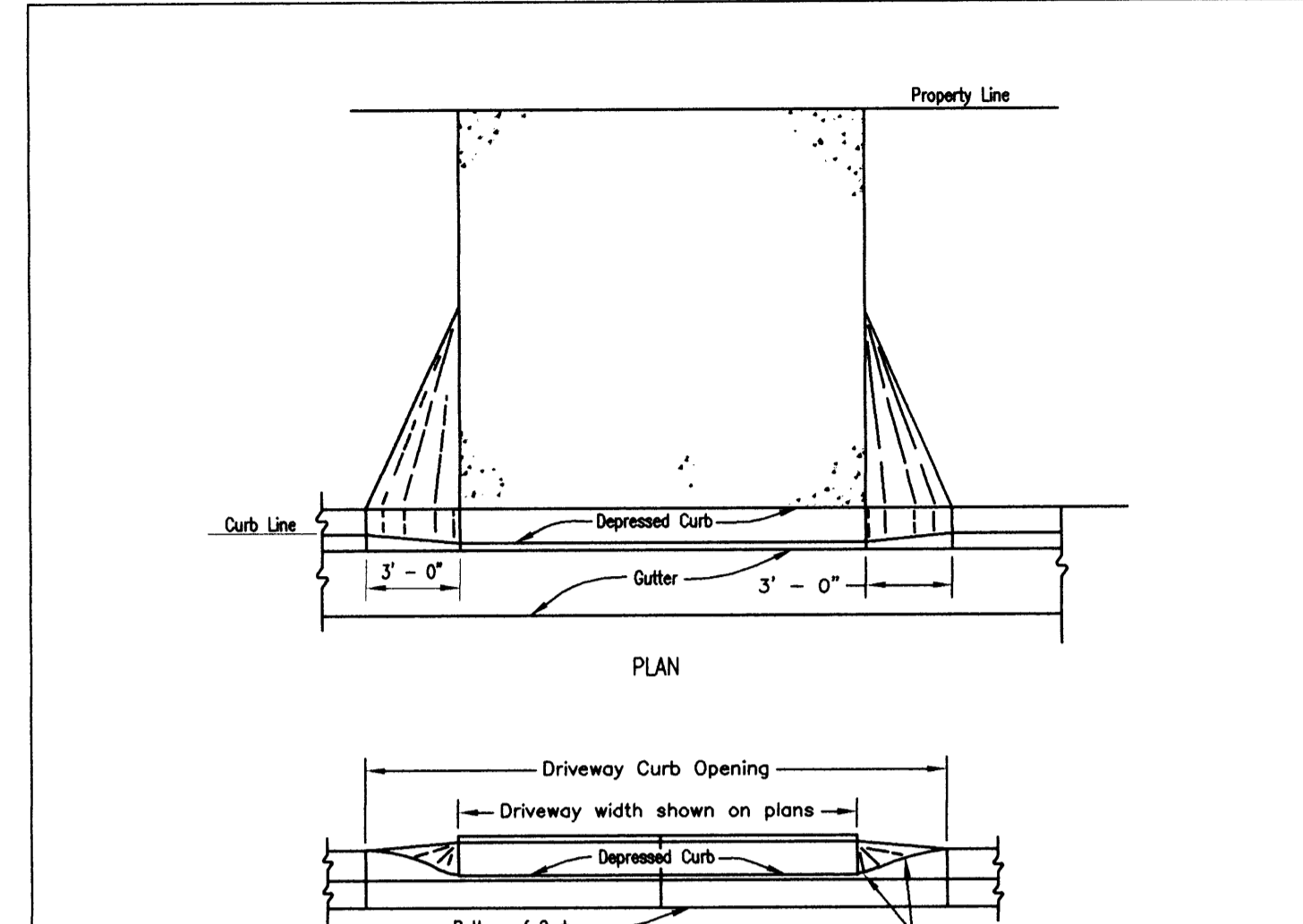


NOTES:
 1. CONCRETE SHALL BE CLASS 3000-15'.
 2. SEE DRAWING S-9 AND S-9 FOR JOINT LOCATION AND DETAILS.

| | | | | | |
|----------|----------|------|---|----------|---------|
| Revision | Approved | Date | DOUGLAS COUNTY PUBLIC WORKS STANDARD DRAWING | Drawn | Checked |
| | | | CURB & GUTTER MONOLITHIC | K. K. K. | S-2 |

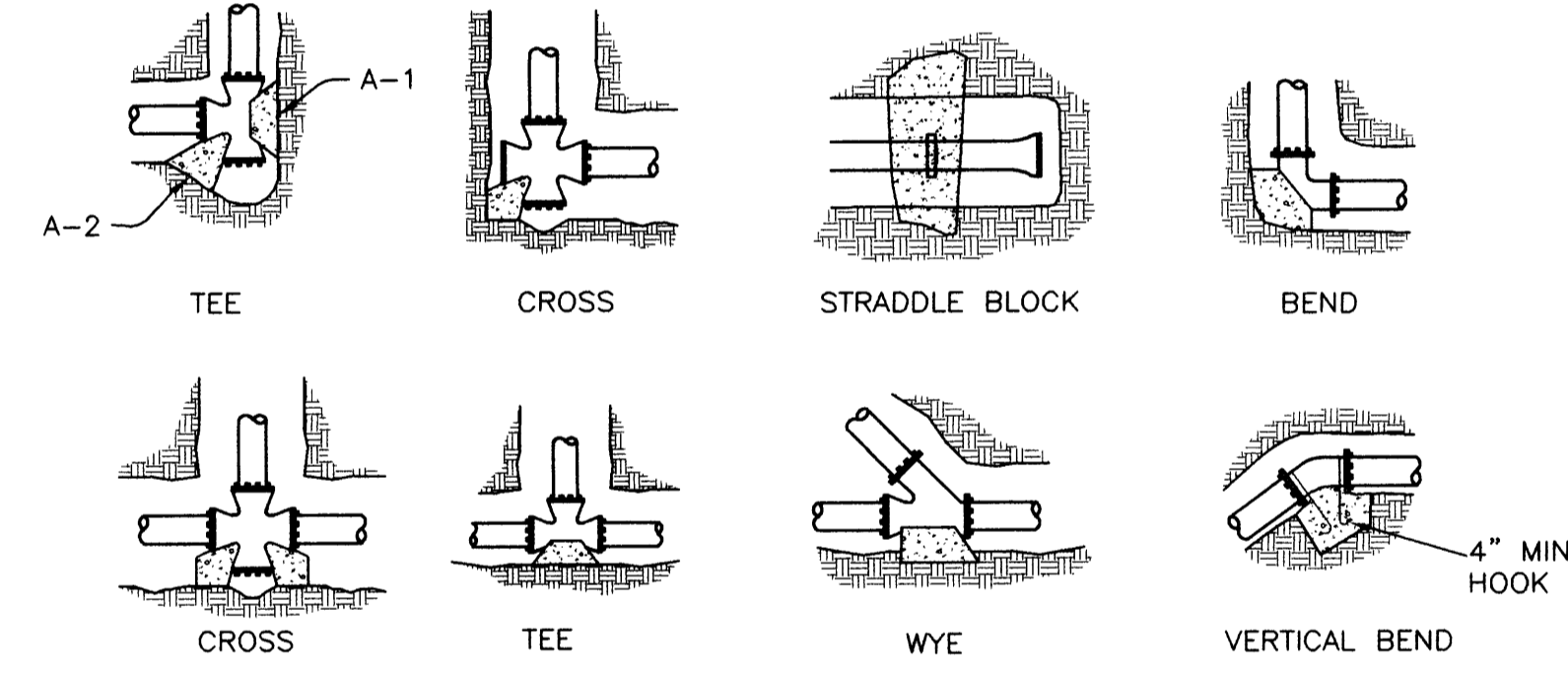


NOTES:
 SEE DRAWING S-18 AND S-19 FOR WIDTH AND LOCATION REQUIREMENTS

| | | | | | |
|----------|----------|------|---|----------|---------|
| Revision | Approved | Date | DOUGLAS COUNTY PUBLIC WORKS STANDARD DRAWING | Drawn | Checked |
| | | | URBAN ASPHALT CONCRETE DRIVEWAY | K. K. K. | S-17 |

| FITTING SIZE | (HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET | | | | | | (VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS | | | | | |
|--------------|---|----------------|------------------------|--------------------|------|----------|--|--------------|----------|----------|--------------|--------------|
| | TEE, WYE, DEAD END & 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 | --- | 1.3 | --- | --- | --- |
| 8 | 3.8 | 6.5 | 5.3 | 7.6 | 5.4 | 2.9 | 1.5 | 1.0 | 2.3 | 1.1 | --- | --- |
| 10 | 5.9 | 10.2 | 8.4 | 11.8 | 8.4 | 4.6 | 2.4 | 1.2 | 3.7 | 1.8 | --- | --- |
| 12 | 8.5 | 14.7 | 12.0 | 17.0 | 12.0 | 6.6 | 3.4 | 1.7 | 5.5 | 2.8 | 1.2 | --- |
| 14 | 11.5 | --- | 16.3 | 23.0 | 16.3 | 8.9 | 4.6 | 2.3 | 7.6 | 3.9 | 1.7 | --- |
| 16 | 15.0 | 26.1 | 21.3 | 30.0 | 21.3 | 11.6 | 6.0 | 3.0 | 9.9 | 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 | --- | --- | --- | --- |

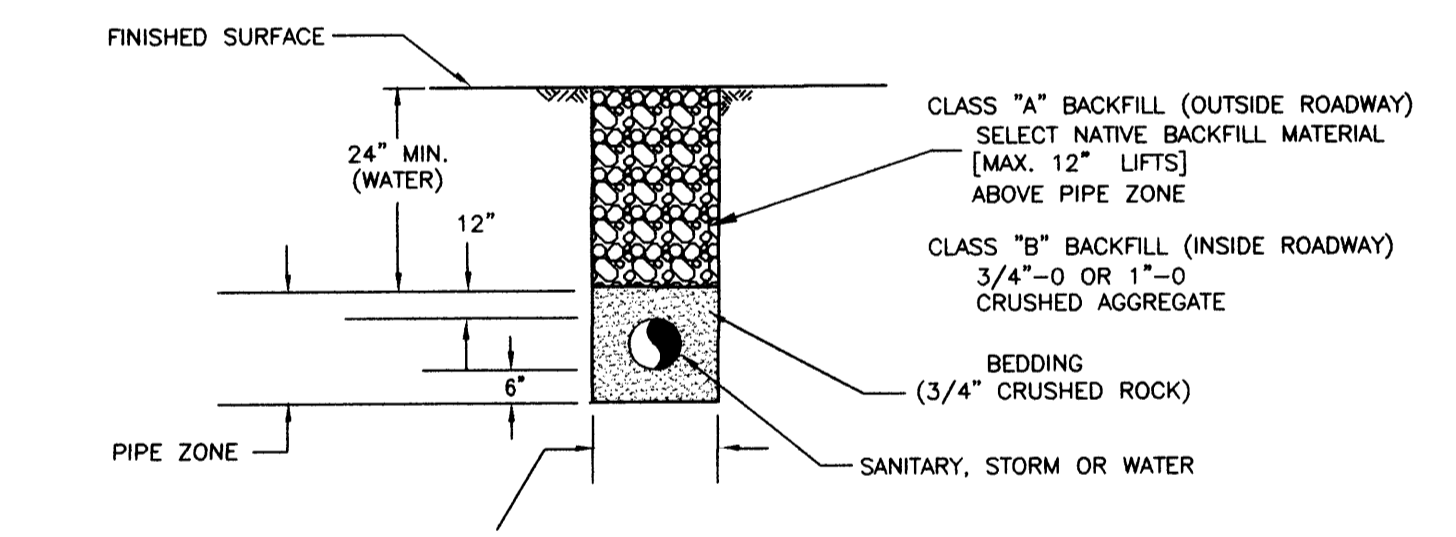
NOTES:
 1. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:
 BEARING AREA = (TEST PRESSURE/150) x (2000/SOIL BEARING STRESS) x (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:
 VOLUME = (TEST PRESSURE/150) x (TABLE VALUE)



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

NOTES:
 1. CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 2. ALL CONCRETE TO BE CLASS 2400 MINIMUM. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
 3. CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
 4. TIE RODS SHALL BE DEFORMED GALVANIZED COLD ROLLED STEEL, 40000 PSI TENSILE STRENGTH.

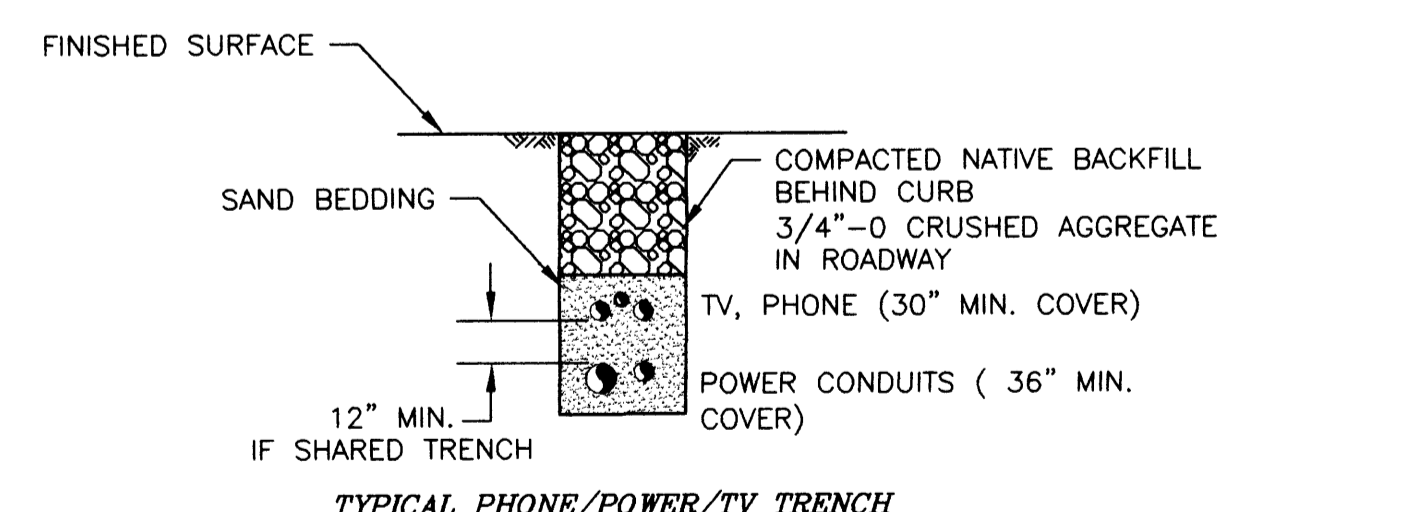
THRUST BLOCK DETAIL (112)



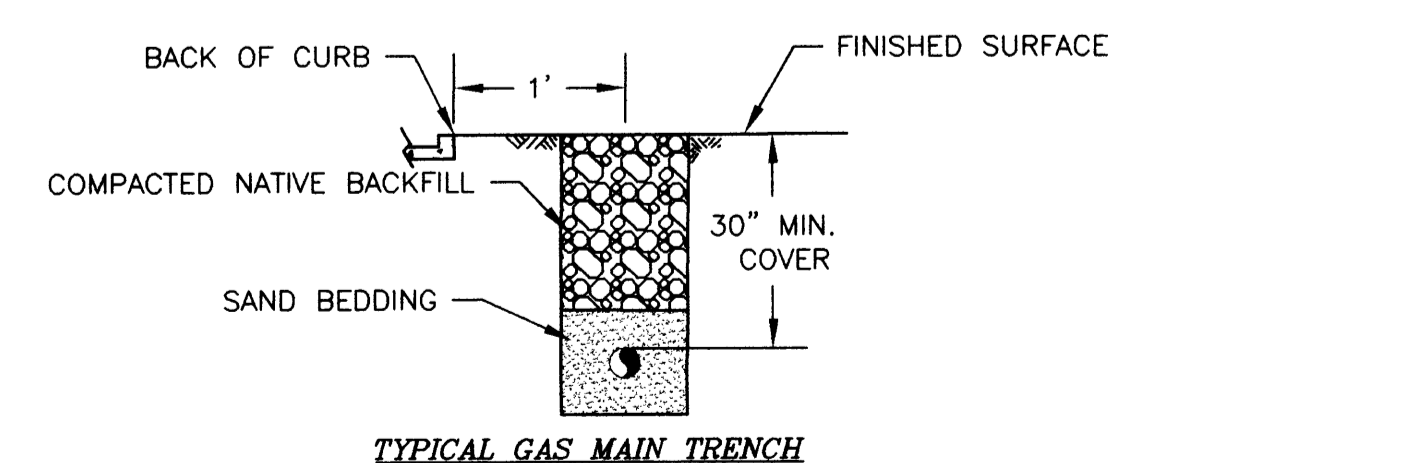
PIPE DIA. PLUS 1" FOR ALL PIPE DIA. LESS THAN 12" & GREATER THAN 4" (18" MIN.)
 PIPE DIA. PLUS 2" FOR ALL PIPE GREATER THAN 12" DIA.

NOTE: COMPACTION TO BE 95% OF ASTM T-99 FOR CLASS B BACKFILL. CLASS A BACKFILL WILL BE WHEEL ROLLED AND MOUNDING

TYPICAL WATER/SEWER/STORM TRENCH

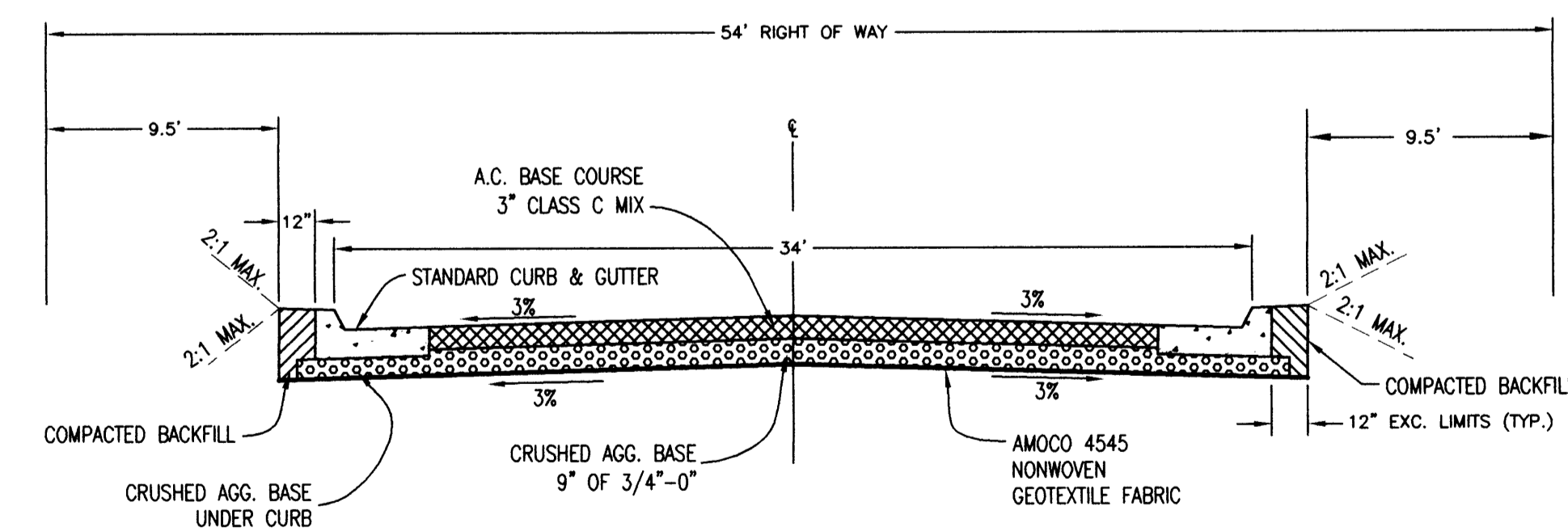


TYPICAL PHONE/POWER/TV TRENCH



TYPICAL GAS MAIN TRENCH

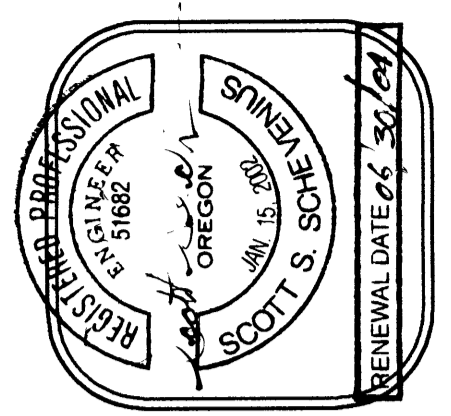
UTILITY TRENCH DETAILS



TYPICAL ROAD SECTION

BASED ON DOUGLAS COUNTY PUBLIC WORKS ROADWAY DESIGN STANDARD DRAWING D-9

POST CONSTRUCTION DRAWINGS
 THESE DRAWINGS REPRESENT THE CONSTRUCTION WORK AS NEAR AS CAN BE DETERMINED. THEY WERE PREPARED FROM INFORMATION GATHERED DURING CONSTRUCTION ACTIVITY BY THE CONTRACTORS AND INSPECTORS AND ARE THOUGHT TO BE ACCURATE. HOWEVER NO GUARANTEE OR WARRANTY IS EXPRESSED OR IMPLIED AS TO THEIR EXACTNESS AND THEY SHOULD BE USED ONLY AS A GENERAL REPRESENTATION OF THE CONSTRUCTION WORKS.



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| | | | |
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| Revision | Date | Revision | Date |
| | | | |

| | | | |
|-------|--------|---------|----------|
| Drawn | Design | Checked | Reviewed |
| STAFF | SSS | SSS | SSS |

AA PROJECT# 8078.02 09/16/03
 TITLE: STANDARD DETAILS
 PROJECT NAME: WINGGATE SUBDIVISION GREEN DISTRICT, OREGON

| | |
|------|---|
| SHT. | 6 |
| OF | 7 |