CITY OF WINTER PARK
WATER & WASTEWATER UTILITY DEPARTMENT
REFERENCE THE "WATER & WASTEWATER UTILITY STANDARDS, SPECIFICATIONS & DETAILS MANUAL"

DATE: January 2, 2008 THRUST COLLAR - FORCE MAIN SCALE: N.T.S

PRIOR APPROVAL REQUIRED

TRENCH LIMITS

18" MIN.

#4 BARS ALL AROUND (MIN. 2" CLEARANCE AROUND PIPE)

9" MIN. (TYP.)

TIE RODS INCLUDING NUTS AND WASHERS (SEE SCHEDULE BELOW)

4" X 4" X 1/2" STEEL BEARING PLATE (TYP.)

#4 BARS

MECHANICAL JOINTS

UNDISTURBED EARTH

ENCASE TIE RODS IN 1-1/2" PVC SLEEVE

D (9'-0" MIN.)

3" COVER

SEE TRENCH DETAILS FOR PIPE BEDDING REQUIREMENTS (FIGURES 26 & 27)

NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE SPECIFIED BY THE ENGINEER.
2. MINIMUM COMpressive STRENGTH FOR CONCRETE SHALL BE 3000 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE SPECIFIED IN THE STANDARD DRAWING.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILLING.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL.
6. DESIGN PRESSURE: 100 PSI.

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<tr>
<th>PIPE SIZE (INCHES)</th>
<th>DIMENSIONS (FT.)</th>
<th>TIE RODS REQD</th>
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NOTE: THRUST COLLAR AREAS TO BE COMPUTED ON BASIS OF 2000 LBS/SF. SOIL RESTRAINT BEARING.

FIGURE 33