

**SECTION 01016****SAFETY REQUIREMENTS AND PROTECTION OF PROPERTY****PART 1 GENERAL****1.01 CONTRACTOR'S RESPONSIBILITY FOR SAFETY**

- A. Conduct whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees) and property during the Contract period. This requirement shall apply continuously and not be limited to normal working hours.
- B. Neither the Professional activities of the Design Professional, nor the presence of the Design Professional nor his or her employees and subconsultants at a construction site, shall relieve the Contractor and any other entity of their obligations, duties and responsibilities including but not limited to, construction means, methods, sequence techniques or procedures necessary for performing, superintending, or coordinating all portions of the Work of construction in accordance with the Project Documents and any health and safety precautions required by any regulatory agencies.

**1.02 MANDATORY SAFETY TRAINING AT WATER AND SEWER TREATMENT PLANTS**

- A. The Contractor shall coordinate with the Construction Manager and thereafter the Water and Sewer Department Safety Office to arrange for a mandatory (PSM) Project Safety Management training for all his personnel who will be on site. This training must be completed prior to mobilization or any other work on site. The Contractor shall also be responsible that all on-site personnel of his subcontractors, at whatever tier, receive this training. The training normally takes about 2 to 3 hours and is held at the project site.

**1.03 FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS**

- A. Safety provisions shall conform to the Federal and State Departments of Labor Occupational Safety and Health Act (OSHA), and all other applicable Federal, State, County, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these Project Documents. Where any of these are in conflict, the more stringent requirements shall be followed. Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.
- B. All open excavations made in the earth shall be performed in compliance with the State of Florida Trench Safety Act, OSHA 29 CFR 1926 Subpart P (Chapter 90-96, Laws of Florida). The Contractor shall appoint a "competent person", in

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accordance with Subpart P, who shall be present at the jobsite. A "competent person" shall mean one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

- C. The Contractor shall familiarize himself with the "Underground Facility Damage Prevention and Safety Act", Florida Statute 556. The Contractor shall contact the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via [www.sunshine811.com](http://www.sunshine811.com)) at least forty-eight hours prior to any excavation. Failure to familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.
- D. Conduct operations in such a manner utilizing warning devices, such as traffic cones, barricades and warning lights that traffic, pedestrian and Department personnel are given adequate warning of hazards of the worksite as may be deemed necessary by the Department, Engineer of Record, and governing agency having jurisdiction over the work or political subdivision.
- E. The Contractor shall be in compliance with all applicable provisions of the OSHA Code of Federal Regulations (CFR), including, but not limited to, the following:
  - 1. Process Safety Management (29 CFR 1910.119)
  - 2. Personal Protective Equipment (29 CFR 1910.132)
  - 3. Respiratory Protection (29 CFR 1910.134)
  - 4. Confined Space Entry Procedures (29 CFR 1910.146)
  - 5. Lockout/Tagout (29 CFR 1910.147)
  - 6. Industrial Truck / Forklift (29 CFR 1910.178)
  - 7. Electrical Safety (29 CFR 1910.301)
  - 8. Commercial Diving (29 CFR 1910.401)
  - 9. Air Monitoring (29 CFR 1910.1000)
  - 10. Asbestos & Lead Abatement (29 CFR 1910.1001, 1025)
  - 11. Blood Borne Pathogens (29 CFR 1910.1030)
  - 12. Crane Operations (29 CFR 1926 & ANSI)
  - 13. Fall Prevention Protection (29 CFR 1926.104)
  - 14. Welding and Cutting (29 CFR 1926.350)
  - 15. Scaffolding (29 CFR 1926.451)
  - 16. Excavation Protection (29 CFR 1926.650)
  - 17. Movement of Traffic (FDOT Index)

#### 1.04 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

- A. The Contractor shall at all times provide proper facilities for safe access to the Work by authorized government officials.

#### 1.05 CONSTRUCTION SAFETY PROGRAM

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- A. Develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor's Manual of Safety Practices outlining the firms policies on field safety procedures for employees shall be submitted to the Engineer for review before "Notice to Proceed" will be issued. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.
- B. Certain products specified in these specifications contain warnings by the manufacturers that under certain conditions, if instructions for use are not followed, a hazardous condition may exist. It is the Contractor's responsibility to instruct his workmen in the safe use of the product, or any product substitution.
- C. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's Safety Supervisor, the safety program, or any safety measures taken in, on, or near the construction site.

#### 1.06 SAFETY EQUIPMENT

- A. As part of the safety program, maintain at an office or other well-known place at the jobsite, safety equipment applicable to the Work as prescribed by the governing safety authorities, all articles necessary for giving first-aid to the injured, and establish the procedure for the immediate relocation to a hospital or a doctor's care of any person who may be injured on the jobsite.
- B. Perform all necessary work to protect all personnel and the general public from hazards, including, but not limited to, surface irregularities or unramped grade changes, and trenches or excavations. Furnish barricades, lanterns, and proper signs to safeguard all persons and work.
- C. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, logging, machinery guards and the like, shall be in accordance with the applicable governing safety authorities.
- D. During construction, construct and at all times maintain satisfactory and substantial temporary chain link fencing, solid fencing, railings, barricades or steel plates, as applicable, at all openings, obstructions, or other hazards. All such barriers shall have adequate warning lights as necessary, or required, for safety.
- E. There shall be no oil dripping from equipment or oil spills.

#### 1.07 STORAGE OF HAZARDOUS MATERIALS

- A. The material shall be stored and handled in a proper and safe manner and upon its use, immediately dispose of the containers, cans, rags and remnants of the

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material in a manner approved by the Department of Environmental Resources Management (DERM) at the Contractor's sole cost. The Contractor is not allowed to store empty containers at the site. In case of any violation, the Engineer will report such violation to DERM and the Contractor shall be subject to all penalties and fines as required by State and County regulations.

- B. The Contractor is hereby cautioned that he cannot store any environmentally hazardous materials such as solvents, greases, lubricants or any other type of chemical substances at the Pump Station site. The Contractor shall be allowed to keep only such materials at the site for immediate use.

#### 1.08 ACCIDENT REPORTS

- A. If death, serious injuries, or serious damages are caused, report the accident immediately by telephone or messenger to the Engineer. In addition, the Contractor must promptly report in writing to the Engineer and MDWASD all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.
- B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, promptly report the facts in writing to the Engineer and MDWASD, giving full details of the claim.

#### 1.09 TRAFFIC SAFETY AND ACCESS TO PROPERTY

- A. Comply with all rules and regulations of the city, state, and county authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of MDWASD and the controlling authority. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved barricades, signs, and lights where necessary for the safety of the public. The convenience of the general public and residents and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.
- B. Where traffic will pass over backfilled trenches before they are paved, the top of the trench shall be maintained with temporary asphalt that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Access to businesses, schools and homes along the route of the work shall be provided by the Contractor at all times. Cleanup operations shall follow immediately behind backfilling and the worksite shall be kept in an orderly condition at all times.
- C. Supply flagmen and guards or Police when they are required by regulation, when deemed necessary for safety, or required by the Engineer. Flagmen and Guards

shall be furnished with approved orange wearing apparel and other regulation traffic control devices.

#### 1.10 FIRE PREVENTION AND PROTECTION

- A. Perform all work in fire-safe manner. Furnish and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

#### 1.11 DECLARED STATE OF EMERGENCIES

##### HURRICANE

- A. Hurricane Preparedness: During such periods of time as are designated by the United States Weather Bureau as being a hurricane alert, the Contractor shall perform all precautions as necessary to safeguard the work and property, including the removal of all small equipment and materials from the site, lashing all other equipment and materials to each other and to rigid construction, and any other safety measures as may be directed by the Engineer.
- B. Prior to the Start of Work: The Contractor shall submit for approval, a Plan of Action for the specific actions to be taken on his particular projects during a hurricane watch and hurricane warning.
- C. Upon Notification of a Hurricane Warning
  - 1. Formal notification to the Contractors to implement their approved Plan of Action to protect the project and the public.
  - 2. For construction projects at a Plant or Pump Station, a copy of the notifications will be provided to the Plant Superintendent or, for Pump Stations, to the Engineer. The Plant Superintendent or Engineer may notify the Construction Superintendent of any assistance he may need for the Contractor in order to secure the Plant or Pump Station.
  - 3. For pipeline construction projects within the public right-of-ways, the Contractor will be notified by the Construction Manager Office to suspend his construction operations. The Contractor will backfill all open trenches, remove all construction equipment and materials from the right-of-way, remove unnecessary traffic barricades and signs, secure remaining barricades by "half burial" or "double sand bags".

##### POST DISASTER WORK

- A. In the event of a disaster declaration by the Local or State governing authorities, the Department may choose to obtain the services of the Contractor to perform

work made an imminent priority for the disaster event. The compensation for the additional work caused by the disaster shall be negotiated between the Engineer and the Contractor with written approval provided by both parties prior to mobilizing at the designated location or locations. The value of the work performed shall be up to the amount of the original contract with contingencies and dedicated allowances.

#### 1.12 JOINT SURVEY TO ESTABLISH AUTHENTICITY OF POSSIBLE DAMAGE CLAIMS

- A. The Contractor shall maintain vertical and horizontal survey control points on all structures and improvements, located in the vicinity of the work prior to beginning work, and shall periodically check the points for movements with copies provided to the Engineer, of the survey notes for each survey and a copy of the layout of the survey control points.
- B. After the contract is awarded and before commencement of work, the Contractor shall perform a thorough examination of existing buildings, structures, and other improvements in the vicinity of the work, as applicable, which might be damaged by his operations.
  - 1. Examinations of existing structures, buildings, and other improvements in the vicinity of the work shall be done by the Contractor. The scope of the examination shall include cracks in the structures, settlement, leakage, and similar conditions. MDWASD assumes no responsibility for pre-existing conditions of the structure.
  - 2. Records in triplicate of all observations shall be prepared by the Contractor, photographs shall be taken by the Contractor signed and dated, with descriptive information and in the manner specified above. One signed copy of every document and photograph will kept on file in the office of the Engineer. Video recording also required.
  - 3. The above records are intended to be used as indisputable evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of the Contractor and MDWASD, and will be a means of determining whether and to what extent damage, resulting from the Contractor's operations, occurred during the Contract work.
- C. In order to protect himself from being held liable for any existing damaged pavement, including detour routes, the Contractor is advised to notify in writing the authority having jurisdiction over the street where such defective pavement exists prior to proceeding with any work in the vicinity. Preconstruction videos and digital pictures shall be taken with date stamps of the entire area of work. A copy of all such notices shall be forwarded to MDWASD.

#### 1.13 TRAFFIC CONTROL AND USE OF PUBLIC STREETS

- A. The Contractor shall be responsible for traffic control as specified hereinafter. Any reference to Miami-Dade County, its departments, or its published regulations, permits and data, shall be synonymous and interchangeable with other recognized governing bodies over particular areas of streets or their departments, published regulations, permits, or data. Abide by all applicable laws, regulations and codes thereof, pertaining to maintenance of public streets, detour of traffic, traffic control and other provisions as may be required for this project.
- B. The Contractor shall be fully responsible for the maintenance of public streets, detour of traffic (including furnishing and maintaining regulatory and informative signs along the detour route), traffic control and other provisions, throughout the project as required by the Metropolitan Dade County Department of Public Works, Traffic Engineering Division (Traffic Division). Traffic shall be maintained according to corresponding typical traffic control details as outlined in the Dade County Public Works Manual. No street shall be completely blocked nor blocked more than one-half at any time, keeping the other half open for traffic without specific approval.
- C. If required by the Traffic Division, employ the required number of uniformed off-duty policemen to maintain and regulate the flow of traffic through the construction area. The number of men required and the number of hours on duty necessary for the maintenance and regulation of the traffic flow shall be subject to their approval. If required for traffic control permits or agencies, the Contractor shall work odd or night hours, as required for traffic control reasons, and the cost of such work shall be considered as incidental to construction.
- D. The Contractor shall provide all barricades and/or flashing warning lights necessary to warn motorists of the construction throughout the project.
- E. Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic safety at all times. Provide necessary access to all adjacent property during construction.
- F. The contractor shall be responsible for the provision, installation and maintenance of all traffic control and safety devices, in accordance with specifications outlined in the Dade County Public Works Manual. In addition, provide for the resetting of all traffic control and information signing removed during the construction period.
- G. Where excavations are to be made in the vicinity of signalized intersections, attention is directed to the fact that vehicle loop detectors may have been embedded in the pavement. Verify these locations by inspecting the site of the work and by contacting the Sunshine 811, at 1-800-432-4770, (or by submitting an internet ticket entry via [www.sunshine811.com](http://www.sunshine811.com)) . Any loop detector which is damaged, whether shown on the Plans or not, shall be repaired or replaced to the satisfaction of the Traffic Division.
- H. Notify the Traffic Division 24 hours in advance of the construction date, and 48 hours in advance of construction within any signalized intersection.
- I. Temporary pavement will be required over all cuts in pavement areas, and also where

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traffic is to be routed over swale or median areas. When the temporary pavement for routing traffic is no longer necessary, it shall be removed and the swale or median area restored to their previous condition.

#### 1.14 WORKING IN CONFINED SPACES

Where a Contractor needs to work in a confined space, the Contractor must comply with the General Industry, OSHA Confined Space Standard, 29 CFR 1910.146 or the equivalent Confined Space Standard in CFR 1926, Safety and Health Regulations for Construction Standards.

### **PART 2 PRODUCTS**

NOT USED

### **PART 3 EXECUTION**

NOT USED

**END OF SECTION**