CLASS A BEDDING

LIMIT OF EXCAVATION FOR PIPE TRENCHES

CONCRETE 2000 PSI (MIN)

CONCRETE

CLASS B BEDDING

LIMIT OF EXCAVATION FOR PIPE TRENCHES

COMPACTED SOIL

CLASS B & C BEDDING IN ROCK

LIMIT OF EXCAVATION FOR PIPE TRENCHES

FINISHED GRADE

EROSION PROTECTION

NORMAL TRENCH INSTALLATION (CLASS C BEDDING)

LIMIT OF EXCAVATION FOR PIPE TRENCHES

CASE I

CASE II

CASE III

CASE IV

NOTE: USE CLASS "C" BEDDING UNLESS OTHERWISE INDICATED.
### Bill of Materials

<table>
<thead>
<tr>
<th>No.</th>
<th>Size</th>
<th>Length</th>
<th>Mark</th>
<th>All Dimensions Are Out-Of-Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3/8&quot;</td>
<td>5'-7&quot;</td>
<td>T101</td>
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<tr>
<td>2</td>
<td>3/8&quot;</td>
<td>5'-7&quot;</td>
<td>T102</td>
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<td>3</td>
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<td>T103</td>
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<td>4</td>
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<td>5</td>
<td>3/8&quot;</td>
<td>5'-7&quot;</td>
<td>T105</td>
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**Variable with Type of Mix:**

- **Standard Manhole:**
  - Frame & Cover
  - See Standard Sheet D-1

- **Flow Channel Either:**
  - Brick or Concrete
  - See Standard Sheet D-1

- **Pipe Size:**
  - 10" x 10" inc.

- **Brick Wall Only**

- **Wall:**
  - See Standard Sheet D-1

**Section A-A**

- **W Manhole:**
  - Shallow Depth Only

**W-30 Manhole:**

- Shallow Depth Only
DOUBLE A CATCH BASIN

FOR USE WITH P.C.C. CURB TYPE 1

FOR USE WITH P.C.C. CURB TYPE 2

W. BEAM SUPPORT FOR STANDARD CATCH BASIN FRAMES AND GRATES
DOUBLE J CATCH BASIN FOR INTEGRAL CURB AND GUTTER ONLY

PLAN

SECTION A-A
TO BE GALVANIZED AFTER WELDING
W BEAM SUPPORT FOR STANDARD CATCH BASIN FRAMES AND GRATES

SECTION B-B

SECTION C-C

NOTE: CATCH BASINS MAY BE PRECAST. CONTRACTOR SHALL SUBMIT DETAILED PLANS SHOWING SECTIONS, DUCTS, REINFORCEMENT AND OTHER FERMENT INFORMATION FOR APPROVAL. STEEL ARE TO BE PLATED. SHEET EXCHANGE, MATERIALS, AND MANUFACTURERS OVER COST OF CATCH BASIN.

REINFORCING STEEL IS TO BE INCLUDED IN UNIT PRICE BID FOR DOUBLE J CATCH BASIN.

W BEAM AND ANGLE IRON ARE TO BE INCLUDED IN UNIT PRICE BID FOR DOUBLE J CATCH BASIN.

USE STANDARD CATCH BASIN FRAMES AND GRATES.

SEE STANDARD SHEET.

COST OF 1'-0" OF INTEGRAL CURB & GUTTER IS TO BE INCLUDED IN UNIT PRICE BID FOR DOUBLE J CATCH BASIN.

CAST BRICK OR BLOCK MASONRY WITH 1/2" OF PORTLAND CEMENT MORTAR.

UPPER 1/2" OF STRUCTURE TO BE OF P.C.G. MASONRY.

FRAMES AND GRATES MAY BE DEPRESSED 1/2" BELOW POSITIONS SHOWN, WHEN DESIRED.

L-6' x 6' x 3/4' 6" LONG

OUTLINE OF INT. CURB & GUTTER

FOR INTEGRAL CURB & GUTTER ONLY

CATCH BASIN (30' PIPE)
Erosion Control Net or Jute Mesh

* Width of Erosion Control Net or Jute Mesh, Directed

Excavate to Form Berm

Normal Fill Slope

Intercepting Ditch

Erosion Control Net or Jute Mesh Along Erosion Control Section, Width as Directed

Entrance Channel Width as Directed

Earth Spillway Must Be Constructed on Undisturbed Soil

Dike

Erosion Control Net or Jute Mesh Along Erosion Control Section, Width as Directed

Diag

Fill Slope

Diagram: Earth Spillway Must Be Constructed on Undisturbed Soil

Dike with Pipe Spillway

Notes:

1. Level Spreaders Must Be Constructed on Undisturbed Soil.
2. Entrance Must Be Graded to Insure the Flow Enters Directly into the 0.0% Graded Channel.

Level Spreader

Diagram: Level Spreaders Must Be Constructed on Undisturbed Soil.

Erosion Control Blanket

Anchor Stakes Required Under Ordinary Circumstances

Plate Centered and Ribbed Stakes in Pane Approx. Six Feet Apart

Excavated Material Shall Be Used to Form Dam

Compact Earth Dam

Area as Directed

6' Min.

Sediment Basin

Flume

Normal Fill Slope

Flume

Entrance Channel

Erosion Control Net or Jute Mesh Along Erosion Control Section, Width as Directed

Diag

Grade 0.5 to 10%

Note:

1. Dikes Must Be Machine Compacted
2. Dikes Must Have a Positive Grade Draining to a Stabilized Outlet.

Earth Spillway

Ditch on Slope Erosion Control Blanket

Net or Jute Mesh

Diagram: Erosion Control Blanket

Anchor Stakes Required Under Ordinary Circumstances

Plate Centered and Ribbed Stakes in Pane Approx. Six Feet Apart

No Check Dike Required

Approx. 60 Stakes per Blanket.
NOTE:

RAIL ELEMENTS INCLUDE THE BASIC RAIL ELEMENTS, SPLICES, AND SPECIAL RAIL SECTIONS SUCH AS TERMINALS FOR "W" BEAM GUARDIAN AND "W" BEAM MEDIAN BARRIER SYSTEMS.

USE 12 GAGE UNLESS OTHERWISE SPECIFIED:

STANDARD TERMINAL SECTION MODIFIED TO BE 10 GAGE.

SEE STANDARD SHEET 0-4 FOR ALTERNATE 6" C STRONG POST DETAIL.
**Tree Protection**

**NOTE:**
- HORIZONTAL CABLES AND CROSS WIRES TO BE 1/2" AWAY FROM BARK.
- APPROVE FENCING MATERIAL.

**Detail A**

**Detail E**

**Section A-E**

**Section of Post**

**Scale:** 1/8" = 1 ft.

**Scale:** 1/32" = 1 ft.

**Method of Fastening Wires to Posts**

**Detail Showing Wires Through Rubber Hose**

**Methods of Fastening Wires to Posts**

**No Scale**

**No Scale**

**Note:**
- SIZE OF ALL BOLTS TO BE 3/8" DIA.
- HOLE SIZE TO BE 3/8" DIA.
- BOLTS TO PROJECT A MINIMUM OF 1/4" BEFORE NUTS WHEN SECURELY FASTENED.
- ALL BOLTS TO BE CHESTED AFTER NUTS HAVE BEEN SECURELY FASTENED.
RIGHT-OF-WAY FENCE

VEHICULAR GATE FOR RIGHT-OF-WAY FENCE

FLAP GATE DETAIL

NO SCALE