

# SURFSIDE DRIVE STREETScape PROJECT



**Town of Surfside Beach  
South Carolina**



**11655 Hwy 707  
Murrells Inlet, SC 29576**

February 2010

SURFSIDE DRIVE STREETScape PROJECT

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**Bid Number** ADMIN 10-001

Bid/Quote Package

**TOWN OF SURFSIDE BEACH**

Administration

**PURCHASING NOTICE**

Bids for the Surfside Drive Streetscape Project in the Town of Surfside Beach per specifications attached, subject to conditions and provisions set forth in the attached Bid Package, will be received at this office no later than Wednesday, March 31<sup>ST</sup> at 2:00 p.m. The Packages will then be publicly opened. A mandatory pre bid meeting will be held on March 9<sup>TH</sup>, 2010 at 10:00 a.m. at Town Hall. The commodities and/or services must be furnished as described and specified in the package.

PLEASE ADDRESS MAILED BIDS TO:

Town of Surfside Beach  
115 U. S. Highway 17 North  
Surfside Beach, South Carolina 29575  
Attn: Micki Fellner, Executive Assistant

Also, please show the following BID/QUOTE Number in the lower left hand corner of the envelope.

Thank you.

BID NUMBER \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

**TOWN OF SURFSIDE BEACH**

**GENERAL INSTRUCTIONS TO BIDDERS**

Unless otherwise stated in Special Instructions to Bidders, the following general instructions will apply.

I. BID OPENING AND AWARD

Bid proposals will be examined promptly after opening, and each Bid will be announced to all participating. It is not a practice to award any Bid until the Town Administrator and the interested Department Head have had ample time to review each Bid proposal. Award will be made, however, at the earliest possible date. No Bid Proposal(s) may be withdrawn for a period of thirty- (30) days after Bid opening date.

II. TAXES

The Town pays South Carolina Sales Tax. The Town is exempt from Federal Excise Taxes, and will issue Exemption Certificates as are requested. All applicable Taxes should be shown as separate line items on the Bid Form.

III. BASIS OF BID AWARD

Award of Bid shall be made to the responsible Bidder meeting the specifications consistent with the quality and service needed for effective use. The following criteria will be used in making this determination:

- A. Superior quality and specification adherence;
- B. Completion time;
- C. Guarantees and Warranties;
- D. Company's reputation and financial status;
- E. Past experience and cost, with similar or like equipment of service;
- F. Anticipated future cost;
- G. Cost

IV. GUARANTEE WITH BID

To protect the interest of the Town, the bidder guarantees that the work performed is according to SCDOT standards and meets all Town of Surfside Beach Codes and Ordinances.

V. BID FORM

Each Bidder must submit a Bid Proposal(s) on the blank forms attached. The bidder shall sign his Bid correctly and Bid Proposal(s) may be rejected if they show any omissions, alterations of form, additions not called for, conditional bid, or any irregularities of any kind.

VI. USE OF BRAND NAMES IN THE BID

Specifications contained herein, in some cases, may refer to brand names. Brand names and numbers are used ONLY to set forth and convey to prospective Bidders in the general style, type, character and quality of materials desired.

VII. SPECIFICATION DEVIATIONS BY THE BIDDER

Any deviation from this specification MUST be noted in detail, and submitted in writing with this Bid Proposal. Completed specifications should be attached for any substitutions offered, or when amplifications are desirable or necessary. The absence of the specification deviation statement and accompanying specifications will hold the Bidder strictly accountable to the specifications as written herein. Failure to submit this document of specification deviation, if applicable, shall be grounds for rejection of the item(s) when offered for delivery. If specifications or descriptive papers are submitted with Bids, the Bidder's name should be clearly shown on each document.

VIII. SPECIFICATION CHANGES AFTER BID AWARD

Any changes in specifications after the Purchase Order/Contract has been awarded, must be with the written consent of the Town Administrator; otherwise, the responsibility for such changes shall be with the Contractor, and could result in non-acceptance of the product by the Town.

IX. BROCHURES

Bid proposals shall include adequate brochures, latest printed specifications and advertising literature, describing the product(s) offered in such fashion as to permit ready comparison with the specifications on an item-by-item basis where applicable.

X. SPECIFICATION CHANGES, ADDITIONS AND DELETIONS

All changes in specifications whether by the Town or the Contractor, shall be in writing and furnished to all Bidders. Verbal information obtained otherwise will NOT be considered in awarding the Bids.

XI. NUMBER OF BID COPIES

Unless otherwise stated in the Special Instructions Section of this Bid request, submit two (2) copies of Bid on forms attached.

XII. BID CHANGES

Bid amendments thereto or withdrawal requests received after the time advertised for bid opening, will be void regardless of when they were mailed.

XIII. PROJECT LOCATION

Project work shall be performed along Surfside Drive as shown on construction plans.

**XIV. CONSTRUCTION TIMES**

Unless otherwise stated in the Special Instructions Section of this Bid request, the work process will be allowable during the hours between 6:00 am and 11:00 pm, Monday through Saturday, unless approved in writing.

**XV. CONSTRUCTION DATES**

The Construction time as stated in the Bid Proposal shall be the time required to perform the work after the receipt of Notice to Proceed or award of the Contract.

The bidder shall submit a project schedule detailing the proposed construction sequence and associated time required. The Bidder certifies that the project will be completed in the time he states, starting at the time the Notice of Award and Proceed is received and that the time between the bid opening and the completion of the project does not exceed the number of days so stipulated in his Bid Proposal. The right is reserved to reject any Bid in which the project time indicated is considered sufficient to delay the operation for which the work is intended.

**XVI. TIE BIDS**

In the case of tie bids, the Town reserves the right to make the award based on the factors previously outlined in Paragraph III in what it considers to be in the best interest of the Town.

**XVII. INFORMATION**

Questions concerning the Bid requirements or specifications should be directed to:

Bobby Moore  
The EARTHWORKS Group  
11655 Hwy 707  
Murrells Inlet, SC 29576  
[bmoore@earthworksgroup.com](mailto:bmoore@earthworksgroup.com)

All questions must be submitted in writing.

**XVIII. BID REJECTION OR PARTIAL ACCEPTANCE**

The Town reserves the right to reject any or all Bid Proposals. It further reserves the right to waive technicalities and formalities in bids as well as to accept in whole or in part such bid or bids where it deems it advisable in protection of the best interests of the Town.

**XIX. ADDITIONAL CHARGES**

Bid prices shall include as separate line items all preparation charges, applicable taxes and any other applicable charges fully prepaid to the point of delivery so that the bid price is the total price to be paid for each Phase.

**XX. INSPECTION AND ACCEPTANCE**

The person(s) named below shall conduct inspection and acceptance:

Jackie Donevant  
Steve Strickland

Building and Zoning Director  
Engineer, Earthworks Group, Inc.

After the completion of the project, a careful inspection will be made by the above named. They will have the absolute authority to accept or reject the project for the Town.

**XXI. INVOICE (S), CERTIFICATES OR ORIGIN AND WARRANTIES/GUARANTEES**

Invoice(s), Certificates of Origin and Warranties/Guarantees, must be submitted by the 10<sup>th</sup> of each month.

**XXII. PAYMENTS**

The Town will review approved construction payment requests monthly. The Bidder in his Bid must make any request for early and/or partial payments prior to the completion of the entire contract or order. Such requests will be given due consideration in the awarding of the Bid(s). Bidder should be aware that a 25% final payment will be retained until and upon the Final Inspection.

**XXIII. BONDS**

A Bid Bond in the sum of 5% will be required for this project and must be submitted with the bid documents. Failure to submit the appropriate bid bond will render the bid non responsive and thus will not be considered.

Simultaneously with his delivery of the of the executed contract to the Owner, a bidder to whom the contract has been awarded must deliver to the Owner executed Performance and Payment Bonds each in the amount of one-hundred percent (100%) of the total amount of the accepted bid, as security for the faithful performance of his Contract and for the payment of all persons performing labor or furnishing materials in connection therewith. The Performance and Payment Bonds shall have as the surety thereon only such surety company or companies as are authorized to write bonds of such character and amount under the laws of the State of South Carolina and with a resident agent in Horry County, South Carolina. The Attorney-in-Fact, or other officer who signs a Performance and Payment Bonds for a surety company must file with such bonds a certified copy of his Power-of-Attorney authorizing him to do so. The Performance and Payment Bonds shall remain in force for one (1) year from the date of final acceptance of the work as a protection to the Owner against losses resulting from latent defects in materials or improper performance of work under the Contract, which may appear or be discovered during that period.

**XXIV. GENERAL TRAFFIC CONTROL**

The bidder must submit with the bid proposal a proposed traffic control plan that identifies the sequence of work along with location and duration of road closures. This plan will be subject to review and approval by the Town of Surfside Beach.

**XXV GENERAL PEDESTRIAN ACCESS**

Temporary pedestrian access must be maintained to businesses during normal business hours. The bidder must submit with the bid proposal a proposed pedestrian access plan that sufficiently demonstrates how access will be maintained to buildings during construction.

**XXVI STATEMENT OF EXPERIENCE OF BIDDER**

The bidder is requested to provide at least three examples of work of similar scope and complexity he has completed along with project location and general amount of contract. The bidder is asked to provide a reference for each with contact number that will aid the Owner to judge the experience of the bidder along with his ability to sufficiently conduct prescribed work.

**XXVII SUMMARY OF ITEMS TO BE SUBMITTED WITH BID PACKAGE**

1. Two copies of Bid Form
2. 5% Bid Bond
3. Bidders Affidavit
4. Form of No Collusive Affidavit
5. Traffic Control Plan
6. Temporary Pedestrian Access Plan
7. Proposed Construction Schedule

**BID FORM**

(Failure to furnish all requested data will be cause for considering Bidder non-responsive and may render this bid invalid on that basis.)

**BID FOR:** Surfside Drive Streetscape Project

**SUBMITTED TO:** Town of Surfside Beach  
Surfside Beach, South Carolina

**SUBMITTED BY:**

\_\_\_\_\_  
Bidder's Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State and Zip Code

1. The undersigned, hereinafter called Bidder, in compliance with the "Notice to Bidders", accepting all of the terms and conditions of the "General Provisions", including with limitation those dealing with the disposition of Bid Security; proposes and agrees, if awarded the Contract, to enter into an Agreement with the Owner in the form of Agreement included in the Contract Documents, to furnish all materials and equipment necessary to complete this Contract within the Contract Time indicated in this Bid, in full and reasonably intended requirements of the Contract Documents, to the full and entire satisfaction of the Owner.
2. THIS BID WILL REMAIN OPEN FOR: Thirty- (30) days after the Bid Opening.
3. IN SUBMITTING THIS BID, BIDDER REPRESENTS THAT:
  - (a) Bidder has become thoroughly familiar with the terms and conditions of the proposed Contract Documents accepting the same as sufficient to indicate and convey understanding of all the conditions and requirements under the Contract.
  - (b) This Bid is genuine and not made in the interest of, or on behalf of, any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.
  - (c) That no member of Town Council or other officers or employees of said Owner is interested directly or indirectly in the Bid or in any portion of the Bid, nor in the

Contract or any part of the Contract, which may be undersigned on the basis of such Bid.

- (d) The Price Bid includes the material, labor, sales taxes and any other applicable taxes and fees.
- (e) The Contractor shall purchase and maintain such insurance as will protect him and the Town of Surfside Beach from claims set forth below:
  - (1) Claims under Workmen's Compensation, Disability Benefit, and other similar employee benefit acts;
  - (2) Claims for damages because of bodily injury, occupational sickness or disease, or death of employees;
  - (3) Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
  - (4) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
  - (5) Contractor shall provide the Town of Surfside Beach with a Certificate of Insurance.
  - (6) Successful Bidder will be required to obtain a Town Business License
- (f) The Successful Bidder shall submit a copy of its Liability Insurance and the W-9 Form (hereto attached).

Quantities are the Engineer's estimate only. All volumes are considered to be "in place"

**BID SCHEDULE (BASE BID )**

Item	Description	Quantity	Unit	Unit Price	Extended Price
<b>ROADWAYS &amp; SITEWORK</b>					
1	ASPHALT REMOVAL	1,290	SY		\$ -
2	BASE COURSE REMOVAL AS REQUIRED	1	LS		\$ -
3	8" GABC BASE COURSE	640	SY		\$ -
4	2" SCDOT TYPE 1 SURFACE COURSE	372	SY		\$ -
5	1-1/2" OVERLAY SCDOT TYPE 1 SURFACE COURSE	1,990	SY		\$ -
6	MILL ROADWAY IN SPECIFIED LOCATIONS	215	SY		\$ -
7	ASPHALT PATCH FOR DRAINAGE AND CONDUIT INSTALLATION PER DETAIL	95	SY		\$ -
8	REMOVE EXISTING SIDEWALK AND CURB & GUTTER	7,873	SF		\$ -
9	INSTALL 4" CONCRETE SIDEWALK WITH OYSTER SHELL TABBY FINISH	10,955	SF		\$ -
10	INSTALL CURB AND GUTTER (REJECT AND BARRIER)	1,045	LF		\$ -
11	REMOVE EXISTING OAK TREES	1	LS		\$ -
12	REMOVE MISCELLANEOUS ITEMS WITHIN RIGHT-OF-WAY AS NEEDED	1	LS		\$ -
13	INSTALL ASPHALT SPEED HUMP	6	EA		\$ -
14	PAVEMENT MARKINGS	1	LS		\$ -
15	WARNING DETECTORS	10	EA		\$ -
<b>SUBTOTAL - ROADWAYS &amp; SITEWORK</b>					\$ -
<b>DRAINAGE SYSTEM</b>					
16	REMOVE AND RELOCATE EX. DRAINAGE BOXES	3	EA		\$ -
17	REMOVE EXISTING 15" RCP AS REQUIRED TO PROPOSED BOX LOCATIONS	1	LS		\$ -
18	INSTALL NEW 2'x2' KNOCK OUT BOXES WITH FRAME AND GRATE PER PLANS AND DETAILS ON EXISTING SYSTEM	3	EA		\$ -
19	INSTALL NEW 2'x2' KNOCK OUT BOXES WITH FRAME AND GRATE PER PLANS AND DETAILS	4	EA		\$ -
20	INSTALL NEW 15" RCP PER PLANS	148	LF		\$ -
21	TIE NEW RCP INTO EXISTING BOXES	2	EA		\$ -
22	ADJUST EXISTING MANHOLE RIMS AS NEEDED TO MATCH PROPOSED GRADES	7	EA		\$ -

Item	Description	Quantity	Unit	Unit Price	Extended Price
23	INSTALL 4" SDR-18 FOR UNDERDRAIN CONNECTION UNDER ROADWAY	60	LF		\$ -
24	INSTALL 4" SOCK PIPE FOR UNDERDRAIN PER DETAIL	740	LF		\$ -
<b>SUBTOTAL - DRAINAGE SYSTEM</b>					\$ -
<b>ELECTRICAL/ PLUMBING</b>					
25	INSTALL 1" ELECTRICAL CONDUIT	1,300	LF		\$ -
26	INSTALL 2" ELECTRICAL CONDUIT	500	LF		\$ -
27	INSTALL 3" ELECTRICAL CONDUIT	500	LF		\$ -
28	INSTALL 3/4 " PVC FOR FUTURE	45	LF		\$ -
<b>SUBTOTAL - ELECTRICAL/PLUMBING</b>					\$ -
<b>MISCELLANEOUS</b>					
29	MAINTAIN ACCESS TO BUSINESSES DURING CONSTRUCTION	1	LS		\$ -
30	BONDS (PERFORMANCE, PAYMENT)	1	LS		\$ -
31	MOBILIZATION/ DEMOBILIZATION	1	LS		\$ -
32	GENERAL SEDIMENT & EROSION CONTROL MANAGEMENT	1	LS		\$ -
33	TRAFFIC CONTROL	1	LS		\$ -
<b>SUBTOTAL MISCELLANEOUS</b>					\$ -
<b>GRAND TOTAL</b>					\$ -

BID TOTAL IN WORDS

**ALTERNATIVE SCHEDULE**

Item	Description	Quantity	Unit	Unit Price	Extended Price
<b>ALTERNATIVE 1 (ITEM TO BE ADDED TO THE BASE BID FOR STAMPED ASPHALT IN LEIU OF STRIPING)</b>					
1	STAMPED ASPHALT FOR SPEED HUMPS	1	LS		
<b>ALTERNATIVE 2 (ITEM TO REPLACE PRICE IN BASE BID FOR CONCRETE IN LEIU OF ASPHALT SPPED HUMP)</b>					
1	CONCRETE SPEED HUMP	6	EA		

**GENERAL CONSTRUCTION SPECIFICATIONS FOR  
SURFSIDE DRIVE STREETScape PROJECT**

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## SECTION 01010: SUMMARY OF WORK

This project consists of street renovations to one block of Surfside Drive within the Town of Surfside Beach. The scope of work includes but is not limited to asphalt removal and replacement, curb removal and replacement, sidewalk removal and replacement, drainage demolition and installation, landscaping removal, and conduit installation for future power and data connections.

### WORK UNDER THIS CONTRACT

#### USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

1. To take every precaution against injuries to persons or damage to property.
2. To store his apparatus, material, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of this work or the work of any other contractors.
3. To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work.
4. To clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times site of the work shall present a neat, orderly and workman like appearance.
5. Before final payment to remove all surplus material, false-work temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat orderly condition.
6. To affect all cutting, fitting, or patching of his work required to make the same to conform to the Plans and Specifications and, except with the consent of the Engineer, not to cut or otherwise alter the work of any other Contractor.

#### QUANTITIES OF ESTIMATE

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and such increase or deduction does not give cause for claim or liability for damages.

#### RIGHTS-OF-WAY AND SUSPENSION OF WORK

The Owner shall furnish all land and rights-of-way necessary for the carrying out of this contract and completion on the work herein contemplated. It is possible that all rights-of-way may not be obtain as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such rights-of-way as the Owner may have previously acquired and no claim for damage whatsoever will be allowed by reason of the delay in obtaining the remaining rights-

of-way. Should Owner be prevented or enjoined from proceeding with the work, or from authorizing its prosecute either before or after the commencement by reason of any litigation, or by reason of its inability procure any rights-of-way for the said work, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay, or to withdraw from the contract except by consent of the Owner but time for completion of the work will be extended to such time as the Owner determines compensate for the time lost by such delay, such determination to be set forth in writing.

#### WORK IN PRESCRIBED RIGHTS-OF-WAYS

The Contractor shall conduct his work entirely within the roadway rights-of-way and other areas identified on the plans. Trees and property outside the rights-of-way and trees within the rights-of-way identified to remain shall be protected from any damage. Staging and parking areas for the Contractor shall be identified at the preconstruction conference. Any damage to any protected specimen tree caused by any act of the contractor will be reconciled with the Owner. This reconciliation is the responsibility of the contractor. Contractor shall hold Owner harmless from any mitigation or to action resulting from damage to or removal of any protected tree.

#### SECTION 01150: MEASUREMENT AND PAYMENT GENERAL

The Contractor shall furnish all labor, tools, equipment and material to construct the proposed improvements complete as shown on the Drawings and described in these specifications. The unit quantities listed in the bid proposal is for information only and the bid price given will be treated as a lump sum bid. Change orders to this contract will not be allowed except in the instance of major change in the scope of work.

The Contractor's attention is called to the fact that although the pay items shown shall be the basis for establishing the contract price, the pay items do not necessarily reflect the total amount of work to be performed. The cost of incidental work such as clearing and grubbing, trenching, backfilling, testing, etc., which is necessary but which is not specifically listed as one of the pay items, shall be included in the bid price.

#### SECTION 01300: SUBMITTALS

##### GENERAL

The following submittals will be required by the Contractor unless noted otherwise in the preconstruction conference.

1. The Contractor shall submit his proposed construction schedule for the Engineer's approval before construction begins.
2. A traffic control plan must be submitted as described in the instruction to bidders.
3. Bench marks and a field run and referenced base line will be provided for construction. Grade stakes, slope stakes and alignment stakes shall be provided by the Owner's surveyor and consistent with orderly construction practice. Five working days notice will be provided by the Contractor to the Owner for any field work layout.

4. The Contractor shall submit promptly to the Engineer two copies of each shop drawing and of pipe testing certificate. After examination of such drawings by the Engineers and the return thereof, the Contractor shall make such corrections to the drawings as have indicated and shall furnish the Engineer with two corrected copies. If requested by the Engineer the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Engineer, the Contractor will nevertheless be responsible for accuracy of such drawings and for their conformity to the Plans and Specifications, unless he notifies the Engineer in writing of any deviations at the time he furnishes such drawings.
5. Other shop drawings shall be submitted to the Engineer in duplicate as discussed in other sections of these Specifications.
6. Owner will pay for one time staking only throughout all stages of construction. Any damaged or destroyed stakes, due to any circumstance, shall be the responsibility of the Contractor.
7. Temporary pedestrian access must be maintained to business during normal business hours. Contractor to provide a temporary access plan to show how they intend to maintain access to buildings during construction.

#### SECTION 01401: QUALITY CONTROL - NONPRESSURE LINES (SEWER)

##### GENERAL

Upon completion of construction, the Contractor shall remove all sand, dirt, brick, and other foreign materials from the sewer and shall conduct his own inspection to locate any defects and determine when the sewer is ready for final inspections, testing and acceptance by the Engineer. After all apparent defects have been corrected the Contractor shall notify the Engineer and request a final inspection.

No final inspection will be scheduled by the Engineers until the Contractor advises that he has conducted his own inspection and believes the project to be ready for such final inspections. Should the Engineer begin a final inspection at the request of the Contractor and find that the sewers have not been cleaned or defects have not been corrected, the inspection will be terminated and will not be rescheduled until the Contractor again advises that the project is ready for inspection. The cost of terminated inspections will be charged back to the contractor.

Acceptance of the project shall involve a visual inspection. The procedures shall be as outlined hereinafter. The work will not be accepted until the visual inspection are satisfactory.

##### EXECUTION

The Engineer will, as part of the final inspection, make the necessary visual inspections to verify quality, of workmanship. Such inspections shall include examination of manholes, "lamping" or "flashing" sewer lines and observation of clean-up, pavement replacement, etc.

Any defects such as misalignment of sewers, visible leaks, obstructions, cracked or broken pipe, or failure to restore the surface to a satisfactory condition must be corrected to the Engineer's satisfaction before acceptance.

Any sags, humps, bends, or other evidence of misalignment, regardless of type of pipe shall be cause rejection.

Contractor shall provide "record documents" survey of sewer lines including inverts of manholes, distances between manholes and location of service lines.

## SECTION 02110: CLEARING

### GENERAL

Items of work under this Section include but are not limited to: clearing and grubbing, removal of trees and stumps, protection of trees to remain, and removal of refuse on the site. The Engineer and/or owner shall visit the site prior to the beginning of clearing operations to locate trees within rights-of-way and easements that are to remain.

Protect tops, trunks and roots of existing trees on the project site that are to remain. Box, fence, or otherwise protect existing trees subject to construction damage before work is started. Remove boxing when directed. Do not permit heavy equipment and stockpiles within branch spread.

Adjacent lawn and surface areas within the project site, but outside the limits for grading, which are disturbed as a result of building operations and storage of materials shall be cleaned of debris and restored to original grades.

Trees to be cut off below grade and roots cut or ground to minimize damage to utilities below sidewalk.

Private or public property adjacent to the site and all natural growth improvements thereon shall be continually protected by the Contractor.

Protect existing utility service from damage. Locations of existing utilities shall be verified by the Contractor prior to commencing work.

The Contractor shall visit the site and become familiar with the existing ground conditions.

Clearing and grubbing shall be performed in accordance with Section 200 of S.C. Department of Transportation Standard Specifications for Highway Construction.

### EXECUTION

Accomplish removal and relocation of existing utility service which will interfere with the work using those who will perform the work on the new utility service installation.

Clear the entire roadway rights-of-way of trees and brush with the exception of trees that are to remain. Cut down existing trees to ground then carefully grind or cut stumps and roots to avoid damage to existing utilities.

Clear and grub only designated areas except as otherwise directed by the Owner. Clear and grub entire width of proposed drainage and utility easements with the exception of trees that are

to remain. Holes remaining after clearing and grubbing shall be backfilled and compacted per the requirements of other sections of these Specifications.

Completely remove and dispose of material resulting from the clearing operations. Burning, if elected and allowed by Codes, shall be done under the constant care of competent watchmen at such times and such a manner that the surrounding vegetation will not be jeopardized. Burning shall be done in accordance with local applicable Codes and Ordinances. All costs shall be absorbed by the Contractor.

## SECTION 02221: BACKFILLING AND COMPACTING

### GENERAL

The work of this section includes but is not limited to structural fill, foundation preparation, formation of embankments and preparation of subgrades for base, paving and concrete appurtenances.

Do not commence backfilling until construction below finish grade has been approved, underground utility systems have been inspected and tested, forms have been removed, and the excavation has been cleaned of trash and debris. Backfill over drain lines shall consist of granular fill.

Clean earth of trash and foreign matter and fill the backfill as necessary. Provide approved material as required if materials at the site are not sufficient for this work.

Flush backfill, except under slabs on earth and footings, with water and tamp every 8" in depth. After backfill has settled bring shallow places up to grade.

NOTE: Contractor shall coordinate with Engineer and Town of Surfside Beach on inspections of the work. At a minimum, all portions of roadways shall be inspected at the following times:

- \* Completion of Clearing Operations
- \* Completion of mucking prior to backfilling, if mucking is required.
- \* Subgrade shall be proofrolled and approved prior to placing curbing.
- \* Subgrade shall be proofrolled and approved prior to placing base.
- \* All storm drainage lines shall be inspected and approved prior to back-filling.
- \* All drainage swales, lakes, etc. shall be inspected.
- \* Base shall be proofrolled and approved prior to placing asphalt.

### PRODUCTS

Provide acceptable materials for backfilling and fill, free of rock or gravel larger than 4" any dimensions, debris, waste, frozen materials, vegetable matter, and other deleterious matter. Suitable soils and backfill material shall be defined as SW, SP, SU, SM, or SC Soils containing less than 10% clay according to the United Soils Classification System, or Groups A-1, A-2, and A-3 according to the AASHTO Soils Classification System. Provide select borrow material from an off-site source as required to perform the grading to the lines and grades shown on the drawings. Select borrow material shall be a low plasticity, inorganic, granular soil capable of being compacted to 95 percent of the Modified Proctor maximum dry density as determined by Method "A" of ASTM D 1557. The contractor shall be responsible for testing all offsite fill to ensure that it is capable of meeting compaction requirements prior to use.

In excavations, use excavated or borrow material that has been tested and approved.

Under grassed areas, use excavated or borrow material that has been tested and approved.

Backfilling consists of placement of acceptable soil material in layers and in excavations to required subgrade elevations, for each area classification listed.

Fill consists of placement of acceptable soil materials, in layer, over ground surface to required elevations, for each area classifications listed.

Provide methods employed in performing the work and equipment, tools, and machinery used for handling materials and executing the work approved by the Engineer before the work is started.

Laboratory tests for moisture density relations shall be determined per Method A, ASTM D-1557 or AASHTO T180. Laboratory testing shall be done by an independent testing laboratory selected by the Owner. Two density tests will be required for each two foot lift of backfill for each trench cut through the pavement section (sewer, storm drainage, water trenches). The cost of such compaction test will be paid by the Contractor.

## EXECUTION

The Contractor shall provide for periodic compaction testing from a qualified soils engineering firm approved by the Engineer during the compacting operation for subgrade and base.

Prior to placing fill, constructing foundations or excavating, strip entire building and paved areas of vegetation, topsoil, roots and other unsuitable material to the depth necessary. The stripped area shall be examined and approved by the inspector.

The entire area to be paved shall be proofrolled and approved by the on-site inspector. Contractor shall utilize a Pneumatic Rubber Tired Roller for proofrolling operations. Proofrolling shall not be performed with a Steel Wheeled Roller. Soft or yielding subgrades shall be removed and replaced with suitable material approved by the Engineer. The Bid Form provides payment for mucking and replacement on a unit cost basis per cubic yard of material removed or replaced. The Owner and Contractor shall determine a mutually agreeable method for measurement of material to be removed and replaced prior to beginning mucking operation.

In the event additional compaction testing is required by The Town of Surfside Beach or SCDOT, the Owner will pay for testing of subgrade and finished grade one time only. Any re-testing due to failure will be at contractor's expense.

Subgrade shall consist of a minimum of two feet of suitable soils.

If the materials excavated on the site do not produce the necessary amount of material satisfactory for the formation of the subgrade, as specified, suitable materials from offsite shall be obtained upon the approval of the Engineer.

Topsoil stripped to the depth encountered shall be spread on areas previously graded and prepared for topsoil. Stockpile sufficient amounts as required to cover areas to be landscaped with a minimum of six inches of material.

Unsuitable material may be used to flatten slopes and in general embankments where loads from traffic or structures will not occur. Excess unsuitable material shall be disposed of as directed by the Engineer.

Backfill excavations as promptly as work permits, but not until completion of the following:

Inspection, testing, approval, and recording locations of underground utilities.

Removal of concrete formwork.

Removal of shoring and bracing, and backfilling of voids with satisfactory materials.

Removal of trash and debris.

Contractor shall be responsible for and maintain embankment areas until completion and final acceptance of the project by the Owner.

No silting or washing of material will be allowed to extend beyond the limits of the property. Should such silting or washing occur, construct and maintain a sedimentary basin at no expense to the Owner

Plow, strip, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.

Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread where directed by Engineer and permitted to dry. Assist drying by disking, harrowing or pulverizing until moisture content is reduced to a satisfactory value as determined by moisture-density relation tests. When accepted by Engineer soil material may be used in compacted backfill or fill.

## SECTION 002260: FINISH GRADING

### GENERAL

Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, and compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

### EXECUTION

Grade areas adjacent to building lines to drain away from structure and to prevent ponding. Finish surfaces free from irregular surface changes.

Finish areas to receive topsoil to within not more than 0.10 feet above or below the required subgrade elevations.

Grading surface or fill under building slabs shall be smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/4 inch when tested with a 10 foot straightedge.

Protect newly graded areas from traffic and erosion, and keep free of trash and debris.

Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerance.

Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify subsurface, re-shape and compact to required density prior to further construction.

## SECTION 02550: SITE UTILITIES - CONCRETE REINFORCEMENT

### GENERAL

Work included in this section consists of furnishings, bending, and installing reinforcement for concrete specified in Site Work Division of the Specifications and as shown on the Drawings.

Steel reinforcement shall be stored above the ground surface on platforms, skids, or other supports located within the scope of the active construction operations.

### PRODUCTS

Reinforcing bars and wire fabric shall conform to the requirements of Section 703 of the South Carolina Department of Highways and Public Transportation "Standard Specification for Highway Construction," latest edition.

### EXECUTION

Before being placed in position, thoroughly clean reinforcement of foreign matter that would tend to destroy or reduce the bond.

Reinforcement shall be accurately positioned and secured in place with wire or metal clips. Reinforcement shall be supported by concrete or metal chairs, stays, spacers, or hangers to maintain the reinforcement in accurate position during concreting operations.

Where splicing is necessary bars shall be lapped not less than 24 inches. Splices shall be staggered. Steel fabric shall be spliced by overlapping the sheets by not less than twelve inches.

All the reinforcing steel necessary for a section of concrete structure shall be accurately and securely placed before concrete is deposited in the section.

## SECTION 02551: SITE UTILITIES - CONCRETE

### GENERAL

The work covered by this section consists of furnishing, erecting, and removing concrete forms; furnishing, proportioning, and mixing concrete ingredients, placing and finishing plain and reinforced concrete masonry and other work incidental thereto for the proper construction of site work.

### PRODUCTS

Provide Class A or Class B concrete as defined by Sections 701 and 702 of the South Carolina Department of Highways and Public Transportation "Standard Specifications for Highway Construction," latest edition.

The concrete used shall be composed of a mixture of Portland cement, coarse and fine aggregates, and water. All concrete shall be Class "A" or Class "B" concrete with 28 day compressive strength of 3000 pounds per square inch or 2500 pounds per square inch, respectively, as specified on Drawings.

#### EXECUTION

Concrete shall be placed before initial set has occurred and within 60 minutes after water is added to the mix.

Concrete shall be placed only upon clear, damp surfaces free from excess water and only after the forms are securely in place.

Deposit concrete in thin layers compacted by mechanical vibrators in such a manner that corners are filled, reinforcement and bedding fixtures are completely covered, and honeycombing is prevented.

Freshly placed concrete shall be protected from rain, sun, flowing water, mud deposits, and other injurious conditions. Concrete shall be kept damp during the curing period by means of external water or spraying with a manufactured membrane curing compound. Curing compound shall be applied under pressure by mechanical sprayers at the rate recommended by the manufacturer, but in no case at a rate less than one gallon to each 150 square feet.

Damaged concrete shall be replaced by the Contractor upon order of the Engineer in writing.

No concrete shall be placed in freezing weather. Additives to decrease setting time will not be allowed. Air temperature in the shade and away from artificial heat shall be at least 35 degrees Fahrenheit and rising at time of mixing.

Forms shall be built of wood or metal. Forms shall be built true to line and grade, cement tight, and sufficiently rigid to prevent displacement and other irregularities.

All concrete shall be a smooth float finish unless otherwise specified.

#### SECTION 02555: SITE UTILITIES STORM DRAINAGE

##### GENERAL

Provide storm drainage utilities, including pipes and drainage structures, complete with castings. For type of structure, size and type of pipe, and location, see Drawings.

This item shall include trench excavation and backfilling of pipes and structures. All excavation shall be true to lines and grades as shown on the contract Drawings.

Refer to Section 02223 for Compaction requirements.

## PRODUCTS

Provide drainage structures as shown on the Drawings in accordance with Sections 720 of the South Carolina Department of Highways and Public Transportation "Standard Specifications," latest edition.

Provide Class III reinforced concrete pipe culverts in accordance with ASTM C-76.

Provide Trevira Spunbound Type 1115 for engineering fabric for underdrains and Trevira Spunbound Type 1127 beneath riprap, or equal and grouted.

Provide perforated PE or PVC pipe for underdrains as shown on the Drawings.

Provide concrete and concrete reinforcement as specified in other sections of these Specifications.

## EXECUTION

Lay pipe in a prepared trench. Excavate trenches with walls as near vertical as soil conditions permit. Make trenches wide enough for proper jointing of pipe and thorough compaction of backfill material under and around pipe. Carefully shape trench bottom, using a template to fit bottom of pipe for a depth of 25 percent minimum of overall height of pipe. Use template conforming to outside diameter of pipe. Excavate recesses to receive projecting hubs and bells.

Each pipe shall be accurately placed to the exact line and grade called for on the Drawings. The Contractor shall furnish labor and materials to establish line and grade control.

Trenches for new pipe adjacent to existing roadways and parking areas shall be protected from cave-in by the use of steel plates placed vertically on the sidewall to minimize undermining of pavement.

Embankment areas receiving pipe culverts shall first be constructed to a height of approximately one foot above the top of pipe and to a distance each side of pipe equal to not less than five times the culvert diameter before excavating trench. Trench bottoms found to be unsuitable for firm bearing, shall be undercut to a depth where suitable material is found and backfilled with suitable material to plan grade.

Accomplish jointing of pipe culvert sections according to recommended standard practice of pipe manufacturer.

All pipes must be inspected by the Engineer prior to backfilling.

Bring backfill evenly up both sides of pipe for its full length. Exercise caution when making contact with sides of pipe. Backfill compaction may be supplemented by rolling or operating heavy equipment longitudinally parallel to the culvert provided displacement and injury of the pipe is avoided.

Pipe culverts shall be maintained by the Contractor during other operations of construction. All pipe culverts shall be thoroughly clean of silt and trash for the entire length of the pipe before final acceptance of the project. Inlet protection shall be established at the time the pipes and boxes are installed.

All drainage structures shall be examined for operation and to see they are built in accordance with the Drawings. Castings and grates shall be in place when the final examination is made.

**SECTION 02601: BASE AND ASPHALTIC CONCRETE PAVEMENT AND PAVEMENT REPLACEMENT**

**GENERAL**

Work of this section consists of new construction and removal and replacement of a flexible base course and a hot mix asphaltic concrete surface course during installation of water and sewer utility lines. The finished surface course shall meet the requirements for line, grade, and materials as defined by conditions prior to construction, local authority requirements, Drawings and Specifications.

Asphalt thicknesses are compacted measurements. In-place paving thicknesses shall be verified by core samples taken at random locations, if requested by the Engineer. Any evidence of inadequate paving shall be corrected by the Contractor without additional expense to the Owner. The Contractor shall also be responsible for replacing materials taken from core sampling at no additional cost to the Owner, regardless of satisfactory or unsatisfactory results.

**PRODUCTS**

In all pavement areas the upper 12" of the subgrade shall be the equivalent of a well compacted structural fill compacted to 95% of modified Proctor maximum dry density.

Provide stabilized aggregate base course in accordance with Section 306.5, Type I, of the South Carolina Department of Highways and Public Transportation Standard Specifications, latest edition with the following exception: Less than 8% of the material shall be permitted to pass the #200 sieve Compact base course to 100% of the maximum dry density when tested in accordance with ASTM D1557, Method D (Modified Proctor Density).

Provide 0.20 gallons/square yard of bituminous prime material meeting the requirements of RC-250 Cut-Back Asphalt (Rapid Cure) AASHTO M81.

Provide Type I hot laid asphaltic concrete surface course in accordance with Section 402 of the, South Carolina Department of Highways and Public Transportation "Standard Specifications" Compaction shall be required to be at least 97% of the laboratory density as determined by the 50 blow Marshall mix design method (ASTM D 1559).

**EXECUTION**

The roadbed shall be stripped of all vegetation, roots, etc., excavated and shaped in conformity with the typical sections and to the lines and grades indicated on the Drawings. The subgrade shall then be compacted as specified or proofrolled with suitable equipment to determine the stability of the subgrade. If soft or unstable areas in the opinion of the on-site inspector or Engineer are encountered during this operation, they shall be removed and replaced with 6 inch lifts of compacted granular material from either an approved on-site or off-site source. The unsuitable material removed shall be deposited and graded within an area identified by the Engineer on the project site or its immediate surroundings. Payment for "mucking" and replacement with approved granular material shall be on a cubic yard basis. A mutually

acceptable method of measurement shall be adopted by both the Engineer and Contractor prior to commencement of "mucking" operations (See Section 02221).

Sufficient subgrade shall be prepared in advance to insure satisfactory prosecution of the work. Subgrade shall consist of a minimum of two feet of suitable soils.

Base material deposited upon the prepared subgrade shall be spread and shaped the same day. Compaction shall begin immediately using the proper equipment selected by the Contractor. Tests shall be made by the Contractor every 200 linear feet of roadway to assure the proper density control.

Bituminous prime coat shall only be applied when the air temperature in the shade is above 60 degrees Fahrenheit. Bituminous material shall be applied to the full width of the area to be paved by means of a pressure distributor in the specified amount. The Contractor shall protect all structures and concrete surfaces from the bituminous material.

Base shall be proofrolled with a pneumatic rubber wheeled roller prior to placing asphalt.

The asphaltic concrete surface course shall be laid using a mechanical spreader. The pavement shall be constructed on the previously completed and approved surface or base. Rolling of placed material shall begin immediately. Rolling shall be accomplished using a two-axle tandem roller weighing not less than ten tons. The air temperature when placing the asphaltic mixture shall be 40 degrees Fahrenheit and rising. The Contractor shall supply copies of all pavement material invoices indicating conformance with specifications to the Engineer upon request. Equipment used to mix, transport and place the asphalt shall comply with Section 401 of the S.C. Department of Highways and Public Transportation Standard Specifications for Highway Construction.

Rollers shall move at a slow but uniform speed with the drive wheels nearest the paver and shall be maintained in a continuous operation. Rolling shall continue until all roller marks are eliminated.

Contact surface of curb and gutter, drainage structures and other concrete appurtenances shall be painted with a thin, uniform coating of bituminous material prior to the mixture being placed against them. Soft and yielding base material shall be removed and replaced with suitable base material prior to placing the asphaltic concrete surface course.

Permit no vehicular traffic on finished surface until thoroughly cool and hardened.

Final clean up of the site shall be done by the Contractor to remove from the site asphalt debris, base material, and miscellaneous material.

Furnish the Owner with a one-year written warranty covering labor, material, and maintenance for new asphalt paving and base work.

Before trenching in paved areas the Contractor shall cut through the pavement in a straight line along the sides of the proposed trench so that the pavement may be removed and the trench may be dug without damage to the adjacent pavement. During construction suitable precautions shall be taken to protect the pavement edges and surfaces and minimize damage.

As soon as the pipe has been installed the trench shall be backfilled and a temporary pavement patch shall be provided in paved areas. The temporary pavement shall consist of at least six (6)

inches of compacted stone base followed by a single surface treatment that will protect the base, prevent "pot holes" or "chuck holes", and provide a reasonably smooth pavement surface until the permanent patch is made.

The permanent pavement patch shall not be made until the job is nearing completion in order to allow maximum time for any further settlement.

Pavement replacement shall extend a minimum of one foot beyond the trench line, and shall include replacement of all defective pavement resulting from the Contractor's operations, regardless of whether caused by blasting, trenching, equipment operation, cave-in or other cause. Where the cut edge of pavement is less than one foot from the edge of the trench, or has been disturbed during construction, the Contractor shall cut through and remove existing pavement as required to permit a neat pavement patch. Irregular or uneven patches will not be permitted. Prior to replacing pavement, the inside edges of the existing asphalt shall be coated with a thin application of liquid bituminous material.

The Contractor shall be responsible for maintaining temporary patches during construction and shall promptly repair any defects. Upon completion of the work the paved surfaces shall be left in as good or better condition than before the start of construction.

## SECTION 02625: CONCRETE CURB & GUTTER, AND SIDEWALKS

### GENERAL

Provide concrete curb and gutter and sidewalks to the lines and grades shown on the Drawings.

The construction of items under this Section shall be coordinated with other items of construction so as to be constructed in proper sequence.

### PRODUCTS

Provide Class "A" concrete as defined by Site Utilities - Concrete section.

Provide crushed oyster shells for tabby finish on sidewalks.

Provide other materials as required by applicable sections of these Specifications.

Prior to starting to work, obtain Engineer's approval of methods, equipment, tools, and machinery for handling materials and executing the work. Engineer's approval is for ability to perform work only.

### EXECUTION

The subgrade shall be excavated and shaped to line, grade, and cross-section prior to the concrete being placed. The subgrade shall be made to the required depth and width that will permit the installation and bracing of forms.

All soft and yielding material shall be removed and replaced with acceptable material, which shall then be compacted as required by other sections of these Specifications.

Forms for sidewalks shall be of wood or metal of a section satisfactory to meet the design conditions. The reinforcing, if required, shall be placed in position as shown on the Drawings.

Allow forms to remain in place for a minimum of 24 hours after concrete placement. Areas for landscaping and lighting shall be formed as shown on the construction drawings.

Do not place concrete until subgrade and forms have been checked for line and grade. Moisten subgrade to produce a uniform dampened condition at time concrete is placed.

The surface of sidewalks shall be divided into blocks by use of a grooving tool. Grooves shall be placed so as to cause expansion joints to be placed at a groove line. The grooves shall be spaced a maximum of five feet apart and the blocks shall be rectangular in shape. The grooves shall be cut to a depth of not less than one inch. The edges of the grooves shall be placed in other flat concrete sections so as to produce the same effect as in the sidewalks. Concrete joints shall be formed by a grooving tool in concrete curb and gutter at a maximum spacing of 10 feet.

Expansion joints formed by 3/4 inch premolded expansion joint filler shall be placed in all sidewalks and curbs at intervals of not over 60 feet. All premolded expansion joint filler shall be cut to full width and length of the proposed construction and shall extend to within 1/2 inch of the top or finish grade. Expansion joint filler of the thickness indicated shall be installed between concrete sidewalks and fixed structures and adjacent concrete sections.

Concrete surfaces shall be protected from the sun by acceptable means of curing. The curing process shall begin as soon as marring of the new concrete will not occur. When a water cure is used the concrete shall be kept continuously wet for 72 hours. If the Contractor elects to use a manufactured curing membrane, it shall be applied under pressure by mechanical sprayers at the rate recommended by the manufacturer, but in no case at a rate less than one gallon to each 150 square feet.

The concrete curb and gutter may be constructed using an automatic curb machine producing the template shown on the Drawings. The Contractor shall submit the mix design for approval prior to beginning work.

Sidewalks to have an oyster tabby finish. Crushed oyster shells to be broadcast by hand over the concrete surface after screeding and a second larger broadcast during the floating. A third layer will be placed after surface has been finished and before concrete has set-up.

Concrete used in extruded curb machine shall have no slump.

Finish concrete surface variations shall be not more than 1/8 inch under a ten foot long straightedge. Provide concrete work of this Section with a wood float finish, unless otherwise specified. The edges of all concrete surfaces shall be rounded with an edging tool having a radius of 1/4 inch.

Sections of curb and sidewalks that are damaged during construction and before final acceptance shall be replaced in a satisfactory manner by the Contractor at no expense to the Owner. Vehicular traffic shall not be allowed in the area of the curbs during the curing process nor in less than five days after placement.

After the curing process has been completed, concrete walks and curbs shall be backfilled with suitable material and then tamped and compacted with metal or wood tamps. The finish grade shall be made smooth with the top of the concrete surface. All excess material and debris shall be removed from the site.

Curb and gutter shall have a light broom finish.

SECTION 02705: SITE WORK CLEANING UP

GENERAL

Work and adjacent areas must be left clean of rubbish and surplus materials and unneeded construction equipment must be removed in order to minimize inconvenience to the public and property owners.

Entirely remove and dispose of material and debris which has washed, flowed or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, areas adjacent to site and elsewhere during site work operations. Upon completion of the work leave these areas clean and neat.

Tear down and remove temporary buildings and structures upon completion of the work unless specifically otherwise directed or permitted in writing. Remove temporary works, tools, machinery, and other construction equipment. Remove, acceptably disinfect and cover organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used in the contractor. Remove rubbish from grounds occupied by the Contractor. Leave roads, premises, and adjacent property affected by site work operations in a neat and satisfactory condition.

Restore or replace public and private property damaged by site work operations to original condition as directed. This work includes making good damage to highways, driveways, and walks. Use suitable materials, equipment, and methods for such work.

Thoroughly clean materials and equipment installed under these Specifications and maintain it undamaged and new appearing condition until accepted by Owner.

SECTION 02829: TOPSOIL

GENERAL

Provide a minimum depth of eighteen (18) inches of topsoil for areas to receive plant materials. Town of Surfside Beach will provide all top soil to be used.

EXECUTION

All base and subgrade will be removed to a depth of twenty-four (24) inches in landscaped areas. Sandy soils or top soils will be placed adjacent to underdrains, then topsoil to be placed level to surface of sidewalk or curb.

Prior to planting, spread existing topsoil, stockpiled on the site, to a minimum depth of six inches over areas that receive plant materials. Provide additional topsoil if existing topsoil is insufficient for specified cover.

Grub out rocks, clods, roots, and other foreign matter greater than two inches in diameter.

PAVEMENT MARKINGS

GENERAL

1.01 WORK INCLUDED

- A. The work included in this Section consists of applying pavement markings as prescribed by the Drawings.

1.02 REFERENCES

- A. SCDOT Standard Specifications, 2000 Edition.
- B. SCDOT Manual of Uniform Traffic Control Devices for Streets and Highways, 1994 Edition.
- C. All local requirements pertinent to identification for handicap spaces.

PRODUCTS

2.01 TRAFFIC PAINT

- A. Paint for permanent pavement markings shall be fast dry waterborne paint upon which spherical glass beads are applied by dropping immediately following paint application, in accordance with SCDOT Standard Specifications -- Section 604 - Permanent Pavement Markings.
  - 1. Volatile organic compounds (VOC) for the paint shall not exceed 100 grams/liter. The white and yellow paints shall have a 75% to 80% total non-volatiles when tested in accordance with ASTM D 3723.
  - 2. Composition. White paint shall contain a minimum of 1.0 pound/gallon of titanium dioxide in the white pigment. For all colors, the titanium dioxide shall conform to ASTM D 476, Types II, III, or IV.
  - 3. Color. The paint shall be capable of maintaining its original color throughout the life of the line. The color of the white paint shall be a clean, bright, untinted white that provides maximum opacity and visibility under daylight and artificial light. The color of the yellow paint shall match color 33538, Federal Standard No. 595B.
  - 4. Distinguishable Color. The yellow color shall be very distinguishable from white markings under day or night conditions when applied on the roadway and be capable of remaining distinguishable during the life of the marking.

EXECUTION

3.01 APPLICATION

- A. Parking stalls and other pavement stripes shall be marked with white 4-inch wide stripes at the spacing and in the locations shown on the Drawings.

- B. Paint shall be applied to clean, dry surfaces as recommended by the manufacturer.
- C. Alignment of Markings. The markings shall be straight or of uniform curvature and shall conform uniformly to tangents, curves, and transitions. Symbols shall be of dimensions shown in the SCMUTCD. Markings shall be of the dimensions as shown on the Pavement Marking Plans or as directed by the Engineer. The Contractor shall provide, at his own expense, sufficient control points to serve as guides for the application of markings. The finished line markings shall be free from waviness and the lateral deviations shall not exceed 2 inches in 15 feet. Any greater deviation shall be sufficient cause for requiring the Contractor to remove and correct such markings at his own expense. The Contractor shall also be required to remove and correct, at his expense, any symbol markings not meeting the dimensional requirements shown in the SCMUTCD.
- D. Application Restrictions. Unless otherwise permitted by the Engineer, no markings shall be applied to areas of pavement when any of the following conditions are present:
  - 1. Any moisture or foreign matter is present on the surface.
  - 2. The air temperature is below 50°F.
  - 3. The relative humidity is above 85%.The Engineer may waive the temperature and humidity requirements on newly placed pavement when markings are immediately required for safe conduct of traffic.
- E. Hours of Operation. Marking operations shall be conducted only during daylight hours, unless nighttime operations are required by the contract. All markings shall be sufficiently dry before opening to traffic.
- F. Rate of Application. The wet film thickness for all markings shall be 15 mils. Place glass beads at a minimum rate of 6 pounds per gallon of paint.

**END OF SECTION**

Bid Number ADMIN 10-001

**BIDDER'S AFFIDAVIT**

**(This Affidavit is Part of the BID)**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

Being duly sworn, deposes and says that he resides at \_\_\_\_\_

\_\_\_\_\_

That he is the \_\_\_\_\_  
(Give Title)

who signed the above Proposal or BID, that he was duly authorized to sign, and that the BID is the true offer of the BIDDER and that all the declarations and statements contained in the BID are true to the best of their knowledge and belief.

\_\_\_\_\_  
(Affiant)

Subscribed and Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Notary Public)

My Commission Expires \_\_\_\_\_, 20\_\_\_\_\_.

(SEAL)

**FORM OF NONCOLLUSION AFFIDAVIT**

**(This Affidavit is Part of BID)**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that he

is \_\_\_\_\_ (Sole owner, a partner, president, secretary, etc.)

of \_\_\_\_\_ the party making the foregoing Proposal or, BID that such BID is genuine and not collusive or sham; that said BIDDER has not colluded, conspired, connived, or agreed, directly or indirectly, with any BIDDER or person, to put in a sham BID, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the Bid Price of Affiant or any other BIDDER, or to fix any overhead, profit or cost element of said Bid Price, or of that of any other BIDDER, or to secure any advantage against OWNER by any person interested in the proposed Contract; and that all statements in said Proposal or Bid are true; and further, that such BIDDER has not, directly or indirectly submitted this BID, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

\_\_\_\_\_  
(Affiant)

Sworn to and Subscribed Before Me This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
(Notary Public)

My Commission Expires \_\_\_\_\_, 20\_\_\_\_\_.

(SEAL)

NOTICE

UPON EXECUTION THIS DOCUMENT, EXCEPTIONS,  
SPECIAL TERMS AND CONDITIONS SHALL  
CONSTITUTE A BINDING CONTRACT

PLEASE READ "GENERAL INSTRUCTION TO BIDDERS",  
AND "SPECIAL INSTRUCTION TO BIDDERS" VERY THOROUGHLY.

**Bid Number** ADMIN 10-001

THIS AGREEMENT is dated as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year 2010 by and between the Town of Surfside Beach, Surfside Beach, South Carolina (hereinafter called OWNER) and \_\_\_\_\_ (hereinafter call CONTRACTOR).

OWNER and CONTRACTOR in consideration of the mutual covenants hereinafter set forth, agree as follows:

**ARTICLE 1. WORK**

CONTRACTOR shall complete all Work as specified or indicated in the bid specifications (page GS-1). The Work is generally described as follows:

**SURFIDE DRIVE STREETScape PROJECT**

**ARTICLE 2. REPRESENTATIVE**

The Project has been developed by:

**EARTHWORKS GROUP, INC.**  
Murrells Inlet, S. C.

Who are hereinafter called REPRESENTATIVES, and who is to act as OWNER'S representative, assume all duties and responsibilities and have the right and authority assigned to him in the Contract Documents in connection with completion of the Work in accordance with the Contract.

**ARTICLE 3. CONTRACT TIME**

The Work will be completed within 90 calendar days from the date when the Contract Time commences.

**ARTICLE 4. CONTRACT PRICE**

OWNER shall pay CONTRACTOR for the completed project in accordance with the Contract Documents in current funds.

**ARTICLE 5. PAYMENT PROCEDURES**

5.1 CONTRACTOR shall submit Applications for Payment to the owner's representative and once approved for Diana King, Finance Director, will process payment

5.2 Final Payment will be made upon final acceptance of the project.

**ARTICLE 6. CONTRACTOR'S REPRESENTATIVE**

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

- 6.1 CONTRACTOR has familiarized themselves with the nature and extent of the Contract Documents that in any manner may affect the cost of the Project.
- 6.2 CONTRACTOR has reviewed and checked all information and specifications shown or indicated in the Contract Documents with respect to compatibility of material specified, in order to furnish the Project at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.
- 6.3 CONTRACTOR has given the Town of Surfside Beach written notice of any and all conflicts, errors or discrepancies that they discovered in the Contract Documents, and the written resolution thereof is acceptable to the CONTRACTOR.

**ARTICLE 7. MISCELLANEOUS**

- 7.1 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, monies that may become due, and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 7.2 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

**ARTICLE 8. OTHER PROVISIONS.**

- 8.1 IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. On counterpart, each has been delivered to OWNER, CONTRACTOR. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by a Representative on their behalf.

This Agreement will be effective on \_\_\_\_\_

OWNER

CONTRACTOR

**Bid Number** ADMIN 10-001

TOWN OF SURFSIDE BEACH

By: \_\_\_\_\_  
Its: Town Administrator  
(Town's Seal)

By: \_\_\_\_\_  
It's: \_\_\_\_\_

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Address for giving Notices:

Address for giving Notices:

115 Highway 17 North

\_\_\_\_\_

Surfside Beach, South Carolina 29575

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