

## **SECTION 02282 - TERMITE CONTROL**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes soil treatment for termite control.

#### **1.3 SUBMITTALS**

- A. General: Submit the following according to Conditions of Contract and Division 1 Specification Sections.
- B. Product data and application instructions.
- C. Certification that products used comply with U.S. Environmental Protection Agency (EPA) regulations for termiticides.

#### **1.4 QUALITY ASSURANCE**

- A. In addition to requirements of these specifications, comply with manufacturer's instructions and recommendations for preparing substrate and application.
- B. Engage a professional pest control operator who is licensed and under contract by the Owner (Ross Louque Exterminating Co., (985) 651-0005, to apply soil treatment solution.
- C. Use only termiticides that bear a federal registration number of the EPA and are approved by local authorities having jurisdiction.

#### **1.5 JOB CONDITIONS**

- A. Restrictions: Do not apply soil treatment solution until excavating, filling, and grading operations are completed, except as otherwise required in construction operations.
- B. To ensure penetration, do not apply soil treatment to frozen or excessively wet soils or during inclement weather. Comply with handling and application instructions of the soil toxicant manufacturer.

## **1.6 WARRANTY**

- A. **Warranty:** Furnish written warranty, executed by Applicator and Contractor, certifying that applied soil termiticide treatment will prevent infestation of subterranean termites. If subterranean termite activity is discovered during warranty period, Contractor will re-treat soil and repair or replace damage caused by termite infestation.
- B. **Warranty Period:** 5 years from date of Substantial Completion.
- C. The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

## **PART 2 - PRODUCTS**

### **2.1 SOIL TREATMENT SOLUTION**

- A. **General:** Use an emulsible, concentrated termiticide that dilutes with water, specially formulated to prevent termites infestation. Fuel oil will not be permitted as a diluent. Provide the following solution: **Termidor**
- B. Other solutions may be used as recommended by Applicator if approved for intended application by local authorities having jurisdiction and by the Building Office of the Archdiocese of New Orleans.

## **PART 3 - EXECUTION**

### **3.1 APPLICATION**

- A. **Surface Preparation:** Remove foreign matter that could decrease treatment effectiveness on areas to be treated. Loosen, rake, and level soil to be treated, except previously compacted areas under slabs and foundations. Toxicants may be applied before placing compacted fill under slabs if recommended by toxicant manufacturer.
- B. Apply as recommended by the Manufacturer.

END OF SECTION 02282

## DIVISION 2 - SITE CONSTRUCTION

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### SECTION 02300 - EXCAVATION, FILLING AND GRADING

#### PART 1 - GENERAL

Provide all materials and equipment required for site clearing, excavation and backfill and site grading specifically required or implied by Contract Documents.

Examine and investigate the building site prior to bid to become fully informed of conditions and problems to be encountered during the Work. No allowance will be made for conditions encountered during construction which were identifiable in nature prior to starting the Work.

#### QUALITY CONTROL

The Owner shall hire an established testing laboratory to test the proposed fill, certify its compliance with these specifications, obtain the optimum moisture content and maximum Proctor Density, and perform field compaction tests as required by these specifications. The certification of material compliance shall be received by the Architect prior to the hauling of fill.

All compaction tests shall be done with a Nuclear Density/Moisture Meter.

Reports for compaction tests required under this specification shall include a sketch of the slab plan and the location of each test point. Each test point shall be numbered for reference in the report. The locations of these test points shall be approved by the Architect before earthwork begins. If test points are indicated and labeled on the Drawings, no supplemental sketch is required. All reported densities shall be clearly referenced to a test point and to the height of the fill above the prepared subgrade. Reports which do not clearly provide this information shall be rejected.

Unless noted otherwise on the Drawings, the number of compaction tests run by the testing laboratory to certify each layer of fill shall be one test per 2500 square feet of fill area or test points shall be located at a maximum spacing of 50 feet, whichever requirement results in the more numerous tests. Location of test points shall begin 10 feet from the exterior edge of the fill area.

Each 6 inch layer of fill shall be certified as complying with the composition and compaction requirements of these specifications prior to the placement of the succeeding layer. If the average compaction is less than specified or if any one test is 3% below specification the layer shall be rejected.

If it becomes necessary to change source of material, or if original borrow pit material changes, certification of the new material shall be identical to the first.

## **PART 2 - PRODUCTS**

### **FILL BENEATH EARTH SUPPORTED SLABS AND FOUNDATIONS**

All fill beneath earth supported slabs and foundations shall be a sandy soil with less than 10% by weight passing the No. 200 sieve and a Plasticity Index of 6% or less or shall be a cohesive soil with a Plasticity Index between 12 and 22 and a Liquid Limit between 30 and 42. Cohesive soil shall classify as CL in accordance with the Unified Soil Classification System (ASTM D2487). Fill shall be completely free of debris, organic matter and chlorides. This material shall be placed in 6 inch thick loose layers and each layer shall be compacted to 95% of its maximum dry density as obtained by the Standard Proctor Test (ASTM D698). Each layer shall be compacted prior to placing the succeeding layer. Fill shall be placed at a moisture content within +/- 3% of the optimum Proctor Moisture.

### **FILL BENEATH PAVING**

All fill beneath paving shall be a sandy soil with less than 10% by weight passing the No. 200 sieve and a Plasticity Index of 6% or less or shall be a cohesive soil with a Plasticity Index between 12 and 22 and a Liquid Limit between 30 and 42. Cohesive soil shall classify as CL in accordance with the Unified Soil Classification System (ASTM D2487). Fill shall be completely free of debris, organic matter and chlorides. This material shall be placed in 6 inch thick loose layers and each layer shall be compacted to 95% of its maximum dry density as obtained by the Standard Proctor Test (ASTM D698). Each layer shall be compacted prior to placing the succeeding layer. Fill shall be placed at a moisture content within +/- 3% of the optimum Proctor Moisture.

### **FILL FOR SITE GRADING AND LANDSCAPING**

Fill for general grading and landscaping shall be clean, free from roots, lumps and other deleterious materials and shall be of such composition to form a firm and stable ground surface suitable for the planting of lawn grass. This fill shall have a sufficient clay content to resist erosion from rainfall. This fill shall be placed to a uniform surface texture and graded to smooth contours between elevations shown on the Drawings.

## **PART 3 - EXECUTION**

### **GROUND WATER**

If ground water is encountered in foundation excavations, notify the Architect immediately. Foundation design may require changes.

### **SITE DRAINAGE**

Grade and cut trenches on the site as required to assure drainage away from the work area of any free water which collects during the earthwork operations. Use pumps if necessary.

Clear the site of all obstructions to the Work, including aboveground and underground utilities.

### **EXISTING UTILITIES**

Locate all existing underground utilities in areas of excavation work. If utilities are to remain in place, provide adequate support and protection during earthwork operations.

If uncharted, or incorrectly charted utilities are encountered, contact utility owner immediately before proceeding.

Do not interrupt existing utility services without prior notice to the Owner and to the respective utility authorities. All temporary interruption of utility services must be coordinated with utility companies.

### **PROTECTION OF PUBLIC**

Barricade all open excavations and post with warning lights.

### **SUBGRADE PREPARATION BENEATH EARTH SUPPORTED SLABS AND FOUNDATIONS AND BENEATH PAVING**

In the area where fill is to be placed remove all surface vegetation and loose topsoil and all organic materials such as grass, roots, tree stumps, etc. If necessary, disc the subgrade and allow to dry (or add water) as required to obtain optimum moisture content in the top 6 inch layer.

After completing the above preparation, proof roll the entire area which receives fill with a 48 inch diameter sheep's foot roller filled with sand and water. Any soft spots or stump holes shall be mucked out and backfilled with fill material meeting this specification. Soft spots and holes which have been refilled shall be compacted to 95% of Standard Proctor Density before any new fill is placed.

Compact the prepared subgrade to 90% of Standard Proctor Density before any new fill is placed.

No fill shall be placed until the subgrade has been certified as complying with these specifications.

### **EXCAVATION**

Excavation shall be made to the dimensions and elevations shown on the Drawings. Dimensions may be increased only the minimum required for tolerances of machine excavation or for the placement of edge forms.

Bottoms of excavations shall be level, free from loose material and brought to the required elevations in undisturbed earth or compacted fill.

If unsuitable bearing material is encountered at the elevations indicated, the Architect shall be immediately notified.

Should excavations be oversized because of machine digging tolerances or because of error, such additional volume shall be filled with concrete poured monolithically with the structural section.

### **BACKFILL**

Remove all forms and debris from excavation prior to backfilling.

The backfill material and compaction for each excavation shall be identical to the fill used above the excavation.

Excavated material may be used as backfill only if it is certified as meeting these specifications.

### **SITE GRADING**

Grade all areas where changes of grade are indicated on the Drawings or where stockpiled materials, equipment, etc. has disturbed the original ground surface.

### **TOLERANCES**

All graded surfaces shall be finished to uniform levels, slopes and texture within the following tolerances:

- |                            |   |
|----------------------------|---|
| lawn or unpaved areas:     | at all points finished surface shall be within plus or minus 0.10 foot of required elevation  |
| beneath exterior pavement: | at all points finished surface shall be within plus 1/8 inch or minus 1/2 inch of required elevation  |
| beneath building slabs:    | at all points finished surface shall be within plus 1/8 inch or minus 1/2 inch of required elevation and shall not vary more than 1/2 inch in any 10 foot length. |

### **CLEAN UP**

Remove from the site, all debris resulting from the Work and leave the entire site in neat and clean condition.

All surplus material resulting from excavation and grading operations shall be removed from the site and disposed of in a legal manner.

END OF SECTION 02300

## SECTION 02528 – CIVIL/ SITEWORK PAVEMENT PATCHING

THIS SPECIFICATION SECTION APPLIES  
TO THE CIVIL/ SITEWORK ONLY (SPECIFICALLY,  
CONSTRUCTION DRAWINGS C01-C06).

### PART 1 - GENERAL

#### RELATED DOCUMENTS:

The Drawings and general provisions of the contract, including General and Supplementary Conditions and General Requirements (if any), apply to the work specified in this Section.

#### DESCRIPTION OF WORK:

The extent of pavement patching consists of the repair of all pavement removed or damaged in the course of constructing the Project.

Pavement patching includes repair of paved roads, streets, highways, walkways, driveways, patios, slabs on grade, and parking lots together with walls, curbing, gutters and headers, and other pavements and appurtenances designated by the Engineer. Pavement referred to under this Section, refers to asphaltic, cementious, brick, cobble or other large stone pavement materials together with underlying construction, irrespective of its composition.

#### JOB CONDITIONS:

Traffic Control: Schedule and conduct Work in a manner, which will minimize inconvenience to vehicular and pedestrian traffic. Provide flagmen, barricades, warning signs, warning lights, and other warning means as appropriate.

Weather Limitations: Conduct all operations during weather conditions appropriate to the Work being performed.

Grade Control: Establish and maintain lines and elevations, which will assure finished pavement patch having desirable appearance, function and strength.

#### SUBMITTALS:

Submit detailed material descriptions when requested by the Engineer.

### PART 2 - PRODUCTS:

General: Use materials and gradations which have locally exhibited a satisfactory record of previous usage, and which for finished visible surfaces will permit obtaining appearance, color and texture reasonably matching remaining adjacent pavement of the same type.

### PART 3 - EXECUTION

Inspection: Examine areas and conditions under which pavement patching will be conducted, giving special attention to stability of subbase. Do not proceed with pavement patching work until unsatisfactory conditions have been corrected in a manner acceptable to personnel or subcontractor doing the paving work.

Preparation: Saw cut any ragged edges of existing pavement, or in the case of concrete work, remove existing pavement to nearest joint. Remove all loose material from underlying and adjacent surfaces.

Strength and Stability: Use materials and construction techniques as necessary to obtain strength, stability and durability of pavement patch at least equal to that of remaining adjacent pavement of the same type. As a minimum, conform with pavement patch details, if any, required elsewhere by the Contract Documents; and where such details are not provided, accomplish pavement patching utilizing strengths, thicknesses, etc. not less than that of remaining adjacent pavement of the same type.

Placing: Construct pavement using methods and equipment in general use for the type of work being performed.

Finish: Accomplish pavement patching using materials and techniques which result in visible, finished surfaces having appearance, color, and texture reasonably matching remaining adjacent pavement of the same type. Do not permit the finished surface to have dips, objectionable roughness or discontinuity or non-draining areas. Do not create any unsafe pavement condition.

Repairs: If pavement patch or adjacent pavement settles or shows evidence of other distress resulting from the Work, cut pavement out, repair subgrade, and reconstruct patch. Do not place additional pavement material on top of unsatisfactory previously repaired surfaces. At expense of Contractor, repair any pavement, which he damages beyond that minimum amount necessary to construct the Work.

END SECTION 02528

## **SECTION 02630 – CIVIL/SITWORK STORM DRAINAGE**

**THIS SPECIFICATION SECTION APPLIES  
TO THE CIVIL/SITWORK ONLY (SPECIFICALLY,  
CONSTRUCTION DRAWINGS C01-C06).**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes storm drainage outside the building.

#### **1.3 DEFINITIONS**

- A. ABS: Acrylonitrile-butadiene-styrene plastic.
- B. EPDM: Ethylene-propylene-diene-monomer rubber.
- C. PE: Polyethylene plastic.
- D. PVC: Polyvinyl chloride plastic.

#### **1.4 PERFORMANCE REQUIREMENTS**

- A. Gravity-Flow, Nonpressure-Piping Pressure Ratings: At least equal to system test pressure.
- B. Force-Main Pressure Ratings: At least equal to system operating pressure, but less than 150 psig (1035 kPa).

#### **1.5 SUBMITTALS**

- A. Product Data: For the following:
  - 1. Plastic, channel drainage systems.
  - 2. Backwater valves, cleanouts, and drains.
  - 3. Plastic dry wells.
  - 4. Stormwater disposal systems.
- B. Shop Drawings: Include plans, elevations, details, and attachments for the following:
  - 1. Precast concrete manholes and other structures, including frames, covers and grates.
- C. Coordination Drawings: Show manholes and other structures, pipe sizes, locations, and elevations. Include details of underground structures and connections. Show other piping in same trench and clearances from sewerage system piping. Indicate interface and spatial relationship between piping and proximate structures.