

DIVISION 15



SECTION 15100

TRAFFIC CONTROL PLAN

- 1.1 **PURPOSE:** The purpose of this section is to provide a plan for maintenance and control of traffic during work under this contract.

This section sets forth procedures that will permit traffic to pass through or around the project area safely and with a minimum of inconvenience.

- 2.1 **GENERAL:** These requirements are in addition to the SCDOT Standard Specifications setting forth certain specific procedures and do not relieve the Contractor of any responsibilities placed upon him by the SCDOT Standard Specifications.

All control devices shall conform to the South Carolina Manual on Uniform Traffic Control Devices, latest edition (hereinafter referred to as - SCMUTCD) unless Engineer gives authorization in writing to do otherwise.

This work shall consist of the furnishing, installation, maintenance, relocation and removal of signs, traffic cones, barrels, barricades, warning lights, flaggers, removal of conflicting pavement marking lines, and other traffic control devices which are used for the purpose of regulating, warning, or directing traffic during construction of the project. It shall also include temporary concrete barrier and crash cushions and other devices if specified in the Drawings. Pavement markings shall also be the responsibility of the Contractor. All items shall remain the property of the Contractor unless otherwise specified in the Drawings or Contract Documents.

1. Specific reference is made to Subsection 107.11 of the SCDOT Standard Specifications - Barricades, Warning and Detour Signs, which is expanded or modified as follows:
 1. Any construction being performed adjacent to the traveled lanes shall be adequately marked by lights or barricades, or both, as shown in the SCMUTCD.
 2. The Contractor performing the work shall be responsible for the erection and maintenance of all traffic control devices during construction as required in the SCMUTCD.
 3. All reflecting materials used on traffic control devices shall conform to the South Carolina Department of Transportation Specifications for Reflective Sheeting. All signs, barrels, barricades, and other traffic control devices used on this project are to be covered with Type III Reflective Sheeting, unless otherwise specified in the Contract Documents or SCDOT Encroachment Agreement. The background material for the signs is to be constructed of either aluminum or steel. Aluminum is to meet the requirements of SCDOT Specifications for Flat Sheet Aluminum Sign Blanks, latest edition. The steel blank shall be made of 14 Gauge materials.

No splices will be permitted in reflective sheeting, except for signs that cannot be covered with a single piece of the widest material available from the sheeting manufacturer. Only one splice is permitted per sign and it shall be on a centerline of the sign. Splices shall overlap not less than 3/16" except butt splices may be used on signs processed with transparent colors, with a gap not greater than 1/32" allowed. In

horizontal overlapped splices, the top portion shall overlap the bottom portion, as viewed when the sign is in an upright position. No screening paints are permitted between the sheeting of overlapped splices. When splicing is done, the reflective sheeting must be carefully matched for color to provide uniform appearance both day and night.

4. All signs and barricades shall be mounted on supports constructed to yield upon impact to minimize hazards to motorists, as indicated in Section 5-2.04 if SC MUTCD.
5. Barrels or drums used for traffic control shall be constructed of a plastic material. Metal barrels or drums will not be allowed.
6. When not in use, all barricades, signs, or other traffic control devices shall be either masked or removed and faced so as not to confuse the traveling public.
7. The Contractor shall maintain all signals and other traffic control channeling devices 24 hours a day. Contractor's personnel shall be available to maintain all traffic control devices as needed. All signs and other traffic control and channeling devices shall be kept clean, aligned and in good repair at all times during their use.
8. The Contractor shall provide all pavement markings - temporary and permanent markings. Temporary markings are markings that are required during construction due to the following reasons:
 1. Asphalt mixtures covering existing markings.
 2. Changes in traffic patterns.
 3. Changes in alignment due to relocations.
 4. Maintenance and replacement of any existing markings which have lost their reflectivity or have become damaged during construction.

Permanent markings are placed on the final surface (including relocations) when the traffic pattern will no longer be changed. When a road is resurfaced, pavement markings are to be applied after each application of asphalt mix, and bituminous surface treatment including the final course.

Pavement Markings - temporary and permanent - will include but not be limited to lanes lines, no passing zone markings, edge lines and any transverse lines, and are to be in place at the end of each days' work.

When a road is widened, the Contractor is to provide all markings, temporary and permanent, necessitated by the widening including, but not limited to, all lane lines, median edge lines (solid and skip) and solid edge lines.

Temporary pavement markings shall use "3 Min. Paint" and Specifications for "3 Min. Paint" are available from the Research and Materials Laboratory, SCDOT, Shop Road.

All temporary painted lines are to be applied at a wet film thickness of 15 mils ∇ 1 mils and are to have glass beads applied at 6 lbs. Per gallon of binder. Before applying the painted lines, the roadway surface is to be cleaned by sweeping to

assure a clean surface for the application of the paint. Permanent markings will be thermoplastic.

The lines are to be of the width and length prescribed by the SCMUTCD and/or the Engineer. Dashed lines are to be 4 inches wide by 10 feet long with a 30 foot gap.

Edge lines are normally solid and 4 inches wide. No passing zone markings are to be provided in accordance with procedures prescribed in the SCMUTCD.

The contractor shall follow standard practices in applying paint to insure that a straight line with true edges and a clean cut is obtained.

2. The Contractor shall be responsible for and shall furnish flaggers, appropriately equipped and instructed, when required to regulate the flow of vehicular traffic around and through the project during the prosecution of the work. Flaggers are to use a STOP/SLOW paddle. The use of the flags will NOT be permitted.
3. The Engineer reserves the right to restrict construction operations and/or lane closures when the continuance of the work and/or lane closures would seriously hinder normal traffic flow during holidays, extended holiday periods weekends, special events or at other times when traffic is unusually heavy. Where specified on the Drawings, streets with high volume of traffic are not to be blocked or lanes closed during specified periods.
4. On roadways open to public travel, the Contractor's trucks and other vehicles will be required to travel in the direction of the normal roadway traffic. When the equipment is not in use, on roadways open to public travel, the Contractor's equipment or vehicles shall be parked well away from the travel lanes so as to lessen the possibility of the equipment being hit by a vehicle. If protection devices are in place such as guardrail or concrete barriers, the equipment can be parked closer to the travel lanes.
5. When working adjacent to or over travel lanes, the Contractor shall insure that dust and other debris from his operation does not endanger normal traffic operations.
6. The contractor shall schedule and arrange his work, equipment and materials to insure the least inconvenience and the utmost in safety to the traveling public and to the Contractor's and the Department's forces.
7. Any existing permanent signs in conflict with any shift or change in traffic patterns or lanes shall be masked, removed or covered and appropriate temporary signing shall be installed by the Contractor to the satisfaction of the Engineer. When the conflict is removed, the Contractor shall immediately re-erect or replace the previously existing permanent signs.
8. Where a specific condition is not covered in the Contract Documents, prior to beginning such work causing the condition, a plan of traffic control shall be agreed upon between the Contractor and the Engineer.
9. All construction signs, whether portable or with supports embedded in earth, are to be leveled and have a mounting height as specified in the SCMUTCD. Mounting height is defined as the distance from bottom edge of the lowest sign to edge of traveled way.

10. When any lane on a multi-lane road is closed for any duration, the Contractor shall provide a large flashing arrow-board sign. The flashing arrow shall be used at the beginning of the taper for a lane closure. One may also be required in front of the construction as specified in the SC MUTCD.
11. In order to provide for the safe movement of traffic, during the rough grading operation, the earth adjacent to the existing pavement to be retained and widened shall be excavated in such a manner so as to maintain a slope no steeper than 6:1 away from the edge of the existing pavement until the fine grading operation is commenced.

END OF SECTION

SECTION 15200

REMOVAL SALVAGE AND DISPOSAL OF EQUIPMENT AND MATERIALS

1.01 **DESCRIPTION** - This section consists of the Removal and Salvage or the Removal and Disposal of equipment and materials, during the construction of this project. Construction includes new installations, and the modification, or removal of existing pump stations equipment.

A. **GENERAL**

1. **Removal and Salvage**

These items are to be carefully removed from the job site, salvaged, and returned to the Owner. The items of major equipment to be salvaged are listed on the Drawings. The Contractor shall deliver, (and obtain a RECEIPT for), the salvaged equipment, to:

City of Myrtle Beach
Department of Public Works ("Sewer Department")
3210 Mr. Joe White Avenue

2. **Disposal**

Material NOT to be salvaged shall be removed from the job site, become the property of the Contractor; and should be properly disposed by the Contractor, at an APPROVED LAND FILL (or material reclamation yard). Any materials designated as HAZARDOUS WASTE shall be disposed in accordance with regulations enforced by the SC Department of Health and Environmental Control (DHEC), Bureau of Solid and HAZARDOUS Waste; (803)734-5000 for information.

3. **Inspection**

Removal and disposal quantities will not be measured as pay items, but shall be included in the lump sum bid for Removal, Salvage, and Disposal. FINAL ACCEPTANCE and Final Payment will be withheld, if the Contractor has not removed unneeded equipment from the job site, and if the Contractor cannot present RECEIPTS from the Owner showing that the salvaged equipment has been delivered to the Owner as specified.

4. **Holes**

Every hole caused by removing old equipment shall be filled or covered up the same day for safety.

2.01 METHOD OF MEASUREMENT

The Removal, Salvage, and Disposal of traffic signal materials and related equipment, will not be measured but shall be paid as a Lump Sum item covering all intersections named in the Contract. The related costs of transportation, disposal, concrete, pavement repair, will not be measured for payment, but shall be included in the bid price of Removal, Salvage, and Disposal.

END OF SECTION