

| (HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET | | | | | | | | | | (VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS | | | |
|---|--------------------------------------|-------------------|------------------------------|--------------------------|------|-------------|-----------------|-----------------|---------------|--|-----------------|-----------------|--|
| FITTING SIZE | TEE, WYE, DEAD END AND HYDRANT | STRADDLE BLOCK | 90° BEND PLUGGED CROSS | TEE PLUGGED ON RUN | | 45° BEND | 22-1/2° BEND | 11-1/4° BEND | 90° * BEND | 45° BEND | 22-1/2° BEND | 11-1/4° BEND | |
| | | | | A-1 | A-2 | | | | | | | | |
| 4 | 1.0 | 1.6 | 1.4 | 1.9 | 1.4 | 1.0 | --- | --- | --- | --- | --- | --- | |
| 6 | 2.1 | 3.7 | 3.0 | 4.3 | 3.0 | 1.6 | 1.0 | --- | --- | --- | --- | --- | |
| 8 | 3.8 | 6.5 | 5.3 | 7.6 | 5.4 | 2.9 | 1.5 | 1.0 | --- | 1.1 | --- | --- | |
| 10 | 5.9 | 10.2 | 8.4 | 11.8 | 8.4 | 4.6 | 2.4 | 1.2 | --- | 1.8 | --- | --- | |
| 12 | 8.5 | 14.7 | 12.0 | 17.0 | 12.0 | 6.6 | 3.4 | 1.7 | --- | 2.8 | 1.2 | --- | |
| 14 | 11.5 | --- | 16.3 | 23.0 | 16.3 | 8.9 | 4.6 | 2.3 | --- | 3.9 | 1.7 | --- | |
| 16 | 15.0 | 26.1 | 21.3 | 30.0 | 21.3 | 11.6 | 6.0 | 3.0 | --- | 5.1 | 2.3 | 0.9 | |
| 18 | 19.0 | --- | 27.0 | 38.0 | 27.0 | 14.6 | 7.6 | 3.8 | --- | --- | --- | --- | |
| 20 | 23.5 | 40.8 | 33.3 | 47.0 | 33.3 | 18.1 | 9.4 | 4.7 | --- | --- | --- | --- | |
| 24 | 34.0 | 58.8 | 48.0 | 68.0 | 48.0 | 26.2 | 13.6 | 6.8 | --- | --- | --- | --- | |

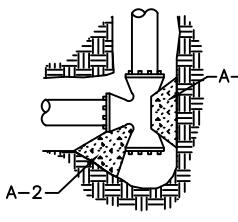
NOTES:

1. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:

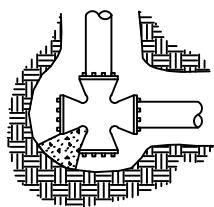
$$\text{BEARING AREA} = (\text{TEST PRESSURE} / 150) \times (2000 / \text{SOIL BEARING STRESS}) \times (\text{TABLE VALUE})$$

2. ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI AND THE WEIGHT OF CONCRETE = 4050 POUNDS PER CUBIC YARD. TO COMPUTE FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION:

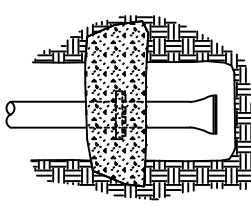
$$\text{VOLUME} = (\text{TEST PRESSURE} / 150) \times (\text{TABLE VALUE})$$



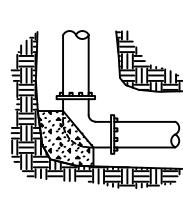
TEE



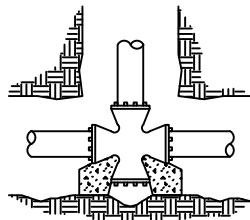
CROSS



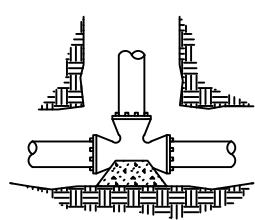
STRADDLE BLOCK



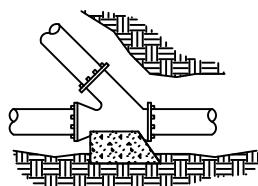
BEND



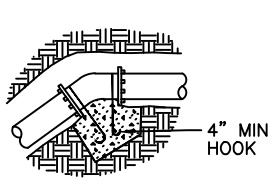
CROSS



TEE



WYE



VERTICAL BEND

NOTES:

1. CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. ALL CONCRETE TO BE CLASS 2400 MINIMUM.
3. INSTALL 8 MIL POLYETHYLENE MEMBRANE BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
4. CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
5. TIE RODS SHALL BE DEFORMED GALVANIZED COLD ROLLED STEEL, 40000 PSI TENSILE STRENGTH.
6. * 90 DEGREE VERTICAL BENDS ARE NOT ALLOWED.

| RODS FOR VERTICAL BENDS | | |
|-------------------------|----------|-----------|
| FITTING SIZE | ROD SIZE | EMBEDMENT |
| 12" AND LESS | #6 | 30" |
| 14"-16" | #8 | 36" |

FILE: W-3 THRUST BLOCKING.DWG

| TOWN OF HANOVER PUBLIC WORKS DEPARTMENT | UNIFORM STANDARDS FOR PUBLIC WORKS CONSTRUCTION | W-3 | |
|--|---|-----------------|--------------|
| | | CHECKED | DATE |
| | | PEK APPROVED | 6/14 DATE |
| | | REVISED | DATE |
| | | | DRAWING No. |