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).

12. The contractor is advised that a Tree Removal/Relocation Permit may be required prior to the removal and/or relocation of tree resources. Prior to removing or relocating any trees, the Contractor shall notify the Tree and Forest Resources Section of DERM at (305) 372-6574 or via e-mail at: tfrs@miamidade.gov , or contact the municipality with tree ordinance jurisdiction to obtain any required permits. Those trees not interfering with the construction shall be protected in place in accordance with the provisions of Section 24-49.5 of the Miami-Dade Code.

13. Please note that the demolition, removal, and/or disturbance of existing underground utilities that contain asbestos- cement pipes (ACP) are subject to the provisions of 40 CFR-61 Subpart M. Therefore, pursuant to the provisions of 40 CFR-61-145, a NOTICE OF DEMOLITION OR ASBESTOS RENOVATION form must be filed with the Air Quality Management Division (AQMD) of DERM, at least ten (10) working days prior to starting of any work. Note that the backfilling and burial of crushed ACP would cause these locations to be considered active disposal sites and subject to 40 CFR-61.154, and 40 CFR-61.151 a year after project completion. Existing standard operating procedures, as well as applicable federal, state and local regulatory criteria, must be followed and implemented to minimize any potential release of fugitive emissions, especially during project construction activities. The AQMD can be contacted via email at asbestos@miamidade.gov or 305-372-6925.

14. For projects proposing the construction of a new private sanitary sewer pump station or the renovation of an existing sanitary sewer pump station, the property owner shall obtain a new Private Sanitary Sewer Operating Permit (PSO) or shall modify the existing PSO Permit, and shall also have a contractor provide and install a Remote Telemetry Unit (RTU) in accordance with the latest version of the **DERM Remote Telemetry Unit (RTU) Guidelines & Minimum Requirements** document, which can be accessed/downloaded from the link below. For additional inquiries about the RTU Guidelines, please contact 305-372-6920.
    https://www.miamidade.gov/permits/library/rtu-guidelines-and-minimum-requirements-v1.pdf