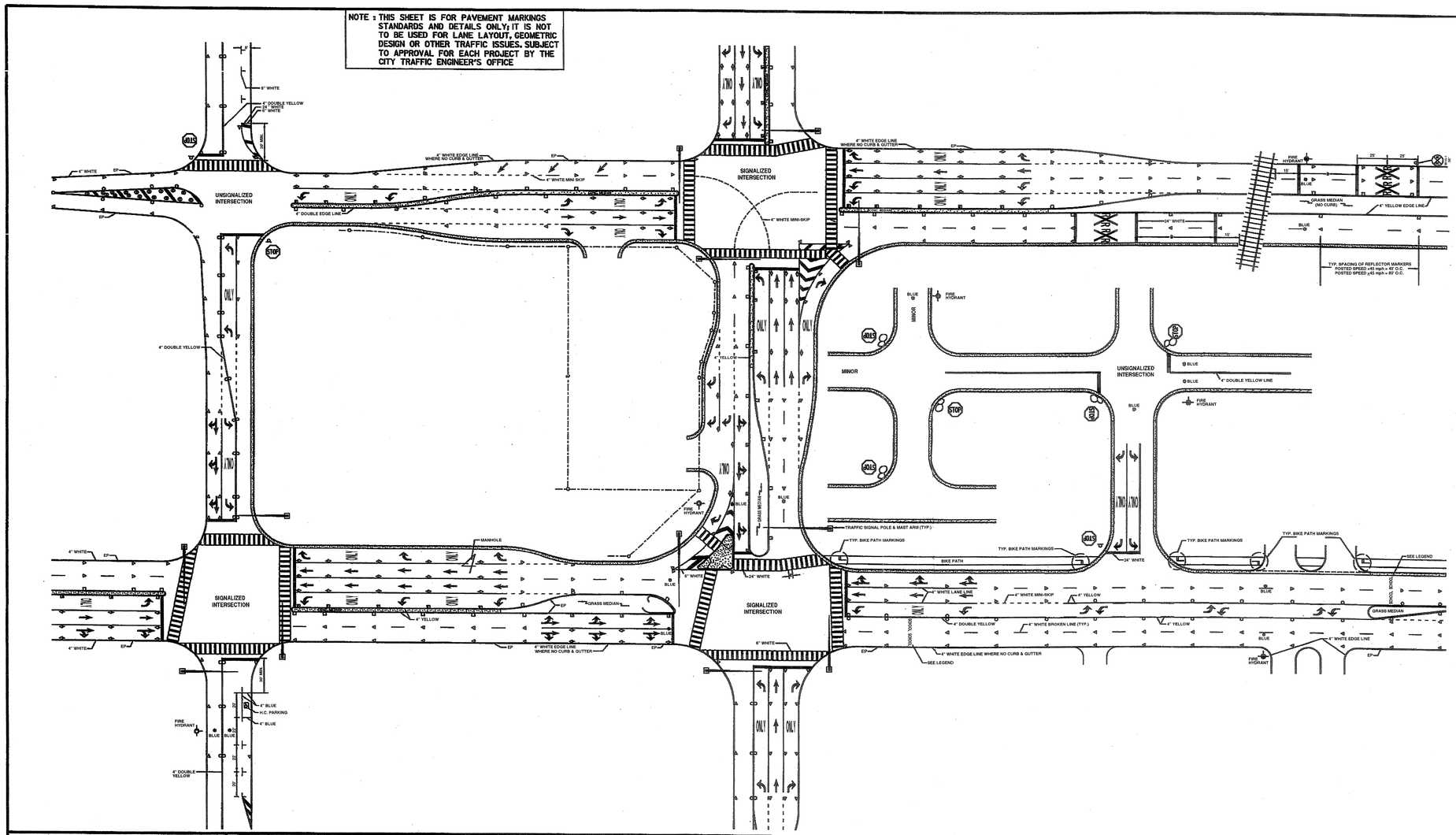
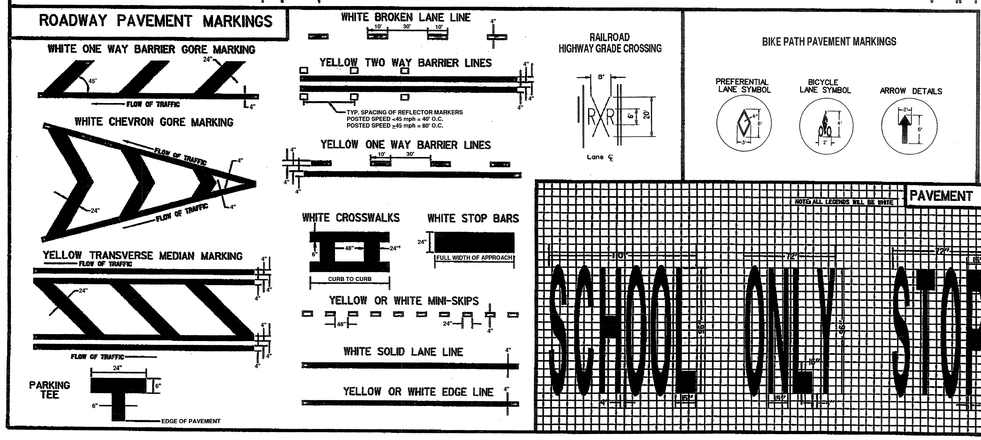
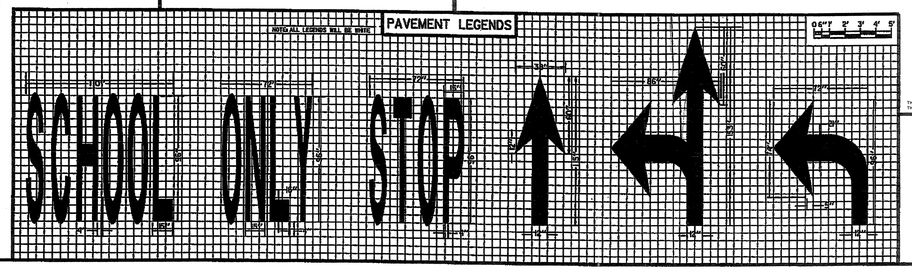
NOTE : THIS SHEET IS FOR PAVEMENT MARKINGS STANDARDS AND DETAILS ONLY; IT IS NOT TO BE USED FOR LANE LAYOUT, GEOMETRIC DESIGN OR OTHER TRAFFIC ISSUES. SUBJECT TO APPROVAL FOR EACH PROJECT BY THE CITY TRAFFIC ENGINEER'S OFFICE



ROADWAY PAVEMENT MARKINGS





THIS DOCUMENT HAS BEEN USED WITH THE PERMISSION OF THE CITY OF VIRGINIA BEACH DEPARTMENT OF PUBLIC WORKS.

COMMONWEALTH OF VIRGINIA
8/30/07
ROBERT E. LEWIS
Lic. No. 0443[illegible]
PROFESSIONAL ENGINEER

CITY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS

PAVEMENT MARKING STANDARDS & DETAILS

City of Suffolk Pavement Marking Standards

Pavement Markings and Markers

Scope: The purpose of these Specifications is to provide the minimum requirements of the City of Suffolk for any Pavement Marking activity that goes on in the Public Right of Way. It is to be in addition to the VDOT Road and Bridge Specifications. All references made to the VDOT Road and Bridge Specifications refer to the January 2002 edition.

Materials:
1. All Pavement Marking Materials (including paint, thermoplastic, and glass beads) shall conform to all VDOT Specifications.
2. Type A paint is only to be used by the direction of the office of the City Traffic Engineer.
3. ***Thermoplastic material shall be of alkyd base binder.***

Section I. Lane, Edge and Centerline Markings

1.1 White lane lines, either solid or skip lines will be 4" unless otherwise stated in plans.
1.2 Lane lines on an approach to a signalized intersection will be solid white for a distance of not less than 150' measured from Stop Bar or equal to the length of the Solid Lane Lines, for adjacent auxiliary (Right and or Left Turn Lane Lines).
1.3 Lane Lines that delineate the edge of the Turn Lane will be 4" Solid white lines and they will continue continuously from the beginning of the full width of the turn lane to the Stop Bar. Mini Skips will be extended from the lane line to the end of the transition.
1.4 Edge Lines, when noted on the plan will be solid white lines 4" wide, but solid yellow lines are to be used when adjacent to a median which separates opposing directions of vehicular traffic. Edge Lines are not to be used with curb and gutter on the outside lane.
1.5 Centerlines on an undivided highway will be solid double yellow lines 4" wide separated by a 4" space.
1.6 On minor approaches to an arterial or collector, lane lines, edge lines, and or centerlines will be extended a minimum distance of 150' from the Stop Bar.

Section II. Crosswalks

2.1 Crosswalk Lines will be solid white lines, 6" wide, marking both edges of the crosswalk area.
2.2 Crosswalk Lines will extend from edge of pavement to edge of pavement or edge of shoulder as possible.
2.3 Lines forming a crosswalk will be parallel.
2.4 The width of a crosswalk will be 8', measuring from center of 6" line to center of 6" line. In heavy traffic areas crosswalks will be 10' in width.
2.5 In heavy traffic areas outside of the Downtown business area, crosswalks will have 2' wide consecutive white rectangles that will cover the entire width of the crosswalk perpendicular to the 6" white lines, spacing will be approximately 6' on center. They will be located so as to avoid normal wheel paths.

Section III. Median Markings

3.1 Center Lane Left Turn Only (Two way left turn lanes or Suicide Lanes) will consist of two sets of one way barrier lines. 10' broken yellow lines with 30' space will be located inside Solid yellow lines.
3.2 Transverse median markings will consist of 2' yellow lines.

Section IV. Gore Markings

4.1 Markings will consist of 2' solid white or yellow transverse lines. Spaced as required by note #3 in Section 4.
4.2 Chevrons will be used when specified in approved plans.
4.3 2' Median, Gore, and Chevron markings will be spaced according to the posted speed limits as follows:

Spacing will match Posted speed limit up to a maximum spacing of 35'.

Section V. Stop Bars

5.1 Two feet wide solid white stop bars will completely transverse all traffic lanes on each approach at a signalized intersection, or approaches to an intersection with a "Stop" Sign control at major collectors and arterial roadways.
5.2 Stop Bars will be located at a minimum of 4' in advance of a crosswalk, unless otherwise specified on an approved plan.

Section VI. Pavement Legends

6.1 Legends will be transversely aligned across each lane, the distance between the arrow symbol and the Stop Bar will be 8'
6.2 Arrows and Legends will not be placed prior to the Solid White Lane Lines.
6.3 Word Messages will be located in advance of its accompanying symbol by a distance of not less than 32', nor more than 80' from the symbol. After the 5th legend in a turn lane the spacing between legends may go to 100' maximum.
6.4 For Auxiliary Right and or Left turn Lanes on all approaches, legends will be centered within the lane. They will continue the length of the lane beginning and ending with a symbol. Thru lanes will not be installed on an uncontrolled thru street at intersection without a signal
6.5 Merge Arrows will be spaced according to the posted Speed Limit as follows:

a. Posted Speed <35 mph=80'
b. Posted Speed >35mph =120'

Section VII. Bicycle Lanes

7.1 Pavement markings consisting of arrow, bicycle and preferential lane symbols shall be placed at the beginning of the bicycle lane at right turn lanes. They shall also be placed at the end of the bicycle lane at right turn lanes if the solid white line separating the bicycle lane from the right turn lane is greater then 100' in length.
7.2 Bicycle lane symbols shall be placed a maximum of 500' apart.
7.3 The bicycle lane stripe shall be 4 feet from the edge of pavement on roads with curb & gutter unless otherwise noted on the plans ors existing markings indicate otherwise.
7.4 The bicycle lane stripe shall be 5 feet from the face of curb on roadways without a gutter pan unless otherwise noted on the plans or existing markings indicate otherwise.

Section VIII. Parking Space Markings

8.1 All on street Parking Spaces will be a minimum of 20' long and a minimum of 8' wide.
8.2 All Parking Spaces will be marked with 6" lines.

Section IX. General Notes

9.1 Installation and Materials for all Pavement Markings and Legends will be in accordance with the City of Suffolk Department of Public Works/Traffic Engineering Division Specifications set forth in this document unless otherwise stated on the plans or in contract documents.
9.2 The contractor will note all special provisions cf the contract specifically with the regard to Rate of Application, Maintenance of Traffic, Restricted
9.3 Working Hours, and or Restricted Weather Conditions.
The Contractor will remove all previous Pavement Markings which in the opinion of the engineer will conflict with the new Pavement Markings. All eradication will be in conformance with the VDOT Specifications.
9.4 Before any markings will be applied in the Right of Way, the City Traffic Engineer's office must be notified 72 hours in advance. If this office is not notified and the markings do not meet with what the City Traffic Engineer's office considers proper, the markings will be eradicated and replaced at the sole expense of the contractor.
9.5 No Pavement Markings will be applied until 24 hours after rainfall, unless otherwise directed by the City Traffic Engineer's office.
9.6 Snow Plowable Pavement Markers will be installed only by direction of the City Traffic Engineer's office.
9.7 Only Alkyd Based Thermoplastic is to be used unless otherwise directed by the City Traffic Engineer's Office.
9.8 All pavement markings installed in the City's Right of Way, whether "Temporary or Permanent" will contain glass beads.