INDEX OF SHEETS

<table>
<thead>
<tr>
<th>SHEET NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TITLE SHEET</td>
</tr>
<tr>
<td>2</td>
<td>LOCATION MAP</td>
</tr>
<tr>
<td>3</td>
<td>INDEX OF SHEETS</td>
</tr>
<tr>
<td>4</td>
<td>RIGHT OF WAY DATA SHEET</td>
</tr>
<tr>
<td>5</td>
<td>REVISION DATA SHEET</td>
</tr>
<tr>
<td>6</td>
<td>SURVEY CONTROL DATA SHEET</td>
</tr>
<tr>
<td>7</td>
<td>CONSTRUCTION ALIGNMENT DATA SHEET</td>
</tr>
<tr>
<td>8</td>
<td>UNDERGROUND UTILITY TEST HOLE INFORMATION</td>
</tr>
<tr>
<td>9</td>
<td>TEMPORARY TRAFFIC CONTROL PLAN ITCC-GENERAL NOTES</td>
</tr>
<tr>
<td>10</td>
<td>TEMPORARY TRAFFIC CONTROL PLAN ITCC-PHASE 1</td>
</tr>
<tr>
<td>11</td>
<td>TEMPORARY TRAFFIC CONTROL PLAN ITCC-PHASE 2</td>
</tr>
<tr>
<td>12</td>
<td>TEMPORARY TRAFFIC CONTROL PLAN ITCC-PHASE 3</td>
</tr>
<tr>
<td>13</td>
<td>TEMPORARY TRAFFIC CONTROL PLAN ITCC-PHASE 4</td>
</tr>
<tr>
<td>14</td>
<td>DRAINAGE INSTALLATION PLAN-PHASE 1</td>
</tr>
<tr>
<td>15</td>
<td>DRAINAGE INSTALLATION PLAN-PHASE 2</td>
</tr>
<tr>
<td>16</td>
<td>DRAINAGE INSTALLATION PLAN-PHASE 3</td>
</tr>
<tr>
<td>17</td>
<td>DRAINAGE INSTALLATION PLAN-PHASE 4</td>
</tr>
<tr>
<td>18</td>
<td>DRAINAGE PROFILE SHEETS</td>
</tr>
<tr>
<td>19</td>
<td>PHASE SHEETS</td>
</tr>
<tr>
<td>20</td>
<td>EMERSON AND SEGMENT CONTROL PLANS (PHASES 1 &amp; 11)</td>
</tr>
<tr>
<td>21</td>
<td>STORM DRAINAGE PROFILE SHEETS</td>
</tr>
<tr>
<td>22</td>
<td>ENTRANCE PROFILE</td>
</tr>
<tr>
<td>23</td>
<td>SIGNAL PLANS</td>
</tr>
<tr>
<td>24</td>
<td>PAYMENT MARGINS AND SIGNING PLANS</td>
</tr>
</tbody>
</table>

TOTAL CROSS SECTION SHEETS 28 (SEE CROSS SECTION SHEET NUMBER 1 FOR INDEX OF SHEETS)
### Preliminary Right of Way Data Sheet

**Project Name:** Scrolls, Williamsburg, VA  
**State Route:** 640  
**State Route Project:** d11555301c.dgn  
**Plotted By:** jthompson  
**5:32:54 PM 11/12/2021**  
**Sheet No.:** 0641-076-301  
**R-201, C-501**  

**City/County:** PRINCE WILLIAM COUNTY  
**UPC No.:** 115553

**These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.**

#### Preliminary Right of Way Data Sheet

<table>
<thead>
<tr>
<th>Parcel No.</th>
<th>Landowner</th>
<th>Sheet No.</th>
<th>Area (Acres or Square Feet)</th>
<th>Fee Taking</th>
<th>Prescriptive Right</th>
<th>Fee Remainder</th>
<th>Easements</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>CNM OLD BRIDGE, LLC</td>
<td>3</td>
<td>1.8778 AC</td>
<td>825 SF</td>
<td>1.757 AC</td>
<td>632 SF</td>
<td>NO</td>
</tr>
<tr>
<td>002</td>
<td>MCN PLAINTIFFS, LLC</td>
<td>4</td>
<td>4.1752 AC</td>
<td>1519 SF</td>
<td>4.608 AC</td>
<td>1.134 SF</td>
<td>NO</td>
</tr>
<tr>
<td>003</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>5</td>
<td>5.00376 AC</td>
<td>1862 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>004</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>6</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>005</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>7</td>
<td>5.50376 AC</td>
<td>1862 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>006</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>8</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>007</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>9</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>008</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>10</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>009</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>11</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>010</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>12</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>011</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>13</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>012</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>14</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
<tr>
<td>013</td>
<td>MCC PLAINTIFFS, LLC</td>
<td>15</td>
<td>4.7435 AC</td>
<td>1705 SF</td>
<td>5.464 AC</td>
<td>0.32 SF</td>
<td>NO</td>
</tr>
</tbody>
</table>

* Early Acquisition - Total Take

---

**60% Plans**

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.

---

* Early Acquisition - Total Take
### REVISION DATA SHEET

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Project</th>
<th>Sheet Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>641</td>
<td>VA</td>
<td>11/12/2021</td>
</tr>
</tbody>
</table>

#### DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC

MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

---

**JMT, SEPTEMBER 2020**

**SURVEYED BY, DATE**

**DESIGN BY JMT (703) 464-7369**

**SUBSURFACE UTILITY BY, DATE**

**PROJECT MANAGER SHERRY DJOUHARIAN (703) 792-6822**

---

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.

---

**60% PLANS**

---

**UPC Number: 115553**

---

**Federal Project:** STP-5B01(129)

**State Project:** 0641-076-301, R-201, C-501

**From:** 0.085 MI. EAST OF RTE. 253

**To:** 0.104 MI. WEST OF RTE. 253

---

**LIC. Number:** 115553
# CONSTRUCTION ALIGNMENT DATA SHEET

## OLD BRIDGE ROAD ALIGNMENT

<table>
<thead>
<tr>
<th>Station</th>
<th>Northing</th>
<th>Easting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0+0000</td>
<td>6930842.034</td>
<td>11837758.037</td>
</tr>
<tr>
<td>0+1373</td>
<td>6930873.932</td>
<td>11837794.359</td>
</tr>
</tbody>
</table>

## ENTRANCE ALIGNMENT

<table>
<thead>
<tr>
<th>Station</th>
<th>Northing</th>
<th>Easting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0+0000</td>
<td>6930710.948</td>
<td>11837983.022</td>
</tr>
<tr>
<td>0+4000</td>
<td>6931188.895</td>
<td>11837994.254</td>
</tr>
</tbody>
</table>

## OCCIDENTAL ROAD ALIGNMENT

<table>
<thead>
<tr>
<th>Station</th>
<th>Northing</th>
<th>Easting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0+0000</td>
<td>6930842.034</td>
<td>11837758.037</td>
</tr>
<tr>
<td>0+1373</td>
<td>6930873.932</td>
<td>11837794.359</td>
</tr>
</tbody>
</table>

---

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.

60% Plans

Plotted By: jthompson

*Sheet NO.*

*STATE*

*VA.*

*R-201, C-501*

*Project Name: O-640*
### Underground Utilities Test Hole Information

<table>
<thead>
<tr>
<th>PLAN SHEET</th>
<th>SHEET</th>
<th>DISTANCE (FEET)</th>
<th>STATION &amp; ROADWAY</th>
<th>OWNER</th>
<th>TYPE OF FACILITY</th>
<th>REMARKS</th>
<th>UTILITY (5)</th>
<th>CONFLICT (3)</th>
<th>ELEV. (2)</th>
<th>OWNER (4)</th>
<th>TYPE OF FACILITY</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

1. All test holes are referenced from the survey baseline unless otherwise noted.
2. Elevations shown herein are to the top of the facility unless otherwise noted.
3. YES = NO indicates no direct conflict. Removal or clearing may be less than acceptable to utility owner.
4. REMARKS TO INCLUDE CLEARANCE DIMENSIONS REGARDLESS OF DISTANCES.
5. YES = NO, INFORMATION TO BE PROVIDED BY THE VDOT DISTRICT UTILITY ENGINEER.

---

### 60% Plans

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
TRANSPORTATION MANAGEMENT PLAN NOTES

GENERAL NOTES

1. If set off the view of the public, lane closures, detours, and signs must be posted in accordance with the Federal Highway Administration's "Guidelines for the Control of Traffic and Pockets of Traffic".

2. The contractor shall submit revised traffic control plans to the Engineer for approval prior to the start of construction and for the duration of the project.

3. The contractor shall maintain an adequate supply of traffic control devices and personnel.

4. The contractor shall ensure that all traffic control devices are in proper working order.

5. The contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC COMMUNICATIONS

1. The Contractor shall be responsible for notifying all affected entities of the construction activities.

2. The Contractor shall provide all necessary information regarding traffic control measures.

3. The Contractor shall maintain a clear and accessible public communication plan.

4. The Contractor shall ensure that all public notices are posted in a location visible to the public.

5. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

6. The Contractor shall ensure that all public notices are in accordance with the applicable traffic control regulations.

TYPICAL TRAFFIC CONTROL

1. The Contractor shall ensure that all traffic control devices are in proper working order.

2. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

3. The Contractor shall ensure that all public notices are posted in a location visible to the public.

4. The Contractor shall maintain a clear and accessible public communication plan.

5. The Contractor shall provide all necessary information regarding traffic control measures.

SEQUENCE OF CONSTRUCTION

1. The Contractor shall submit revised traffic control plans to the Engineer for approval prior to the start of construction.

2. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

3. The Contractor shall maintain a clear and accessible public communication plan.

4. The Contractor shall provide all necessary information regarding traffic control measures.

5. The Contractor shall ensure that all traffic control devices are in proper working order.

6. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC INSTALLATION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC CONTROL

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADJUSTMENT

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC INCREASE

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC DECREASE

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC CLOSURE

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADOPTION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC INSTALLATION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADJUSTMENT

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC CLOSURE

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADOPTION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC INSTALLATION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADJUSTMENT

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC CLOSURE

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.

PUBLIC ADOPTION

1. The Contractor shall coordinate with local authorities to ensure that the public is informed of any changes to the traffic control plans.

2. The Contractor shall maintain a clear and accessible public communication plan.

3. The Contractor shall provide all necessary information regarding traffic control measures.

4. The Contractor shall ensure that all traffic control devices are in proper working order.

5. The Contractor shall notify the Engineer of any changes to the traffic control plans.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 1

TEMPORARY PAVEMENT MARKING LEGEND

1. TYPE A, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
2. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH
3. TYPE A, WHITE PAVEMENT LINE MARKING, 6" WIDTH
4. TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
5. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
6. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)
7. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH
8. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH
9. TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
10. TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 24" WIDTH
11. TYPE A, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)
12. TYPE A, PAVEMENT SYMBOL MARKING, (DOUBLE TURN ARROW THRU/LT OR RT)
13. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (45 DEGREES, 20' SPACE)
14. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)
15. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (45 DEGREES, 20' SPACE, 300' GAP)
16. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
17. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (10' LINE, 3' SPACE)
18. TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH

LEGEND

1. DENOTES CONSTRUCTION THIS STAGE
2. DENOTES CONSTRUCTION PREVIOUS STAGE
3. DENOTES GROUP 2 CHANNELIZING DEVICES
4. DENOTES CONSTRUCTION DURING SHORT-TERM LANE CLOSURES
5. DENOTES CONSTRUCTION PROXIMATE STAGE
6. DENOTES GROUP 3 CHARMING DEVICES

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
1. Install proposed storm sewer system along Occoquan Road outfalling at Str. 6-3 from the downstream end working upstream to Str. 4-6, prior to any excavation activities.

2. For the installation of the pipe between Str. 6-1 and 6-2, install at night closing one lane at a time for a staged installation, using flaggers. Excavate trench and install a portion of pipe, then place steel plate over open trench at completion of work that night. Once entire pipe is installed, backfill trench. All work to be done at night.

3. Upon installation of proposed storm sewer system, remove existing drainage structures and system outfalling along Occoquan Road at Sta. 104+25, Lt of CL, make the appropriate pipe connections to the existing inlet along Old Bridge Road at Sta. 3-20, Lt of CL, so that the proposed system is functional.

4. Maintain short-term lane closures to construct Westbound Old Bridge Rd. from Sta. 104+4 to Sta. 106+86.
DRAINAGE INSTALLATION PLAN

SEQUENCE OF CONSTRUCTION

1. Install proposed storm sewer system along Occoquan Road outfalling at Str. 6-3 from the downstream end and working upstream to Str. 4-6, prior to any excavation activities.

2. For the installation of the pipe between Str. 6-1 and 6-2, install at night closing one lane at a time for a staged installation, using flaggers. Excavate trench and install a portion of pipe, then place steel plate over open trench at completion of work that night. Once entire pipe is installed, backfill trench. All work to be done at night.

3. Upon installation of proposed storm sewer system, remove existing drainage structures and system outfalling along Occoquan Road at Sta. 202+75, Lt of CL, and make the appropriate pipe connections to the existing inlet along Old Bridge Road at Sta. 104+29, Lt of CL so that the proposed system is functional.

Sequence of Construction

STAGE 1

Maintain short term lane closures to construct Westbound Old Bridge Rd from Sta. 104+29 to Sta. 106+86.

LEGEND

- Denotes Construction This Stage
- Denotes Construction Previous Stage
- Denotes Group 2 Channelizing Devices

60% PLANS

These Plans are Unfinished and Unapproved and are Not to Be Used for Any Type of Construction or the Acquisition of Right of Way.
DRAINAGE INSTALLATION PLAN
STAGE 1

SEQUENCE OF CONSTRUCTION

1. Install proposed storm sewer system along Occoquan Road outfalling at Stn. 6-3
   from the downstream and working upstream to Stn. 4-6, prior to any excavation activities.
2. For the installation of the pipe between Stn. 6-4 and 6-2, install at night closing one lane at
   a time for a staged installation using flaggers. Excavate trench and install a portion of pipe,
   then place steel plates over open trench at completion of work that night. Once entire pipe is
   installed, backfill trench. All work to be done at night.
3. Upon installation of proposed storm sewer system, remove existing drainage structures
   and system outfalling along Occoquan Road at Stn. 202-75, Li of CL, and make the appropriate
   pipe connections to the existing inlet along Old Bridge Road at Stn. 104-25, Li of CL, so that the
   proposed system is functional.
4. Maintain short-term lane closures to construct Westbound Old Bridge Rd from Stn. 104-29
   to Stn. 106-86.

60% PLANS
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 1

TEMPORARY PAVEMENT MARKING LEGEND

- Type A: White Pavement Line Marking, 4" Width
- Type B: White Pavement Line Marking, 6" Width
- Type C: Yellow Pavement Line Marking, 4" Width
- Type D: Class VI: Yellow Pavement Line Marking, 6" Width
- Type E: White Pavement Line Marking, 4" Width (10' line, 30' space)
- Type F: White Pavement Line Marking, 4" Width (10' line, 30' space, 300' gap)
- Type G: White Pavement Line Marking, 24" Width, 1/2" Line, 6" Space
- Type H: Yellow Pavement Line Marking, 24" Width, 1/2" Line, 6" Space
- Type I: White Pavement Symbol Marking, Single Turn Arrow Left or Right
- Type J: White Pavement Symbol Marking, Double Turn Arrow Left or Right

LEGEND
- Denotes construction this stage
- Denotes construction during short term lane closures
- Denotes construction previous stage
- Denotes group 2 channelizing devices

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
SEQUENCE OF CONSTRUCTION

1. Install proposed storm sewer system along Occoquan Road outfalling at Str.6-3
   From the downstream and working upstream to Str. 4-6 prior to any excavation activities.

2. For the installation of the pipe between Str. 6-1 and 6-2, install at night closing one lane at a time for a staged installation, using flaggers. Excavate trench and install a portion of pipe, then place steel plate over open trench at completion of work that night. Once entire pipe is installed, backfill trench. All work to be done at night.

3. Upon installation of proposed storm sewer system, remove existing drainage structures and system outfalling along Occoquan Road at Sta. 202+75, Lt of CL, and make the appropriate pipe connections to the existing inlet along Old Bridge Road at Sta. 104+25, Lt of CL, so that the proposed system is functional.

4. Maintain short-term lane closures to construct Westbound Old Bridge Rd from Sta. 104+29 to Sta.106+86,

LEGEND

- Denotes construction this stage
- Denotes construction during short-term lane closures
- Denotes construction previous stage
- Denotes group 2 channelizing devices

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TEMPORARY PAVEMENT MARKING LEGEND

TYPE A, YELLOW PAVEMENT LINE MARKING, 4" WIDTH

TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH

TYPE A, WHITE PAVEMENT LINE MARKING, 6" WIDTH

TYPE A, PAVEMENT SYMBOL MARKING, (DOUBLE TURN ARROW THRU/LT OR RT)

TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)

TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)

TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH

TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH. CONTRAST

TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH. CONTRAST

TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (45 DEGREES, 20' SPACE)

TYPE A, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)

TYPE A, WHITE, 24' WIDTH (10' LINE, 3' SPACE)

TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST

TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)

TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST (45 DEGREES, 20' SPACE, 300' GAP)

TYPE A, YELLOW PAVEMENT LINE MARKING, 24" WIDTH, (45 DEGREES, 20' SPACE, 300' GAP)
SEQUENCE OF CONSTRUCTION

1. Remove existing storm sewer system along Old Bridge Road between Str. 108-25, U of CL, and Sta. 100-00, R of CL.
2. Install proposed storm sewer system along Old Bridge Road between Str. 5-4 and Str. 5-3 and tie into existing storm sewer system. Maintain flow through system.
3. Install remainder of proposed storm sewer system from Str. 5-5 to Str. 5-4.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm sewer system along Old Bridge Road between Sta. 108+25, Lt of CL, and Sta. 110+00, Rt of CL.
2. Install proposed storm sewer system along Old Bridge Road between Str. 5-4 and Str. 5-3 and tie into existing storm sewer system. Maintain flow through system.
3. Install remainder of proposed storm sewer system from Str. 5-3 to Str. 5-4.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 2

TEMPORARY PAVEMENT MARKING LEGEND

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>White Painted Line, 4&quot; Width</td>
<td>Denotes Construction This Stage</td>
</tr>
<tr>
<td>B</td>
<td>White Painted Line, 6&quot; Width</td>
<td>Denotes Construction Previous Stage</td>
</tr>
<tr>
<td>C</td>
<td>Yellow Painted Line, 4&quot; Width</td>
<td>Denotes Construction This Stage</td>
</tr>
<tr>
<td>D</td>
<td>Yellow Painted Line, 24&quot; Width</td>
<td>Denotes Construction Previous Stage</td>
</tr>
<tr>
<td>E</td>
<td>White Painted Line, 24&quot; Width (45 degrees)</td>
<td>Denotes Construction Previous Stage</td>
</tr>
<tr>
<td>F</td>
<td>White Painted Line, 12&quot; Width (60 degrees)</td>
<td>Denotes Construction Previous Stage</td>
</tr>
</tbody>
</table>

LEGEND

- □□□□□ Denotes Construction This Stage
- ■■■■■ Denotes Construction Previous Stage
- ●●●●● Denotes Group 2 Channelizing Devices

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

SCALE: 25' = 1 H (9)
DRAINAGE INSTALLATION PLAN
STAGE 2

SEQUENCE OF CONSTRUCTION

1. Remove existing storm sewer system along Old Bridge Road between Sta.108+25.17 of CL, and Sta.110+00, Rt of CL.
2. Install proposed storm sewer system along Old Bridge Road between Str. 5-4 and Str. 5-3 and tie into existing storm sewer system. Maintain flow through system.
3. Install remainder of proposed storm sewer system from Str. 5-5 to Str. 5-4.

LEGEND

- Pipe to be removed
- Pipe to be cleaned out
- Structure to be removed
- Structure to be cleaned out

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 2

TEMPORARY PAVEMENT MARKING LEGEND

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm sewer system along Old Bridge Road between Sta.108+25.41 of CI, and Sta.100+00.43 of CI.
2. Install proposed storm sewer system along Old Bridge Road between Sta.5+4 and Sta.5+3 and tie into existing storm sewer system, Maintain flow through system.
3. Install remainder of proposed storm sewer system from Sta.5+5 to Sta.5+4.

LEGEND

- Denotes Construction This Stage
- Denotes Construction During Short-term Lane Closures
- Denotes Construction Previous Stage
- Denotes Group 2 Channelizing Devices

60% PLANS

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
TEMPORARY PAVEMENT MARKING LEGEND

- TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
- TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH (45 DEGREES, 20' SPACE)
- TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH (10' LINE, 3' SPACE)
- TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
- TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (2' LINE, 6' SPACE)
- TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH. CONTRAST
- TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH. CONTRAST
- TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)
- TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (45 DEGREES, 20' SPACE, 300' GAP)
- TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 24" WIDTH

TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 3
SEQUENCE OF CONSTRUCTION

1. Install storm sewer system between Str. 3-1 and 3-2 and cap proposed structures.
2. Install proposed drainage system between Str. 3-2 and Str. 4-1 and pipe to Str. 4-2; cap all installed structures and pipes.
3. Install storm sewer system between Str. 4-3 and 4-9. Install Str. 4-9 and connect to existing storm sewer system.
4. Install pipe under Occoquan Road between Str. 4-3 and 4-2 at night in phases. Close one lane at a time and excavate trench, install pipe in sections. Place steel plate on trench at the end of work each night. Once entire pipe is installed, backfill trench.
5. Install Str. 4-2 once pipe under Occoquan Road is installed and connect to storm sewer system between Str. 3-1 and Str. 4-2. Uncap pipes and make system functional.
6. Install Str. 3-2 and pipe between Str. 3-3 and Str. 3-2.
DRAINAGE INSTALLATION PLAN

SEQUENCE OF CONSTRUCTION

STAGE 3

1. Install storm sewer system between Str. 3-1 and 3-2 and cap proposed structures.
2. Install proposed drainage system between Str. 3-2 and Str. 4-1 and pipe to Str. 4-2; cap all installed structures and pipes.
3. Install storm sewer system between Str. 4-3 and 4-9. Install Str. 4-9 and connect to existing storm sewer system.
4. Install pipe under Occoquan Road between Str. 4-3 and 4-2 at night in phases. Close one lane at a time and excavate trench. Install pipe in sections. Place steel plate on trench at the end of work each night. Once entire pipe is installed, backfill trench.
5. Install Str. 4-2 once pipe under Occoquan Road is installed and connect to storm sewer system between Str. 3-1 and Str. 4-2. Uncap pipes and make system functional.
6. Install Str. 3-3 and pipe between Str. 3-3 and Str. 3-2.

LEGEND

- Denotes construction this stage
- Denotes construction previous stage
- Denotes group 2 channelizing devices

60% PLANS

These Plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 3

TEMPORARY PAVEMENT MARKING LEGEND

1. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH
2. TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
3. TYPE A, WHITE PAVEMENT LINE MARKING, 6" WIDTH
4. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
5. TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)
6. TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
7. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
8. TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
9. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH (45 DEGREES, 20' SPACE)
10. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH
11. TYPE A, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)
12. TYPE A, PAVEMENT SYMBOL MARKING, (DOUBLE TURN ARROW THRU/LT OR RT)
13. TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH (10' LINE, 3' SPACE)
14. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
15. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST (45 DEGREES, 20' SPACE, 300' GAP)
16. TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 24" WIDTH, CONTRAST (45 DEGREES, 20' SPACE, 300' GAP)
17. TYPE A, YELLOW PAVEMENT LINE MARKING, 24" WIDTH

LEGEND

- Denotes construction this stage
- Denotes construction during short-term lane closures
- Denotes construction previous stage
- Denotes group 2 channelizing devices

60% PLANS

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.

TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 3

OLD BRIDGE ROAD (RTE. 641)

RTE. 641 CONSTRUCTION BASELINE

STA. 114+00

END CONSTRUCTION / END PROJECT

Scale:
25'
50'
SEQUENCE OF CONSTRUCTION

1. Install storm sewer system between Str. 3-1 and 3-2 and cap proposed structures.
2. Install proposed drainage system between Str. 3-2 and Str. 4-1 and pipe to Str. 4-2; cap all installed structures and pipes.
3. Install storm sewer system between Str. 4-3 and 4-9; install Str. 4-9 and connect to existing storm sewer system.
4. Install pipe under Occoquan Road between Str. 4-3 and 4-2, at night in phases. Close one lane at a time and excavate trench; install pipe in sections. Place steel plate on trench at the end of work each night. Once entire pipe is installed, backfill trench.
5. Install Str. 4-2 once pipe under Occoquan Road is installed and connect to storm sewer system between Str. 3-1 and Str. 4-2. Uncap pipes and make system functional.
6. Install Str. 3-3 and pipe between Str. 3-3 and Str. 3-2.

LEGEND
- Dashes Construction this Stage
- Dashes Construction during Short-Term Lane Closures
- Dashes Construction Previous Stage
- Dashes Group 2 Channelizing Devices

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TEMPORARY TRAFFIC CONTROL (TTC)
PLAN - STAGE 3

TEMPORARY PAVEMENT MARKING LEGEND

1. Type A: White Pavement Line Marking, 4" Width
2. Type B: White Pavement Line Marking, 4" Width
3. Type C: White Pavement Line Marking, 6" Width
4. Type D: Class II Yellow Pavement Line Marking, 4" Width
5. Type E: White Pavement Line Marking, 24" Width (45 degrees, 20' Space)
6. Type F: White Pavement Line Marking, 4" Width (10' Line, 30' Space)
7. Type G: White Pavement Line Marking, 4" Width (2' Line, 6' Space)
8. Type H: White Pavement Line Marking, 4" Width (10' Line, 30' Space)
9. Type I: Type A, Yellow Pavement Line Marking, 4" Width
10. Type J: Type A, White Pavement Line Marking, 24" Width

LEGEND

- Denotes Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Construction Previous Stage
- Denotes Group 2 Channelizing Devices

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
SEQUENCE OF CONSTRUCTION

1. Install storm sewer system between Str. 3-1 and 3-2 and cap proposed structures.
2. Install proposed drainage system between Str. 3-2 and Str. 4-1 and pipe to Str. 4-2. Cap all installed structures and pipes.
3. Install storm sewer system between Str. 4-3 and 4-9. Install Str. 4-9 and connect to existing storm sewer system.
4. Install pipe under Occoquan Road between Str. 4-3 and 4-2 at night in phases. Close one lane at a time and excavate trench. Install pipe in sections. Place steel plate on trench at the end of work each night. Once entire pipe is installed, backfill trench.
5. Install Str. 4-2 once pipe under Occoquan Road is installed and connect to storm sewer system between Str. 3-1 and Str. 4-2. Uncap pipes and make system functional.
6. Install Str. 3-3 and pipe between Str. 3-3 and Str. 3-2.
TEMPORARY TRAFFIC CONTROL (TTC)

PLAN - STAGE 4

TEMPORARY PAVEMENT MARKING LEGEND

- TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 6" WIDTH
- TYPE A, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, 10' LINE, 30' SPACE
- TYPE A, WHITE PAVEMENT LINE MARKING, 24" WIDTH
- TYPE A, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
- TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
- TYPE B, CLASS VI, YELLOW PAVEMENT LINE MARKING, 4" WIDTH, CONTRAST
- TYPE B, CLASS VI, WHITE PAVEMENT LINE MARKING, 24" WIDTH, 45 DEGREES, 20' SPACE, 300' GAP
- TYPE A, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)
- TYPE A, PAVEMENT SYMBOL MARKING, (DOUBLE TURN ARROW THRU/LT OR RT)

LEGEND

- DENOTES CONSTRUCTION THIS STAGE
- DENOTES CONSTRUCTION PREVIOUS STAGE
- DENOTES GROUP 2 CHANNELIZING DEVICES
- DENOTES SHORT-TERM LANE CLOSURES
- DENOTES CONSTRUCTION DURING SHOULDER OR CENTER LANE CLOSURES
- DENOTES CONSTRUCTION PREVIOUS STAGE
- DENOTES GRP & CHANNELIZING DEVICES

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm system along the existing Old Bridge Road being demolished up until the location of proposed Str. 5-2.
2. Install storm sewer system between Str. 4-9 and Str. 5-3, starting from the downstream end and working upstream. Remove connections with existing pipe at Str. 4-9. Make proposed storm sewer system functional.
3. Plug and abandon previously connect existing storm sewer system downstream of Str. 4-9 that is connected to Str. 5-4.
4. The work to install the cross pipe between Str. 5-6 and Str. 5-3 will be completed at night. Closing one lane at a time starting at Str. 5-3, excavate trench and install portion of pipe from the downstream end working upstream. Upon completion of work each night, cover trench with steel plate for during the day. Once entire pipe is installed, cap pipe at Str. 5-6 and backfill trench.
5. As the median is constructed, install proposed storm sewer system between Str. 4-5 and 5-6 from the downstream end and working upstream with the use of short term lane closures as necessary.
6. When the pipe between Str. 4-5 and 5-7 is installed, remove 20 lin.ft. of the existing pipe connected upstream to Str. 5-4.
7. Once entire system is installed, unplug pipe between Str. 5-6 and Str. 5-3 to make proposed storm sewer system functional.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm system along the existing Old Bridge Road being demolished up until the location of proposed Str.5-2.

2. Install storm sewer system between Str.4-9 and Str.5-9, starting from the downstream end and working upstream. Remove connections with existing pipe at Str.4-9. Make proposed storm sewer system functional.

3. Plug and abandon previously existing storm sewer system downstream of Str.4-9 that is connected to Str.5-4.

4. The work to install the cross pipe between Str.5-6 and Str.5-3 will be completed at night. Closing one lane at a time starting at Str.5-3, excavate trench and install portion of pipe from downstream end working upstream. Upon completion of work each night, cover trench with steel plate for during the day. Once entire pipe is installed, cap pipe at Str.5-4 and backfill trench.

5. As the median is constructed, install proposed storm sewer system between Str.4-5 and 5-6 from the downstream end working upstream with the use of short-term lane closures as necessary.

6. When the pipe between Str.4-5 and 5-1 is installed, remove 20 ft of the existing pipe connected upstream to Str.5-4.

7. Once entire system is installed, unplug pipe between Str.5-6 and Str.5-3 to make proposed storm sewer system functional.

As the median is constructed, install proposed storm sewer system between Str.4-5 and 5-6 from the downstream end working upstream with the use of short-term lane closures as necessary.

When the pipe between Str.4-5 and 5-1 is installed, remove 20 ft of the existing pipe connected upstream to Str.5-4.

Once entire system is installed, unplug pipe between Str.5-6 and Str.5-3 to make proposed storm sewer system functional.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm system along the existing Old Bridge Road being demolished up until the location of proposed Str. 5-2.
2. Install storm sewer system between Str. 4-9 and Str. 5-9, starting from the downstream end and working upstream. Remove connections with existing pipe at Str. 4-9. Make proposed storm sewer system functional.
3. Plug and abandon previously connect existing storm sewer system downstream of Str. 4-9 that is connected to Str. 5-4.
4. The work to install the cross pipe between Str. 5-6 and Str. 5-3 will be completed at night. Close one lane at a time starting at Str. 5-3, excavate trench and install portion of pipe from the downstream end working upstream. Upon completion of work each night, cover trench with steel plate for during the day. Once entire pipe is installed, cap pipe at Str. 5-6 and backfill trench.
5. As the median is constructed, install proposed storm sewer system between Str. 4-5 and Str. 5-6 from the downstream end working upstream with the use of short-term lane closures as necessary.
6. When the pipe between Str. 4-5 and 5-7 is installed, remove 20 ft. of the existing pipe connected upstream to Str. 5-4.
7. Once entire system is installed, unplug pipe between Str. 5-6 and Str. 5-3 to make proposed storm sewer system functional.

LEGEND
- PIPE TO BE REMOVED
- PIPE TO BE CLEANED OUT
- STRUCTURE TO BE REMOVED
- STRUCTURE TO BE CLEANED OUT

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TEMPORARY TRAFFIC CONTROL (TTC) PLAN - STAGE 4

TEMPORARY PAVEMENT MARKING LEGEND

- **Type A**: White Pavement Line Marking, 4" Width
- **Type B**: Yellow Pavement Line Marking, 4" Width
- **Type C**: White Pavement Line Marking, 6" Width
- **Type D**: Class VI, Yellow Pavement Line Marking, 24" Width
- **Type E**: White Pavement Line Marking, 24" Width

LEGEND

- **Denotes Construction This Stage**
- **Denotes Construction During Short-Term Lane Closures**
- **Denotes Construction Previous Stage**
- **Denotes Group 2 Channelizing Devices**

60% PLANS

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
SEQUENCE OF CONSTRUCTION

1. Remove existing storm system along the existing Old Bridge Road being demolished up until the location of proposed Str. 5-2.

2. Install storm sewer system between Str. 4-9 and Str. 5-9, starting from the downstream end and working upstream. Remove connections with existing pipe of Str. 4-9. Make proposed storm sewer system functional.

3. Plug and abandon previously connect existing storm sewer system downstream of Str. 4-9 that is connected to Str. 5-4.

4. The work to install the cross pipe between Str. 5-6 and Str. 5-3 will be completed at night. Close one lane at a time starting at Str. 5-3, excavate trench and install portion of pipe from the downstream and working upstream. Upon completion of work each night, cover trench with steel plate for during the day. Once entire pipe is installed, cap pipe at Str. 5-6 and backfill trench.

5. As the median is constructed, install proposed storm sewer system between Str. 4-5 and 5-6 from the downstream and working upstream with the use of short term lane closures as necessary.

6. When the pipe between Str. 4-5 and 5-7 is installed, remove 20 lin. ft. of the existing pipe connected upstream to Str. 5-4.

7. Once entire system is installed, unplug pipe between Str. 5-6 and Str. 5-3 to make proposed storm sewer system functional.
TEMPORARY TRAFFIC SIGNAL PLAN

CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND INSTALLATION OF THE ELECTRICAL SERVICE FOR THE TRAFFIC SIGNAL WITH THE LOCAL UTILITY COMPANY.


JUNCTION BOX COVERS SHALL HAVE THE LETTER "TRAF" CASE IN THE TOP SURFACE DEPRESSION FOR ALL SIGNAL CONTRACTOR SHALL COORDINATE PAVEMENT MARKING WITH THE PAVEMENT MARKING CONTRACTOR.

BACKPLATE (HVSB). BACKPLATE HARDWARE SHALL BE STAINLESS STEEL. ALL TRAFFIC SIGNAL HEAD SECTIONS MAINTENANCE AND REPAIR OF THE TRAFFIC SIGNAL AND ANY NECESSARY FUTURE MODIFICATIONS DURING CONSTRUCTION AND WHEN NOT IN USE, NEW LED TRAFFIC SIGNAL HEADS AND OVERHEAD TRAFFIC SIGNAL SIGNAGE SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE SIGNAL SIGNAGE SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE SIGNAL SIGNAGE SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE SIGNAL SIGNAGE SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE SIGNAL SIGNAGE SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION.
**GENERAL NOTES**

**DRAINAGE**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The proposed width of the drainage structures shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. The proposed width of the drainage structures shown on these plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The proposed width of the drainage structures shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. The proposed width of the drainage structures shown on these plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

**EROSION AND SEDIMENT CONTROL (ESC)**

- If the removed or recycled fill material is classified as unpaved ground, the weight of pumped or recycled fill material is to be determined in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

- If the removed or recycled fill material is classified as unpaved ground, the weight of pumped or recycled fill material is to be determined in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

- If the removed or recycled fill material is classified as unpaved ground, the weight of pumped or recycled fill material is to be determined in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

**ACQUISITION OF RIGHT OF WAY.**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

**NOTES**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The proposed width of the drainage structures shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. The proposed width of the drainage structures shown on these plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

**NOTES**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

**NOTES**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.

**NOTES**

- The horizontal elevation and slope elevation shown on these plans are in accordance with the applicable Virginia Department of Transportation (VDOT) Road and Bridge Specifications. They are based on existing survey data and require engineering judgment. During construction, the slope elevation and vertical alignment shown on plans are to be used for constructing the project. The slope elevation and vertical alignment shown on plans are to be used for constructing the project. All proposed and constructed C.S. structures shown on plans are to be constructed in accordance with the applicable VDOT Road and Bridge Specifications. Where the proposed construction of a C.S. structure is shown on plans, the contractor shall be responsible for the design and construction of the C.S. structure.
TYPICAL SECTIONS

OLD BRIDGE ROAD (RTE. 641)

SIDEWALK STRUCTURE

SIDEWALK SECTION NOTES

1) Surface - 4" Hydronic Cement Concrete (Design A-3)
2) Base - 16" Aggregate Base Material (A-1) No. 2WA
3) Extended 4" on either side of the surface
4) Regular Fill Material

NOTES:

1. For approximate limits of Mill & Overlay, build-up, and full depth pavement, refer to plan sheets.
2. Where additional pavement build-up is needed to meet proposed grade, the depth may be variable with a 2-inch minimum required see detail or sheet 2A(1). Size profile and cross sections for finished grade elevations, to see profile and cross sections for full super-elevation and transition lengths.
3. All pavement widening shall be performed in accordance with STD WP-2.
4. Remove and dispose of any existing underdrain pipe that is disturbed.
5. Underdrain, unstable materials to a minimum depth of 3 feet below subgrade or until the suitable material is no longer present.
6. If no churning or soil lies below the underdrain, the replacement material should be selected from the next material type with minimum CBS-2L.

60% PLANS

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
NOTES:

1. FOR APPROXIMATE LIMITS OF MILL & OVERLAY, BUILDUP, AND FULL DEPTH PAVEMENT, REFER TO PLAIN SHEETS.

2. WHERE ADDITIONAL PAVEMENT BUILDUP IS NEEDED TO MEET PROPOSED GRADE, THE DEPTH SHALL BE VARIABLE WITH MINIMUM REQUIREMENTS DETAIL IN SHEET 2A(3). SEE PROFILE AND CROSS SECTIONS FOR FINISHED GRADE ELEVATIONS. 2(A) WHERE ADDITIONAL PAVEMENT BUILDUP IS NEEDED TO MEET PROPOSED GRADE, THE DEPTH SHALL BE VARIABLE WITH MINIMUM REQUIREMENTS DETAIL IN SHEET 2A(3). SEE PROFILE AND CROSS SECTIONS FOR FINISHED GRADE ELEVATIONS.

3. SEE PROFILE AND CROSS SECTIONS FOR FULL SUPERELEVATION AND TRANSITION LENGTHS.

4. ALL PAVEMENT WORKING SHALL BE PERFORMED IN ACCORDANCE WITH STD WP-2.

5. REMOVE AND DISPOSE OF ANY EXISTING UNDERDRAIN PIPE THAT IS DISTURBED.
Virginia Department of Transportation
NOVA District Materials Section

Detail: Asphalt Concrete Build-up

Asphalt Concrete Surface Course
Asphalt Concrete Intermediate Course
Asphalt Concrete Base Course
(Max. 4" lift thickness)

Variable depth asphalt planning to achieve an asphalt concrete surface course application rate of approx. 235 lbs./sq.yd (2").

Not to Scale

60% PLANS

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
DRAINAGE DESCRIPTIONS

SHEET 3

1. 49 LF. STD. MH-4 or 2 REQ'D. 1 STD. MH-4 Frame & Cover Req'd. INV. 96.91 INV. 91.36 Silt Tight Joint Type

2. 96 LF. STD. MH-4 or 2 REQ'D. 1 STD. MH-4 Frame & Cover Req'd. INV. 96.91 INV. 91.36 Silt Tight Joint Type

3. 1 STD. DI-3B REQ'D.

4. 152'-18" STORM SEWER PIPE REQ'D. (6' COVER) Joints are to be opened a maximum of 25% of the spigot or tongue length. INV. 96.91 INV. 91.36

SHEET 4

5. 40'-15" STORM SEWER PIPE REQ'D. (3' COVER) 1 STD. DI-3B REQ'D.

6. 192'-24" STORM SEWER PIPE REQ'D. (9' COVER) 4.9 LF STD. MH-1 or 2 REQ'D.

7. 244'-24" STORM SEWER PIPE REQ'D. (9' COVER) 5-8 5-1 1 STD. DI-2A REQ'D.

8. 47'-15" STORM SEWER PIPE REQ'D. (3' COVER) 4-2 4-7 Ex. 5-12 85'-24'' STORM SEWER PIPE REQ'D. (5' COVER) 4.1 LF STD. MH-1 or 2 REQ'D.

9. 211'-15'' STORM SEWER PIPE REQ'D. (3' COVER) 4-8 120'-24" STORM SEWER PIPE REQ'D. (9' COVER) 5-2 1 STD. DI-3B REQ'D.

10. 111'-15'' STORM SEWER PIPE REQ'D. (3' COVER) 4-9 111'-18" STORM SEWER PIPE REQ'D. (9' COVER) 10.3 LF STD. MH-1 or 2 REQ'D.

11. 67'-18" STORM SEWER PIPE REQ'D. (4' COVER) 5-7 4-3 4-6 4-9

12. INV.(IN) 97.22 INV.(OUT) 86.05 Silt Tight Joint Type

13. INV. 97.22 1 St'd. MH-1 Frame & Cover Req'd.

14. INV.(IN) 101.47 INV.(OUT) 97.32 Silt Tight Joint Type

15. INV. 101.47 1 St'd. MH-1 Frame & Cover Req'd.

16. INV.(IN) 105.28 INV.(OUT) 101.57 Silt Tight Joint Type

17. L=8', H= 4.6', INV. 105.28 St'd. IS-1 Req'd.

18. INV. 105.28

19. 5-7 4-3

20. Silt Tight Joint Type Connect Proposed 15" Storm Sewer Pipe Ex. 4-20 to 4-6. L=20', H= 5.4', INV. 110.97

21. Silt Tight Joint Type Connect to existing 15" Conc. Pipe from Ex5-20 L=8', H= 10.9', INV. 86.99

SHEET 5

22. INV.(IN) 86.54 INV.(OUT) 81.41 Silt Tight Joint Type

23. INV. 86.99 1 St'd. MH-1 Frame & Cover Req'd.

24. INV.(IN) 91.26 INV.(OUT) 88.05 Silt Tight Joint Type

25. INV. 91.26 1 St'd. MH-1 Frame & Cover Req'd.

26. INV.(IN) 97.22 INV.(OUT) 91.26 Silt Tight Joint Type

27. INV. 97.22

28. INV. 101.47

29. INV. 101.47

30. INV. 105.28

31. INV. 105.28

32. INV. 105.28

33. INV. 105.28

34. INV. 105.28

35. INV. 105.28

36. INV. 105.28

37. INV. 105.28

38. INV. 105.28

39. INV. 105.28

40. INV. 105.28

41. INV. 105.28

42. INV. 105.28

43. INV. 105.28

44. INV. 105.28

45. INV. 105.28

46. INV. 105.28

47. INV. 105.28

48. INV. 105.28

49. INV. 105.28

50. INV. 105.28

51. INV. 105.28

52. INV. 105.28

53. INV. 105.28

54. INV. 105.28

55. INV. 105.28

56. INV. 105.28

57. INV. 105.28

58. INV. 105.28

59. INV. 105.28

60. INV. 105.28

61. INV. 105.28

62. INV. 105.28

63. INV. 105.28

64. INV. 105.28

65. INV. 105.28

66. INV. 105.28

67. INV. 105.28

68. INV. 105.28

69. INV. 105.28

70. INV. 105.28

71. INV. 105.28

72. INV. 105.28

73. INV. 105.28

74. INV. 105.28

75. INV. 105.28

76. INV. 105.28

77. INV. 105.28

78. INV. 105.28

79. INV. 105.28

80. INV. 105.28

81. INV. 105.28

82. INV. 105.28

83. INV. 105.28

84. INV. 105.28

85. INV. 105.28

86. INV. 105.28

87. INV. 105.28

88. INV. 105.28

89. INV. 105.28

90. INV. 105.28

91. INV. 105.28

92. INV. 105.28

93. INV. 105.28

94. INV. 105.28

95. INV. 105.28

96. INV. 105.28

97. INV. 105.28

98. INV. 105.28

99. INV. 105.28

100. INV. 105.28
DRAINAGE DESCRIPTIONS

5-6
AP-45" STORM SEWER PIPE REGD. (1/2 COVER)
INV. IN: 82.54, INV. OUT: 84.29
(64" Road with open joints - using B pig joint lengths)
Joints are to be opened a maximum of 25% of the spigot or tongue length.

5-7
1 STD. Di-3B REGD.
L: 14', H: 45, INV. 84.29
S/a: 1.5, Prep. 6

5-8
365-45" STORM SEWER PIPE REGD. (1/2 COVER)
Silt Tight Joint Type
INV. IN: 84.29, INV. OUT: 82.89

5-9
1 STD. Di-3B REGD.
L: 14', H: 45, INV. 82.89
S/a: 1.5, Prep. 6
Connect to existing 18" Conc. Pipe
Convert UD-4 to DI

5-10
1 STD. Di-3B REGD.
L: 14', H: 45, INV. 81.95
Connect UD-4 to DI

5-11
AP-45" STORM SEWER PIPE REGD. (1/2 COVER)
Silt Tight Joint Type
INV. IN: 81.95, INV. OUT: 83.36

5-12
1.0 LF. STD. or 2. REGD.
1.50 MWH Frame & Cover Req'd.
INV. 83.36
S/a: 1.5, Prep. 6
Tie to existing 15" Conc. Pipe from Ex. DI 5-8

5-13
865-45" STORM SEWER PIPE REGD. (1/4 COVER)
Silt Tight Joint Type
INV. IN: 83.36, INV. OUT: 83.36

5-14
1 STD. MH-1 or 2 REGD.
L: 42, INV. 81,895
S/a: 1.5, Prep. 6
1 Std. MH-1 Frame & Cover Req'd.
INV. 81.27

6-1
114'-15" STORM SEWER PIPE REGD. (3' COVER)
Silt Tight Joint Type
INV. (IN) 84.36, INV. (OUT) 81.27
1 STD. DI-3B REGD.
L: 8', H: 6.4, INV. 84.27
St'd. IS-1 Req'd.
Connect UD-4 to DI

6-2
28'-15" STORM SEWER PIPE REGD. (1/2 COVER)
Silt Tight Joint Type
INV. IN: 84.27, INV. OUT: 81.50
1 STD. Di-3B REGD.
4 Tons S/C/EC Class 1 Req'd. Type B Installation

6-3
20'-15" STORM SEWER PIPE REGD. (1/4 COVER)
Silt Tight Joint Type
INV. IN: 81.50, INV. OUT: 80.50
1 STD. EW-1 REGD.
4 Tons St'd. EC-1 Class 1 Req'd. Type B Installation

6-4
117'-15" STORM SEWER PIPE REGD. (5' COVER)
Silt Tight Joint Type
INV. (IN) 86.54, INV. (OUT) 84.19
(614' Radius with open joints - using 8' pipe joint lengths)
Joints are to be opened a maximum of 25% of the spigot or tongue length.

6-5
1 STD. Di-3B REGD.
L: 6', H: 4.5, INV. 84.09
St'd. IS-1 Req'd.

6-6
55'-15" STORM SEWER PIPE REGD. (5' COVER)
Silt Tight Joint Type
INV. IN: 84.09, INV. OUT: 82.99
1 STD. Di-3B REGD.
L: 8', H: 6.1, INV. 82.01
St'd. IS-1 Req'd.
Connect to existing 18" Conc. Pipe
Connect UD-4 to DI

6-7
159'-15" STORM SEWER PIPE REGD. (4' COVER)
Silt Tight Joint Type
INV. IN: 87.95, INV. OUT: 83.36
Tie to existing 15" Conc. Pipe from Ex. DI 5-18

6-8
36'-15" STORM SEWER PIPE REGD. (4' COVER)
Silt Tight Joint Type
INV. IN: 83.36, INV. OUT: 82.11
### STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

**SECTION I - GENERAL INFORMATION**

1. **Activity Description:** Realign the intersection of Old Bridge Road and Occoquan Road.
2. **Location:** Prince William County, VA.
3. **Type of Construction:** Realign.
4. **Area:** Approximately 30 acres.
5. **Construction Phase:** 2020.
6. **Water Quality Requirements:**
   - **SWM:** Stormwater Management
   - **VESCP:** Virginia Erosion and Sediment Control Program
   - **TMDL:** Total Maximum Daily Load

### ACRONYMS
- SWM - Stormwater Management
- VESCP - Virginia Erosion and Sediment Control Program
- TMDL - Total Maximum Daily Load

### RESPONSIBILITY FOR CONSTRUCTION ACTIVITIES

**RLD - Responsible Land Disturber**

**ESC - Erosion and Sediment Control**

**EPA - U.S. Environmental Protection Agency**

**DEQ - Department of Environmental Quality**

**CBPA - Chesapeake Bay Preservation Act**

### VSMP Authority

- **Construction General Permit coverage letter:** (List VPDES Permit # or Letter from DEQ)
- **NPDES Coordinator responsible for the oversight inspection in accordance with IIM-LD-256 Reference Form LD-445H for delegation of authority (form 445H for the project is hereby provided/completed by the contractor).**

### WATER QUALITY REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Position</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDES Coordinator</td>
<td>responsible for the oversight inspection</td>
<td>for the construction activities</td>
</tr>
<tr>
<td><strong>RLD</strong></td>
<td></td>
<td>for the on-site activities:</td>
</tr>
<tr>
<td><strong>ESC</strong></td>
<td></td>
<td>responsible for the review &amp; the coordination of the current Construction General Permit.</td>
</tr>
<tr>
<td><strong>EPA</strong></td>
<td></td>
<td>for the on-site activities:</td>
</tr>
<tr>
<td><strong>DEQ</strong></td>
<td></td>
<td>responsible for the oversight inspection in accordance with IIM-LD-256 Reference Form LD-445H for delegation of authority (form 445H for the project is hereby</td>
</tr>
<tr>
<td><strong>CBPA</strong></td>
<td></td>
<td>provided/completed by the contractor.</td>
</tr>
</tbody>
</table>
SECTION II  EROSION AND SEDIMENT CONTROL

14. All channel relocations are to be constructed during the earliest stage of construction for this land disturbance (construction) activity.

15. The contractor shall plan and implement his land disturbance operations in order to:
   a. Minimize the disturbance of steep slopes.
   b. Minimize sediment discharge from the site.
   c. Minimize the disturbance of surface waters.
   d. Minimize the disturbance to minimize erosion at outlets and in downstream channels.
   e. Minimize runoff to vegetated areas and maximize stormwater infiltration, unless infeasible.
   f. Provide and maintain natural buffers around surface waters.

16. The name of the individual or contractor responsible for the installation and maintenance of the erosion and sediment control measures supplied by the contractor and associated with this land disturbance (construction) activity is:

17. Sediments temporarily placed within the project area are to be assessed, identified, stabilized, and protected with sediment trapping measures.

18. A construction vehicle or other measure supplied by contractor where construction vehicle traffic access across interest is a paved or dirt road in order to maximize stormwater infiltration and minimize erosion.

19. Any exception, variance or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request or DEQ approval) must be retained with the SWPPP Project Site.

20. The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by DEQ for this land disturbance (construction) activity:

Appendix Regulation/Section/Document/Approval Date/Date of Notice/Construction

(1) Type of modification, variance from ESC regulation, or deviation from published guidance
(2) Section of Regulation or Guidance Document Modified (e.g., ESC Min. Std. 15)
(3) Date that variance/exception/deviation was approved by DEQ.

SECTION III  POST CONSTRUCTION STORMWATER MANAGEMENT

1. This land disturbance activity utilizes the Part III B technical criteria and Part IIB Technical Criteria, as published, of the VDOT R&B Specifications.

2. A description and schedule of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good and effective operating conditions are identified in the current edition of Sections 107.16 and 303.03 of the VDOT R&B Specifications.

3. Locations where stabilization practices are expected to occur are identified in the project plan set or for other such documents for this land disturbance (construction) activity.

4. A description of permanent and temporary stabilization practices for the site is located in the applicable section of the documents identified in the Table Set Section.

5. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated or provided by the contractor and maintained with the record set or for other such documents for this land disturbance (construction) activity.

6. The temporary erosion and sediment control measures shown on the ESC Plan for this land disturbance (construction) activity are intended to provide a generation for controlling erosion and sediment within the project limits. The ESC Plan is based on field conditions at the time of planning and an assumed sequence of construction for the project. The contractor, in conjunction with the VDOT Project Engineer and ESC Inspector, determines the location, quantity and type of erosion and sediment control measures required based on the following: The condition of construction and the following conditions:

   a. The extent of erosion
   b. The extent of sedimentation
   c. The anticipated flow conditions
   d. The location of construction activity
   e. The location of erosion and sedimentation

The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by DEQ for this land disturbance (construction) activity:

ACRONYMS

ACQUISITION OF RIGHT OF WAY

ACQUISITION OF RIGHT OF WAY.

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

SECTION IV SWPPP
1. Documents related to the SWPPP for this land disturbance (construction) activity shall be maintained at the activity site and made available for review upon request during normal business hours. Such documents include, but are not limited to, the construction plan set for such documents, the CEQ plan, the Pollution Prevention Plan, the post-construction SWPPP Flowchart, the SWPPP General Information sheets, and any other supporting documentation, Special Provisions and Special Provisions for Construction Activities (when applicable) and those required to be developed by the contractor for pollution prevention associated with any onsite support facilities (if applicable). The SWPPP General Information sheets for this land disturbance (construction) activity are to be maintained at the activity site with the other SWPPP construction documents and将是 found at a location convenient to the contractor for pollution prevention associated with any onsite support facilities. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

2. The SWPPP and any subsequent amendments, modifications, and updates shall be implemented from commencement of land disturbance until termination of VPDES Construction Activities (when applicable) and those required to be developed by the contractor for pollution prevention associated with any onsite support facilities (if applicable). The SWPPP General Information sheets for this land disturbance (construction) activity shall be maintained with the designated record of plans for such documents for compliance with the requirements of the Virginia Chesapeake Bay Preservation Act.

3. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site. The SWPPP General Information sheets are intended to comply with the requirements of the VPDES General Permit for Discharges of Stormwater From Construction Activities that are to be kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours. The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit for Discharges of Stormwater From Construction Activities that are to be kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

4. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site. The SWPPP General Information sheets are intended to comply with the requirements of the VPDES General Permit for Discharges of Stormwater From Construction Activities that are to be kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

5. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site. The SWPPP General Information sheets are intended to comply with the requirements of the VPDES General Permit for Discharges of Stormwater From Construction Activities that are to be kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

SECTION V - POLLUTION PREVENTION PLAN
1. The following non-stormwater discharges from this land disturbing (construction) activity and any onsite support facilities are prohibited:
   a. Watersheds from concrete washouts.
   b. Watershed from the washout and cleanout of stucco, paint, from release of contaminated water, concrete washouts, and settling ponds.
   c. Fuels, oils or other pollutants used in vehicle and equipment operation.
   d. Water used to control dust that has been filtered, settled or similarly treated prior to discharge.
   e. Water used to wash vehicles or equipment where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
   f. Water used to control dust that has been filtered, settled or similarly treated prior to discharge.

2. The contractor shall develop a SWPPP in accordance with, but not limited to, Section 106.08, Chesapeake Bay Preservation Act. The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area of 10,000 square feet or greater, except outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Toddaker, Virginia in the Virginia Chesapeake Bay Preservation Act.

3. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

4. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.

5. The SWPPP General Information sheets are to be completed and included in the construction plan set for such documents and are to be provided to the project team and kept by or with the designated RLD at a location convenient to the activity site and shall be made available for review upon request during normal business hours.
### Stormwater Pollution Prevention Plan (SWPPP) General Information Sheet

The VDOT requires that the information shown in the SWPPP General Information Sheet be completed in accordance with the Virginia Stormwater Management Manual. It is intended to provide a summary of the BMP information used to support the construction plans.

#### Table B: Alternative BMP Types

<table>
<thead>
<tr>
<th>Alternative BMP Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detention Basin</td>
<td>A temporary storage basin designed to detain stormwater runoff.</td>
</tr>
<tr>
<td>Vegetated Filter Strip</td>
<td>A strip of vegetation planted around a stream or road to reduce erosion.</td>
</tr>
<tr>
<td>Retention Basin III</td>
<td>A permanent storage basin designed to detain stormwater runoff.</td>
</tr>
<tr>
<td>Retention Basin I</td>
<td>A temporary storage basin designed to detain stormwater runoff.</td>
</tr>
<tr>
<td>Infiltration Basin</td>
<td>A system that allows stormwater to infiltrate the soil.</td>
</tr>
<tr>
<td>Grassed Swale</td>
<td>A swale with grasses to reduce erosion and improve water quality.</td>
</tr>
<tr>
<td>Extended Detention Basin Enhanced</td>
<td>An enhanced version of an extended detention basin.</td>
</tr>
<tr>
<td>Extended Detention Basin</td>
<td>A detention basin with additional features.</td>
</tr>
<tr>
<td>Constructed Wetlands (Level 1)</td>
<td>A system to manage stormwater runoff.</td>
</tr>
<tr>
<td>Filtering Practice (Level 1)</td>
<td>A method to filter stormwater runoff.</td>
</tr>
<tr>
<td>Wet Swale</td>
<td>A swale with wetlands to reduce erosion and improve water quality.</td>
</tr>
<tr>
<td>Dry Swale</td>
<td>A swale without wetlands.</td>
</tr>
<tr>
<td>Bioretention (Level 2)</td>
<td>A system to manage stormwater runoff.</td>
</tr>
<tr>
<td>Infiltration Practice (Level 2)</td>
<td>A method to infiltrate stormwater runoff.</td>
</tr>
<tr>
<td>Soil Compost Amendment</td>
<td>A method to amend soil with compost.</td>
</tr>
<tr>
<td>Grass Channel</td>
<td>A system to manage stormwater runoff.</td>
</tr>
<tr>
<td>Sheet Flow to Vegetated Filter Strip</td>
<td>A method to convey stormwater runoff to a vegetated area.</td>
</tr>
</tbody>
</table>

### Section VI - Permanent BMP Information

<table>
<thead>
<tr>
<th>Name of Impaired Water (9)</th>
<th>Name of Generating Entity</th>
<th>Nutrient Credits Acquired (lbs./TP./year)</th>
<th>Status of Nutrient Credits</th>
<th>Perpetual Nutrient Credits Acquired for Project (lbs./TP./year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

1. **Geographic Location**
   - County or City
   - Latitude/Longitude

2. **BMP Inspection**
   - Section 5.1.1 & 5.1.2
   - Section 5.1.1 & 5.1.2
   - Section 5.1.1 & 5.1.2
   - Section 5.1.1 & 5.1.2

3. **Receiving Water**
   - Name of Impaired Water (9)

4. **Acres Treated Per BMP (3)**

5. **Information pertains to the alternative BMP option location, where applicable.**

6. ** Applies to the purchase of nutrient credits only.**

7. **Information pertains to the alternative BMP option location, where applicable.**

8. **Provide the section of each Maintenance manual that pertains to the alternative BMP option location.**

9. **Revised 5/1/19**

10. **Any changes to the approved BMP plan or BMPs necessitated during the construction phase of the project that affect the proposed construction details or specified criteria for the BMP that became functional as a permanent control measure with the assigned Maintenance ID number and the date that the BMP became functional as a permanent control measure.**

11. **Any changes to the proposed BMP plan or BMPs necessitated during the construction phase of the project that affect the proposed construction details or specified criteria for the BMP that became functional as a permanent control measure with the assigned Maintenance ID number and the date that the BMP became functional as a permanent control measure.**

**6% Plans**

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
NUTRIENT CREDIT PURCHASE

Old Bridge Road and Occoquan Road Intersection Improvement

Water Quality

The Project is located within one 6th Order HUC. Per the latest publication of VDOT's Instructional and Informational Memorandum (IIM), IIM-195.12, the area subject to VSMP regulations excludes areas defined as routine maintenance. IIM-195.12 defines routine maintenance as "...those activities performed to maintain the original line and grade, hydraulic capacity or original construction of the Project. Routine maintenance includes areas of mill & overlay as well as areas of full-depth reconstruction. Therefore, preparation of the VSMP calculations for the Project deducted all areas considered routine maintenance from the total disturbed area for the Project site. However, the routine maintenance exemption does not apply to the Virginia Erosion and Sediment Control (ESC) Program. See Appendix E Land Use Mapping for a graphical depiction of the overall Project areas, existing and proposed impervious surface areas and those areas defined as routine maintenance under both pre- and post-construction conditions. See Appendix E for the VRRM spreadsheet computations. Table 4 summarizes the areas used in the VRRM calculations and the required removal rate of pounds of phosphorus.

Table 4: VRRM Project Areas

<table>
<thead>
<tr>
<th></th>
<th>Pre-Construction</th>
<th>Post-Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Limits of Construction (LOD)</td>
<td>AC 5.64</td>
<td>AC 5.64</td>
</tr>
<tr>
<td>Maintenance Area (exempt from VSMP Regulations)</td>
<td>AC 2.61</td>
<td>AC 2.61</td>
</tr>
<tr>
<td>Remaining</td>
<td>AC 3.03</td>
<td>AC 3.03</td>
</tr>
<tr>
<td>Managed Traf</td>
<td>AC 0.85</td>
<td>AC 2.00</td>
</tr>
<tr>
<td>Impervious Surface</td>
<td>AC 1.20</td>
<td>AC 0.60</td>
</tr>
<tr>
<td>Forested</td>
<td>AC 0.56</td>
<td>AC 0.00</td>
</tr>
<tr>
<td>Required Removal Rate</td>
<td>lb/yr</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

The total annual pollution load reduction requirement for the Project produces a negative number of -0.09 LB/yr. No TP load reduction is required, likely due to the overall reduction in impervious surface under the pre-development condition. Per VSMP Regulations 9VAC22-870-69, offsite compliance options may be used to meet the required phosphorus nutrient reductions because the Post-Construction Total Phosphorus Load Reduction is less than 10 lbs. Since the required removal is less than zero, there will be no purchase of credits or onsite treatment for this project.

JMT

VDOT Northern Virginia

These Plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
EROSION & SEDIMENT CONTROL GENERAL NOTES

Erosion and sediment control measures shall be implemented to minimize the effects of construction activities on the environment. These measures include:

1. Site buffer strips
2. Silt fences
3. Sediment basins
4. Diversion dikes
5. Silt fence sediment barriers
6. Sediment-laden runoff control practices
7. Stormwater management practices
8. Vegetative practices
9. Permanent stabilization

These measures are designed to control sediment and soil erosion from construction activities, protect existing vegetation, and minimize impact on downstream water bodies. Site-specific plans will be developed to address the unique conditions of each project.

Erosion & Sediment Control Plan:

1. Off-site areas (including borrow areas) will be subject to the Erosion & Sediment Control Plan.
2. Permanent seeding shall be done in accordance with these plans and the Virginia Erosion and Sediment Control Handbook.
3. Permeable pavement and vegetative practices shall be used to minimize runoff.
4. Vegetative practices shall be put in place to address stormwater management.
5. The calculation of runoff before and after development indicates a net increase in erosion hazard.
6. Sediment-laden runoff control practices shall be used to minimize erosion.
7. Vegetative practices shall be used to control erosion.
8. Permanent stabilization shall be done in accordance with the VESCH and VDOT Road & Bridge Specifications.
9. The Virginia Erosion and Sediment Control Handbook and the VDOT Road and Bridge Specifications shall be used to address erosion and sediment control.

Erosion and Sediment Plan:

1. Erosion and sediment control measures shall be implemented to minimize the effects of construction activities on the environment.
2. Site buffer strips shall be installed to prevent erosion.
3. Silt fences shall be installed to trap sediment.
4. Sediment basins shall be installed to trap sediment.
5. Diversion dikes shall be installed to direct sediment-laden runoff.
6. Silt fence sediment barriers shall be installed to filter sediment.
7. Sediment-laden runoff control practices shall be used to minimize erosion.
8. Vegetative practices shall be used to control erosion.
9. Permanent stabilization shall be done in accordance with the VESCH and VDOT Road & Bridge Specifications.

Checklist:

For Erosion and Sediment Control Plans:

1. Off-site areas (including borrow areas) will be subject to the Erosion & Sediment Control Plan.
2. Permanent seeding shall be done in accordance with these plans and the Virginia Erosion and Sediment Control Handbook.
3. Permeable pavement and vegetative practices shall be used to minimize runoff.
4. Vegetative practices shall be put in place to address stormwater management.
5. The calculation of runoff before and after development indicates a net increase in erosion hazard.
6. Sediment-laden runoff control practices shall be used to minimize erosion.
7. Vegetative practices shall be used to control erosion.
8. Permanent stabilization shall be done in accordance with the VESCH and VDOT Road & Bridge Specifications.
9. The Virginia Erosion and Sediment Control Handbook and the VDOT Road and Bridge Specifications shall be used to address erosion and sediment control.

Note:
The Erosion & Sediment Control Plans are subject to change as deemed necessary by the Virginia Department of Conservation and Recreation (DCR) or to regulation and control of traffic and other public agencies.
1. INSTRUCTION FOR TEMPORARY SOIL STABILIZATION REQUIREMENTS ARE PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE - MINIMUM STANDARDS (MS-19) NARRATIVE
2. A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
3. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION.
4. THE SEDIMENT TRAPS ARE CONTROLLING LESS THAN THREE ACRES AND ARE DESIGNED WITH A MINIMUM STORAGE CAPACITY OF 134 CUBIC YARDS PER ACRE, SEE STRUCTURAL PRACTICES ON SHEET 2E(1).
5. MATERIAL USED FOR BACK FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
6. ALL SEDIMENT TRAPPING MEASURES SHALL BE CONSTRUCTED AS A FIRST STEP PRIOR TO UP SLOPE LAND DISTURBANCE.
7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE DISTURBING ACTIVITIES.
8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO INSTRUCTION FOR PERMANENT STABILIZATION REQUIREMENTS ARE PROVIDED ON THE PLANS, SEE THE E&S NARRATIVE -
9. OUTLET PROTECTIONS ARE PROVIDED ON THE PLAN AT THE APPROPRIATE LOCATIONS, SEE EROSION AND SEDIMENT CONTROL NARRATIVE
10. UNDERGROUND UTILITIES MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT
11. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED WITHIN 30 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
13. WHEN SEDIMENT IS TRANSPORTED ONTO A PAVED ROAD SURFACE, THE ROAD WILL BE CLEANED THOROUGHLY AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
14. A VOY WITHIN THE PIPE OR SYSTEM.
15. RPA AND FLOODPLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS, ETC.
16. UNDERGROUND UTILITIES MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT
17. ORANGE SAFETY FENCE MUST BE INSTALLED AROUND ALL SILT TRAPS AND SEDIMENT BASINS.
18. JMT, SEPTEMBER 2020
19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE
20. THE APPLICANT SHALL:
21. SEDIMENT TRAPS ARE CONTROLLING EROSION ANDREMEDY CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
22. THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS AND TO THE PRINCE WILLIAM COUNTY EROSION AND SEDIMENT CONTROL STANDARDS MANUAL
23. THE GAP OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
24. THE DISPOSITION OF TEMPORARY MEASURES WILL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
25. THE APPLICANT SHALL:
26. INSTALLATION OF PROTECTION FOR OTHER SURFACES OR INSTALLATION OF PROTECTION FOR OTHER SURFACES OR INSTALLATION OF PROTECTION FOR OTHER SURFACES
27. TRENCHES SHALL BE COMPLETED IN A MANNER THAT CAUSES THE LEAST INHIBITION TO EROSION.
28. EQUAL OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
29. IN APPLYING THESE STORMWATER RUNOFF CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL, OR INDUSTRIAL
PROJECT SOILS MAP
Prince William County, Virginia

<table>
<thead>
<tr>
<th>MAP UNIT SYMBOL</th>
<th>MAP UNIT NAME</th>
<th>RATING</th>
<th>ACRES UB AOI</th>
<th>PERCENT OF AOI</th>
<th>SURFACE RUNOFF</th>
<th>FLOODING</th>
<th>SHRINK/SWELL</th>
<th>EROSION HAZARD</th>
<th>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>18A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>27A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>47C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>47D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>54B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>18E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>22A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>42B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>25B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>47B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>47D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
<tr>
<td>55E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HYDRAULIC SOIL GROUP - SUMMARY BY MAP UNIT - PRINCE WILLIAM COUNTY, VIRGINIA (VA153)</td>
</tr>
</tbody>
</table>

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
TEMPORARY SEEDING TABLES

Table 3.10a

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SEEDING RATE (lbs/acre)</th>
<th>PLANT CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernal</td>
<td>1.75</td>
<td>Small, thin leaves, early bloom, fast growth</td>
</tr>
<tr>
<td>Perennials</td>
<td>2.00</td>
<td>Medium-sized leaves, long bloom period, strong growth</td>
</tr>
<tr>
<td>Annuals</td>
<td>2.50</td>
<td>Large leaves, short bloom period, moderate growth</td>
</tr>
</tbody>
</table>

Table 3.10b

<table>
<thead>
<tr>
<th>COMBINED NAME</th>
<th>CHARACTERISTICS</th>
<th>MAINTENANCE REQUIREMENTS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernal</td>
<td>Thin leaves, early bloom, fast growth</td>
<td>Water regularly, fertilize occasionally</td>
<td>None</td>
</tr>
<tr>
<td>Perennials</td>
<td>Medium-sized leaves, long bloom period, strong growth</td>
<td>Water regularly, fertilize occasionally</td>
<td>None</td>
</tr>
<tr>
<td>Annuals</td>
<td>Large leaves, short bloom period, moderate growth</td>
<td>Water regularly, fertilize occasionally</td>
<td>None</td>
</tr>
</tbody>
</table>

JMT, SEPTEMBER 2020

**DESIGN FEATURES RELATING TO CONSTRUCTION**

**OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.**

**SURVEYED BY, DATE**

**DESIGN BY JMT (703) 464-7369**

**SUBSURFACE UTILITY BY, DATE**

**PROJECT MANAGER SHERRY DJOUHARIAN (703) 792-6822**

**THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.**

**60% PLANS**
EROSION & SEDIMENT CONTROL PLAN
(PHASE I)

LEGEND

- LDD  LIMITS OF DISTURBANCE
- SF  SILT FENCE
- DD  DIVERSION DIKE
- IP  STORM DRAIN INLET PROTECTION
- CIP  CULVERT INLET PROTECTION

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

60% PLANS

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

DESIGN BY JMT (703) 464-7369
SUBSURFACE UTILITY BY, DATE JMT, SEPTEMBER 2020

SCALE 25'

EXIST. R/W  OLD BRIDGE ROAD (RTE. 641)
EXIST. R/W

MATCH LINE STA. 103+25 - SEE SHEET 4B(1)

PROJECT MANAGER  SHERRY DJOUHARIAN (703) 792-6822

VA. STATE ROUTE PROJECT

REVISED STATE ROUTE PROJECT SHEET NO.

JMT, SEPTEMBER 2020

PLOTTED BY: JTHOMPSON
5:49:08 PM 11/12/2021

HYDRAULIC ENGINEER

Herndon, Virginia

Johnson, Mirmiran & Thompson
EROSION & SEDIMENT CONTROL PLAN

(PHASE 2)

LEGEND

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDD</td>
<td>Limits of Disturbance</td>
</tr>
<tr>
<td>LF</td>
<td>Silt Fence</td>
</tr>
<tr>
<td>DDI</td>
<td>Diversion Dike</td>
</tr>
<tr>
<td>SF</td>
<td>Storm Drain Inlet Protection</td>
</tr>
<tr>
<td>CIP</td>
<td>Culvert Inlet Protection</td>
</tr>
</tbody>
</table>

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
EXIST. GROUND
PROP. PROFILE
STA. 200+79.74
BEGIN CONSTRUCTION

OCCOOLAN ROAD (RTE. 253) PROFILE
0641-076-301
R-201, C-501
641
0641-076-301
VA.
STATE
ROUTE
PROJECT
VA.
REVISED
STATE
ROUTE
PROJECT
SHEET NO.

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

SURVEYED BY, DATE  JMT, SEPTEMBER 2020
DESIGN BY  JMT (703) 464-7369
SUBSURFACE UTILITY BY, DATE  JMT, SEPTEMBER 2020
PROJECT MANAGER  SHERRY DJOUHARIAN (703) 792-6822
ROADWAY ENGINEER
Herndon, Virginia
Johnson, Mirmiran & Thompson

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130

201+00 202+00 203+00 204+00
EROSION & SEDIMENT CONTROL PLAN (PHASE 1)

LEGEND

- **LOG**: Limits of Disturbance
- **SF**: Silt Fence
- **Lod**: Storm Drain Inlet Protection
- **CIP**: Culvert Inlet Protection
- **DD**: Diversion Dike

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.

[Sheet 6B(1)]

Scale: 25'
LEGEND

- Proposed Pavement Resurfacing / Backfill
- Proposed Full Depth Pavement
- Proposed Demolition of Pavement

**NOTES:**

1. **Maintain existing pipes and structures to be shielded in place (or removed) please see traffic control sheets (sheet 2) for details**
2. **Remove & replace ex. sidewalk**
3. **Remove ex. curb & gutter**
4. **Remove ex. sidewalks**
5. **Concrete sidewalk**
6. **Stsd Radial CG-6 Req'd**
7. **Stsd UD-4 Req'd**
8. **Stsd MC-1 Req'd**
9. **Stsd Outlet Pipe Req'd**
10. **Stsd CG-6 Req'd**
11. **Stsd Outlet Pipe Req'd**
12. **Stsd G-4 Req'd**

**REFERENCES**

- **HYDRAULIC ENGINEER**
- **ROADWAY ENGINEER**
- **PROJECT MANAGER**
- **DESIGNER**

**PROFESSIONAL & TRADE DESCRIPTION SHEETS**

- **ROUTE 253 PROFILE EA**
- **E&S PLANS 6691-6696**
- **DRAW DESC. 2593-2602**

- **60% PLANS**

**60% PLANS**

These Plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

ROADWAY ENGINEER
Herndon, Virginia
Johnson, Mirmiran & Thompson
EROSION & SEDIMENT CONTROL PLAN (PHASE 1)
EROSION & SEDIMENT CONTROL PLAN
(PHASE 2)

Legend:
- Limits of Disturbance
- Silt Fence
- Diversion Dike
- Storm Drain Inlet Protection
- Culvert Inlet Protection

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
STORM SEWER PROFILES

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
STORM SEWER PROFILES

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
TRAFFIC SIGNAL
INDEX OF SHEETS, GENERAL NOTES & LEGEND

GENERAL NOTES
1. THE FOLLOWING ITEMS SHALL BE ACCURATE AND MEET STANDARDS LISTED BELOW:
   - Traffic Signal Plan
   - Controller Cabinet
   - Electrical Service
   - Pedestrian Pushbutton & Sign
   - Pedestal Pole and Foundation
   - Signal Pole or Controller

2. THE INCLUSION OF ITEMS, EXCEPT AS NOTED, SHOULD BE INCLUDED IN THE CONTRACTOR'S BID.
   - Items not included in the bid shall be removed from the plans.
   - Items not included in the plans shall not be installed by the contractor.

3. ITEMS LISTED ABOVE MAY BE CHANGED OR ADDED TO THE CONTRACTOR'S BID.
   - Changes shall be made only with the approval of the engineer.
   - Additions shall be quoted separately in the contractor's bid.

4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ERRORS OR OMISSIONS.
   - Errors or omissions shall be corrected by the contractor.
   - Corrections shall be made only with the approval of the engineer.

5. ITEMS LISTED ABOVE MAY BE CHANGED OR ADDED TO THE CONTRACTOR'S BID.
   - Changes shall be made only with the approval of the engineer.
   - Additions shall be quoted separately in the contractor's bid.

STANDARD TRAFFIC SIGNAL LEGEND

PLAN ITEM
1. Traffic Signal Plan
2. Controller Cabinet
3. Electrical Service
4. Pedestrian Pushbutton & Sign
5. Pedestal Pole and Foundation

PLAN SYMBOLS

PLAN SYMBOL
1. Traffic Signal Plan
2. Controller Cabinet
3. Electrical Service
4. Pedestrian Pushbutton & Sign
5. Pedestal Pole and Foundation

INDEX OF SHEETS, GENERAL NOTES & LEGEND

1. Traffic Signal Plan
2. Controller Cabinet
3. Electrical Service
4. Pedestrian Pushbutton & Sign
5. Pedestal Pole and Foundation

TRAFFIC SIGNAL PROJECT

NOTES

1. THE ENGINEER AND CONTRACTOR PER SECTION 700 PRIOR TO INSTALLATION
   - ALL POLES SHALL BE FIELD STAKED BY THE CONTRACTOR AND INSPECTED BY
   - DETAIL REFERENCED TO THE INSTALLATION

2. THE CONTRACTOR SHALL MAINTAIN SIGNAL COMMUNICATIONS AT ALL TIMES.
   - THE CONTRACTOR SHALL PROVIDE SIGNAL TIMINGS.
   - THE CONTRACTOR SHALL MAINTAIN SIGNAL COMMUNICATIONS AT ALL TIMES.

3. ITEMS LISTED ABOVE MAY BE CHANGED OR ADDED TO THE CONTRACTOR'S BID.
   - Changes shall be made only with the approval of the engineer.
   - Additions shall be quoted separately in the contractor's bid.

4. THE CONTRACTOR WILL PROVIDE SIGNAL TIMINGS. THE CONTRACTOR SHALL
   - PROVIDE SIGNAL TIMINGS. THE CONTRACTOR SHALL

5. ITEMS LISTED ABOVE MAY BE CHANGED OR ADDED TO THE CONTRACTOR'S BID.
   - Changes shall be made only with the approval of the engineer.
   - Additions shall be quoted separately in the contractor's bid.

TRAFFIC SIGNAL PLAN SHEETS

1. Traffic Signal Plan
2. Controller Cabinet
3. Electrical Service
4. Pedestrian Pushbutton & Sign
5. Pedestal Pole and Foundation

NOTES

1. THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.
SIGNING AND PAVEMENT MARKING
INDEX OF SHEETS, GENERAL NOTES & LEGEND

GENERAL NOTES
1. ALL SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE FOLLOWING DOCUMENTS:
   - 2009 VIRGINIA SUPPLEMENT TO THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL
   - 641-SP-1M "CONSTRUCTION MATERIAL & MARKINGS"
   - OR ANY OTHER CONTROL CONSIDERED NEEDED PER SECTION 641-SP-1M.

2. ALL EXISTING AND PROPOSED ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

3. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

4. ALL EXISTING AND PROPOSED SIGN LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

5. ALL EXISTING AND PROPOSED ITEM LOCATIONS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

6. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

7. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

8. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

9. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

10. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

11. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

12. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

13. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

14. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

15. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.

16. ALL EXISTING AND PROPOSED ITEM LOCATIONS AND ITEMS ARE APPROXIMATE AND MAY NOT BE ACCURATE OR COMPLETE. THE CONTRACTOR SHALL COMPLY WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES AND THE CONTRACTOR SHALL LOCATION ALL EXISTING UTILITIES IN ACCORDANCE WITH THE "VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT" AND THE STATE CORPORATION COMMISSION SPECIFICATIONS FOR LOCATION OF EXISTING UTILITIES.
# SIGNING AND PAVEMENT MARKING
## PROPOSED SIGN SCHEDULE

### TABLE:

<table>
<thead>
<tr>
<th>TEST #</th>
<th>SIGN ASSEMBLY NO.</th>
<th>TEXT</th>
<th>MOUNT ST/DL.</th>
<th>PANEL SIZE</th>
<th>QTY</th>
<th>FT</th>
<th>SQ. TUBE</th>
<th>PROP SIGN STRUCTURE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>2</td>
<td>6.75</td>
<td>12&quot;</td>
<td>SQ. TUBE</td>
<td>STP-1 ISO-TUBE POST</td>
<td>SCAN TYPE A</td>
</tr>
<tr>
<td>02</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>5</td>
<td>5</td>
<td>25</td>
<td></td>
<td>SQ. TUBE</td>
<td>STP-1 ISO-TUBE POST</td>
</tr>
<tr>
<td>03</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>1</td>
<td>7.5</td>
<td>63</td>
<td></td>
<td>SQ. TUBE</td>
<td>STP-1 ISO-TUBE POST</td>
</tr>
<tr>
<td>04</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>1</td>
<td>5</td>
<td>67</td>
<td></td>
<td>SQ. TUBE</td>
<td>STP-1 ISO-TUBE POST</td>
</tr>
<tr>
<td>05</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>1</td>
<td>7.5</td>
<td>7.5</td>
<td></td>
<td>SQ. TUBE</td>
<td>STP-1 ISO-TUBE POST</td>
</tr>
<tr>
<td>06</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td></td>
<td>STU-1 ISO-TUBE POST</td>
<td>SCAN TYPE A</td>
</tr>
<tr>
<td>07</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td></td>
<td>STU-1 ISO-TUBE POST</td>
<td>SCAN TYPE A</td>
</tr>
<tr>
<td>08</td>
<td>AX5-17000</td>
<td></td>
<td>24&quot; x 10&quot;</td>
<td>1</td>
<td>9</td>
<td>9</td>
<td></td>
<td>STU-1 ISO-TUBE POST</td>
<td>SCAN TYPE A</td>
</tr>
</tbody>
</table>

### NOTES:
1. All signs shall be oriented as shown on the plans.
2. Sign color combinations shall be in accordance with the PMS A SIG BOOK AND THE VIRGINIA SIG BOOK OR AS NOTED IN THE PLANS.
3. All positive contrast guide and specific service signs shall utilize fabrication letter type C-3 or C-4 unless otherwise noted in the remarks.
4. All sheeting shall be non-effective.
5. Sign structures shall be installed per the noted sign std.
6. All std/stp+ structures to be single post unless otherwise noted.

---

**60% PLANS**

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way.
PAVEMENT MARKING & PAVEMENT MARKINGS LEGEND

1. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH
2. TYPE B, CLASS I, YELLOW PAVEMENT LINE MARKING, 4" WIDTH
3. TYPE B, CLASS I, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH
4. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 6" WIDTH, (10' LINE, 30' SPACE)
5. TYPE B, CLASS I, DOUBLE YELLOW PAVEMENT LINE MARKING, 4" WIDTH, (45 DEGREES, 20' SPACE)
6. TYPE B, CLASS II, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (10' WIDTH, 2' SPACE)
7. TYPE B, CLASS II, WHITE PAVEMENT LINE MARKING, 24" WIDTH
8. TYPE B, CLASS II, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)
9. TYPE B, CLASS II, DOUBLE TURN ARROW THRU/LT OR RT)
10. TYPE B, CLASS II, WHITE PAVEMENT LINE MARKING, 24" WIDTH
11. TYPE B, CLASS III, WHITE PAVEMENT LINE MARKING, 24" WIDTH, (10' LINE, 20' SPACE)
12. TYPE B, CLASS II, PAVEMENT MESSAGE MARKING, ("ONLY")
13. TYPE B, CLASS II, PAVEMENT SYMBOL MARKING, (SINGLE TURN ARROW LT OR RT)
14. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (2' LINE, 6' SPACE)
15. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
16. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
17. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)
18. TYPE B, CLASS I, WHITE PAVEMENT LINE MARKING, 4" WIDTH, (10' LINE, 30' SPACE)

60% PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.