

**SECTION 01100**

**SPECIAL PROJECT PROCEDURES**

**PART 1 - GENERAL**

1.01 RESPONSIBILITY OF THE CONTRACTOR

- A. The Contractor shall have at all times as his agent on the site of the work a competent superintendent capable of reading and thoroughly understanding the Plans and Specifications.
- B. The Contractor shall be responsible for the good condition of the work or materials until formal release from his obligations under the guidelines of this project. The Contractor shall store materials and shall be responsible for and shall maintain partly or wholly finished work during the continuance of the Contract. He shall place sufficient lights and danger signals on or near the work from sunset to sunrise; shall erect suitable railings or other protective devices about unfinished work, open trenches, embankments, or other obstructions; shall provide all necessary watchmen on the work by day or by night for the safety of the public, and shall take all necessary precautions for preventing accidents or injuries to persons or property in or about the work.
- C. The Contractor shall be responsible for the coordination, location, and relocation of utilities, including but not limited to utility light poles, cables, fiber optic lines, water mains and services, sewer mains and services, electrical, telephone and television cables, signals and signal poles, fences, guard rails, piping, culverts, conduits and drains that interfere with the positioning of the work as set out on the Drawings. The cost of all such coordination and relocations shall be included in the Bid for the Project and shall not result in any additional cost to the Department.
- D. Prior to proceeding with trench excavation the Contractor shall contact all utility companies and all other users of the right-of-way in the area to aid in locating their underground services. It shall be the Contractor's responsibility to contact utility companies at least three NORMAL WORKING DAYS before starting construction. The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of underground utilities may be determined. The Contractor shall comply with Chapter 556, F.S., "Underground Facility Damage Prevention and Safety Act", Chapter 553, F.S., "Florida Trench Safety Act, Part IV", Chapter 368, F.S., "Florida Gas Safety Law, Part 1", and OSHA Standard 1926.651.
- E. Wherever piping systems or utilities such as water, wastewater, air, chemical, electrical or other service lines must be crossed, deflection of the pipe within recommended limits and cover shall be used to satisfactorily clear the obstruction unless otherwise indicated on the Drawings. Approximate locations of known installations in the vicinity of new work must be verified in the field by the Contractor, who shall uncover them carefully, prior to commencement of the work.
- F. It is the responsibility of the Contractor to ensure that all utility or other existing facilities, the stability of which may be endangered by the close proximity of excavation, are temporarily held in position while work proceeds in the vicinity of the pole or other facilities and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

- G. The Contractor shall take all reasonable precautions against damage to existing utilities. However, in the event of a break in an existing water main, gas main, sewer or underground cable, the Contractor shall immediately notify the responsible official of the organization operating the interrupted utility. The Contractor shall lend all possible assistance in restoring services and shall assume all cost, charges, or claims connected with the interruption and repair of such services, as determined by the Owner.
- H. The Contractor shall familiarize himself with all codes and regulations of the Federal Government, the State of Florida, the County of Miami-Dade and any municipal corporations applicable to every aspect of the Project. The Contractor shall provide all materials and shall perform all work necessary to fully comply with all provisions and requirements of applicable codes and regulations whether specifically indicated in the Plans and Specifications or not. It is the intent of the Department to obtain a finished project in full compliance with all requirements of any agencies having jurisdiction over any portion of the work involved in the Project. The Inspector will not recommend acceptance of the work until all requirements and provisions of pertinent codes and regulations have been satisfactorily fulfilled

#### 1.02 PIPE AND EXISTING UTILITIES

- A. The underground utilities, structures and other facilities shown on the Plans are located according to the best information available, but may vary by several feet from both the position and elevation shown. The Contractor shall explore far enough in advance of his main trench to determine the exact location and condition of such utilities, structures or facilities so that, before the pipe is installed, the Engineer may change the line or grade of the pipe, should that become necessary to avoid a conflict.
- B. All costs for changing the grade of the proposed main downward 2'-6" or less to clear obstructions located differently than shown on the Plans, or to clear obstructions not shown on the Plans but the location of which could have become known or should have become known by proper observation of field conditions or the proper exploratory procedure, shall be included in the prices bid under the various items of the Quotation and no additional compensation will be allowed. Changing the grade of the proposed main by rising deflections, or the alignment by horizontal deflections, will not be considered as extra work, or extra cost, to the Contractor, and in some cases a credit to the Department may be warranted.
- C. Additional cost, if any, for changing the grade of the proposed main downward more than 2'-6", for the same reasons, will be paid for as "Extra Work" in accordance with Section 13 "Extra Work and Payment Therefore" of the General Covenants and Conditions.
- D. In all cases where the main is deflected either horizontally or vertically, and the Engineer requires additional work and items such as paving and similar items for which a pay item was established in the Quotation, then such additional work and items will be paid for at the prices bid. Wider trench widths may be paid with the approval of the Engineer.
- E. The Contractor shall determine the locations of recent additions to the systems not shown on the Plans. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities. The location of all overhead utilities shall be verified and the Engineer notified of any conflict which might occur. The Contractor shall be responsible for

determining which poles will need shoring during excavation and shall provide such shoring and support as is required.

1.03 CONNECTIONS TO EXISTING PIPING:

- A. Perform in such a manner that no damage and minimal interruption is caused to existing installation. Any damage caused to existing installations shall be repaired or replaced by the Contractor.
- B. Coordinate connection operations with the Department, who shall be notified at least 7 days in advance of any activity which may interfere with the existing utility system.
- C. All connections to existing mains of the Miami-Dade Water and Sewer Department shall be made under the direct supervision of Department personnel. Valves separating the main being installed from existing mains shall be operated by Department personnel upon request by the Contractor. Under no circumstances shall any of these valves be operated by the Contractor's personnel.
- D. Any proposed length of pipe, fitting or valve to be installed as an integral part to an active water main, shall be swabbed on the inside with calcium hypochlorite, HTH, Perchloron, or approved equal, mixed in solution with water. The quantity of hypochlorite shall in all cases be subject to the approval of the Department whose representative shall be present at all times while this phase of the work is in progress.
- E. The installation shall be made as swiftly as possible after service has been halted in the pipeline and any water in the ditch shall be kept below the level of the length of pipe, fitting or valve. The pipeline shall then be placed in service by the Department personnel.

1.04 WATER USED IN CONSTRUCTION

- A. The Department will furnish water for construction purposes free of charge from the nearest fire hydrant using the Contractor's designated floating meter. **The Contractor shall obtain a project specific floating meter and maintain daily records for meter readings.** The floating meter shall be used only for the work of this project; any other use will be considered tampering. The meter will be read on a monthly basis at a cost of \$50 by the Department's Water Distribution Meter Section. There will be no charge for consumption.
- B. The Contractor can obtain the meter through proper application and payment of deposit fee at the Department's Business Office, 3575 South LeJeune Road, Miami, Florida or Miami-Dade Permitting and Inspection Center (MDPIC) at 11805 SW 26 Street. The Contractor shall present a Miami-Dade Fire Rescue permit, City of Miami Department of Fire-Rescue, or Coral Gables Fire Department Permit during application with the Business Office. The deposit fee will be refunded to the Contractor upon return of the meter in a sound satisfactory condition. The largest meter available is 2 inches NPS. Deposits are \$2,500 for a 3" meter and \$1,500 for a 1" meter, additional service charges may apply., for current fees contact the Department's Business Office at (305) 669-7701. Additional fees may be required by other governmental agencies for utilizing existing sources of water.

- C. Water for construction activities will be furnished from adjacent MDWASD-owned water mains or the most convenient water source. In instances where no Department-owned source of water is available, the Contractor shall make his own arrangements with the municipality or other controlling authority and include the cost of all water required during construction in his overall construction cost. No reimbursement will be made.
- D. When the project is occurring in Unincorporated Dade County, the City of Miami or Coral Gables, the Contractor shall present a Dade County, City of Miami or Coral Gables, respectively, Fire Department Permit during application with New Customer Division. This requirement may also apply to some municipal areas of Miami Dade County.
- E. The deposit fee will be refunded to the Contractor upon return of the meter in a sound satisfactory condition. The largest meter available is 2-inches NPS. Effective October 1, 2007, the required deposit for a 2-inch meter is \$2,500.00 plus \$125.00 service charge. For current fees contact the Department's New Customer Division at (786) 268-5200. Additional fees may be required by other governmental agencies for utilizing existing sources of water. The Contractor shall bear all cost imposed by other governmental agencies for water use, meter use and all similar fees, at no cost to the Department. When the project is occurring in Unincorporated Dade County, the City of Miami or Coral Gables, the Contractor shall present a Dade County, City of Miami or Coral Gables, respectively, Fire Department Permit during application with New Business Office. This requirement may also apply to some municipal areas of Miami Dade County.
- F. All piping, fittings, valves and equipment, including pumps and power, required for handling the water shall be furnished by the Contractor. Care shall be exercised in the use of the water and provision shall be made to protect the water supply from contamination and indiscriminate use by unauthorized persons. The Contractor shall use only potable water.
- G. Under no circumstance shall the Contractor utilize a water source, including existing piping, until such source or piping has been approved for use by the Engineer.
- H. In instances where no Department-owned source of water is available, the Contractor shall make his own arrangements with the municipality or other controlling authority and include the cost of all water required during construction in his overall construction cost. No reimbursement will be made.

#### 1.05 DAMAGE TO EXISTING STRUCTURES AND UTILITIES

- A. The Contractor shall be responsible for and make good all damage to pavement, buildings, telephone or other cables, water pipes, irrigation systems, sanitary pipes, or other structures, caused by this Contract, which may be encountered, whether shown or not shown on the Drawings.
- B. Information shown on the Drawings as to the location of existing utilities has been prepared from the most reliable data available to the Engineer. This information is not guaranteed, however; and it shall be the Contractor's responsibility to determine the locations, character and depth of any existing utilities. He shall assist the utility companies, by every means possible to determine said locations. Extreme caution shall be exercised to eliminate any possibility of any damage to utilities resulting from his activities.

1.06 MATERIALS AND EQUIPMENT FURNISHED BY THE DEPARTMENT

- A. No material or equipment will be furnished by the Department under this Contract. All material, labor and equipment necessary for completion of the work shall be furnished and installed by the Contractor, whether or not shown on the Plans or specifically mentioned in the Specifications.
- B. The Department will not furnish electric power for this Project. All electrical driven equipment, including dewatering pumps and electrical welders, shall be served by the temporary electrical service to be provided by the Contractor. The Contractor shall supply extension cords, ground fault circuit interrupters, and transformers, and any safety equipment necessary to protect his workmen and Plant personnel.

C.

1.06 MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR:

- A. The Contractor shall furnish all materials required to complete the construction of the project and related items, ready for service. All fittings and components shall, wherever possible be standard stock. The Contractor shall furnish materials listed on the Pre-Approved Product List on the Water and Sewer Department website <http://www.miamidade.gov/water/pre-approved-product-list.asp>.
- B. All material and equipment furnished by the Contractor for incorporation into the Project shall be new and of recent domestic manufacture, and shall be the products of reliable manufacturers who, unless otherwise specified, have been regularly engaged in the manufacture of such material and equipment for at least five (5) years.
- C. Unless otherwise specified or noted on the Contract Plans, all steel bolts, nuts, washers and other miscellaneous ferrous metal items (except cast iron or stainless steel) furnished by the Contractor shall be hot-dip galvanized in accordance with ASTM A123, Zinc (Hot-Dip Galvanized) Coatings for Iron and Steel Products, or ASTM A153, Zinc Coating (Hot-Dip) on Iron and Steel Hardware. Where the word galvanized or its abbreviation is used on the Contract Plans or in the Specifications, it shall mean hot-dip galvanized. Fabricated items shall be hot-dip galvanized after fabrication. Internal threads shall be tapped or retapped after galvanizing.
- D. All valves, piping, structural steel and miscellaneous materials and equipment shall be stored on blocks or racks. As far as possible, no materials or equipment shall be stored so that it is in direct contact with the ground. All metal shall be thoroughly cleaned before being placed in the work. Storage and protection measures shall be subject to approval of the Engineer whose decision shall be final. The Contractor shall immediately protect materials by different methods, materials and to a greater extent, if so directed by the Engineer in the field.
- E. All materials shall, wherever possible be standard stock articles of well known manufacturers. Where the Plans and Specifications designate the products of a particular manufacturer, the product specified or listed as pre-approved has been found suitable for the intended use, articles or products of similar characteristics may be offered for the approval of the Engineer. When substitutions are permitted, the Contractor shall make all necessary changes in adjacent or connected structures and equipment at his expense.
- F. Where contemplated changes, substitutions or appurtenant work require engineering design, in the opinion of the Engineer, the Contractor shall have such design services performed at his

expense. Said engineering services shall be of an extent satisfactory to the Engineer whose word shall be final and shall be performed by a Registered Engineer licensed to practice in the State of Florida.

- G. The Contractor shall care for and protect against loss or damage all material to be incorporated in the construction, for the duration of the Contract, and shall repair or replace any damaged or lost materials. He shall be relieved of such responsibility only upon final acceptance of all the work by the Engineer.
- H. The Contractor shall furnish a covered, weather-protected storage structure providing a clean, dry, noncorrosive environment for all mechanical equipment, electrical equipment, instrumentation equipment and materials, pumps, blowers, and motors to be incorporated into this Project. Storage of equipment shall be in strict accordance with the "instructions for storage" of each equipment supplier and manufacturer including placing of storage lubricants in equipment, etc. Corroded, damaged or deteriorated equipment and parts shall be replaced before acceptance of the project. Equipment and materials not properly stored will not be included in a payment estimate.
- I. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.
  - 1. Store products subject to damage by the elements in weather-tight enclosures.
  - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
  - 3. Store fabricated products above the ground, on blocking or skids prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
- J. To insure satisfactory and successful final painting of materials and equipment to be furnished, it is essential that the paints applied in the shop and in the field be mutually compatible. To this end, the Contractor shall require that the shop paint applied to the materials and equipment be compatible with the paint proposed to be used in the field, or shall determine what shop paints have been used and select field paints compatible therewith.
- K. The Contractor shall not reuse any of the material removed from existing pipeline systems.
- L. The Contractor shall supply certification that all materials supplied that will directly encounter drinking water conform with American National Standards Institute (ANSI)/NSF International (NSF) Standard 61.
- M. Extended Warrantees:
  - 1. The Standard Warranty for all completed work, materials and equipment shall be one year from the date of final acceptance. Longer warranties may be required as part of the Contract. Specialty and high value equipment such as pumps, motors, panels, variable frequency drives, switchgears, motor control centers, engines, actuators, roofing systems, and plant process equipment will have the warranty requirement listed on the product specification.
  - 2. The Contractor shall procure extended manufacturer's warranties on equipment furnished by him. These warranties shall be kept in force and extended such that the Department

will be provided a manufacturer's warranty with at least one year to run beyond the date of final acceptance of the Project. A copy of the warranty with these provisions clearly stated or with an attached letter of certification from the manufacturer to this effect shall be delivered with the equipment and no payment or partial payment for said equipment will be made until such warranty/certification is delivered to the Engineer.

3. The warranty shall specifically cover the case where the equipment warranted has been replaced by a newer model. In such instance the warranty shall either provide spare parts and service to repair or replace in its entirety the original model, or in lieu of this; provide a complete new model unit to replace the warranted and failing equipment. Should the failing equipment be replaced by a new model, the Contractor shall be responsible for making all necessary changes to adjacent and/or connected equipment at no extra cost to the Department and to the satisfaction of the Engineer who's decision shall be final.
4. As a part of final inspection, the Contractor shall deliver to the Department in a form satisfactory to the Engineer, either warranties or certifications of warranty extensions showing the warranties to be in effect at least one year beyond the planned date of final acceptance.
5. All costs for procuring, maintaining and extending these warranties shall remain with the Contractor, even in cases where the contract construction time for completion has been extended. These costs shall be included in the Contractor's bid price and no further compensation will be allowed.
6. In instances, as specified in Section 28 "Partial and Final Payment" of the "General Covenants and Conditions"; where the Department puts an item of equipment into full productive service prior to final acceptance, the warranty shall still be extended to at least one year past final acceptance. However, the Department will reimburse the Contractor for the prorated cost of the extended warranty from the time when the equipment was placed in full productive service to the date of final acceptance based upon the manufacturer's invoice to the Contractor for this cost. Only the warranty cost will be reimbursed, no overhead or other costs will be allowed.

#### 1.07 MANUFACTURER'S EXPERIENCE RECORD:

- A. When a manufacturer's experience record is required by these specifications, the following may be provided in lieu of the specified record:
  1. Manufacturers and/or equipment which does not meet the specified experience period will be considered if the manufacturer or supplier provides a bond or cash deposit valid for five (5) years less his years of experience, which will guarantee replacement of the equipment or process in the event of failure or unsatisfactory performance or service.

#### 1.08 INCLEMENT WEATHER

- A. In the event of inclement weather, all work shall be suspended which might be damaged or rendered inferior by such weather conditions and Contractor will, and will cause Subcontractors to protect carefully the Work and materials against damage or injury from the weather and to protect the public from damage or injury. If, in the opinion of Engineer, any portion of work or materials shall have been damaged or injured by reason of failure on the part of Contractor or any Subcontractors to so protect the Work, such Work and materials shall be removed and replaced at the expense of Contractor.

1.09 SAFETY AND HEALTH REGULATIONS

- A. The Contractor shall comply with the Department of Labor Safety & Health Regulations for construction promulgated under the Occupational Safety & Health Act of 1970, (PL 91-596) and under Section 107 of the Contract Work Hours & Safety Standards Act (PL 91-54).
- B. All equipment furnished and installed under this Contract shall comply with Part 1910, Occupational Safety & Health Standards & Amendments thereto.

1.10 PROTECTION OF PUBLIC AND PROPERTY

- A. Barricades, Guards and Safety Provisions:
  - 1. The Contractor shall be solely responsible for adhering to the rules and regulations of OSHA and appropriate authorities regarding safety provisions. To protect persons from injury and to avoid property damage, adequate barricades, construction signs, lights and guards as required shall be placed and maintained by the Contractor at his expense during the progress of the Work and until it is safe for traffic to use the roads and streets. Material piles, equipment and pipe which may serve as obstructions to traffic shall be enclosed by fences or barricades and shall be protected by proper lights when the visibility is poor.
  - 2. Signage and barricades shall be in accordance with applicable FDOT manuals.
  - 3. During construction, pedestrian corridors shall be maintained in a safe, passable, and stabilized manner. Measures utilized shall include, but not be limited to, boardwalks or stabilized pathways. The Contractor shall be solely responsible for coordination with School Board Transportation Safety Manager for potential construction impacts to schoolyards and crossings or Parks Department for any impacts to parks or trails. Closure of any sidewalks and/or school crossings near schools shall require coordination with the School Board Transportation Safety Manager and written authorization from the Department if construction is conducted when school is in session.
- B. Protection of Utility Structures:
  - 1. Temporary support, adequate protection and maintenance of all underground and surface utility structures including drains, sewers, manholes, hydrants, valves, valve covers, power poles and miscellaneous other utility structures encountered in the progress of the Work shall be furnished by the Contractor at his expense. Any such structures that may have been disturbed shall be restored upon completion of the Work. The Departments' valves, hydrants, manholes and other appurtenances shall be made accessible to the Departments' personnel during all phases of construction.
- C. Open Excavation:
  - 1. All open excavations shall be adequately safeguarded by providing temporary barricades, caution signs, lights and other means to prevent accidents to persons and damage to property. The Contractor shall, at his own expense, provide suitable and safe bridges with handrails and other crossings for accommodating travel by pedestrians and workmen. Bridges provided for access to private property during construction shall be removed when no longer required. The length of open trench will be controlled by the particular surrounding conditions, but shall be limited to 300 feet unless otherwise approved by the Department. If the excavation becomes a hazard, or if it excessively restricts traffic at any point, the



Department may require special construction procedures such as limiting the length of open trench, fencing, prohibiting excavated material in the street and requiring that the trench shall not remain open overnight. The Contractor shall take precautions to prevent injury to the public due to open trenches. All trenches excavated material, equipment or other obstacles that could be dangerous to the public shall be barricaded and well lighted at night. OSHA Regulations shall apply to all open excavation.

D. Tree and Shrub Protection and Trimming

1. Contractor shall exercise care to protect all trees and shrubs not shown to be removed on construction drawings. Trees and shrubs outside construction limits shall remain and shall be protected and where damaged, restored to original condition. Contractor shall obtain approval from Department's Representative prior to removing any trees. Trees damaged within or outside of construction limits due to negligence shall be restored to original condition at the expense of the Contractor.
2. Tree limbs which interfere with construction operations and are approved for pruning shall be neatly cut with sharp pruning instruments; do not break or chop. All cut faces shall be coated with an approved tree pruning compound which is waterproof, antiseptic, elastic and free of kerosene, coal tar, creosote and other substances harmful to plants. Pruning operations shall be extended to restore the natural shape of the entire tree or shrub. Do not allow fires under or adjacent to trees or other plants which are to remain.
3. Contractor shall protect tree and shrub root systems. Do not store construction materials, debris or excavated materials beyond construction limits. Do not permit vehicles or construction equipment beyond the limits of utility line construction. Restrict foot traffic to prevent excessive compaction of soil over root system. Excavated material shall be stockpiled away from tree drip lines as approved by the Engineer. Protect tree and shrub root systems from damage due to noxious materials in solution caused by run-off or spillage during construction operations, or drainage from stored materials. Protect root systems from flooding, erosion or excessive wetting resulting from dewatering operations. Excavate within the drip line of trees only when approved by the Engineer. Where trees are designated to remain within the limits of construction and trenching for utilities is required within tree drip lines, cut roots with sharp pruning instruments; do not break or chop. Paint roots over 2" caliper with approved tree pruning compound.
4. Trees damaged by construction operations shall be repaired promptly after damage occurs to prevent progressive deterioration of damaged trees. Removed trees, branches, roots and other excess materials shall be removed from the construction site to an approved land fill at the expense of the Contractor.

E. Protection of Lawn Areas:

1. Lawn areas shall be left in as good or better condition as before starting of the Work. Where sod is to be removed it shall be carefully restored with new sod of the same type.

F. Restoration of Fences:

1. Any fence, or part thereof, that is damaged or removed during the course of the Work shall

be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the Work. The manner in which the fence is repaired or replaced and the materials used shall be subject to the approval of the Department.

G. Protection Against Siltation and Bank Erosion:

1. The Contractor shall follow federal, state and local permit requirements.

1.11 SITE CLEANUP AND RESTORATION

- A. In addition to the requirements set forth in the General Conditions and Section 01710, the Contractor shall keep the working areas free at all times of tools, materials and equipment not essential to the progress of the Work. Debris, waste materials, and rubbish shall be properly disposed of and not allowed to accumulate. If the Contractor should fail to do this, the Department will make the necessary arrangements to effect the cleanup by others and will back charge the cost to the Contractor. If such action becomes necessary on the part of and in the opinion of the Department, the Department will not be responsible for the inadvertent removal of material which the Contractor would not have disposed of had he effected the required cleanup.
- B. Where material or debris has washed or flowed into or been placed in watercourses, ditches, gutters, drains, catch-basins, or elsewhere as result of the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during progress of the Work, and the ditches, channels, drains etc., kept in a clean and neat condition.
- C. On or before the completion of the Work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools, and machinery or other construction equipment furnished by him; shall remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used by him; shall remove all rubbish from any grounds he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations, in a neat and satisfactory condition.
- D. The Contractor shall restore the entire project site to its original or better condition, with the exception of any area(s) designated for alteration by the Contract Documents. The Contractor shall restore or replace; when and as directed, any public or private property damaged by his work, equipment, or employees to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk, and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration.
- E. The Contractor shall thoroughly clean all materials and equipment installed by him and his subcontractors and on completion of the Work shall deliver it undamaged and in fresh and new appearing condition.

**1.12 EXISTING JOB SITE AT PLANTS**

- A. The work of this project is to be performed on the site of an existing Waste Water Treatment Plant which must be maintained operational for the entire duration of the Project. Coordinate all work with the Engineer and the Superintendent of the South District Waste Water Treatment Plant; insure the safety of operating personnel. Work that will affect Waste Water Treatment Plant performance must be performed at night during times of minimum flow. This night work forms an ordinary part of the work of this Contract and no extra compensation will be allowed. Do not restrict access of the operating personnel to Waste Water Treatment Plant facilities for the purposes of the operation and maintenance, and exercise extreme care to prevent damage to the existing facilities, particularly when making interconnections thereto.

#### 1.13 LAND FOR CONSTRUCTION PURPOSES AT PLANTS

- A. The Contractor shall limit his operations, temporary facilities and storage of equipment and materials to on-site areas to be designated by the Engineer.
- B. Should the Contractor require additional space he shall make his own arrangements for storage of materials and equipment in locations off the construction site. For the allocated space, submit to the Engineer for approval, proposed plan and layout for all temporary sanitary facilities, offices, storage facilities, temporary water service and distribution, and temporary power service and distribution. Prior to commencing any new construction remove, relocate and protect where necessary all existing underground and above ground facilities, pipelines, utility systems, plantings and all other existing installations. All of these existing features shall be restored to their initial or better than initial conditions.

**PART 2 - PRODUCTS** (Not used)

**PART 3 - EXECUTION** (Not used)

**END OF SECTION**