STANDARD DETAILS of CONSTRUCTION

July 1, 2010
### STANDARD DETAILS of CONSTRUCTION

#### TABLE of CONTENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>H-1003A PEDESTRIAN CROSSWALKS - MALL TYPE A</td>
</tr>
<tr>
<td>2.</td>
<td>H-1003B PEDESTRIAN CROSSWALKS - MALL TYPE B</td>
</tr>
<tr>
<td>3.</td>
<td>H-1004 TYPICAL TEMPORARY PEDESTRIAN PASSAGeway IN ROADWAY AREA</td>
</tr>
<tr>
<td></td>
<td>DURING CONSTRUCTION</td>
</tr>
<tr>
<td>4.</td>
<td>H-1005 BUS STOP IN NEW ROADWAY</td>
</tr>
<tr>
<td>5.</td>
<td>H-1005A BUS STOP IN EXISTING ROADWAY</td>
</tr>
<tr>
<td>6.</td>
<td>H-1009 CHAIN LINK FENCE DETAILS TENSION WIRES TOP AND/OR BOTTOM</td>
</tr>
<tr>
<td>7.</td>
<td>H-1010 STEEL FACED CONCRETE CURB STEEL FACING TYPE D</td>
</tr>
<tr>
<td>8.</td>
<td>H-1011 SIDEWALK PEDESTRIAN RAMPS</td>
</tr>
<tr>
<td>9.</td>
<td>H-1012 TIMBER CURB</td>
</tr>
<tr>
<td>10.</td>
<td>H-1013 ILLUMINATED TIMBER BARRICADE</td>
</tr>
<tr>
<td>11.</td>
<td>H-1014 TEMPORARY PEDESTRIAN STEEL BARRICADE</td>
</tr>
<tr>
<td>12.</td>
<td>H-1015 STEEL FACED DROP CURB DRIVEWAYS</td>
</tr>
<tr>
<td>13.</td>
<td>H-1017 BAR PICKET FENCE (4'-0&quot; HIGH)</td>
</tr>
<tr>
<td>14.</td>
<td>H-1021 CHAIN LINK FENCE. DETAILS (SH. 1 TO 4)</td>
</tr>
<tr>
<td>15.</td>
<td>H-1022 BEAM BARRIER FOR DEAD END STREETS</td>
</tr>
<tr>
<td>16.</td>
<td>H-1029 CRITERIA FOR DESIGN &amp; CONSTRUCTION OF CANOPIES</td>
</tr>
<tr>
<td>17.</td>
<td>H-1030 STANDARD RECESS IN VAULT CONSTRUCTION TO PROVIDE FOR STREET</td>
</tr>
<tr>
<td></td>
<td>WIDENING. RECEIVING BASINS. INLETS. AND 12'-0&quot; CORNER RADIUS</td>
</tr>
<tr>
<td>18.</td>
<td>H-1031 TYPICAL PAVEMENT KEY</td>
</tr>
<tr>
<td>19.</td>
<td>H-1032 TYPICAL NEW PAYMENT IN UNPAVED WING AREA</td>
</tr>
<tr>
<td>20.</td>
<td>H-1033 TYPICAL RESURFACING ON ASPHALT PAVEMENT AND/OR WEARING</td>
</tr>
<tr>
<td></td>
<td>COURSE (LESS THAN FULL WIDTH)</td>
</tr>
<tr>
<td>21.</td>
<td>H-1034 TYPICAL CONSTRUCTION JOINTS FOR CONCRETE BASE FOR PAVEMENT</td>
</tr>
<tr>
<td>22.</td>
<td>H-1035 REINFORCED CONCRETE CURB &amp; DROP CURB</td>
</tr>
<tr>
<td>23.</td>
<td>H-1036 TYPE III BREAKAWAY BARRICADE</td>
</tr>
<tr>
<td>24.</td>
<td>H-1040 TRANSVERSE CONSTRUCTION JOINTS FOR CONCRETE BASE</td>
</tr>
<tr>
<td>25.</td>
<td>H-1041 CONCRETE COLLAR AROUND STEAM MANHOLE AND STEAM VALVE</td>
</tr>
<tr>
<td>26.</td>
<td>H-1042A STANDARD TRENCH OR HOLE RESTORATION IN ACCORDANCE WITH LOCAL LAW</td>
</tr>
<tr>
<td></td>
<td>NO. 14</td>
</tr>
<tr>
<td>27.</td>
<td>H-1042B CONCRETE PAVEMENT RESTORATION</td>
</tr>
<tr>
<td>28.</td>
<td>H-1042C ROADWAY RESTORATION FOR NEWLY CONSTRUCTED ROADWAYS</td>
</tr>
<tr>
<td>29.</td>
<td>H-1043 STEEL FACED CURB STEEL FACING TYPE D FOR STRUCTURES</td>
</tr>
<tr>
<td>30.</td>
<td>H-1044 CONCRETE CURB</td>
</tr>
<tr>
<td>31.</td>
<td>H-1045 CONCRETE SIDEWALK</td>
</tr>
<tr>
<td>32.</td>
<td>H-1046 STREET TREE PLANTING DETAIL TYPE I</td>
</tr>
<tr>
<td>33.</td>
<td>H-1046A PROTECTIVE TREE BARRIER</td>
</tr>
<tr>
<td>34.</td>
<td>H-1047 TYPICAL CURB DETAIL AT EXISTING TREES</td>
</tr>
<tr>
<td>35.</td>
<td>H-1048 PLASTIC BARREL</td>
</tr>
<tr>
<td>36.</td>
<td>H-1050 REINFORCED CONCRETE PAVEMENT CONSTRUCTION DETAILS (SH. 1 TO 4)</td>
</tr>
<tr>
<td>37.</td>
<td>H-1051 TEMPORARY WOODEN STEPS</td>
</tr>
<tr>
<td>38.</td>
<td>H-1052 DETAILS FOR CONSTRUCTING AREAS OF ADJUSTMENT AND TRANSITION SECTIONS</td>
</tr>
<tr>
<td>39.</td>
<td>H-1053 LIMITS OF MEASUREMENT FOR PAYMENT OF TEMPORARY ASPHALT PAVEMENT</td>
</tr>
<tr>
<td>40.</td>
<td>H-1054 PAVEMENT KEY TYPE A, B-1, B-2, C</td>
</tr>
<tr>
<td>41.</td>
<td>H-1055 PAVEMENT KEY ONE OF THE 3 TYPES OF CEMENT</td>
</tr>
<tr>
<td>42.</td>
<td>H-1056 TYPICAL GRANITE CURB</td>
</tr>
<tr>
<td>43.</td>
<td>H-1056A NY HISTORICAL GRANITE CURB</td>
</tr>
<tr>
<td>44.</td>
<td>H-1057 TEMPORARY STORAGE AREA</td>
</tr>
<tr>
<td>45.</td>
<td>H-1058 NEW YORK CITY COMPARISON OF DATUM PLANES</td>
</tr>
<tr>
<td>46.</td>
<td>H-1059 SIDEWALK PAYMENT LIMITS</td>
</tr>
<tr>
<td>47.</td>
<td>H-1060 TYPICAL ROADWAY CROSS - SECTION RESURFACING</td>
</tr>
<tr>
<td>48.</td>
<td>H-1061 CATCH BASIN ADJUSTMENT - TYPE 1</td>
</tr>
</tbody>
</table>

---

**THE CITY OF NEW YORK**  
**DEPARTMENT OF TRANSPORTATION**
Steel Faced Curb

See Detail H-1010

Varies

Concrete Sidewalk

Section Thru Mall A-A

Not to Scale

Section Thru Cross Walk B-B

Not to Scale

Exposed Steel Surface shall be ground smooth.

Top 1/2" Sealer or Bond Breaker (Typ.)

1/16" of Top Surface

Slope 1:12 Max.

Concrete Sidewalk

Detectable Warning Surface

See Detail H-1101

Variable Pitch (Typ.)

Plan

Not to Scale

Elevation

Not to Scale

New York City Department of Transportation

PEDESTRIAN CROSSWALKS-MALL

TYPE-A

Approved:

Associate Commissioner

Infrastructure

Volume

Design + Construction

CHECKED BY: 

REVISION NO.

DESCRIPTION

DATE

APPROVED

Date Issued: 

Scale

Drawing #: H-1009A

1/10
NOTES

1. ALL TIMBER SHALL BE DOUGLAS FIR GRADE NO. 1.
2. ALL WORK SHALL CONFORM WITH NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENINGS.
3. LIGHTING FIXTURES CAN BE BATTERY TYPE FLASHER WARNING LIGHT OR AS DIRECTED BY THE ENGINEER.
4. RAILS & POSTS ARE TO RECEIVE TWO (2) COATS OIL PAINT, ORANGE & WHITE COLORS, IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. CONTRACTOR TO PROVIDE SHOP DRAWING CERTIFIED BY LICENSED PROFESSIONAL ENGINEER, CURRENTLY REGISTERED IN THE STATE OF NEW YORK, FOR APPROVAL.

CHECKED BY: [Signature]

Date Issued: [Date]

REVISION NO. DESCRIPTION DATE APPROVED

Scale: [Scale]

Drawing R-A-1004
APPROVED
W.F.

EXPANSION JOINT

CONCRETE

PREFORMED JOINT

DETAIL 1

JOINT FILLER BASIN

SECTION A-A

DETAIL 1

KEYED CONSTRUCTION JOINT

EXCEPT CURB LINE

SECTION B-B

DETAIL 2

EXPANSION JOINT

AT STEEL FACED CURB

FOR GRANITE CURB SEE DETAIL 2A

SECTION C-C

CONTRACTION JOINT

NOTES:

1. BUS PADS ARE NOT REQUIRED, WHEN REINFORCED CONCRETE
   PAVEMENT IS PLACED IN THE ROADWAY.

2. EDGE OF THE BUS PAD AT INTERSECTIONS SHALL BE PARALLEL
   TO CROSSWALK MARKING LINES OR INTERSECTING BUILDING
   LINE AS DETERMINED BY ENGINEER.

3. DRAINAGE STRUCTURES AND MANHOLES SHALL BE TOTALLY
   WITHIN OR TOTALLY OUTSIDE THE BUS PAD.

4. LAPS OF WELDED WIRE FABRIC SHALL BE A MINIMUM OF 12 INCHES.

5. DIMENSIONS SHOWN ARE FOR DEPARTMENT OF ENVIRONMENTAL
   PROTECTION TYPE II STANDARD CURB MANHOLE, ADJUST TO
   ACCOMMODATE OTHER SIZE HARDWARE, AS APPROVED BY THE
   ENGINEER.

6. THE EXACT LOCATION OF THE HYDRANT SHALL BE DETERMINED IN
   THE FIELD BY THE ENGINEER.

New York City
Department of Transportation

BUS STOP IN
NEW ROADWAY

Approved: Associate Commissioner
Chair Engineer

Date Issued: 7/1/10
Scale: 1/4" = 1'-0"

Drawing No. 49-1085
**Notes:**

1. BOARDS OF THE BUS PAD AT INTERSECTIONS SHALL BE PARALLEL TO CROSSWALK MARKING LINES OR INTERSECTING BUILDING LINES OR AS DETERMINED BY ENGINEER.

2. DRAINAGE STRUCTURES AND MANHOLES SHALL BE TOTALLY WITHIN OR TOTALLY OUTSIDE THE BUS PAD.

3. LAPS IN WELDED WIRE FABRIC SHALL BE A MINIMUM OF 12 INCHES.

4. DIMENSIONS SHOWN ARE FOR DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER MANHOLE. ADJUST TO ACCOMMODATE OTHER SIZE HARDWARE, AS APPROVED BY THE ENGINEER.

New York City Department of Transportation

**Bus Stop in Existing Roadway**

---

**Plan of Bus Stop**

- **Curb Line**: 11' wide or as directed.
  - Type 2 Sealer and 1/2" PREFORMED joint filler.
  - Concrete fill.
- **Expansion Joint**: 11' wide or as directed.
  - Type 2 Sealer and 1/2" PREFORMED joint filler.
  - Concrete fill.
- **Manhole**: New steel faced concrete curbs 2" deep.
  - 2" PREFORMED joint filler type 2 within concrete surface.
  - WWF 4x4-W4xW4 (No separate payment).
- **Sidewalk**: 11' wide or as directed.
  - Type 2 Sealer on bond breaker, fill to 1/2" of top surface.
  - Reflective cracking membrane (See H-945).
- **Concrete Fill**: 3" ASPH. WEARING COURSE.
  - Tool Sealer joint, 1/4" - Type 2 Sealer, fill to 1/8" of top surface.
  - WWF.

---

**Section A-A**

- **Load Transfer Joints**: 10' long, 3' from top & 4' off all 3 sides, item 7.19.

---

**Section B-B**

- **Curb Line**: 11' wide or as directed.
  - Type 2 Sealer and 1/2" PREFORMED joint filler.
  - Concrete fill.
- **Sidewalk**: 11' wide or as directed.
  - Type 2 Sealer on bond breaker, fill to 1/2" of top surface.
  - Reflective cracking membrane (See H-945).
- **Manhole**: New steel faced concrete curbs 2" deep.
  - 2" PREFORMED joint filler type 2 within concrete surface.
  - WWF 4x4-W4xW4 (No separate payment).
- **Expansion Joint**: 11' wide or as directed.
  - Type 2 Sealer on bond breaker, fill to 1/2" of top surface.
  - Reflective cracking membrane (See H-945).

---

**Detail 1**

- **Concrete Fill**: 3" ASPH. WEARING COURSE.
- **Tool Sealer Joint**: 1/4" - Type 2 Sealer, fill to 1/8" of top surface.
- **WWF**.

---

**Detail 2**

- **Concrete Fill**: 3" ASPH. WEARING COURSE.
- **Tool Sealer Joint**: 1/4" - Type 2 Sealer, fill to 1/8" of top surface.
- **WWF**.

---

**Notes:**

1. BOARDS OF THE BUS PAD AT INTERSECTIONS SHALL BE PARALLEL TO CROSSWALK MARKING LINES OR INTERSECTING BUILDING LINES OR AS DETERMINED BY ENGINEER.

2. DRAINAGE STRUCTURES AND MANHOLES SHALL BE TOTALLY WITHIN OR TOTALLY OUTSIDE THE BUS PAD.

3. LAPS IN WELDED WIRE FABRIC SHALL BE A MINIMUM OF 12 INCHES.

4. DIMENSIONS SHOWN ARE FOR DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARD SEWER MANHOLE. ADJUST TO ACCOMMODATE OTHER SIZE HARDWARE, AS APPROVED BY THE ENGINEER.

---

**New York City Department of Transportation**

**Bus Stop in Existing Roadway**

---

**Approved**

---

**Drawing # H-1005A**

---

**Issued: 7/11/10**

---

**Scale: 1/16" = 1'-0"**

---

**Drawing # H-1005A**
1. The tension wire shall be installed at a top wire height of 6'-0" high or at such height as to be in accordance with the Contractor's plans. The proposed height of each post shall be equal to or exceed 2'-0" for a 5'-0" high fence or 2'-6" for a 6'-0" high fence. If the tension wire is to be replaced, the Contractor shall be responsible for the required height. The tension wire shall be installed after the pipe sections have been properly tensioned and shall be checked prior to the installation of new sections. The tension wire shall be checked and approved by the Engineer prior to the installation of the new sections.

2. The tension wire shall be installed in a vertical and horizontal alignment that is in accordance with the Contractor's plans. The tension wire shall be pre-stressed and the required tension shall be maintained throughout the length of the fence.

3. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

4. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

5. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

6. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

7. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

8. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

9. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

10. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

11. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

12. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

13. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.

14. The tension wire shall be pre-stressed at each post location. The tension wire shall be checked and approved by the Engineer prior to the installation of new sections. Any proposed changes to the tension wire shall be submitted to the Engineer for approval.
EXPANSION JOINTS IN THE STEEL CURB FACING AND CONCRETE BACKING SHALL BE AT A MAXIMUM SPACING OF 24 FEET.

2. THE EXPANSION JOINTS OF THE CURB AND STEEL CURB FACING SHALL LINE UP WITH THE EXPANSION JOINTS OF THE CONCRETE SIDEWALKS, WHEREVER POSSIBLE.

3. NO PIECE OF STEEL CURB FACING HAVING LESS THAN TWO (2) WELDED DOWELS MAY BE INSTALLED UNLESS IT IS WELDED TO THE ADJACENT STEEL CURB FACING.

4. 1/2" x 6" HEADED ANCHOR STUDS (GRANULAR OR SOLID FLUX FILLED) MAY BE SUBSTITUTED.

5. STRUCTURAL STEEL (A.S.T.M. DESIGNATION A36), SURFACE TO BE CLEANED AND PAINTED AS PER NYCDOT STANDARD HIGHWAY SPECIFICATIONS, SECTION 2.13. COLOR OF TOP COAT SHALL BE GRAY AS APPROVED BY THE ENGINEER.

6. CONCRETE TO BE CLASS B, AIR-ENTRAINED.

7. WHERE TWO (2) PIECES OF STEEL CURB FACING ARE JOINED BUT NOT WELDED, TWO (2) ONE-HALF (1/2) INCH RODS, TWENTY FOUR (24) INCHES LONG SHALL BE INSERTED INTO THE CONCRETE BACKING, ONE-HALF (1/2) THE LENGTH AT EACH SIDE OF THE JOINT.

6. CORNER CURBS VERTICAL FACE WILL BE ACCEPTABLE FOR CORNER CURBS PROVIDING THE EDGES ARE WAFERED TO FORM A TRANSITION WITH ADJACENT BATTERED FACE CURBS.

NOTES:

1. EXPANSION JOINTS IN THE STEEL CURB FACING AND CONCRETE BACKING SHALL BE AT A MAXIMUM SPACING OF 24 FEET.

2. THE EXPANSION JOINTS OF THE CURB AND STEEL CURB FACING SHALL LINE UP WITH THE EXPANSION JOINTS OF THE CONCRETE SIDEWALKS, WHEREVER POSSIBLE.

3. NO PIECE OF STEEL CURB FACING HAVING LESS THAN TWO (2) WELDED DOWELS MAY BE INSTALLED UNLESS IT IS WELDED TO THE ADJACENT STEEL CURB FACING.

4. 1/2" x 6" HEADED ANCHOR STUDS (GRANULAR OR SOLID FLUX FILLED) MAY BE SUBSTITUTED.

5. STRUCTURAL STEEL (A.S.T.M. DESIGNATION A36), SURFACE TO BE CLEANED AND PAINTED AS PER NYCDOT STANDARD HIGHWAY SPECIFICATIONS, SECTION 2.13. COLOR OF TOP COAT SHALL BE GRAY AS APPROVED BY THE ENGINEER.

6. CONCRETE TO BE CLASS B, AIR-ENTRAINED.

7. WHERE TWO (2) PIECES OF STEEL CURB FACING ARE JOINED BUT NOT WELDED, TWO (2) ONE-HALF (1/2) INCH RODS, TWENTY FOUR (24) INCHES LONG SHALL BE INSERTED INTO THE CONCRETE BACKING, ONE-HALF (1/2) THE LENGTH AT EACH SIDE OF THE JOINT.

6. CORNER CURBS VERTICAL FACE WILL BE ACCEPTABLE FOR CORNER CURBS PROVIDING THE EDGES ARE WAFERED TO FORM A TRANSITION WITH ADJACENT BATTERED FACE CURBS.
GENERAL NOTES:

1. ALL TIMBER AND LUMBER TO BE DENSE STRUCTURAL GRADE DOUGLAS FIR OR LONGLEAF YELLOW PINE.
2. WHITE AND ORANGE EXTERIOR ENAMEL.
3. WHITE TO BE REFLECTORIZED.
ILLUMINATED TIMBER BARRICADE

NOTES:
1. ALL TIMBER SHALL BE DOUGLAS FIR GRADE NO. 1 OR EQUAL.
2. ALL WORK SHALL CONFORM WITH NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENINGS.
3. ALL PAINTING SHALL BE ON TRAFFIC FACE, 2-COATS APPROVED ORANGE AND STAIN RESISTANT REFLECTED WHITE.
4. ALL ELECTRICAL WORK FOR BARRICADE LIGHTING SHALL CONFORM TO THE DETAILS SHOWN IN D.W.S.G. & E. STANDARD DRAWING NO. H-3009 AND IN D.W.S.G. & E. "GENERAL SPECIFICATION FOR THE INSTALLATION OF ILLUMINATION SYSTEMS."
5. THIS STANDARD APPLIES FOR BOTH BATTERY OPERATED FLASHING UNITS OR ELECTRICAL UNITS AS SHOWN. PROJECT SPECIFICATIONS WILL DICTATE THE TYPE OF POWER SUPPLY.
ELEVATION

STRAIGHT SECTIONS - 7 TO 9'
CORNER SECTIONS - 3 TO 4'

SECTION A-A

NEW YORK CITY
Department of Transportation

TEMPORARY PEDESTRIAN
STEEL BARRICADE

Approved:

Chief Engineer
Associate Commissioner
Department of Design + Construction

Date Issued:

Scale:

Drawing #:

CHECKED BY:

REVISION NO.

DESCRIPTION

DATE

SCALE

REVISED

Sheet:

Page:

In 4-1614
1. 1/2" x 3" BUSHED ANCHOR STUDS (GRAINULAR OR SOLID FLUX FILLED) MAY BE SUBSTITUTED.
2. STRUCTURAL STEEL, AS PER ASTM DESIGNATION A-36.
3. STEEL FACINGS TO BE CLEANED AND PrimED AS PER SPECIFICATION. TOP COAT SHALL BE GRAY AS APPROVED BY THE ENGINEER.
4. CONCRETE TO BE CLASS 8-32, TYPE II A.
5. 3'-6" TO 5'-0" AS ORDERED BY THE ENGINEER EXCEPT FOR THE FIRE DEPARTMENT DRIVEWAYS WHICH WILL SLOPE STRAIGHT BACK TO THE PROPERTY LINE. FIRE DEPARTMENT DRIVEWAYS SHALL BE TYPE III SIDEWALK-SEE H1046.
1. Sleeves required in new concrete masonry structures.
2. Sleeves not required for individual new footings.
3. In existing concrete or masonry structures, contractor to drill 1/2" dia. holes for 1-3/4" X 1-3/4" posts.
4. All steel shall conform to specification own of the A.I.S.I.
5. All joints to be welded unless noted otherwise.
6. All steel to be painted with one (1) shop coat of primer. All steel prime shop coat to be exposed. Prior to erection installation shall be given one (1) shop coat of intermediate and one (1) shop coat or rolled field coat of finish top coat in compliance with the requirements of subsection 2.13.4 of the NYCDOT standard highway specifications. The color of top coat shall be as approved by the engineer.
7. All fastening hardware to be compatible.
8. Concrete in individual footings - class B-55, type K.
9. Cement grout - 1:1 mix.

New York City
Department of Transportation

Approved:

Design:

Bar Picket Fence
(6'-0" High)
THE NPS EDGE ENGINEER ARE INTEGRAL PARTS OF CONSTRUCTION. THEY ARE USED IN THE FOLLOWING SIZES:

- 2" O.D. POST
- 2½" O.D. POST
- 3" O.D. POST
- 4" O.D. POST
- 5" O.D. POST
- 6" O.D. POST

THE TWO PIECES SHALL BE KNUCKLED AT TOP AND BOTTOM AND THE TOP PIECE MUST BE BOLTED AT BOTTOM AND BURIED AT TOP.

WIRE FABRIC NOTES:
- THE MESH SHALL BE PLACED ON ALL EXTERIOR CHAIN LINK FENCES AT THE TIME OF INSTALLATION. THE MESH SHALL BE KNUCKLED AT EACH POST OR BOARD AND THE MESH SHALL BE SECURED AT THE TOP OR BOARD.

PIPE SCHEDULE:

<table>
<thead>
<tr>
<th>Size</th>
<th>WT</th>
<th>FT/PK</th>
<th>LB/FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>3&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
</tbody>
</table>

PIECE OF MESH SHALL BE KNUCKLED AT BOARD AND POST.

TENSION MEMBERS:

- ⅝" O.D. CANVAS BOLT
- ⅞" O.D. CANVAS BOLT
- 1½" O.D. BOLTS

NOTE:
- A·½" FOR 2" - 4½" O.D. POST
- B·½" FOR 2½" O.D. OR SMALLER POST
- C·½" FOR 3" - 4½" O.D. OR LARGER - 2 BOLTS REQUIRED

BOLT AND FABRIC NOTES:
- PEW END OF ALL BOLTS.
- BOLTS SHOULDER ARE DRILLED 6 OR LESS HOLES FOR SCREWS. THE SCREWS SHALL BE FASTENED TO THE SATISFACTORY OF THE CONTRACTOR.
- ON HOLES OVER 12 FEET DEEP, THE SCREWS SHALL BE USED TO PLACE THE MESH. THE SCREWS ARE TO BE KNUCKLED AT TOP AND BOTTOM AND THE TOP PIECE MUST BE BOLTED AT BOTTOM AND BURIED AT TOP.
- THE TWO PIECES SHALL BE SOWN IN SUCH A MANNER AS TO GIVE A FINISHED NET APPEARANCE.
- FABRIC TO BE KNUCKLED AT TOP AND BOTTOM AND THE TOP PIECE MUST BE BOLTED AT BOTTOM AND BURIED AT TOP.

WIRE FABRIC NOTES:
- THE MESH SHALL BE PLACED ON ALL EXTERIOR CHAIN LINK FENCES AT THE TIME OF INSTALLATION. THE MESH SHALL BE KNUCKLED AT EACH POST OR BOARD AND THE MESH SHALL BE SECURED AT THE TOP OR BOARD.

THE MATERIALS ARE PART OF THE CONTRACT PRICES.

SCHEDULE OF SIZES OF MEMBERS - AS PER ASTM A 53, ALL SIZES NPS:

<table>
<thead>
<tr>
<th>Size</th>
<th>WT</th>
<th>FT/PK</th>
<th>LB/FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>3&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
</tbody>
</table>

FABRIC WIDTHS:

<table>
<thead>
<tr>
<th>Size</th>
<th>WT</th>
<th>FT/PK</th>
<th>LB/FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>¾&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>1½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>2½&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
<tr>
<td>3&quot;</td>
<td>0</td>
<td>12</td>
<td>0.375</td>
</tr>
</tbody>
</table>

Plan: plan view of the fence with dimensions and details.

Elevation: elevation view of the fence with dimensions and details.

Section: sectional view of the fence with dimensions and details.

Section A-A: sectional view of the fence with dimensions and details.
1. **Extend Fence Height - Section**

2. **Different Curb Elevations**

3. **Supply New Portal**

4. **Protective End Piece**

5. **Replace Fence Post 10'-0" HT. & OVER**

6. **Replace Fence Post Up to 8'-0"**

**Schedule for Post Inserts**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>3&quot;</th>
<th>4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1/2&quot;</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>3&quot;</td>
<td>6&quot;</td>
<td></td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td>7&quot;</td>
<td></td>
</tr>
</tbody>
</table>

New York City
Department of Transportation

**Chain Link Fence - Special Conditions**

**Approved**

**Issued**

**Checked by**

**Scale**

**Drawing**

<table>
<thead>
<tr>
<th>Revision</th>
<th>Description</th>
<th>Date</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- NEW CONCRETE CURB: The new concrete curb shall be cast to the depth of post socket (see detail sheet 3 of 4).
- DOUBLE SHORT CURB: The new curb shall be cast to the depth of post socket (see detail sheet 2 of 4).
- EXISTING CONCRETE CURB: The existing concrete curb shall be removed before new curb is cast.
- Replace fence post up to 8'-0" height.
- Replace fence post 10'-0" HT. & OVER.
- Replace fence post 8'-0" HT. & OVER.
- Replace fence post 12'-0" HT. & OVER.
- Replace fence post 14'-0" HT. & OVER.
- Replace fence post 16'-0" HT. & OVER.

**Note:**
- All fence posts shall be a minimum of 2' from the top of the curb.
- All fence conditions shall be approved by the Department of Design & Construction.

**New York City Department of Transportation**

**Contractor:**

**Architect:**

**Engineer:**

**APPROVED:**

**Date:**

**Scale:**

**Drawing:**

- 1/10" = 1'-0" (Architectural)
1. 4'-0" & 3'-0" FENCE
2. 4'-0" SINGLE FENCE GATE
3. GATE POST SPLIT FITTING AND CAP
4. GATE STOP TYPE "B" - TOP
5. 6'-0" FENCE
6. 8'-0" FENCE
7. 10'-0" FENCE
8. 12'-0" SINGLE FENCE GATE
9. MALLEABLE IRON HINGE
10. GATE LOCK GATE STOP TYPE "B" - BOTTOM
11. 12'-0" FENCE
12. PRESS STEEL HINGE
13. 15'-0" FENCE
14. SCHEDULE OF MEMBER SIZES
15. GATE PIN
16. NOMINAL THICKNESS CHARTS

New York City Department of Transportation

Checked by: [Signature]

Approved: [Signature]
GAGE STANDARD

ELEVATION

PLAN

SECTION A-A

KEY PLAN

NOT TO SCALE

NOTES:
1. ALL MATERIALS SHALL CONFORM TO ASTM (OB. MINI).
2. BEAMS AND TERMINAL SECTIONS SHALL BE MADE FROM 12-GAGE, 1/8 IN. ALUMINUM ALLOY SHEET.
3. POSTS SHALL CONFORM TO ASTM A36 WITH A MINIMUM YIELD STRENGTH OF 36,000 PSI.
4. POSTS SHALL BE MADE FROM 12-GAGE STEEL. THE ULTIMATE TENSILE STRENGTH OF THE STEEL SHALL BE AT LEAST 80,000 PSI.
5. THE VERTICAL, WHITE STRIPES ON THE BEAM BARRIER SHALL BE REFLECTORIZED WITH 1-1/2" REFLECTIVE LIQUIDS AS MADE BY MINN. MINING AND MANUFACTURING COMPANY OR APPROVED EQUIVALENT.
6. SPLICE BOLTS SHALL BE MADE FROM 12-GAGE STEEL. THE ULTIMATE TENSILE STRENGTH OF THE STEEL SHALL BE AT LEAST 80,000 PSI.
7. GALVANIZATION Primer and Paint for Black Stripes Shall Be as Approved by the Engineer.

CHECKED BY: M. R. McGoff

Department of Transportation

BEAM BARRIER FOR DEAD END STREETS

New York City

CROSS SECTION THROUGH GUARD RAIL SPACE

ELEVATION OF GUARD RAIL SPACE AT POST

DEAD ENDCross Section Through Guard Rail Space
THE BOTTOM OF THE COVERING OF THE CANOPY SHALL BE NOT LESS THAN EIGHT FEET ABOVE THE SIDEWALK.

THE CANOPY MAY EXTEND FROM THE BUILDING TO NO MORE THAN A MIN. OF ONE FOOT OR A MAX. OF 2 FEET FROM CURB LINE.

THE WIDTH OF THE CANOPY IS LIMITED TO THE WIDTH OF THE ENTRANCE TO THE BUILDING OR PLACE OF BUSINESS, BUT IN NO CASE MAY THE WIDTH BE LESS THAN FOUR FEET.

COVERING MATERIAL
MAY BE OF FLAMEPROOF CANVAS OR CLOTH, APPROVED SLOW BURNING PLASTIC, WIRET METAL OR OTHER EQUIVALENT MATERIAL.

COLOR
MUST HARMONIZE WITH THE ARCHITECTURE OF THE BUILDING THAT IT IS INTENDED FOR AND ALSO BE IN KEEPING WITH THE SURROUNDING AREA.

LETTERING
ON COVERING MAY BE OF A PAINTED, IMPRINTED OR STENCILED TYPE AS APPROVED AND SHALL BE LIMITED TO A SINGLE HORIZONTAL LINE OF LETTERING.

PAINTING
WHERE FRAMEWORK IS IRON, STEEL OR GALVANIZED, IT SHALL BE PAINTED AT A MAXIMUM OF FIVE YEAR INTERVALS THEREAFTER.

SIDE CURTAINS
NO SIDE CURTAINS ARE PERMITTED.

SUPPORT AND FRAMEWORK MATERIAL
SUPPORTING FRAMEWORK SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE METAL MEMBERS, VERTICAL UPRIGHTS SHALL BE OF SUFFICIENT SIZE AND STRENGTH AND SHALL BE NO LESS THAN A STANDARD STEEL PIPE 1 1/4 IN. DIAMETER. WHERE SPECIAL CONSTRUCTION IS USED INSTEAD OF PIPE, THE DESIGN SHALL BE EQUIVALENT TO THE ABOVE NOTED MINIMUM STANDARD FOR PIPE.

CONSTRUCTION
THE VERTICAL UPRIGHTS SHALL BE IMBEDDED IN A CONCRETE FOOTING OF AGGREGATE SIZE DESIGNED TO TAKE CARE OF WIND UPLIFT. INTERMEDIATE SUPPORTS OR DIAGONAL BRACING FOR VERTICAL SUPPORTS ARE NOT PERMITTED.

REPAINTING
WHERE INITIALLY PAINTED, IT SHALL BE REPAINTED AT A MAXIMUM OF FIVE YEAR INTERVALS.

LIGHTING
AREA UNDER CANOPY COVERING SHALL BE LIGHTED TO THE SATISFACTION OF THE NYC DEPARTMENT OF TRANSPORTATION (NYCDOT) WHERE DEEMED NECESSARY BY THE SYSCO DIVISION OF TRAFFIC OPERATIONS, STREET LIGHTING SECTION.

NOTE A
PRIOR APPROVAL MUST BE OBTAINED FROM THE FIRE DEPARTMENT FOR DISTANCE LESS THAN 15'.

NOTE B
PRIOR APPROVAL MUST BE OBTAINED FROM THE BUREAU OF TRAFFIC OPERATIONS WHERE EXISTING PARKING METERS ARE LOCATED WITHIN THE PROPOSED CANOPY AREA.

A PERMIT MUST BE OBTAINED FROM THE NYC DEPARTMENT OF TRANSPORTATION BEFORE ANY CANOPY IS ERECTED.
NOTES:

1. DESIGN VAULT ROOT TO CONFORM TO REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

2. CURB & APPNACE SHALL BE SET TO LINE AND CURB AS DETERMINED BY THE NYC DEPARTMENT OF TRANSPORTATION (ANOCAP). RECESS FOR CURB TO BE NOT LESS THAN 1/4" BELOW GRADE, TO BE FURNISHED BY THE CITY.

3. CURB SHALL CONFORM TO THE STANDARD SPECIFICATION ON FILE IN THE NYC DEPARTMENT OF TRANSPORTATION.

4. VATIE AREA BETWEEN EXISTING AND PROPOSED CURB LINES TO BE MAINTAINED FOR PEDESTRIAN TRAFFIC PENDING WIDENING OF THE ROADWAY.

5. STANDARD RECESSION REQUIRED IN VAULT CONSTRUCTION WHERE CORNER IS TO BE TURNED AT A 12'-0" RADIUS. EXISTING BASINS REMODELED & INLETS BUILT.

6. PERMIT FROM THE NYC DEPARTMENT OF TRANSPORTATION AND DEPARTMENT OF BUILDINGS MUST BE OBTAINED BEFORE ANY WORK IS PERFORMED WITHIN THE AREA.
LIMITS OF ASPHALT OVERLAY

3-

MINIMUM (OR TO TOP OF BASE
SMALLEST DIMENSION GOVERNS)

STRAIGHT, SAW-CUT EDGE APPLY
TACK COAT TO ALL SURFACES

REMOVE ALL MATERIAL WITHIN KEY
AND DISPOSE OF AWAY FROM SITE
AS DIRECTED BY THE ENGINEER

EXISTING ASPHALT WEARING COURSE

CONCRETE BASE, ASPHALT BASE OR STONE BASE

TYPICAL PAVEMENT KEY

VARIABLE

TYPICAL PAVEMENT KEY

N.T.B.
EXISTING WIDTH OF ROADWAY - EXISTING OR PROPOSED CURB LINE

EXISTING OR PROPOSED CURB LINE

EXISTING PAVEMENT

EXISTING UNPAVED WING AREA

EXISTING CONDITION

N.T.S.

SAWCUT

AVERAGE WIDTH

MINIMUM

TYPICAL NEW PAVEMENT IN UNPAVED WING AREA

N.T.S.

SECTION

TYPICAL NEW PAVEMENT IN UNPAVED WING AREA

N.T.S.

CHECKED BY: MZ

New York City

Department of Transportation

TYPICAL NEW PAVEMENT IN UNPAVED WING AREA

Approved:

Date Issued: 7/1/10

Drawing # H-1012
NOTE:
ADJUST ALL MANHOLES, GRATES, CATCH BASINS, VAULTS, BOXES, ETC. WITHIN AREA OF RESURFACING.

MILL AND RESURFACE TO MATCH THE EXISTING ADJACENT PAVEMENT SURFACE. ADJUSTMENT SHOULD BE MADE AS NECESSARY TO ELIMINATE PONDING CONDITION.

ASPHALTIC CONCRETE OVERLAY

SAW CUT EDGE, FULL DEPTH

EXISTING ASPHALT WEARING COURSE

EXISTING PAVEMENT

SECTION
N.T.S.
NOTES:
1. TYPE I CONSTRUCTION JOINT TO BE USED FOR LONGITUDINAL ROADWAY JOINTS.
2. TYPE II CONSTRUCTION JOINT SHALL BE INSTALLED ON ALL TRANSVERSE ROADWAY JOINTS.
3. ALL ASPHALT JOINTS SHALL BE SAW-CUT, FULL DEPTH. TACK COAT TO BE APPLIED TO ALL SURFACES. JOINT SHALL BE PARALLEL TO CURBLINE OR AS OTHERWISE DIRECTED.
CURB ELEVATION VIEW
NOT TO SCALE

SECTION A-A
NOT TO SCALE

SECTION B-B
NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE CLASS A-40; 4000 P.S.I. AS PER SECTION 3.05 OF
   STANDARD HIGHWAY SPECIFICATIONS.
2. STEEL REINFORCEMENT SHALL BE AS PER ASTM A615, GRADE 60.
3. THE SLOPE OF THE TOP OF CURB SHALL CONFORM TO SLOPE OF SIDEWALK
   IN ALL CASES.
4. EXPANSION JOINTS IN CURB SHALL NOT EXCEED 3/8" O.C.
5. THE EXPANSION JOINTS OF THE CURBS SHOULD LINE UP WITH THE EXPANSION
   JOINTS IN THE CONCRETE SIDEWALK.
NOTES:
1. ALL EXPOSED SURFACES TO BE STEEL TROWEL FINISHED.
2. THE MATERIAL UNDERLYING THE CURB SHALL BE SATISFACTORY AND THOROUGHLY COMPACTED TO THE SATISFACTION OF THE ENGINEER.
3. PREFORMED JOINT FILLER TO BE USED AT ALL EXPANSION JOINTS. THICKNESS OF EXPANSION JOINT TO MATCH THAT OF ADJACENT BEDDING.
4. COLOR TO BE AS DIRECTED.
NOTE:
AUTHORIZATION REQUIRED BY N.Y.C. DEPT. OF BUILDINGS & DEPT. OF ENVIRONMENTAL PROTECTION FOR NEW INSTALLATIONS.


**NOTES**

1. ALL PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PRESSURE RATED PIPE SDR 21 OR SDR 26 ASTM D2241.
2. JOINT FITTINGS MAY BE PVC ASTM D2665 OR ACRYLONITRILE BUTADIENE STYRENE (ABS) ASTM D2661 (DRAINAGE AND VENT).
3. ALL PIPE SHALL BE WHITE. WHITE FITTINGS ARE PREFERRED. BLACK MAY BE USED.
4. ALL JOINTS MAY BE USED TO SEPARATE UPON VEHICLE IMPACT.
5. SHADOW CONCRETE TO BE TIED TOGETHER WITH ROPE THREADED INTO PIPE INTERIOR. USE MIP NO. 10 SOLID BRAIDED NYLON OR EQUIVALENT.
6. A FIXED PAVEMENT CONNECTION IS PREFERRED. SAND MAY BE SUBSTITUTE.
7. THE WIRE IS MADE OF ALUMINUM OR GALVANIZED STEEL.
9. REFLECTIVE SHEETING N.Y.S.D.O.T. 730.05-01 OR 730.05-02.

11. FOR LIGHTED BARRICADES THE MOUNTING OF BATTERY PACKS FOR LIGHTING ON CONSTRUCTION BARRICADES SHALL BE AT THE BASE OF THE BARRICADES.

**TYPICAL TYPE III BREAKAWAY BARRICADE UNIT**

**ALTERNATE "A"**

**NOT TO SCALE**

**TYPICAL TYPE III BREAKAWAY BARRICADE UNIT**

**ALTERNATE "B"**

**NOT TO SCALE**

---

**NEW YORK CITY**

**DEPARTMENT OF TRANSPORTATION**

**TYPE III BREAKAWAY BARRICADE**

---

**CHECKED BY:**

---

**SCALE:**

---

**NEW YORK CITY**

**DEPARTMENT OF TRANSPORTATION**

---

**DRAWING P-H-9369**

---
NOTES:

1. TYPE I CONSTRUCTION JOINTS TO BE INSTALLED ON ALL LONGITUDINAL ROADWAY JOINTS.

2. TRANSVERSE JOINTS TO BE SAW CUT WITHIN 24 HOURS OF POURING OF CONCRETE. TRANSVERSE JOINTS SHALL BE 5 FT. SKEWED AND SHALL BE PROVIDED AT 20 FT. CENTERS. SEE TYPICAL LAYOUT AND SECTION X-X FOR DETAILS. (1/8" WIDE)

3. AN 18 INCH WIDTH OF R.C. MEMBRANE IS TO BE APPLIED OVER TRANSVERSE AND LONGITUDINAL JOINTS TO PREVENT REFLECTIVE CRACKING. R.C. MEMBRANE TO BE APPROVED BY THE ENGINEER.

4. R.C. MEMBRANE TO BE INSTALLED AS PER MANUFACTURER’S SPECIFICATIONS.

5. ROADWAY JOINTS (LONGITUDINAL OR TRANSVERSE) TO BE PAID FOR UNDER NEW CONC. BASE ITEM.

6. CONTRACTOR WILL BE PERMITTED TO INSTALL ALTERNATE COLD JOINT FOR TRANSVERSE SECTIONS, SUBJECT TO THE APPROVAL OF THE FIELD ENGINEER.

7. R.C. MEMBRANE WILL BE PAID FOR UNDER ITEM 6.9, REFLECTIVE CRACKING MEMBRANE (18" WIDE).
1. DEPTH "D" TO BE TO THE TOP OF THE EXISTING CONCRETE BASE. THE CONCRETE BASE SHALL BE CHIPPED CLEAN AND AN EPOXY BONDING COMPOUND SHALL BE APPLIED TO THE EXPOSED CONCRETE SURFACE.

2. SHOULD THE DEPTH "D" TO THE TOP OF THE EXISTING CONCRETE BASE BE LESS THAN 6" THE BASE SHALL BE CUT DOWN TO A MIN. OF 6" AND AN EPOXY BONDING COMPOUND WILL BE APPLIED TO THE EXPOSED CONCRETE SURFACE.

3. CONCRETE PAVEMENT SHALL BE CLASS "A" CONCRETE (4000 psi AT 28 DAYS).

4. PRICES SHALL INCLUDE ALL EXCAVATION, PREPARATION, EPOXY, CONCRETE, FINISHING, ETC., AS REQUIRED FOR THE PROPER INSTALLATION.

5. THE PERIMETER OF THE EXCAVATED AREA SHALL BE CUT SQUARE IN ORDER TO PROVIDE FOR AN EVENLY FINISHED AREA.

6. IF THE SEPARATION BETWEEN TWO OR MORE CASTINGS IS SMALLER THAN 2" THE RESTORATION SHALL BE AS ONE UNIT WHILE THE PAY ITEM SHALL BE THE NUMBER OF MANHOLES (VALVE BOXES) INCORPORATED INTO THE WORK.

7. FOR CONCRETE COLLAR AROUND STEAM VALVE BOXES CONSTRUCTION WILL BE SIMILAR EXCEPT EDGE DISTANCE "D" SHALL BE 1'-0".
NOTES:

1. ALL UNDERMINED BASE SHALL BE REMOVED PRIOR TO BACKFILLING.

2. ALL TRENCHES SHALL BE BACKFILLED WITH GOOD TO EXCELLENT GRADE AS PER NEW YORK CITY STANDARD SPECIFICATIONS.

3. ALL EXPOSED CONCRETE BASES TO BE CLEANED AND APTLY BONDED (COMPACTED APPLIED) TO BE PERFORMED ONLY AFTER THE COMPLETION OF THE BACKFILL TO THE BOTTOM OF THE BASE.

4. BACKFILL MATERIAL SHALL BE DEPOSITED IN HORIZONTAL LAYERS NOT EXCEEDING 12" THICKNESS PRIOR TO COMPACTING. A MINIMUM OF 95% OF THE STANDARD MAXIMUM DENSITY WILL BE REQUIRED. WHEN PLACING INFRAPORT, ALL LAYERS SHALL BE DEPOSITED TO PROGRESSIVELY BURY THE PIPE TO EQUAL DEPTHS ON BOTH SIDES. COMPACTING SHALL BE ACHIEVED BY THE USE OF IMPACT RAMMERS, PLATE OR SMALL DRUM VIBRATORS OR PNEUMATIC BUTTON HEAD COMPACTING EQUIPMENT. HAND TAMMING IS NOT PERMITTED EXCEPT IN THE IMMEDIATE AREA OF THE UNDERGROUND FACILITY.

5. ALL RESTORATIONS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF NEW YORK DEPARTMENT OF TRANSPORTATION AND MUST BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.

6. WHEN THE EXISTING PAVEMENT IS ASPHALT MACADAM WITHOUT CONCRETE BASE, THE CONTRACTOR SHALL SAWN AND SAWCUT A WIDTH OF NOT LESS THAN W + 1 FT. BY SAWCUTTING AND GRINDING OR PEELING AS NOT TO DAMAGE CONCRETE BASE. THE SAWCUT SHALL ALIGN WITH THE LANE MARKINGS OR DIRECTION OF TRAFFIC. IF THERE ARE NO LANE MARKINGS, THE AUTHORITY SHALL BE NOTIFIED.

7. WHEN THE DISTANCE BETWEEN HOLES IS GREATER THAN 10 FT. FROM EDGE TO EDGE OF THE PAVEMENT, THE CONTRACTOR SHALL SAWN AND SAWCUT A WIDTH OF NOT LESS THAN W + 1 FT. BY SAWCUTTING AND GRINDING OR PEELING AS NOT TO DAMAGE CONCRETE BASE. THE SAWCUT SHALL ALIGN WITH THE LANE MARKINGS OR DIRECTION OF TRAFFIC. IF THERE ARE NO LANE MARKINGS, THE AUTHORITY SHALL BE NOTIFIED.

8. FOR TRENCH OR HOLE RESTORATION AT BUS STOPS OF FULL DEPTH, SEE STANDARD DRAWING H-1050 FOR CONSTRUCTION DETAILS AND STANDARD DRAWING H-1050A FOR RESTORATION DETAILS.
1. All trenches shall be backfilled with good to excellent fill as per the New York City Department of Transportation specifications.

2. Backfill material shall be deposited in horizontal layers not exceeding 12" in thickness prior to compaction. A minimum of 95% of standard maximum density will be required when placing backfill. Layers shall be deposited to progressively bury the utility to equal depth on both sides. Compaction shall be achieved by the use of impact hammers, plate or small drum vibrators or pneumatic button head compaction equipment. Hand tamping is not permitted except in the immediate area of the underground facility.

3. All materials used in the restoration shall conform to the standards and specifications of the New York City Department of Transportation and/or shall be approved by the OCMC.

4. The outline of the patch shall be full depth saw cutting at a minimum distance of 1/2" from all edges of the excavation. (See sketch for details. The breakup with pneumatic hammers is to be done at the center of the patch area not at the saw cuts. If the contractor spalls the concrete during the removal, he must make a new saw cut outside the sawed area and remove the concrete without additional compensation.

5. To minimize or eliminate patch rocking, pumping, and breakup, the width of the patch shall not be less than one full lane width. However, if the excavation extends into an adjacent lane the concrete in this adjacent lane is to be removed to the next longitudinal joint (to the curb line if cut is in curbed lane). Existing joints thereby removed are to be restored in such a manner so that the structural integrity of the original joint is retained. Tie bars, if present, shall in all cases be retained or replaced.

6. The edge of the patch shall not be closer than 10' to the nearest transverse joint. If said edge falls within this ten (10) foot distance all concrete up to the joint shall be removed and replaced to said boundary. Likewise, the edge of the patch shall not be closer than 1/2" beyond the far side of the hardware. Joints may be rough faced or smooth faced but in all cases the structural integrity of the existing joint is to be retained. Load transfer devices, if present, shall be retained or replaced.

7. Immediately prior to the placing of the new concrete all exposed edges of the old concrete shall have a cement/water/sand grout or epoxy bonding compound brushed-on.

8. A Wire mesh of the same size as that in the original pavement shall be placed in the patch area. No physical tie to the existing mesh will be required. This mesh will be placed approx. 2-3/12" below the roadway surface.

9. A conventional concrete mixture containing an increased cement factor (6 bag mix type I cement), reduced water content, superplasticizer and an accelerator is to be used so that the patch can be opened to traffic within a twenty-four hour period, or before, if and when the concrete has obtained a strength of 2500 psi or better. Until this time the patch shall be protected from traffic by platting and/or barricading.

10. Extra attention is to be given to ensure that the patch is sufficiently vibrated around the edges and that it is not over finished. The patch should be struck off two or three times to ensure that its surface is even with the adjacent concrete. The finished texture shall match that of the adjacent pavement.

11. A CEMENT CURING AND SEALING COMPOUND SHALL BE APPLIED TO THE FINISHED SURFACE.
3. The concrete base of the existing composite pavement shall be removed with a bevel saw cut, as shown on the detail. All existing asphaltic concrete shall be removed to dimensions twelve inches greater than the opening of the concrete base at the top of the bevel by sawcut and grinding or peeling so as not to damage the concrete base.

4. The beveled saw cut surface shall be roughened with a small impact hammer, 20 lb. or less, with a chisel point at least one inch wide.

5. Steel reinforecing bars, as specified on the detail, shall be grooved into drilled holes with concrete grooving material, conforming to New York State Department of Transportation Specification (Rev.) 29.

6. The roughened beveled surface shall be air blasted to remove dust and loose particles prior to coating with a two component bonding compound conforming to New York State Department of Transportation Specification 274-45, Epoxy Polyurethane Grout.

7. A conventional concrete mixture containing an increased cement factor (at least 1.5 times the cement content required for conventional concrete mixtures) shall be used to construct the restoration. The restoration can be opened to traffic with a twenty-four hour period when the concrete has attained a strength of 2 ksi or greater. Until this time, the restoration shall be protected from traffic by placing indoor barriers.

8. A tack coat shall be used on all exposed concrete surfaces before installing new asphaltic concrete wearing course.

9. All trenches shall be backfilled with material meeting New York State Department of Transportation Standard Highway Specifications, Section 4.11.
NOTES

1. EXPANSION JOINTS IN THE STEEL CURB FACING AND CONCRETE BACKING SHALL BE AT A MAXIMUM SPACING OF 24 FEET.

2. THE EXPANSION JOINTS OF THE CURB AND STEEL CURB FACING SHALL LINE UP WITH THE EXPANSION JOINTS OF THE CONCRETE SIDEWALK.

3. NO PIECE OF STEEL CURB FACING HAVING LESS THAN TWO (2) WELDED DOWELS MAY BE INSTALLED UNLESS IT IS WELDED TO THE ADJACENT STEEL CURB FACING.

4. 1/2" x 5" HEADED ANCHOR STUDS (GRANULAR OR SOLID FLUX FILLED) MAY BE SUBSTITUTED.


6. SURFACE TO BE PAINTED SHALL BE THOROUGHLY CLEANED AND THEN PAINTED AS PER REQUIREMENTS OF SECTION 2.131 IN THE NYC DOT STANDARD HIGHWAY SPECIFICATIONS. THE COLOR OF TOP COAT SHALL BE GRAY AS APPROVED BY THE ENGINEER.

7. CORNER CURB (VERTICAL FACE WILL BE ACCEPTABLE FOR CORNER CURBS PROVIDING THE EDGES ARE WARPED TO FORM A TRANSITION WITH ADJACENT BATTERED FACE CURBS)

ELEVATION-STEEL FACING FOR BRIDGE DECK CURBS

N.T.S.
NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION 4.08 OF THE NYC DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS.

ROADWAY SURFACE

TOP 1/4 SEALER ON BORD BREAKER (TYP)
FULL TO 1/8 OF TOP SURFACE

1/8" ON 1/8 PREFORMED JIONT FILLER

SIDEWALK ON 6" FOUNDATION MATERIAL

1" RADIUS

BASE (SHADOW)

VOLUME - UPWING FOR ELOCATION ON PAVEMENT DESIGN

1/8 INCH - NAVIGABLE

DATE: APPROVED

New York City
Department of Transportation

CONCRETE CURB

CHECKED BY: [Signature]

REVISED NO. DESCRIPTION

DATE: APPROVED

Checked 7/1/10

Scale: None

Drawing #: 11480-0144
NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION 4.13 OF THE NYC DEPARTMENT OF TRANSPORTATION (DOT) STANDARD HIGHWAY SPECIFICATIONS.

2. WELDED WIRE FABRIC, WHERE SPECIFIED, SHALL BE ASTM DESIGNATION A-185, GAUGE #8, 6.5" X 6.5" SPACING, AND CONFORM TO SECTION #2.45 OF THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS.

CONCRETE SIDEWALK

TYPE I - SIDEWALK, OUTSIDE DRIVEWAY
AND CORNER QUADRANTS
N.T.S.

6" GRAVEL, BROKEN STONE OR SAND AS PER STANDARD SPECIFICATION

COMPACTED EARTH

TYPE II - SIDEWALK, IN DRIVEWAY
AND IN CORNER QUADRANTS
N.T.S.

WELDED WIRE FABRIC
#8 @ 6" X 6" SPACING

6" GRAVEL, BROKEN STONE OR SAND AS PER STANDARD SPECIFICATION

TYPE III - SIDEWALK
WITH WELDED WIRE FABRIC
N.T.S.

WELDED WIRE FABRIC
NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION 4.1.16 OF THE STANDARD HIGHWAY SPECIFICATIONS, LATEST EDITION.

2. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT FROM THE DEPT. OF PARKS AND RECREATION FOR THE REMOVAL AND PLANTING OF TREES.

3. TREE PIT SHOULD BE LOCATED TWO (2) FEET MINIMUM FROM GAS, OIL OR WATER BOXES.

4. TREE STAKES ARE TO BE REMOVED BY THE TREE SUBCONTRACTOR NOT LESS THAN ONE YEAR AFTER PLANTING OF SAID TREES AND PRIOR TO THE FINAL ACCEPTANCE OF THE WORK.

5. USE OF SIDEWALK PAVEMENT MATERIALS OTHER THAN GRANITE BLOCK MUST BE SPECIFICALLY APPROVED, IN WRITING, BY ENGINEER.

6. GRANITE BLOCK IN TREE PIT SHALL BE PAID FOR UNDER ITEM NO. 6.06 AB OR 6.06 BB, AS APPLICABLE.

7. WHERE CONCRETE PAVERS ARE SPECIFIED FOR USE IN TREE PITS THEY SHALL BE PAID FOR UNDER ITEM NO. 6.47 TP.

SECTION A-A

PLAN
TREE PLANTING, STAKING AND TREE PIT PAVEMENT DETAILS FOR SIDEWALK AREAS

TREE PITS SHALL BE 4' X 5' OR 5' X 5' OR 5' X 10' AS SPECIFIED

REVIEWED

DEPARTMENT OF DESIGN + CONSTRUCTION

New York City Department of Transportation
STREET TREE PLANTING DETAIL TYPE 1

CHECKED BY: MZ

DEPARTMENT OF TRANSPORTATION

New York City

Drawing 910-910

Scale: None

Drawing SHEET 1 OF 1

Date Issued: 7/11/10

Sheet

Revision Shown Date

Description

SIGN

APPROVED

Chief Engineer

Department of Transportation

Department of Design + Construction

Copyright © 2010.

All rights reserved.
SECTION A-A
DETAILS - PROTECTIVE TREE BARRIER

2"X6" FLANKS, ALL AROUND
4"X4" POSTS, TYPICAL
SNOW FENCE TYPE TREE WRAP
2"X6" FLANKS, ALL AROUND
2"X6" BRACES, ALL AROUND
2"X6" FLANKS, ALL AROUND

* WIDTH MAY BE REDUCED TO 3' ON NARROW SIDEWALKS AS REQUIRED TO MAINTAIN SIDEWALK CLEARANCE OF 3' (THREE FEET) AT THE TREE BARRIERS ONLY.
1. THIS DETAIL SHALL APPLY FOR BOTH CONCRETE AND STEEL FACED CONCRETE CURB AND SHALL BE USED WHERE DIRECTED BY THE ENGINEER.

2. FOR STEEL FACED CONCRETE CURB, CUT STEEL FACING AT HAUNCH (8" BELOW TOP OF CURB). THE STEEL SHALL BE CUT IN SUCH A MANNER THAT THE BOTTOM ANCHORS ARE NOT REMOVED.

3. THE CONTRACTOR SHALL HAND EXCAVATE FOR A DISTANCE OF 4' ON EACH SIDE OF CENTERLINE OF EXISTING TREE TO REMAIN, ITEM #8.02 B OR 8.02 AB-S.

4. BULKHEAD OPENING SO THAT PAVEMENT DOES NOT ENCROACH ON OPEN AREA.

5. ALL MATERIALS & CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTIONS 4.05 & 4.09 OF THE NYC DEPT. OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS.
NOTES:

1. BARREL MUST BE PLASTIC AND SPECIFICALLY DESIGNED AS A TRAFFIC CONTROL DEVICE. THE BARREL MUST BE FLATTENED ON AT LEAST ONE SIDE OR OTHERWISE DESIGNED SO THAT IT WILL NOT ROLL IF OVERTURNED.

2. THE BATTERY POWERED LIGHT IS FOR NIGHT USE ONLY. USE TYPE A LOW INTENSITY FLASHING LIGHT FOR POINT HAZARDS. USE TYPE C LOW INTENSITY STEADY BURN LIGHTS FOR CHANNELIZATION. THE LIGHT SHALL BE PHOTO CELL CONTROLLED FOR NIGHT USE.

3. ALL MATERIALS & METHODS USED ARE TO CONFORM TO SECTION 8.87 OF THE STANDARD SPECIFICATIONS, LATEST EDITION, AS AMENDED.
METAL REINFORCEMENT FOR CONCRETE PAVEMENT

GENERAL NOTES:

1. WELDED WIRE FABRIC SHALL MEET REQUIREMENTS OF ASTM A-195.
2. WELDED WIRE FABRIC SHALL BE 4x4, 4xW4.
3. CONCRETE SHALL BE HIGH-EARLY STRENGTH AS SPECIFIED.
4. SHEETS MAY BE HINGED AS SHOWN IN THE DETAIL. HINGED SHEETS SHALL BE HINGED AT LEAST TWO LONGITUDINAL MEMBERS OFF CENTER, AND EACH ADJOINING SHEET SHALL BE REVERSED IN PLACING, IN ORDER THAT THE HINGES SHALL NOT OVERLAP EACH OTHER AT THE LAPS.
5. THE METAL REINFORCEMENT SHALL BE PLACED AT 3/4 DEPTH OF PAVEMENT.
6. THE DETAIL OF REINFORCEMENT IS SHOWN FOR HALF OF THE WIDTH OF THE ROADWAY AND IS SIMILAR IN THE OTHER HALF.
7. REINFORCEMENT FOR OTHER WIDTHS OF ROADWAY SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN WITH APPROPRIATE DIMENSIONS.
8. CONCRETE PAVEMENT SURFACE TO BE TRANSVERSELY TEXTURED WITH A SET OF SPRING STEEL TINES (3 1/2" DEEP) IN A DIRECTION PARALLEL TO THE TRANSVERSE JOINT LINES.

CONTINUED ON SHEET 2 OF 4
GENERAL NOTES CONTINUED

9. ALL JOINT DOWELS MUST BE LEVEL, TRUE AND ADEQUATELY SUPPORTED SO THERE IS NO MOVEMENT DURING THE PLACEMENT OF CONCRETE.

10. DOWELS MUST BE PARALLEL TO THE CURB LINES AND THE SURFACE OF THE SLAB. TOLERANCE OF THIS PLACEMENT SHALL BE ±1/4 INCH.

11. THE CONCRETE SHALL BE DEPOSITED ON A MOIST GRADE IN SUCH MANNER AS TO REQUIRE AS LITTLE REHANDLING AS POSSIBLE.

12. CONCRETE SHALL BE THOROUGHLY CONSOLIDATED AGAINST AND ALONG THE FACES OF ALL FORMS AND ALONG THE FULL LENGTH AND ON BOTH SIDES OF ALL JOINTS ASSEMBLIES. VIBRATORS SHALL NOT BE ALLOWED TO WALK ON THE FRESHLY MIXED CONCRETE WITH BOOTS OR SHOES COATED WITH EARTH OR FOREIGN SUBSTANCES.

13. CONCRETE SHALL BE DEPOSITED AS NEAR TO EXPANSION AND CONSTRUCTION JOINTS AS POSSIBLE WITHOUT DISTURBING THEM BUT SHALL NOT BE DUMPED ONTO A JOINT ASSEMBLY.


15. THE SURFACE SHOULD BE DRY WHEN THE SEALANT IS POURED.

16. THE JOINTS CAN BE COMPLETELY FILLED WITH SEALANT MATERIAL OR PREMOLDED JOINT FILLER CAN BE INSERTED IN THE JOINT FIRST TO REDUCE THE AMOUNT OF SEALANT REQUIRED.

17. PRIOR TO SEALING, JOINT SURFACES MUST BE CLEANED AND FREE OF CURING COMPOUND, RESIDUE; LAITANCE AND ANY OTHER FOREIGN MATERIAL.

18. THE SURFACE SHOULD BE DRY WHEN THE SEALANT IS POURED.

19. THE JOINTS CAN BE COMPLETELY FILLED WITH SEALANT MATERIAL OR PREMOLDED JOINT FILLER CAN BE INSERTED IN THE JOINT FIRST TO REDUCE THE AMOUNT OF SEALANT REQUIRED.

20. PRIOR TO SEALING, JOINT SURFACES MUST BE CLEANED AND FREE OF CURING COMPOUND, RESIDUE; LAITANCE AND ANY OTHER FOREIGN MATERIAL.

21. THE SURFACE SHOULD BE DRY WHEN THE SEALANT IS POURED.

TYPICAL SECTION FOR TRANSVERSE CONTRACTION JOINTS

NOT TO SCALE

1. THE JOINTS CAN BE COMPLETELY FILLED WITH SEALANT MATERIAL OR PREMOLDED JOINT FILLER CAN BE INSERTED IN THE JOINT FIRST TO REDUCE THE AMOUNT OF SEALANT REQUIRED.

2. SEALER TO BE POURED TO WITHIN 1/8 INCH OF TOP OF PAVEMENT.

3. PRIOR TO SEALING, JOINT SURFACES MUST BE CLEANED AND FREE OF CURING COMPOUND, RESIDUE, LAITANCE AND ANY OTHER FOREIGN MATERIAL.

4. THE SURFACE SHOULD BE DRY WHEN THE SEALANT IS POURED.

TYPICAL SECTION FOR TRANSVERSE AND LONGITUDINAL CONSTRUCTION JOINTS

NOT TO SCALE

NOTE: TRANSVERSE CONSTRUCTION JOINTS ARE NECESSARY FOR PLANNED INTERRUPTIONS, AND WHERE EMERGENCY INTERRUPTIONS SUSPEND OPERATIONS FOR 30 MINUTES OR MORE.
TRANVERSE JOINT NOTES

1. CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW PAVEMENT BY SAWING THE HARDENED SLAB OR BY PLACING AN INSERT OR GROOVE IN THE SLAB SURFACE WHILE THE CONCRETE IS PLASTIC.

2. TRANVERSE CONTRACTION JOINTS SHALL BE SHORED JOINTS WITH A MAXIMUM SPACING OF 20 FEET AND A MINIMUM SPACING OF 15 FEET.

3. TRANSVERSE JOINTS SHALL BE ALIGNED TO COINCIDE WITH THE JOINTS IN THE ADJACENT CURBS WHERE PRACTICAL.

4. TRANSVERSE JOINTS ARE TO BE SAWED TO A DEPTH OF 1/4". ALL JOINTS ARE TO BE SAWED IN SUCCESSION AND SHOULD BE SAWED WHILE THE PAVEMENT IS UNDER COMPRESSION TO PREVENT THE SLAB FROM CRACKING AHEAD OF THE SAW.

5. WHEN A WIDER JOINT SEALANT RESERVOIR IS REQUIRED THE RESERVOIR MAY BE SAWED SIMULTANEOUSLY WITH THE INITIAL SAW CUT BY PLACING BLADES OF DIFFERENT SIZES ON THE MANDREL.

6. PRIOR TO SEALING, THE JOINT SURFACES MUST BE CLEAN AND FREE OF CURING COMPOUND RESIDUE, LAITANCE, AND ANY OTHER FOREIGN MATERIAL.

7. FIELD MOLDED SEALANTS MEETING MSHTO M220 AND/or ASTM D150 OR AN APPROVED EQUAL ARE TO BE PLACED AS PER MANUFACTURER'S RECOMMENDATIONS.

8. THE SURFACES MUST BE DRY WHEN THE SEALANT IS PLACED AND THE JOINTS ARE TO BE FILLED TO 1/8" BELOW FLUSH WITH THE PAVEMENT SURFACE AT 1/16" INCH.

9. IF THE CONTRACTOR ELECTS TO USE PREFORMED SEALANTS THEY ARE TO MEET THE SPECIFICATIONS FOR ASPHALTICбитumen AND/or ASTM D433 OR AN APPROVED EQUAL AS SHOWN ON THE PLANS ARE TO BE REVISED AS PER RECOMMENDATIONS OF THE MANUFACTURER OR SUPPLIER.

10. IF AN EMERGENCY CONTRACTION JOINT OCCURS AT OR NEAR THE LOCATION OF A PLANNED CONTRACTION JOINT, A BUTT-TYPE JOINT WITH DOWEL BARS IS TO BE USED. IF SAID JOINT OCCURS IN THE MIDDLE THIRD OF THE NORMAL JOINT INTERVAL, A KEYED JOINT WITH TIE BARS IS TO BE USED.

11. TRANSVERSE CONTRACTION JOINTS FALING AT PLANNED LOCATIONS FOR CONTRACTION OR EXPANSION JOINTS ARE TO BE BUILT AND SEALED TO CONFORM WITH THE SPECIFICATIONS FOR THOSE JOINTS.

TYPICAL JOINT LAYOUT

(SEE GENERAL NOTE #14)

LONGITUDINAL JOINT NOTES

1. LANE JOINTS ARE TO BE SAWED JOINTS (1/4" WIDE X 1/4"+1/2") TIE BARS WILL NOT BE REQUIRED BUT A SEALANT RESERVOIR SIMILAR TO THOSE USED FOR THE TRANSVERSE CONTRACTION JOINTS MUST BE INSTALLED.

2. THE CENTER LINE JOINT IS TO BE A KEYED CONSTRUCTION JOINT WITH TIE BARS SPACED AS SHOWN ON THE PLANS AND SET PERPENDICULAR TO THE CENTER LINE AND PARALLEL TO THE TOP OF THE SLAB.

3. TIE BARS SHALL BE RIGIDLY SECURED BY CHARIS OR OTHER APPROVED SUPPORTS TO PREVENT DISPLACEMENT.

4. TIE BARS SHALL NOT BE COATED WITH ANY MATERIALS DELTERIOUS TO BOND.

5. LONGITUDINAL JOINTS SHALL BE AT LEAST 1/4+1/2" AND 1/4" WIDE.

6. AFTER SAWING, THE JOINTS ARE TO BE FILLED, DRIED AND SEALED TO ELIMINATE A SECOND CLEANING.

7. THE SAWED GROOVE CAN BE COMPLETELY FILLED WITH SEALANT MATERIAL OR A ROPE, CORD OR OTHER APPROVED MATERIAL CAN BE INSERTED IN THE GROOVE FIRST TO REDUCE THE AMOUNT OF SEALANT REQUIRED.

8. JOINTS ARE TO BE FILLED TO 1/8" BELOW FLUSH WITH THE PAVEMENT SURFACE AT 1/16" INCH.

9. NOTES 6, 7, 8, AND 9 UNDER TRANSVERSE JOINTS APPLY TO LONGITUDINAL JOINTS ALSO.

NOTE:
FOR ADDITIONAL NOTES SEE SHEETS 1 AND 2.
DETAILED ARRANGEMENTS FOR SLAB JOINT/MANHOLE

1. JOINTS, IF CONTINUED, WILL PASS WITHIN 1'-0" OF MANHOLE RIM.
2. JOINT CLEAR THE MANHOLE RIM BY 1'-0" OR MORE.
3. JOINTS, IF CONTINUED, WILL PASS WITHIN 1'-0" OF MANHOLE RIM.

DETAILS FOR SLAB JOINT/MANHOLE ARRANGEMENTS

NOT TO SCALE

PAVEMENT LIMITS

1. THE LIMITS OF CONCRETE PAVEMENT IN THE INTERSECTING STREETS SHALL BE APPROXIMATELY AT THE BUILDING LINE ALONG ROADWAY, PLACED SO AS NOT TO INTERSECT ANY STREET HARDWARE.
2. ADJUSTMENT AREAS SHALL BE AS DIRECTED BY THE ENGINEER. (5'-15') AND SHALL NOT INTERSECT ANY STREET HARDWARE.

GENERAL CONSTRUCTION

- SEE NOTE 5
- SHEET 1 OF 4
- REINFORCED CONCRETE PAVEMENT
- CONSTRUCTION DETAILS
- APPROVED:
  - New York City Department of Transportation

NOTES - SAWCUT

- APPLY ASPHALT TACK COAT TO ALL SURFACES.
- PAYMENT WILL BE MADE FOR NUMBER OF LINEAR FEET OF SAW-CUTTING AS ORDERED BY ENGINEER.
- EXISTING ASPHALT TO BE REMOVED UNDER OTHER ITEMS AND THE ADJUSTMENT AREA RESTORED WITH NEW 3" AC. ON NEW BINDER MIXTURE AS REQUIRED TO MATCH THE EXISTING ASPHALT.

DETAIL AT THE JUNCTION OF PAVEMENT AND CURB

NOT TO SCALE

- 6" SOIL CEMENT OR LIME STABILIZED BASE ITEM 6.65 AS (IF REQUIRED)
- TOP 1" SEALER ON BOXED BREAKER (TYP) FULL TO 1/2" ON TOP SURFACE
- WELDED WIRE FABRIC
- PREFORMED JOINT FILLER & REFLECTIVE CRACKING MEMBRANE, ITEM NO. 6.91

DETAIL OF SAW CUT AT END OF NEW PAVEMENT

NOT TO SCALE

- STRAIGHT SAW-CUT EDGE (NO DIRECT PAYMENT)
- FULL DEPTH SAW-CUT (NOTE 6)
NOTES:
1. ALL MATERIAL AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION 7.150 OF THE NYC DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY SPECIFICATIONS.
2. ALL FASTENERS SHALL BE GALVANIZED INDUSTRIAL STANDARD.
3. 2'-8" DIMENSION IS FROM FRONT OF STEP TO TOP OF POST.
4. TOP OF RAIL TO BE PLANE SMOOTH.

2"x4" HAND RAIL
BOTH SIDES (REQUIRED)

2"x4" POST
SEE DETAIL "A"

2"x12" STRINGER

2"x4" CLEAT

2"x12" STEP

FRONT VIEW
R.T.B.

ORLQUE VIEW
R.T.B.

DETAIL "A"
R.T.B.

NEW YORK CITY
Department of Transportation

TEMPORARY WOODEN STEPS

CHECKED BY:

Issued:

Scale:

Docket #H-5991

Sheet No.

Date:

Sheet:

N.A.
NOTES:
1. 20' MAXIMUM UNLESS OTHERWISE SPECIFIED.
2. CONCRETE BASE FOR AREA OF ADJUSTMENT AND NEW ROADWAY PAVEMENT BASE TO BE KEYED TOGETHER.
3. CROWN OF MAJOR ROADWAY TO BE MAINTAINED. TRANSITION CROWN OF SIDE STREET TO MEET MAIN STREET GUTTER LINE. MAIN STREET WATER FLOW ACROSS SIDE STREET TO BE MAINTAINED.
4. CONCRETE PAVEMENT EDGE TO BE MIN. OF 1'-0" FROM EDGE OF STREET HARDWARE.
5. ASPHALT CONCRETE FOR AREA OF ADJUSTMENT AND NEW ROADWAY PAVEMENT TO BE PLACED MONOLITHICALLY UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. TACK COAT (SECTION 6.58) ALL EDGES.
7. ADDITIONAL THICKNESS GREATER THAN 3" AC.W.C. WILL BE PAID FOR UNDER ASPHALT CONCRETE (ITEM 4.02 CB) OR BINDER MIXTURE (ITEM 4.02 CA).

SECTION X.X
N.T.S.
LIMIT OF TEMP. ASPHALT CONC.

NEW Curb

"3" THICK AND 2 1/2 FT. WIDE IN TEMPORARY PEDESTRIAN RAMPS AT CORNERS IF NEW CONCRETE BASE IS PLACED. (RAMPS SIMILAR TO DETAIL A).

IN ROADWAY AREA ADJACENT TO ALL NEW CURB INCLUDING CORNERS.

IN FULL WIDTH SIDEWALK AREA ADJACENT TO ALL NEW CURB EXCEPT AT CORNERS.

BACKFILL WITH SOIL IN CMP SIDEWALK AREA (NO DIRECT PAYMENT)

IN ROADWAY AREA OVER 12" D.I. PIPE CONNECTION.

NEW TRIM PT. OUTPUT

FULL WIDTH SIDEWALK ONLY

* OR FULL LENGTH OF EXTENDED TRIM PT.

NEW CURB

3' THICK IN SIDEWALK AREA ADJACENT TO THE CURB AT ALL CORNERS.

2 FT.

TRAFFIC SIGNAL OR FIRE COMMUNICATION LINE

VARIABLE THICKNESS TO MEET EXIST. PAVEMENT.

NEW CONCRETE BASE

TOP OF PAVEMENT

12" D.I. PIPE

SECTION A-A

4 FT. THICK IN ROADWAY AREA AROUND ALL NEW CATCH BASINS AND AT ABANDONED BASIN LOCATIONS.

6" THICK BASIN

NEW CURB

SIDEWALK REVEAL TO MATCH NEW CURB.

4" THICK IN ROADWAY AREA AROUND ALL NEW CATCH BASINS AND AT ABANDONED BASIN LOCATIONS.

CURB

SIDEWALK

LIMITS OF MEASUREMENT FOR PAYMENT OF TEMPORARY ASPHALT PAVEMENT

1. PAYMENT FOR FURNISHING, DELIVERING, PLACING, AND REMOVAL OF TEMPORARY RESTORATION OF PAVEMENT SHALL BE MADE UNDER ITEM NO. 4.02 CB. TEMPORARY RESTORATION OF PAVEMENT SHALL BE MADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF NOTE 3, BELOW.

NOTE:

1. PAYMENT FOR FURNISHING, DELIVERING, PLACING, AND REMOVAL OF TEMPORARY RESTORATION OF PAVEMENT SHALL BE MADE UNDER ITEM NO. 4.02 CB. TEMPORARY RESTORATION OF PAVEMENT SHALL BE MADE IN ACCORDANCE WITH THE RECOMMENDATIONS OF NOTE 3, BELOW.

2. TEMPORARY PAVEMENT FOR TRENCH RESTORATIONS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 4.08 IN BOTH THE NYCDOT STANDARD SEWER SPECIFICATIONS, DATED AUGUST 1, 2005, AND FOR UNDER ITEM NO. 4.02 CB.

3. UNLESS OTHERWISE SHOWN ON PLAN OR DIRECTED BY THE ENGINEER, ASPHALTIC CONCRETE MIXTURE PLACED FOR TEMPORARY RESTORATION OF PAVEMENT SHALL HAVE A THICKNESS OF 3" IN THE ROADWAY PAVED AREAS AND A THICKNESS OF 2" IN THE SIDEWALK PAVED AREAS.
NOTES:

1. WHERE THERE IS NO CONCRETE BASE, OR WHERE IT IS NEEDED TO REMOVE CONCRETE BASE SUBSEQUENT TO INSTALLING TYPE "B" PAYMENT KEY, PAYMENT FOR DEPTHS GREATER THAN 2-1/2" WILL BE MADE UNDER ITEM 6.51A, UNCLASSIFIED EXCAVATION.

2. CONTRACTOR MAY AT HIS OPTICAL STRIP OR GRIND THE AREA TO THE REQUIRED DEPTH. IF THE CONTRACTOR CHOOSES TO STRIP THERE WILL BE NO ADDITIONAL PAYMENT FOR OVER CUTTING OR ADDITIONAL BINDER.

3. THIS ITEM WHEN ORDERED BY THE ENGINEER WILL BE USED TO ELIMINATE HIGH POINTS IN THE EXISTING PAVEMENT PRIOR TO RESURFACING.

4. (A.O.B.E,) AS ORDERED BY ENGINEER.
TYPICAL DETAIL OF GRANITE CURB INSTALLATION

NOTES:
A. LENGTHS OF STRAIGHT GRANITE CURB SHALL RANGE FROM 4 FT. TO 12 FT. LONG, 80% OF WHICH SHALL BE 6 FT. OR GREATER,
B. LENGTHS OF CORNER GRANITE CURB SHALL RANGE FROM 3 FT. TO 8 FT. LONG, 80% OF WHICH SHALL BE 4 FT. OR GREATER,
C. LENGTH OF TRANSITION CURB (STRAIGHT OR CURVED) AT CORNERS SHALL BE 5 FT. LONG, AND,
D. EXPOSED SURFACES OF THE GRANITE CURB TO BE DRESSED WITH A BUSH HAMMERED OR THERMAL FINISH, WITH NO DRILL HOLES.

CONCRETE BASE

GRANITE CURB TYPE I, CLASS A

ASPHALTIC CONCRETE

NOTE: GRANITE CURB SAMPLES OF WHICH SHALL BE FURNISHED TO THE CITY BY THE CONTRACTOR PRIOR TO INSTALLING GRANITE IS TO BE MEDIUM GRAY IN COLOR AS APPROVED BY THE ENGINEER.

DIMENSIONS AND FINISH ON GRANITE CURB

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>NO PROJECTION OVER</th>
<th>NO DEPRESSION OVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>A</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>O</td>
<td>1&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>G</td>
<td>1-1/2&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>N</td>
<td>1-1/2&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>F</td>
<td>1&quot;</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

New York City Department of Transportation
TYPICAL GRANITE CURB

Approved: [Signature]
Checking: [Signature]

Date Issued: 7/1/10
Scale: None
Drawing #: D-6005
PROJECTIONS IN BACK
NOT TO EXCEED A BATTER OF 3IN 12

RANDOM LENGTHS (6'-0" ML STRAIGHT)
(3'-0" ML CURVED)

1'-0"

(THERMAL)

±1"

VERTICAL SPLIT FACE (1/8", 3/8"

ENDS JOINT
OFF TO 1/8"

ENDS MAY BREAK BACK NOT OVER 8"
AFTER FIRST 10" FROM TOP

SIDEWALK
PAVEMENT

N/1/4" OR 1/2" PREFORMED
EXPANSION JOINT FILLER
PAYMENT INCLUDED IN PRICE BD FOR
NON-GEDMEN

TOP 1'-0" SEALER ON APPROVED BOND BREAKER
TYVEK FALL TO 1/8" OF TOP SURFACE
NO SEPARATE PAYMENT

ASPHALTIC CONCRETE

TYPE A, CLASS B

GRANITE CURB

NEW CONCRETE CURB
CLASS A 65 CONC.
NO SEPARATE PAYMENT

CONCRETE

BASE

TYPICAL DETAIL OF NY HISTORICAL
GRANITE CURB INSTALLATION

NEW YORK CITY
Department of Transportation

HISTORICAL CURB DETAIL

CHECKED BY: MEF

DATE APPROVED:

REVISION NO.

DESCRIPTION

DATE

APPROVED:
TEMPORARY STORAGE AREA

PROJECT NAME

CONTRACTOR'S NAME

FIELD OFFICE ADDRESS

TELEPHONE NO.

DETAILED INFORMATION SIGN

NOTES

- NO DIRECT PAYMENTS FOR MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- ADVISE TAPER AT APPROACH END TO CHANNELIZE TRAFFIC PER NATIONAL MUTED WITH NYS SUPPLEMENT.

New York City
Department of Transportation

TEMPORARY STORAGE AREA

CHECKED BY: 

CHECKED BY: 

CHECKED BY: 

DATE ISSUED: 

DATE ISSUED: 

DATE ISSUED: 

Signature: 

Signature: 

Signature: 

Engineer Designated 
Department of Transportation 

Engineer Designated 
Department of Transportation 

Engineer Designated 
Department of Transportation 

Department of Design + Construction 

Department of Design + Construction 

Department of Design + Construction 

Signature: 

Signature: 

Signature: 

Date: 

Date: 

Date: 

Department of Design + Construction 

Department of Design + Construction 

Department of Design + Construction 

New York City
Department of Transportation

TEMPORARY STORAGE AREA

CHECKED BY: 

CHECKED BY: 

CHECKED BY: 

DATE ISSUED: 

DATE ISSUED: 

DATE ISSUED: 

Signature: 

Signature: 

Signature: 

Date: 

Date: 

Date: 

Department of Design + Construction 

Department of Design + Construction 

Department of Design + Construction 

New York City
Department of Transportation

TEMPORARY STORAGE AREA

CHECKED BY: 

CHECKED BY: 

CHECKED BY: 

DATE ISSUED: 

DATE ISSUED: 

DATE ISSUED: 

Signature: 

Signature: 

Signature: 

Date: 

Date: 

Date: 

Department of Design + Construction 

Department of Design + Construction 

Department of Design + Construction 

New York City
Department of Transportation

TEMPORARY STORAGE AREA

CHECKED BY: 

CHECKED BY: 

CHECKED BY: 

DATE ISSUED: 

DATE ISSUED: 

DATE ISSUED: 

Signature: 

Signature: 

Signature: 

Date: 

Date: 

Date: 

Department of Design + Construction 

Department of Design + Construction 

Department of Design + Construction 

New York City
Department of Transportation

TEMPORARY STORAGE AREA
NOT TO SCALE
STANDARD DRAWINGS

STEEL FACED CURB, TYPE D
H-9010

SIDEWALK PEDESTRIAN RAMP
H-9011

STEEL FACED DROP CURB (DRIVEWAYS)
H-9015

CONCRETE CURB
H-9044

CONCRETE SIDEWALK
H-9048

NO SIDEWALK TO BE INSTALLED IN THIS AREA (TYPICAL) UNLESS SIDEWALK VIOLATIONS HAVE BEEN PROPERLY ISSUED AND VERIFIED BY THE ENGINEER. PAYMENT TO BE REIMBURSED FROM THE PROPERTY OWNER.

WHERE EXISTING SIDEWALK REMAINS AND CURB IS REPLACED, THE PAYMENT IN THIS AREA IS NOT CHARGABLE TO THE PROPERTY OWNER.

PEDESTRIAN RAMPS TO BE INSTALLED WHERE DIRECTED. PAYMENT CHARGABLE TO THE CITY OR PROPERTY OWNER AS DIRECTED.

SIDEWALK VIOLATION & PAYMENT

CHECKED BY: [Signature]

New York City Department of Transportation

SIDEWALK PAVEMENT LIMITS

Approval: [Signature]

[Date]
EXISTING CURB LINE

MAX. TRANSVERSE SLOPE 1/2% PER FOOT OR AS ORDERED BY ENGINEER

MIN. CROWN = .004/ft

NEW ROADWAY RESURFACING

MAX. WIDEBAND IDENTIFIED BINDER

1/4" WIDEBAND IDENTIFIED BINDER

EXISTING FRICTION SURFACE

PRE-IDENTIFIED BINDER

6" DEGRADABLE 1/2" ABSOLUTE MIN.

NEW YORK CITY
DEPARTMENT OF TRANSPORTATION

TYPICAL ROADWAY CROSS-SECTION RESURFACING

Approved:

Date Issued: 7/1/98
NOTES

1. UPON BEING ORDERED BY THE ENGINEER TO PERFORM THIS REQUIRED ADJUSTMENT, THE CONTRACTOR IS TO FIELD INVESTIGATE EACH LOCATION AND DETERMINE THE HEIGHT REQUIRED TO BRING GRATING TO THE PROPOSED GRADE.

2. THIS METHOD OF ADJUSTMENT MAY BE USED ONLY WHERE AN UPWARD ADJUSTMENT OF 3" TO 5" IS REQUIRED AND WHERE ORDERED BY THE ENGINEER.

3. THE ADJUSTMENT COLLAR WHEN INSTALLED SHALL HAVE NO LATERAL OR VERTICAL MOVEMENT OF ANY KIND.

4. EACH GRATING WHEN SET ON NEW SEAT SHALL BEAR EVENLY SO THAT NO VERTICAL MOVING OR ROCKING OCCURS DURING TRAFFIC.

5. THE CONTRACTOR MAY USE AN APPROVED EQUIVALENT ADJUSTMENT FRAME.

6. NO WORK SHALL PROCEED UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND APPROVED BY THE DEPARTMENT.
CUT AND REMOVE EXIST. (IF ASPH. CONC. OR CONCRETE) PAVEMENT SURFACE
INSTALL NEW PAVEMENT ON A BINDER COURSE AS REQUIRED.

ELEVATION
N.T.E.
SECTION A-A

NEW ROADWAY RESURFACING
NEW BINDER COURSE

EXIST. CURB
EXIST. GUTTER
NEW ROADWAY RESURFACING
NEW BINDER COURSE

PLAN
N.T.E.

A
A

2'-0"
2'-0"

2'-0"

New York City Department of Transportation

ADJUSTMENT AT CATCH BASINS

Scale: 1" = 20'0"