CRUSHED STONE
STANDARD GRADATION COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY.

CLASS "C" EMBEDMENT FOR PVC PIPE BACKFILL PER APPLICABLE DETAIL

Bd + 16" (24" MIN.)

N.T.S.

6" MIN.

TRENCH EMBEDMENT, BACKFILL AND PAVEMENT REPAIR DETAILS

(3,000 PSI) CLASS "A" CONCRETE THICKNESS AND REINFORCEMENT TO MATCH EXIST. PAVEMENT

EXIST. PAVEMENT

SAW CUT

EXIST. ASPH. OVERLAY

SAW CUT

EXIST. CONC. PVMT.

8" FLEXBASE

EXISTING PVMT.

SAW-CUT TACK COAT (0.05-0.10 GAL./SY)

TRENCH BACKFILL

EXIST. PVMT.

NOTE: THE CUSHION PORTION OF CONCRETE ENCASEMENT SHALL BE POURED FIRST AND ALLOWED TO SET UP, BUT NOT ALLOWED TO DRY, BEFORE PLACEMENT OF THE SIDE AND TOP CONCRETE.

CONCRETE ENCASEMENT
CLASS "G" EMBEDMENT

EXIST. CONC. PVMT.

LEVEL OF FIRST POUR

4" MIN.

CONCRETE PAVEMENT REPAIR
FOR OPEN CUT TRENCHING

4-1/2" TYP "B" HMAC (275 LB./SY.) COARSE GRADED BINDER COURSE.

RC-2 TACK COAT (0.05-0.10 GAL./SY)

1-1/2" TYPE "D" HMAC (165 LB./SY) FINE GRADED SURFACE COURSE.

CONCRETE PAVEMENT REPAIR W/ASPHALT OVERLAY FOR OPEN CUT TRENCHING

4" (TYP.) FLEXBASE EMBEDMENT AND BACKFILL FOR UTILITY CONDUITS, GAS MAINS AND WATER SERVICES < 4"

EXISTING GROUND

NOTE: NATURAL BASEBALL MECHANICALLY COMPACTED IN 6" UPS TO AT LEAST 95% STANDARD PROCTOR DENSITY AT +2% OPTIMUM MOISTURE.

EXIST. CONCRETE PAVEMENT

HOT MIX-COLD Laid ASPHALTIC CONCRETE PAVEMENT FOR TEMPORARY PAVEMENT REPAIR

2" TYP "FF" HOT MIX (COLD LAID) FINE GRADED SURFACE COURSE.
**TRENCH SHEETING & SHEETING - MINIMUM REQUIREMENTS**

**Size and Spacing of Members**

<table>
<thead>
<tr>
<th>Depth of Trench</th>
<th>Kind or Condition of Earth</th>
<th>Uprights</th>
<th>Stringers</th>
<th>Cross Braces</th>
<th>Maximum Spacing</th>
<th>Width of Trench</th>
<th>Min. Dimension</th>
<th>Max. Spacing</th>
<th>Min. Dimension</th>
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<td>4 x 6</td>
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<tr>
<td>6 X 8</td>
<td>Hard, Compact</td>
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**Note:**
- Trench jacks may be used in lieu of, or in combination with, cross braces.
- Stringers can range to meet each end, hard stake, or more tight.
- Where available, steel shear piling and a spacing of equal strength may be substituted for problem.

**TABLE P-2**

**Approximate Angle of Repose for Sloping of Sides of Excavations**

**Table P-1**

**FIGURE 1**

**One Example of Several Types of Sheet Metal**

**FIGURE 2**

**FIGURE 3**

**TRENCH SHORING & SHEETING - MINIMUM REQUIREMENTS**

**Table P-2**

**Capital Improvement Program**

**CITY OF IRVING**

**825 West Irving Boulevard**

**Irving, Texas 75060**

**972.721.2611**

**www.cityofirving.org**

**STANDARD DETAILS**

**TRENCH SHEETING, SHORING & SLOPING FOR TRENCHES OVER 5 FEET DEEP**
**GENERAL NOTES FOR ALL THRUST BLOCKS:**

1. CONCRETE FOR BLOCKS SHALL BE CLASS "C".
2. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 300 LBS/FTR² FOR CONCRETE PIPE.
3. NUMBERS ARE FOR INTERNAL PIPE DIA. & WALL THICKNESS TO BE USE.
4. CONCRETE IS THE BASIC BUILDING BLOCK AND ALL OTHER MATERIALS ARE TO BE USED TO COMPLETE THE WORK.
5. WALL THICKNESS IS ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
6. POLY CONCRETE FOR BLOCKS AGAINST UNDERGROUND EARTH.
7. OVERHANGS MAY BE USED AS REQUIRED PER FIELD CONDITIONS WHERE AND AS LIFE-SPACE REQUIREMENTS.
8. THE INSIDE PIPE DIAMETER FOR CONCRETE PIPE SHALL BE THE INSIDE DIAMETER FOR PLASTIC PIPE.
9. OVERHANGS MAY BE USED AS REQUIRED WHERE AND AS LIFE-SPACE REQUIREMENTS.
10. CONCRETE SHALL NOT EXTEND BEYOND PIPE.

**TABLE OF PLUGS & TEES DIMENSIONS & QUANTITIES**

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<thead>
<tr>
<th>Diameter (In.)</th>
<th>I.D. (In.)</th>
<th>12.0</th>
<th>32.0</th>
<th>31.6</th>
<th>70.0</th>
<th>12.0</th>
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<td>11.5</td>
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<td>90.0</td>
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**TABLE OF HORIZONTAL 11.25° & 22.5° BENDS DIMENSIONS & QUANTITIES**

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<th>31.6</th>
<th>70.0</th>
<th>12.0</th>
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**TABLE OF HORIZONTAL 30° & 45° BENDS DIMENSIONS & QUANTITIES**

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**TABLE OF VERTICAL 11.25° TO 90° BEND DIMENSIONS & QUANTITIES**

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**PLAN OF TEE THRUST BLOCK**

**PLAN OF PLUG THRUST BLOCK**

**THRUST BLOCKS FOR 11.25° TO 90° HORIZONTAL BENDS**

**THRUST BLOCKS FOR 11.25° TO 90° VERTICAL BENDS**