onsite Municipal Road	Miami-Dade County	Miami-Dade County
Offsite Road Improvements	Miami-Dade County	Miami-Dade County
Onsite CDD Roads	CDD	CDD
Stormwater Management:	CDD	CDD
Water Distribution System	WASD	WASD
Sanitary Sewer System	WASD	WASD
Public Park	Miami-Dade County	Miami-Dade County

**VIII. Permitting Status.****1. Platting.**

The T-Plats have been approved by Miami-Dade County under the following numbers: Venetian Parc West: T-22904. Venetian Parc: T-22849. The approvals are valid until May 17, 2013 and July 19, 2013 respectively but they may be renewed for additional nine month periods if the final plats have not been recorded before.

**2. Roadway, Paving, Grading and Drainage Permits.**

Five-year approvals by DERM and Miami-Dade County Public Works Department for Paving and Drainage were received in January, February, March and June of 2008.

**3. Water Distribution System**

Approved by WASD under Water Permit DW 2008-117 on September 9, 2008. Approved by the Department of Health under Permit No. 272313-522-DSGP on October 9, 2008. Approved by Miami-Dade County Fire Department on September 24, 2008.

**4. Sanitary Sewer System.**

Approved by WASD under Sewer Permit DS 2008-545 on July 9, 2008. Approved by the Department of Health under Permit No. 272313-485-DSGP on August 26, 2008. Approved by Miami-Dade County Fire Department in July, 2008.

**5. Public Park.**

Declaration of Restrictions in Favor of the Miami-Dade County Parks and Recreation Department was recorded in OR Book 26318, Page 2787 on April 10, 2008.

**IX. Estimate of Capital Improvement Costs.**

<b>Category</b>	<b>Total</b>
Roadway Improvements	\$ 5,892,930
Stormwater Management System	\$ 2,235,831
Water Distribution System	\$ 2,525,182
Sanitary Sewer System	\$ 2,560,752
Public Park	\$ 391,083
<b>Total</b>	<b>\$13,605,778</b>

Tables 1 through 6 show line item estimates for each category of infrastructure.

**X. Allocation of the Capital Improvement Costs Among the Single Family and Townhome Lots within Assessment Areas One and Two.**

Refer to the analysis in the Appendix for details of the method and calculation of the allocation of estimated construction costs. The following table shows the result of the analysis:

	Allocation of All Costs				
	Single Family	Townhomes	Total	Single Family Lot	Townhome Lot
Area One	\$5,182,917	\$1,620,538	\$6,803,455	\$25,038	\$16,881
Area Two	\$5,283,070	\$1,519,253	\$6,802,323	\$25,038	\$16,881
	\$10,465,987	\$3,139,791	\$13,605,778		

The costs of the Public Infrastructure will be allocated to each residential unit within the District in the form of special assessments in accordance with the approved methodology described in the

"Supplemental Special Assessment Methodology Reports for Venetian Parc Community Development District" prepared for the Venetian Parc Community Development District by Special District Services, Inc.

**XI. Engineer's Certification.**

It is our opinion that the proposed improvements constituting the Public Infrastructure and their estimated costs are fair and reasonable, and that the residential lots within assessment areas One and Two, respectively will receive a special benefit equal to or greater than the cost of such improvements allocated to each assessment area. We believe that the improvements can be permitted, constructed and installed at the costs described in this report.

I hereby certify that the foregoing is a true and correct copy of the Engineer's Report for the Venetian Parc Community Development District.

Juan R. Alvarez, PE  
Florida Registration No. 38522  
Alvarez Engineers, Inc.  
April 18, 2013

**APPENDIX**  
**TABLES AND EXHIBITS**



**VENETIAN PARC CDD**  
**Construction Cost Estimate**  
**Roadway Improvements**

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Estimated Cost
				(\$)
<b>ONSITE</b>				
Clearing & Grubbing	48.22	AC	2,200.00	106,092.09
Silt Fence	8,175	LF	1.50	12,262.50
Demuck	38,725	CY	3.65	141,345.64
Import Fill	52,279	TN	7.50	392,088.94
Landscape and Irrigation (Include Landscape Tracts)	127,436	SY	5.50	700,898.00
12" Subgrade	104,947	SY	1.05	110,194.35
8" Base rock	102,531	SY	4.00	410,124.00
1" Asphalt (First Lift)	48,194	SY	5.75	277,115.50
1" Asphalt (Second Lift)	48,194	SY	5.75	277,115.50
3/4" Asphalt (First Lift)	49,505	SY	4.75	235,148.75
3/4" Asphalt (Second Lift)	49,505	SY	4.75	235,148.75
Type "F" Curb & Gutter	9,579	LF	11.00	105,369.00
Sidewalk (4")	27,140	SY	22.50	610,650.00
Guardrail	40	LF	40.00	1,600.00
Guardrail Flared End Section	2	EA	150.00	300.00
Entrance Features	1	LS	600,000.00	600,000.00
Signing and Pavement Marking	96,649	SY	1.00	96,649.00
Densities	150	EA	55.00	8,250.00
M.O.T.	1	LS	2,000.00	2,000.00
Permits	20,000	LS	1.00	20,000.00
<b>Subtotal</b>				<b>4,342,352.02</b>
Surveying & As-builts	1.25%	LS	4,342,352.02	54,279.40
<b>Subtotal Onsite</b>				<b>4,396,631.42</b>
Engineering and Professional Fees	10.00%	LS	4,396,631.42	439,663.14
Contingency	15.00%	LS	4,396,631.42	659,494.71
<b>Total Onsite</b>				<b>\$5,495,789.28</b>
<b>OFFSITE (Roundabout at SW 176 St &amp; SW 147 Ave and Traffic Signal at SW 184 St &amp; SW 157 Ave)</b>				
<b>Roundabout</b>				
Clearing and Grubbing	1	AC	2,200.00	2,200.00
Silt Fence	750	LF	1.50	1,125.00
Excavation Existing Limerock	5	CY	3.65	18.25
Landscape	1,555	SY	5.50	8,552.50
12" Subgrade	1,360	SY	1.05	1,428.00
8" Base rock	1,360	SY	4.00	5,440.00
Milling 2" Exist. Asphalt Pavement	1,400	SY	2.00	2,800.00
Resurfacing 1" (First Lift)	2,650	SY	5.75	15,237.50
Resurfacing 1" (Second Lift)	2,650		5.75	15,237.50
Type F Curb and Gutter	1,235	LF	11.00	13,585.00
Type B Curb	840	LF	10.00	8,400.00
4" Concrete Sidewalk	210	SY	22.50	4,725.00
Paver Sidewalk	255	SY	78.35	19,979.25
Reset Chain Link Fence	150	LF	16.75	2,512.50
Relocation of Mailboxes	1	LS	500.00	500.00
Relocation of Bus Stop	1	LS	2,500.00	2,500.00
Driveway Adjustment	1	LS	500.00	500.00
Removal of Concrete Ramp	1	LS	750.00	750.00
Detectable Warning	4	EA	450.00	1,800.00
M.O.T.	1	LS	6,500.00	6,500.00
<b>Subtotal Roundabout</b>				<b>113,790.50</b>
<b>Traffic Signal</b>				
Traffic Signal	1	EA	200,000.00	200,000.00
<b>Subtotal Traffic Signal</b>				<b>200,000.00</b>
<b>Subtotal Offsite</b>				<b>313,790.50</b>
Surveying & As-builts	1.25%	LS	313,790.50	3,922.38
<b>Subtotal Offsite</b>				<b>317,712.88</b>
Engineering and Professional Fees	10.00%	LS	317,712.88	31,771.29
Contingency	15.00%	LS	317,712.88	47,656.93
<b>Total Offsite</b>				<b>\$397,141.10</b>
<b>Grand Total</b>				<b>\$5,892,930.38</b>



**VENETIAN PARC CDD  
Construction Cost Estimate  
Water Distribution System**

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Estimated Cost (\$)
<b>ONSITE</b>				
16" D.I.P.	1,195	LF	67.50	80,662.50
12" D.I.P.	4,770	LF	47.75	227,767.50
8" D.I.P.	20,603	LF	32.50	669,597.50
6" D.I.P.	1,450	LF	25.00	36,250.00
16" Butterfly Valve	1	EA	3,700.00	3,700.00
12" Gate Valve	17	EA	2,127.50	36,167.50
8" Gate Valve	72	EA	1,200.00	86,400.00
6" Gate Valve	58	EA	750.00	43,500.00
Fire Hydrant	58	EA	2,600.00	150,800.00
16" Tee & Cross	1	EA	1,775.00	1,775.00
16"/6" Tee	1	EA	1,250.00	1,250.00
12" Tee & Cross	10	EA	1,775.00	17,750.00
12"/6" Tee	7	EA	565.00	3,955.00
12"/8" Tee	10	EA	625.00	6,250.00
8" Tee & Cross	33	EA	400.00	13,200.00
8"/6" Tee	50	EA	350.00	17,500.00
6" Bend Restrained	12	EA	350.00	4,200.00
12" Bend	12	EA	540.00	6,480.00
12" Bend Restrained	24	EA	750.00	18,000.00
8" Bend	31	EA	275.00	8,525.00
8" Bend Restrained	84	EA	400.00	33,600.00
12"X8" Reducer	3	EA	350.00	1,050.00
Plug & 2" F.V.O.	8	EA	1,400.00	11,200.00
Connect to Exist WM	8	EA	750.00	6,000.00
12" Tapping Sleeve & Valve	4	EA	6,500.00	26,000.00
8" Tapping Sleeve & Valve	4	EA	4,500.00	18,000.00
Single Service	64	EA	775.00	49,638.23
Double Water Service	457	EA	775.00	354,136.77
Densities	75	EA	55.00	4,125.00
Blue Line Paint Water Main	28,017	LF	0.50	14,008.50
Flush, Chlorination & Testing	28,017	LF	1.00	28,017.00
HRS- Sampling Points	1	LS	7,500.00	7,500.00
M.O.T.	2,500	LS	1.00	2,500.00
Permits	12,500	LS	1.00	12,500.00
<b>Subtotal</b>				<b>2,002,005.50</b>
Surveying & As-builts	0.75%	LS	2,002,005.50	15,015.04
<b>Subtotal Onsite</b>				<b>2,017,020.54</b>
Engineering and Professional Fees	10.00%	LS	2,017,020.54	201,702.05
Contingency	15.00%	LS	2,017,020.54	302,553.08
<b>Total Onsite</b>				<b>2,521,275.67</b>
<b>OFFSITE (Roundabout at SW 176 St &amp; SW 147 Ave)</b>				
Relocation and adjustment of FH and Valves	1	LS	2,500.00	2,500.00
<b>Subtotal</b>				<b>2,500.00</b>
Surveying & As-builts	25.0%	LS	2,500.00	625.00
<b>Subtotal Offsite</b>				<b>3,125.00</b>
Engineering and Professional Fees	10.0%	LS	3,125.00	312.50
Contingency	15.0%	LS	3,125.00	468.75
<b>Total Offsite</b>				<b>3,906.25</b>
<b>Grand Total Water Distribution System</b>				<b>\$2,525,181.92</b>



<b>VENETIAN PARC CDD</b>				
<b>Construction Cost Estimate</b>				
<b>Sanitary Sewer System</b>				
Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Estimated Cost
				(\$)
<b>ONSITE</b>				
<b>Gravity System</b>				
8" D.I.P. (0'-6') Epoxy	1,489	LF	75.00	111,675.00
8" D.I.P. (6'-8') Epoxy	259	LF	77.50	20,072.50
8" D.I.P. (8'-10') Epoxy	137	LF	82.50	11,269.04
8" D.I.P. (10'-12') Epoxy	310	LF	85.00	26,384.48
8" D.I.P. (12'-14') Epoxy	40	LF	92.50	3,700.00
8" D.I.P. (14'-16') Epoxy	100	LF	95.00	9,500.00
8" PVC (0'-6')	8,072	LF	22.50	181,620.07
8" PVC (6'-8')	6,685	LF	25.00	167,118.13
8" PVC (8'-10')	3,029	LF	27.50	83,299.04
8" PVC (10'-12')	1,274	LF	30.00	38,226.09
8" PVC (12'-14')	376	LF	37.50	14,100.48
6" PVC Lateral	621	EA	565.00	350,865.00
MH (0'-6')	55	EA	3,000.00	165,000.00
MH (6'-8')	23	EA	3,500.00	80,500.00
MH (8'-10')	15	EA	4,000.00	60,000.00
MH (10'-12')	7	EA	4,500.00	31,500.00
MH (12'-14')	2	EA	5,000.00	10,000.00
6" Cleanout W/Box	621	EA	500.00	310,500.00
Concrete Collar	204	EA	150.00	30,600.00
Rainstoper	204	EA	150.00	30,600.00
Drop Connection	1	EA	1,550.00	1,550.00
Manhole Adapter	204	EA	150.00	30,600.00
Densities	75	EA	55.00	4,125.00
Gravel # 57	6,095	TN	10.00	60,950.00
Cleaning & Testing	21,771	LF	1.50	32,656.50
M.O.T. & Traffic Control	2,500	LS	1.00	2,500.00
Permit	12,500	LS	1.00	12,500.00
<b>Subtotal</b>				<b>1,881,411.33</b>
Surveying & As-builts	0.75%	LS	1,881,411.33	14,110.58
<b>Subtotal Gravity System</b>				<b>1,895,521.91</b>
Engineering and Professional Fees	10.00%	LS	1,895,521.91	189,552.19
Contingency	15.00%	LS	1,895,521.91	284,328.29
<b>Total Gravity System</b>				<b>2,369,402.39</b>
<b>Force Main</b>				
12" DIP Epoxy	1,360	LF	82.50	112,200.00
Connect to Existing	2	EA	6,000.00	12,000.00
12" Bend	4	EA	850.00	3,400.00
12" Bend Restrained	4	EA	900.00	3,600.00
Air Release Valve	3	EA	3,000.00	9,000.00
Densities	10	EA	55.00	550.00
Greenline Paint Force Main	1,360	LF	0.50	680.00
Cleaning & Testing	1,360	LF	1.50	2,040.00
M.O.T. & Traffic Control	2,500	LS	1.00	2,500.00
Permit	2,500	LS	1.00	2,500.00
<b>Subtotal</b>				<b>148,470.00</b>
Surveying & As-builts	1.00%	LS	148,470.00	1,484.70
<b>Subtotal Force Main</b>				<b>149,954.70</b>
Engineering and Professional Fees	10.00%	LS	149,954.70	14,995.47
Contingency	15.00%	LS	149,954.70	22,493.21
<b>Total Force Main</b>				<b>187,443.38</b>
<b>Total Onsite</b>				<b>2,556,845.77</b>
<b>OFFSITE (Roundabout at SW 176 St &amp; SW 147 Ave)</b>				
Relocation and adjustment of Manhole Covers	1	LS	2,500.00	2,500.00
<b>Subtotal</b>				<b>2,500.00</b>
Surveying & As-builts	25.00%	LS	2,500.00	625.00
<b>Subtotal Offsite</b>				<b>3,125.00</b>
Engineering and Professional Fees	10.00%	LS	3,125.00	312.50
Contingency	15.00%	LS	3,125.00	468.75
<b>Total Offsite</b>				<b>3,906.25</b>
<b>Grand Total Sanitary Sewer System</b>				<b>\$2,560,752.02</b>



**Venetian Parc Allocation of Infrastructure Costs**  
**Per Assessment Area**

**I. NUMBER OF LOTS PER ASSESSMENT AREA**

	Single Family	Townhomes	Total
Area One	207	96	303
Area Two	211	90	301
	418	186	604

**II. ALLOCATION OF COSTS PER CATEGORY OF INFRASTRUCTURE**

**A. Roadway Improvements**

**Daily Trips (Per ITE Factors):**

Single Family	Townhomes	Relationship (Townhome to Single Family)
10	6	60.00%

**Roadway Cost for Entire CDD:** \$5,892,930

**Distribution:**

	Single Family	Townhomes	Total	Allocation of Roadway Costs	
				Single Family Lot	Townhome Lot
Area One	\$2,303,317	\$640,923	\$2,944,240	11,127	6,676
Area Two	\$2,347,825	\$600,865	\$2,948,690	11,127	6,676
	\$4,651,142	\$1,241,788	\$5,892,930		

**B. Water Distribution System**

**Water Usage (Per WASD Factors, GPD):**

Single Family	Townhomes	Relationship (Townhome to Single Family)
220	180	81.82%

**Water Cost for Entire CDD:** \$2,525,182

**Distribution:**

	Single Family	Townhomes	Total	Allocation of Water Costs	
				Single Family Lot	Townhome Lot
Area One	\$916,747	\$347,857	\$1,264,604	4,429	3,624
Area Two	\$934,462	\$326,116	\$1,260,578	4,429	3,624
	\$1,851,209	\$673,973	\$2,525,182		

**Venetian Parc Allocation of Infrastructure Costs**  
**Per Assessment Area**

**C. Sanitary Sewer System**

**Sewage Usage (Per WASD Factors, GPD)**

Single Family	Townhomes	Relationship (Townhome to Single Family)
220	180	81.82%

**Sewer Cost for Entire CDD:** \$2,560,752

**Distribution:**

			Allocation of Sanitary Sewage Costs		
	Single Family	Townhomes	Total	Single Family Lot	Townhome Lot
Area One	\$929,661	\$352,757	\$1,282,418	4,491	3,675
Area Two	\$947,625	\$330,709	\$1,278,334	4,491	3,675
	\$1,877,286	\$683,466	\$2,560,752		

**D. Drainage**

**Runoff (SqFt). (Assume 30% coverage for SF and 50% coverage for TW)**

Single Family	Townhomes	Relationship (Townhome to Single Family)
5000	2000	52.00%

**Drainage Cost for Entire CDD:** \$2,235,831

**Distribution:**

			Allocation of Drainage Costs		
	Single Family	Townhomes	Total	Single Family Lot	Townhome Lot
Area One	\$899,162	\$216,842	\$1,116,004	4,344	2,259
Area Two	\$916,538	\$203,289	\$1,119,827	4,344	2,259
	\$1,815,700	\$420,131	\$2,235,831		

**E. Public Park**

**Park Usage (Assume Usage is Equal for Families in Single Family or Townhome Lots)**

Single Family	Townhomes	Relationship (Townhome to Single Family)
1	1	100.00%

**Public Park Cost:** \$391,083

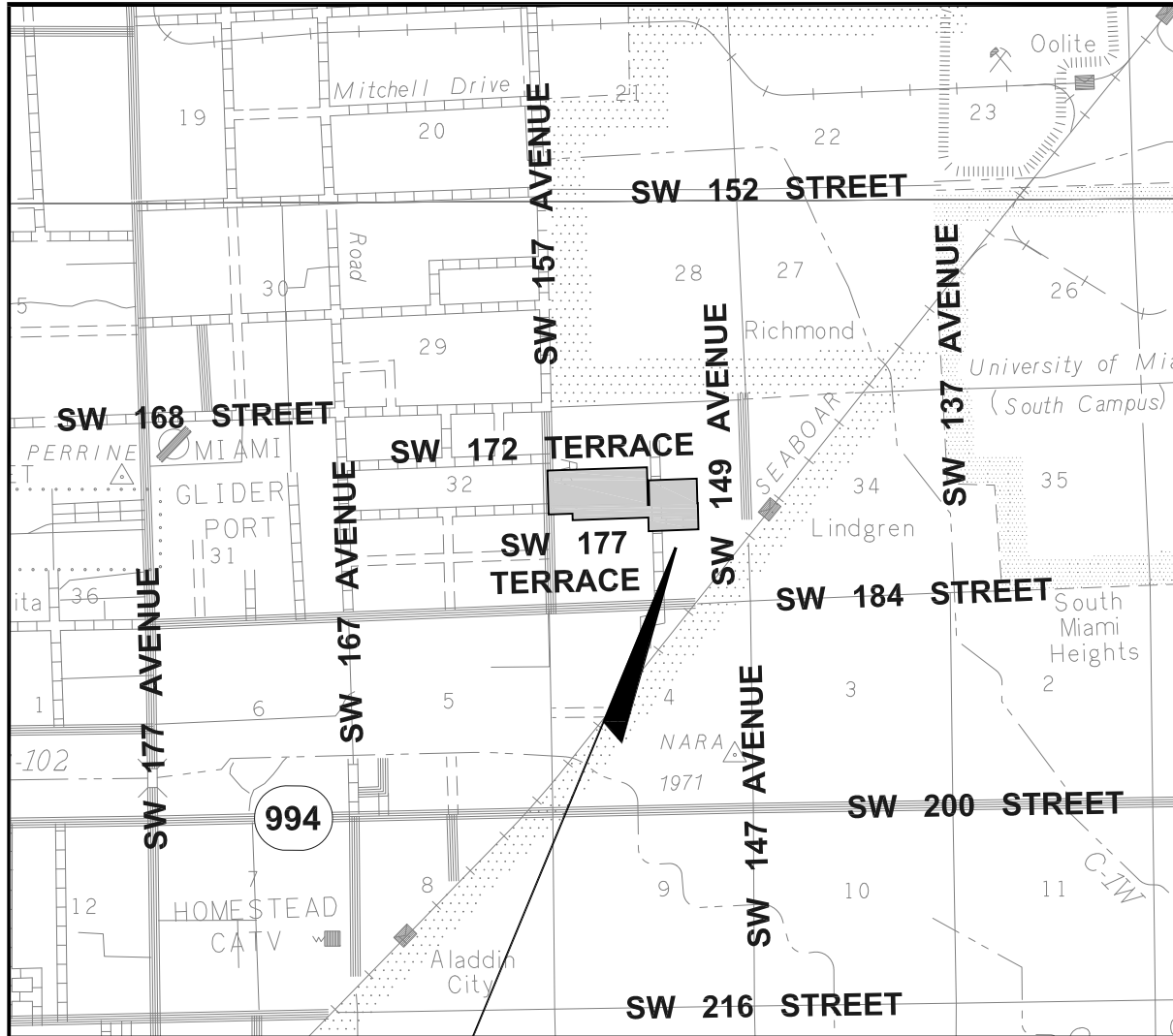
**Distribution:**

			Allocation of Park Costs		
	Single Family	Townhomes	Total	Single Family Lot	Townhome Lot
Area One	\$134,030	\$62,159	\$196,189	647	647
Area Two	\$136,620	\$58,274	\$194,894	647	647
	\$270,650	\$120,433	\$391,083		

**Venetian Parc Allocation of Infrastructure Costs**  
**Per Assessment Area**

**III. GRAND TOTAL**

	Single Family	Townhomes	Total	Allocation of All Costs	
				Single Family Lot	Townhome Lot
Area One	\$5,182,917	\$1,620,538	\$6,803,455	25,038	16,881
Area Two	\$5,283,070	\$1,519,253	\$6,802,323	25,038	16,881
	<u>\$10,465,987</u>	<u>\$3,139,791</u>	<u>\$13,605,778</u>		

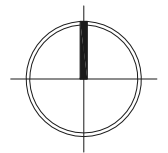


**LOCATION OF PROJECT**

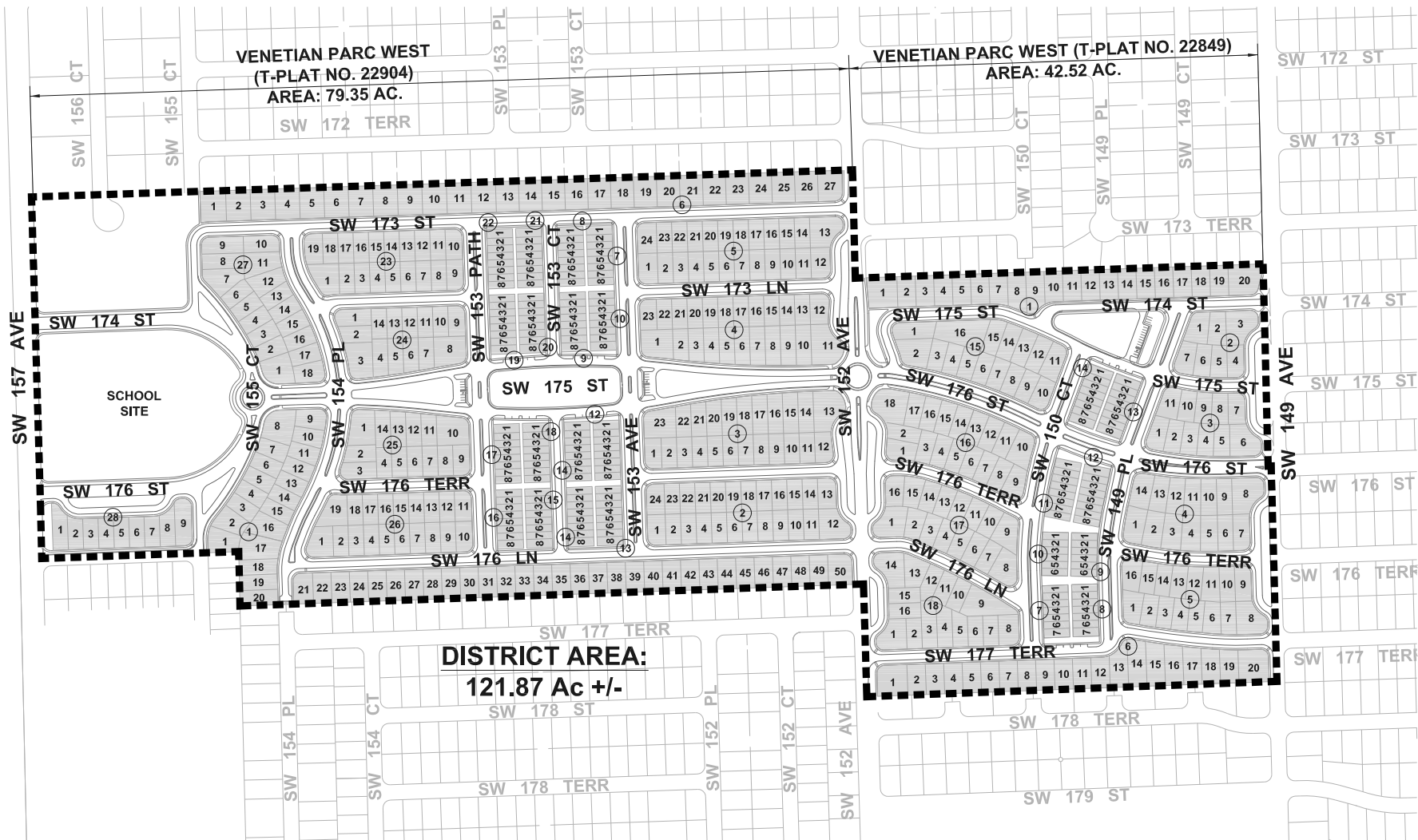
MIAMI-DADE COUNTY  
FLORIDA

**ALVAREZ ENGINEERS, INC.**

VENETIAN PARC C.D.D.  
**LOCATION MAP**



1 MILE 

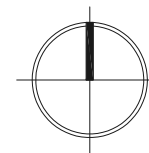


LEGEND  
 ■■■ DISTRICT BOUNDARY

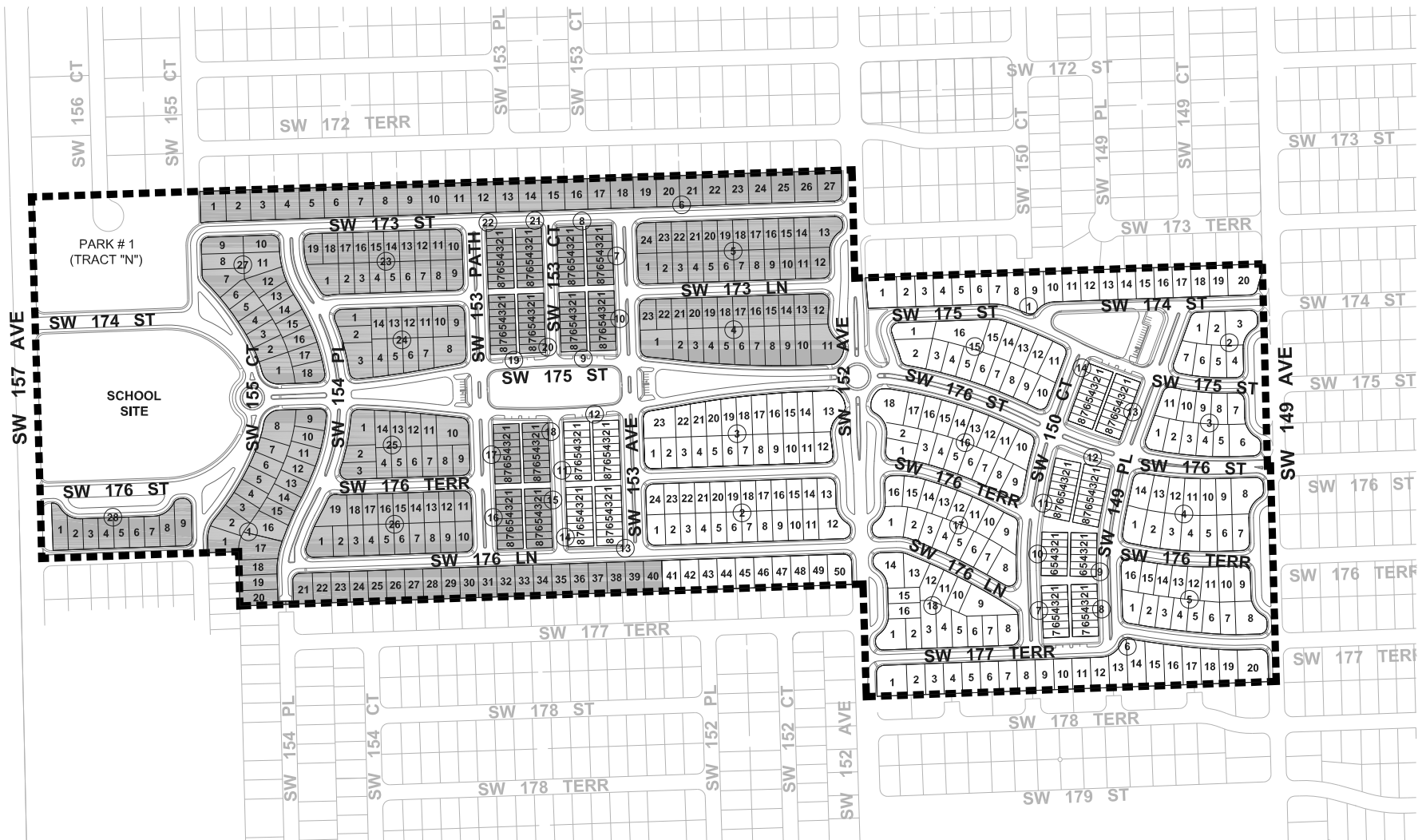
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## VENETIAN PARC C.D.D. DISTRICT BOUNDARY




1" = 500'



**LEGEND**

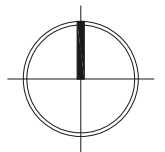
**ASSESSMENT AREAS**


**LOTS WITHIN ASSESSMENT AREA ONE (DEVELOPED BY LENNAR)**  
 207 SINGLE FAMILY AND 96 TOWNHOMES = 303 UNITS

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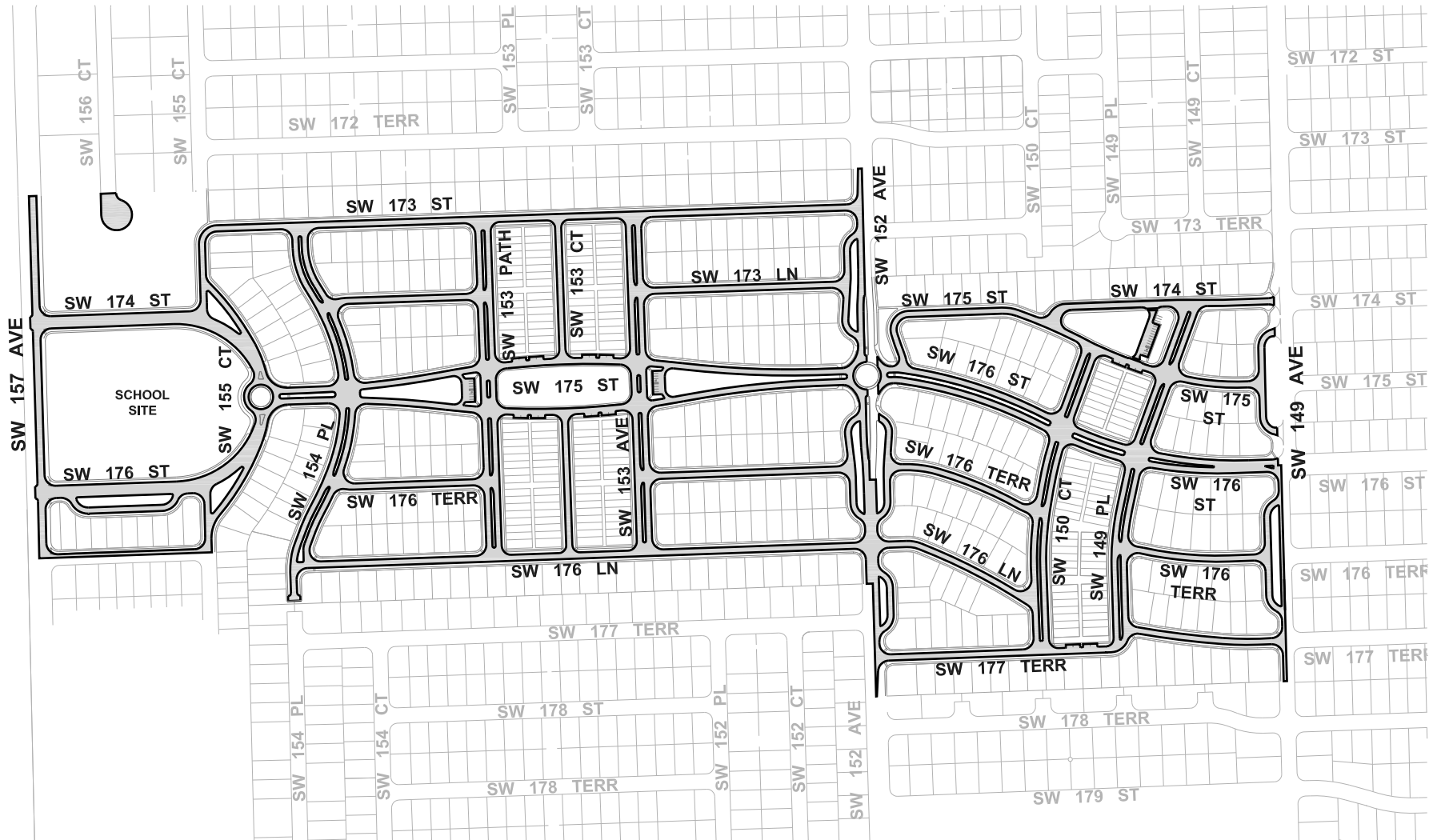
**VENETIAN PARC C.D.D.  
ASSESSMENT AREA ONE**



1" = 500' 





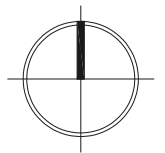


LEGEND  
 PUBLIC ROADS

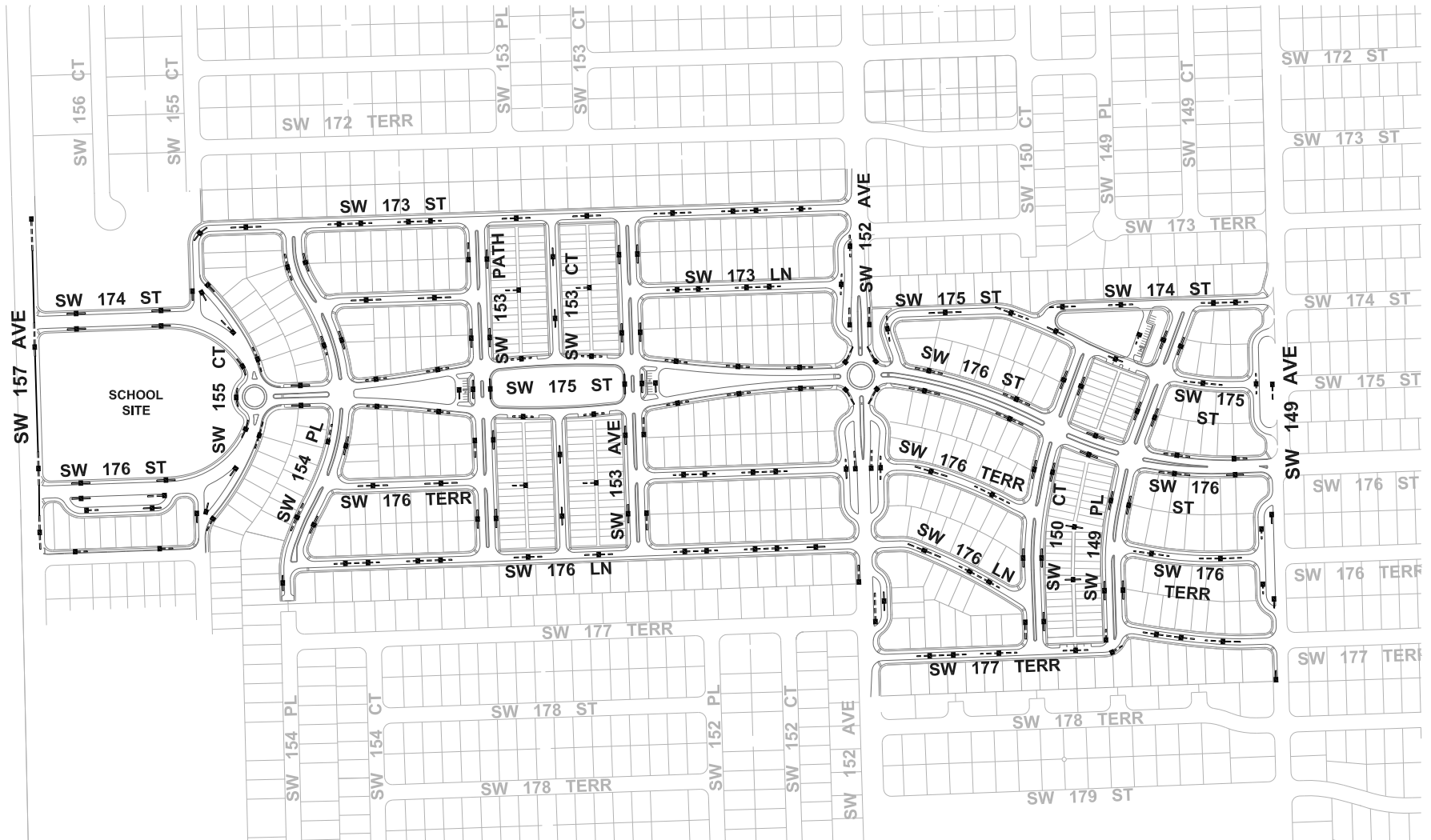
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## VENETIAN PARC C.D.D. ROADWAY IMPROVEMENTS



1" = 500' 

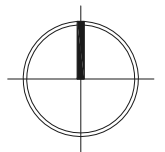


- LEGEND**
- PROPOSED PIPE LINES
  - CATCH BASIN
  - - - - EXFILTRATION TRENCH

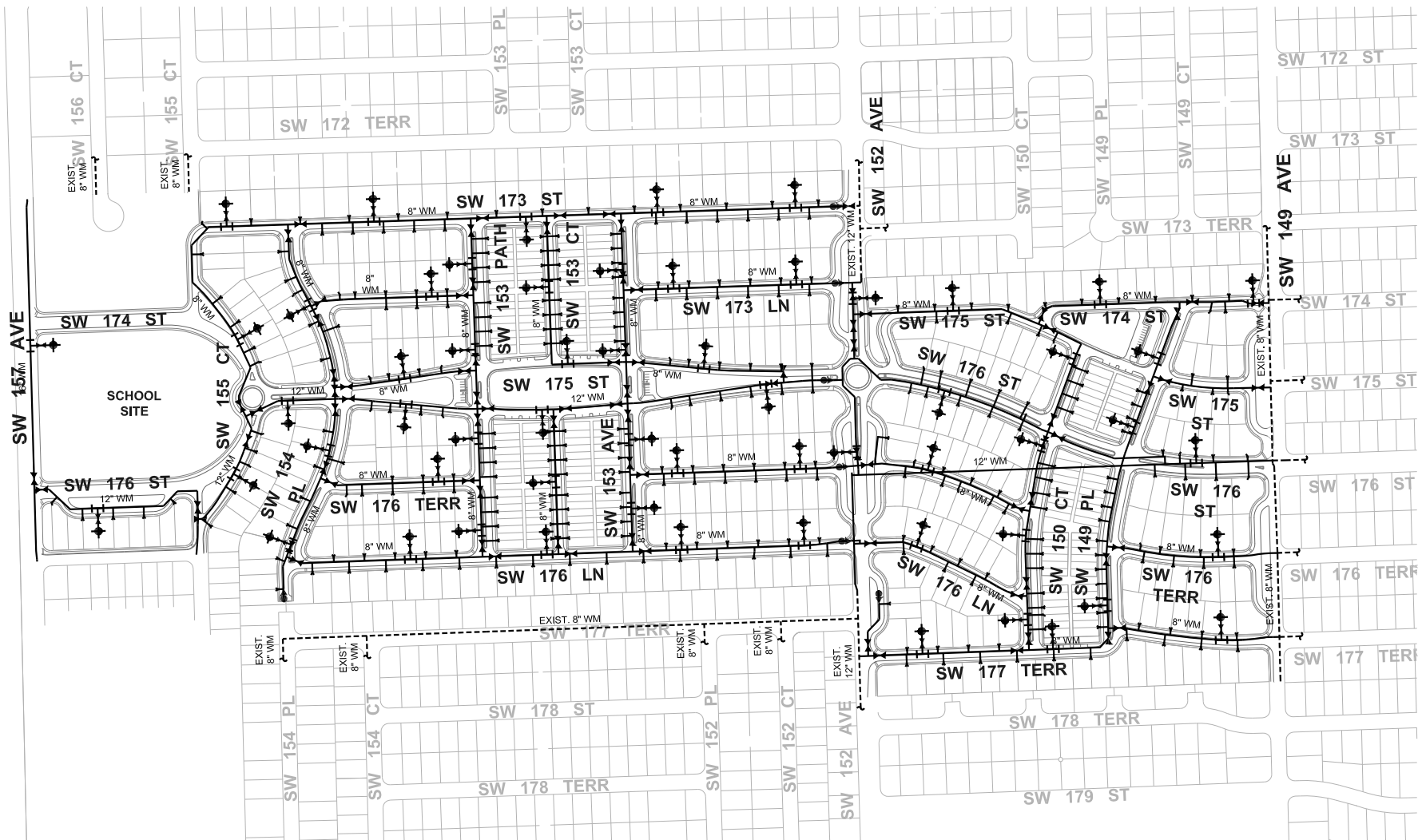
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**VENETIAN PARC C.D.D.  
STORMWATER MANAGEMENT**



1" = 500'



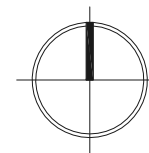
**LEGEND**

- PROPOSED WATERMAIN
- - - - EXISTING WATERMAIN
- ◆ PROPOSED FIRE HYDRANT WITH VALVE
- ⌋ DUAL WATER METER SERVICE

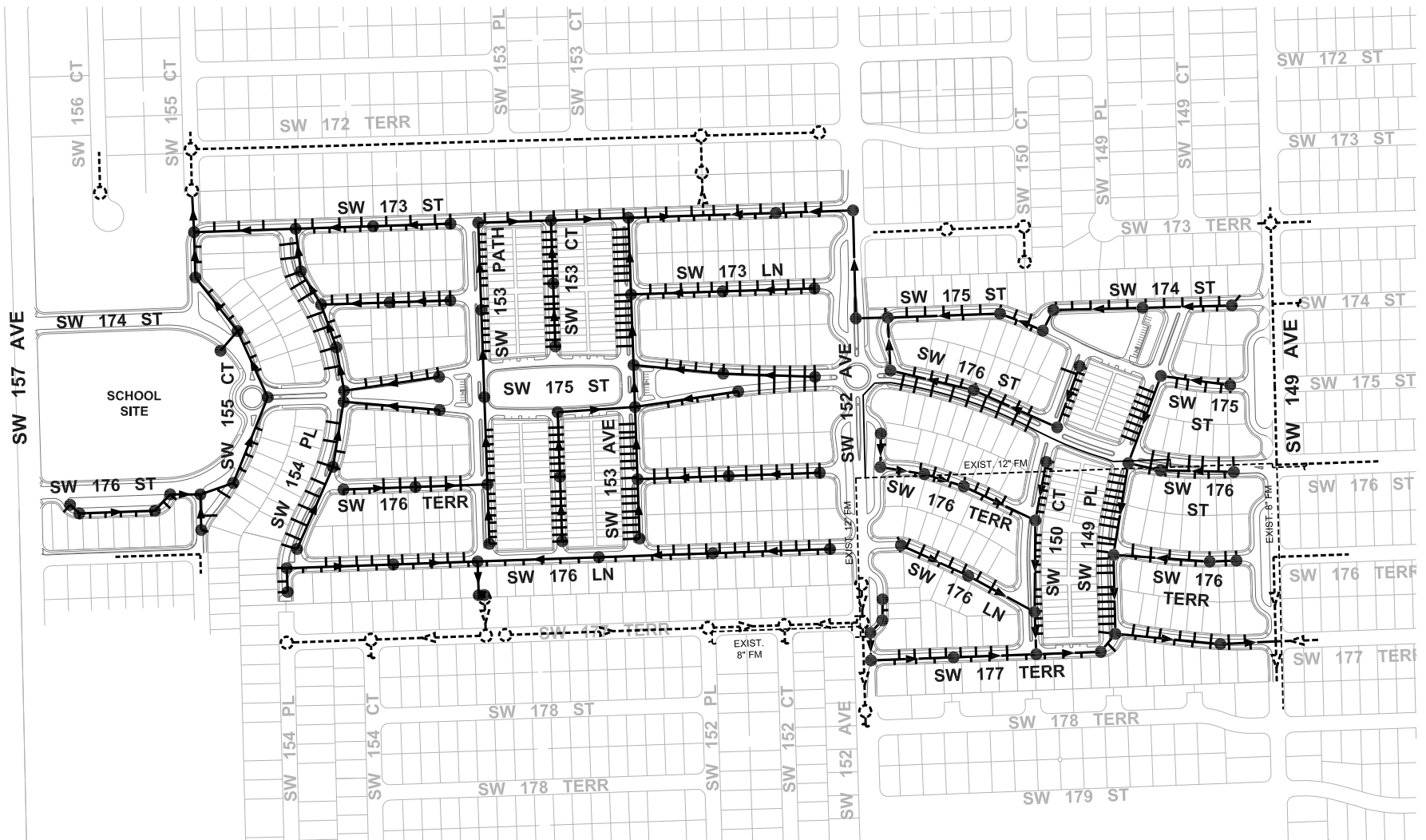
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**VENETIAN PARC C.D.D.  
WATER DISTRIBUTION SYSTEM**



1" = 500'

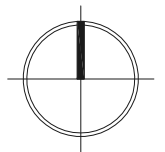


**LEGEND**

- ▲ FLOW ARROW
- +— PROPOSED 8" GRAVITY SANITARY SEWER PIPE WITH SERVICE LATERAL
- MANHOLE
- - - - - EXISTING SANITARY SEWER PIPE
- EXISTING MANHOLE
- FORCE MAIN
- - - - - EXISTING FORCE MAIN

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**VENETIAN PARC C.D.D.  
 SANITARY SEWER SYSTEM**



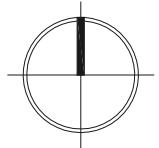
1" = 500'



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**VENETIAN PARC C.D.D.  
PUBLIC PARK**



1" = 500'