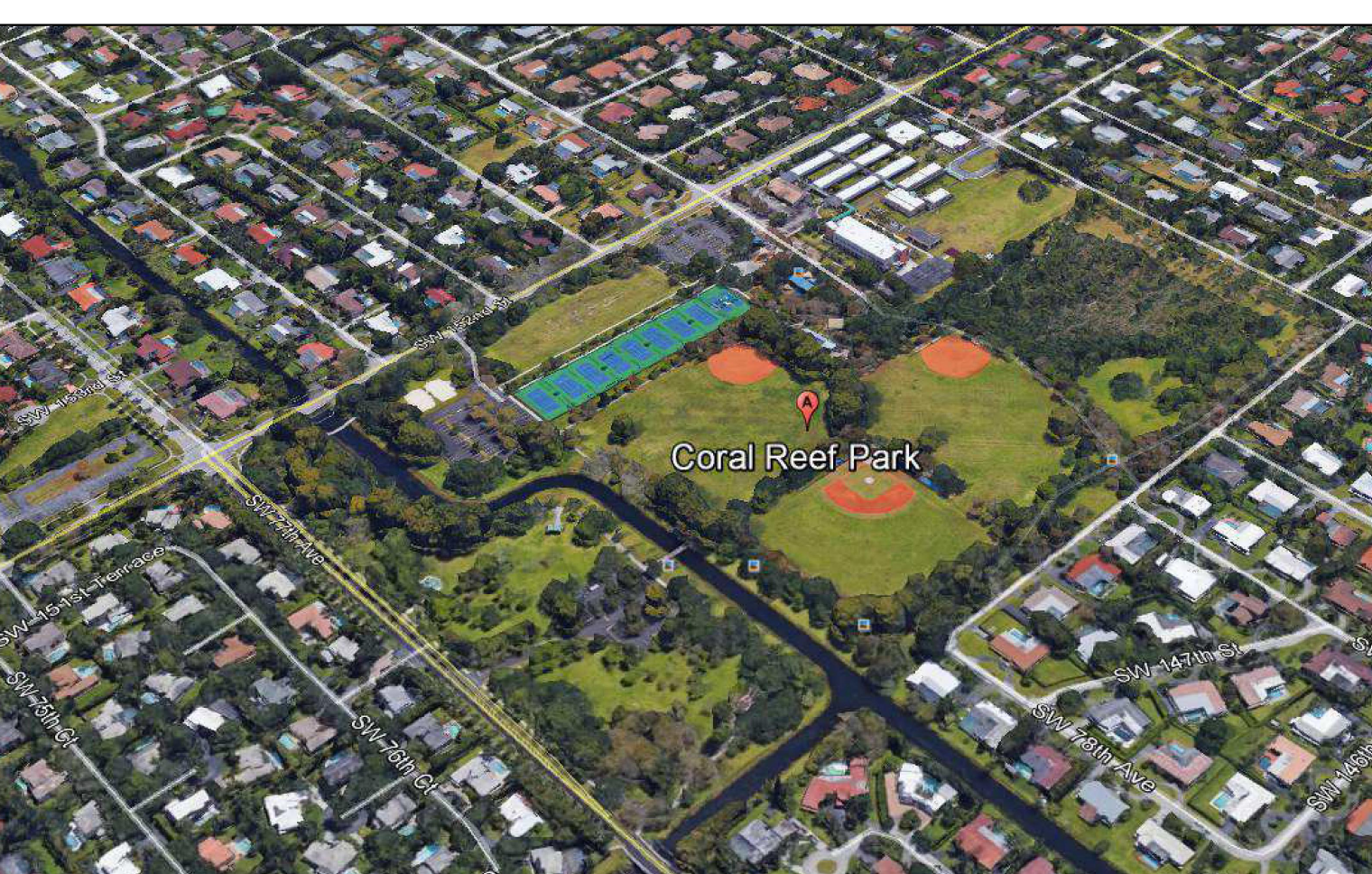


**SCHEDULE OF PROPOSED WORK:**

1. PROPOSED BATHROOM FACILITIES (SEE ARCHITECT'S PLANS FOR DETAILS)
2. PROPOSED SEPTIC SYSTEM (SEE MEP PLANS FOR DETAILS)
3. PROPOSED 1" SINGLE DOMESTIC WATER SERVICE W/ 5/8" PER WSD DETAIL WS 2.16 (SHT 3/4) TO BE INSTALLED BY WSD FORCES AT OWNER'S EXPENSE
4. PROPOSED 3/4" H.D.P.E. SERVICE LINE FROM EXISTING 4" WATER MAIN TO PROPOSED METER BOX TO BE INSTALLED BY WSD FORCES AT OWNER'S EXPENSE
5. PROPOSED 2" RPZ PER WSD DETAIL WS 4.18 (SHT 1/5) TO BE INSTALLED BY THE SITE CONTRACTOR FROM PROPOSED 2" RPZ TO PROPOSED BATHROOM BUILDING WITH MINIMUM 24" OF COVER. THE WATER SERVICE LINE IS TO BE LOCATED 6" MINIMUM FROM THE DRIP LINE OF ALL EXISTING TREES THAT THE WATER SERVICE LINE RUNS BY
6. PROPOSED 2" GATE VALVE WITH VALVE BOX TO BE LOCATED AT 2"± FROM FACE OF PROPOSED BATHROOM BUILDING
7. THE SITE CONTRACTOR SHALL RUN THE SERVICE LINE AS A CONTINUOUS LINE AND ONLY USE JOINTS WHERE NECESSARY (I.E. @ RPZ CONNECTION, BLDG CONNECTION, ETC.)
8. THE SITE CONTRACTOR SHALL PROVIDE A CERTIFICATION OF THE 2" RPZ. THIS WILL BE REQUIRED TO ALLOW WSD TO INSTALL THE 5/8" METER IN THE BOX ONCE THE SERVICE LINE HAS BEEN INSTALLED BY WSD FORCES
9. THE SITE CONTRACTOR SHALL PROVIDE FLORIDA DEPARTMENT OF HEALTH BACTERIOLOGICAL TEST RESULTS PRIOR TO THE 5/8" METER BEING INSTALLED BY WSD FORCES
10. THE SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE PROPOSED ON-SITE 2" H.D.P.E. WATER SERVICE LINE WITH THE INSTALLATION OF OTHER PROPOSED UTILITIES (I.E. UNDERGROUND ELECTRIC, SEPTIC SYSTEM, ETC.)

**PROPOSED SITE PLAN**

SCALE: 1" = 30'

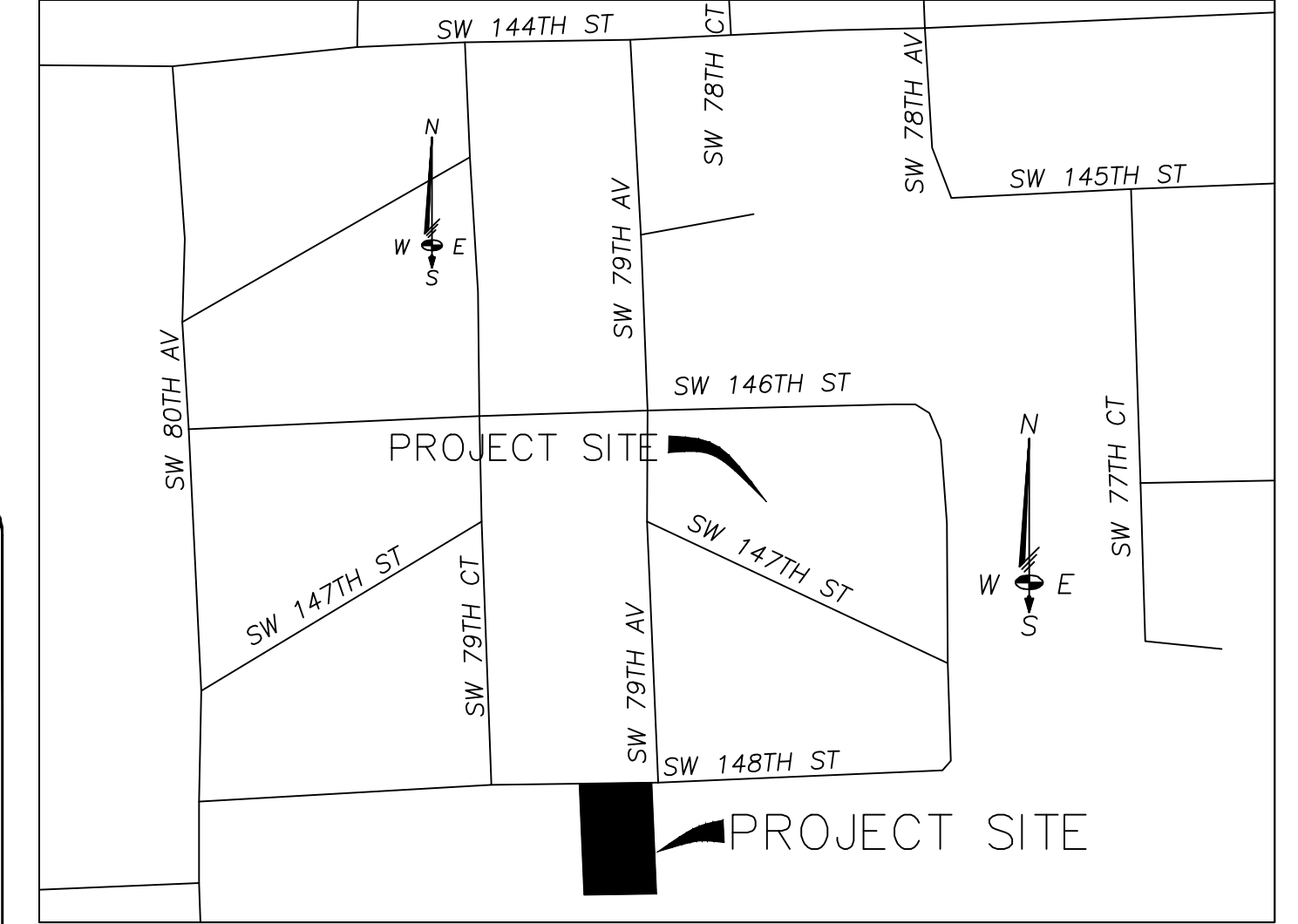


**SITE DATA:**  
**METER LOCATION ADDRESS:**  
 SW 148 STREET & SW 79 AVENUE  
 PALMETTO BAY, FL 33158  
**CORAL REEF PARK ADDRESS:**  
 7895 SW 152 STREET  
 PALMETTO BAY, FL 33158

**SITE DATA:**  
**PROPERTY FOLIO #:**  
 33-5022-000-0750  
**PROPERTY LEGAL:**  
 NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4; LESS CUTLER DRAIN CANAL A/K/A CORAL REEF PARK AS RECORDED IN OR BOOK 21727-1874 0906 3 OF THE MIAMI DADE COUNTY, FLORIDA PUBLIC RECORDS

**LEGEND:**

O.H.E. = OVERHEAD ELECTRIC	ELEC = ELECTRIC
U.T. = UNDERGROUND TELEPHONE	SV = SEWER VALVE
U.E. = UNDERGROUND ELECTRIC	SS = STORM SEWER
C&G = CURB & GUTTER	SS = SANITARY SEWER
EOP = EDGE OF PAVEMENT	MH = MANHOLE
P.P. = PROPERTY LINE	PP = POWER POLE
C/L = CENTER LINE	LP = LIGHT POLE
R/W = RIGHT OF WAY	FD = FRESH DRAIN
EXIST. = EXISTING	ESL = EXIST. NEW SEWER LATERAL
EXIST. GRADE = EXISTING GRADE	EGV = EXIST. GATE/BUTTERFLY VALVE
PROPOSED GRADE = PROPOSED GRADE	EGV = EXIST. GATE/BUTTERFLY VALVE
D.I.P. = DUCTILE IRON PIPE	FD = FLOW DIRECTION
W.M. = WATER MAIN	ESL = EXIST. NEW FIRE HYDRANT ASSEMBLY
ELEV. = ELEVATION	ESL = SINGLE/DUAL WATER SERVICE
T.O.P. = TOP OF PIPE	ESL = EXIST./NEW REDUCER
BLDG = BUILDING	ESL = EXIST./NEW MANHOLE
UNK = UNKNOWN	TEES & BENDS
WV = WATER VALVE	CL SWL = C/L OF SWALE
QI = PROP DRAINAGE	CL SWL = C/L OF SWALE
BST = BELL SOUTH TELEPHONE	CL SWL = C/L OF SWALE
SAN = SANITARY	CL SWL = C/L OF SWALE
WAS = PROPOSED WATER	CL SWL = C/L OF SWALE
WAS = PROPOSED WATER	CL SWL = C/L OF SWALE
WAS = PROPOSED WATER	CL SWL = C/L OF SWALE



**LOCATION MAP**  
 SCALE: 1" = 300'  
 Section 22 Township 55S Range 40E

**ENGINEER NOTES**  
 (NOT PART OF WSD NOTES OR APPROVAL)

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 on file with Miami-Dade Water and Sewer Department (MD-WASD).
2. The locations of the existing utilities, shown on the Drawings, are based upon the most reliable information available to the Engineer and are approximate only. The Contractor shall verify the location and elevation of the utilities located in the area of the proposed work, prior to commencing construction (i.e., underground electric, telephone, water, etc.). The Engineer takes no responsibility for the accuracy of the location of all existing utilities or for those not shown on the drawings.
3. Cover over water mains shall be a minimum of 4'-0" unless otherwise shown on the drawings.
4. All water main line valves shall be installed complete with 10" riser pipes and No. 3 valve boxes. Fire hydrants and service valves shall be installed complete with 6" riser pipes and No. 2 valve boxes.
5. All water meters will be installed by the Miami-Dade Water and Sewer Department (MD-WASD), providing the appropriate charges have been prepaid. The meter box and service piping shall be installed by the Contractor.
6. Fire hydrant requirements (number and location) shall be as required by Dade County Fire Department or the appropriate Fire Agency with installation in accordance with MD-WASD Standards.
7. The Miami-Dade Water and Sewer Department and the Engineer MUST be notified 48 hours prior to the start of construction.
8. All water mains shall be chlorinated in accordance with AWWA Standard C-651, Latest Revision. The Contractor shall contact the local Health Department and request bacteriological samples be obtained with copies being forwarded to the Engineer.
9. MD-WASD personnel will inspect all facilities approved by the MD-WASD. The other permitting agencies shall inspect all facilities approved by them and construction 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 Miami-Dade Water and Sewer Department (MD-WASD) and in compliance with MD-WASD detail GS 0.5, Sht 1 & 2 of 2.
11. All connections from existing MD-WASD mains to be made by MD-WASD forces ONLY. The Contractor to excavate at required locations and provide material with fittings.
12. All vertical and horizontal separations shall be in accordance with The Health Department and Miami Dade County's Regulatory and Economic Resources (RER) Department
13. The contractor will be required to obtain the latest paving & drainage plan and have it available at the job site for the use of Miami-Dade Water and Sewer Department (MD-WASD) personnel.
14. All water mains shall be hydrostatically tested in accordance with AWWA Standard C-600, Latest Revision, and applying the following formula:  

$$L = \frac{SD \sqrt{P}}{148,000}$$

$$L = \text{Leakage in gallons per hour}$$

$$S = \text{Length of pipe in feet}$$

$$D = \text{Diameter of pipe in inches}$$

$$P = \text{Average test pressure in lbs. per sq. in.}$$
15. All water meters and service lines will be connected to existing water mains will be installed by MD-WASD Personnel.
16. In the event unsuitable material is encountered at the depth of the proposed water and sewer facilities, the Contractor shall contact the Engineer of Record for proper direction prior to commencement of construction.
17. All valve boxes and manhole rims shall be set to match the proposed grades as per the paving and drainage plan or the grades of the existing roadways.
18. All water and sewer systems shall be constructed in accordance with Miami-Dade Water and Sewer Department Standards.
19. All sewers installed within the cone of influence shall not infiltrate at the rate in excess of 100 gallons per day per inch dia. per mile and all construction shall be in conformity with all requirements of Section 24-12.1 of the Dade County Code.
20. All construction shall be done in a safe manner, specifically, the rules and regulations of the Occupational Safety and Health Administration (OSHA), the Manual of Uniform Traffic Control Devices (MUTCD), and Chapter 90-86 (CS/BS 2626) the Florida Trench Safety Act shall be strictly observed.
21. All elevations on the plans are based on National Geodetic Vertical Datum (NGVD).
22. It shall be the Contractor's responsibility to arrange for or supply temporary water service, sanitary facilities and electricity to his employees and subcontractors for their use during construction.
23. Maintenance of traffic in the public Right-of-Way shall be in accordance with the Dade County Public Works Department Standards or applicable Public Works Department

**REGULATORY AND ECONOMIC RESOURCES RER NOTES ON WATER-SEWER INSTALLATION**  
 (NOT PART OF WSD NOTES OR APPROVAL)

1. A horizontal distance of at least 6 feet and preferably 10 feet (outside to outside) shall be maintained between sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewer pipes 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, smaller separations are allowed if one of the following is met:
  - The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
  - The sewer is encased in a watertight carrier pipe or concrete.
  - 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. The 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, smaller separations are allowed if one of the following is met:
  - The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
  - 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 C900 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 two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
  - b. Non-Residential 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. Any observed leaks or any obviously defective joints 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 shall be replaced even when the total leakage is below that allowed
6. Force main sewers constructed in a public wellfield protection area shall be ductile iron, C900 PVC, HDPE or reinforced concrete pressure sewer pipes.
7. The maximum allowable exfiltration/leakage rate of force main sanitary sewers shall be:
  - a. Ductile Iron, C900 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 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
  - c. Any observed leaks or any obviously defective joints 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 and existing water or sewer pipe except where they cross
  - 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) if contaminated soils are encountered at 305.372.6700
  - c. If contaminated soils and/or buried solid waste material is executed during construction, then they require proper handling and disposal in accordance with 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 herein. If disposal within a Miami Dade County owned landfill (Class 1 Landfill) is appropriate and selected, please contact the Miami Dade County Public Works and 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 Electric Code (NEC) requirements for Class 1, Group D, Division 1 locations (Explosion Proof)

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CHG#	SPCS	REF.
03/07/2010	W.P.	STANDARD REQUIREMENTS	05	GS	0.5
07/29/2016	B.V.	WATER AND SEWER CONSTRUCTION	05	GS	0.5

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CHG#	SPCS	REF.
03/07/2010	W.P.	STANDARD REQUIREMENTS	05	GS	0.5
07/29/2016	B.V.	"AS-BUILT" REQUIREMENTS	05	GS	0.5

**Department of Health**  
 (NOT A PART OF MD-WASD NOTES OR APPROVAL)

**WATER MAIN HORIZONTAL SEPARATION:**

1. Separations shall be measured outside edge to outside edge between water mains, and storm sewer, stormwater force mains, or reclaimed water mains, shall be 3 feet minimum.
2. Between water mains and vacuum type sewer preferably 10 feet, and at least 3 feet minimum.
3. Gravity or pressure sanitary sewers, wastewater force mains or reclaimed water preferably 10 FT and at least 6 FT, may be reduced to 3 feet where bottom of water mains is at least 6 inches above top of sewer.
4. 10 feet to any part of on-site sewer treatment or disposal system

**WATER MAIN VERTICAL SEPARATION:**

1. Separations between water mains and gravity sewer, vacuum type sewer, or storm sewers to be preferably 12 inches, or at least 6 inches above.
2. Pressure sanitary sewer, wastewater, stormwater 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 orange pipes so joints are at least 3 feet from joints in vacuum, storm or storm force mains. At least 6 feet from joints in gravity or pressure sewers, wastewater force mains or reclaimed water

**WASD NOTES:**

1. All Existing Mains Being Impacted By This Project And All Proposed Water & Force Mains And Fittings Are To Be Restrained Per GS 2.0. Where Applicable
2. All Existing Water And/Or Sewer Utilities Being Removed And/Or Relocated Or Abandoned In Place Must Remain Active And In Service Until Such Time When Replacing Water And/Or Sewer Utilities Have Been Installed. Placed In Service, Accepted By The Department And All Services From The Existing Mains Have Been Transferred To The New Ones By M-DWASD Forces At Owners Expense As Where Applicable.
3. All WSD Owned And Maintained Water And/Or Sewer Facilities Located On Private Property Shall Be Removed After All Installed Services Have Been Transferred To The Already Installed And In Service Water And/Or Sewer Mains. Any Associated WASD Exclusive Easements Shall Be Closed And Released After The Removal And/Or Abandon In Place Of The Existing WASD Owned Water And/Or Sewer Facilities.

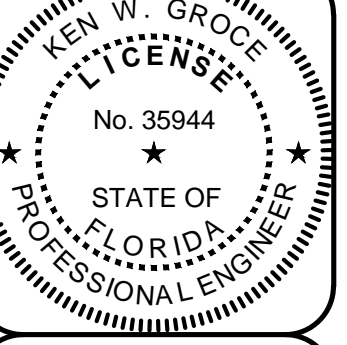


**CHEROKEE CONSULTING, INC**  
 CIVIL ENGINEERS  
 5621 SW 51 TERRACE, MIAMI, FLORIDA 33155  
 Phone: 305.205.2861; E-Mail: kugroce@att.net  
 Certificate of Authorization 27419

**CORAL REEF PARK BATHROOM**  
 SW 148 ST & SW 79 AVE  
 WATER SERVICE PLAN & NOTES  
 PALMETTO BAY, FLORIDA

**REVISIONS**

Date	Remarks	By	Appr.
03/07/2010	ISSUE FOR PERMITS	W.P.	W.P.
07/29/2016	ISSUE FOR PERMITS	B.V.	B.V.



THIS SHEET HAS BEEN ELECTRONICALLY SIGNED & SEALED ON 8.8.17 BY KEN W. GROCE P.E. USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS SHEET ARE NOT CONSIDERED AS SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

PRINTED COPIES SHALL HAVE AN ORIGINAL SIGNATURE AND DATE

DESIGNED BY: KEN W. GROCE, P.E.  
 FL. Reg. No. 35944  
 Civil Engineer

Scale: As Shown In Views  
 Designed By: KGW  
 Drawn By: CDS  
 Checked By: KGW  
 Date: 8.8.17  
 Project No: 17-30

Sheet:  
**WS-1** OF 1