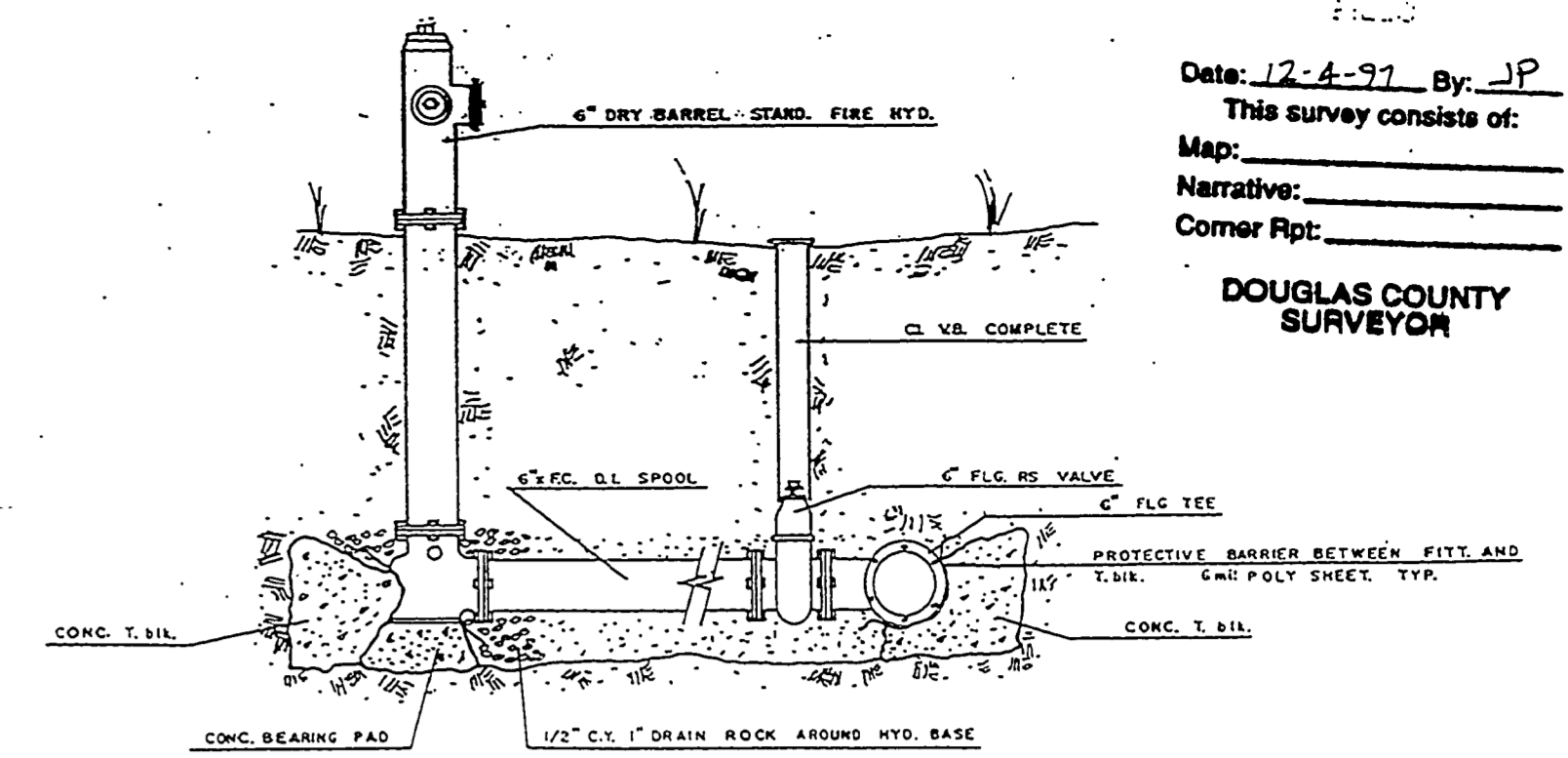
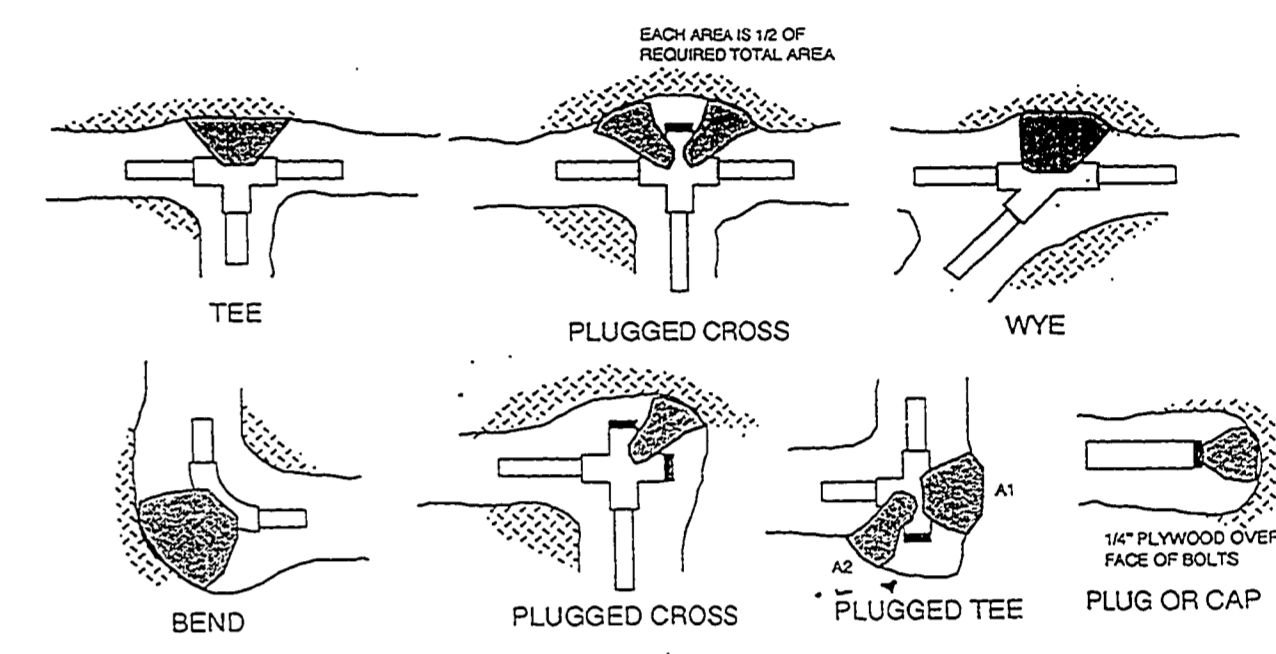


Date: 12-4-97 By: JP
 This survey consists of:
 Map:
 Narrative:
 Corner Rpt:
DOUGLAS COUNTY SURVEYOR



FIRE HYDRANT DETAIL



THRUST BLOCK DETAILS AND INFORMATION

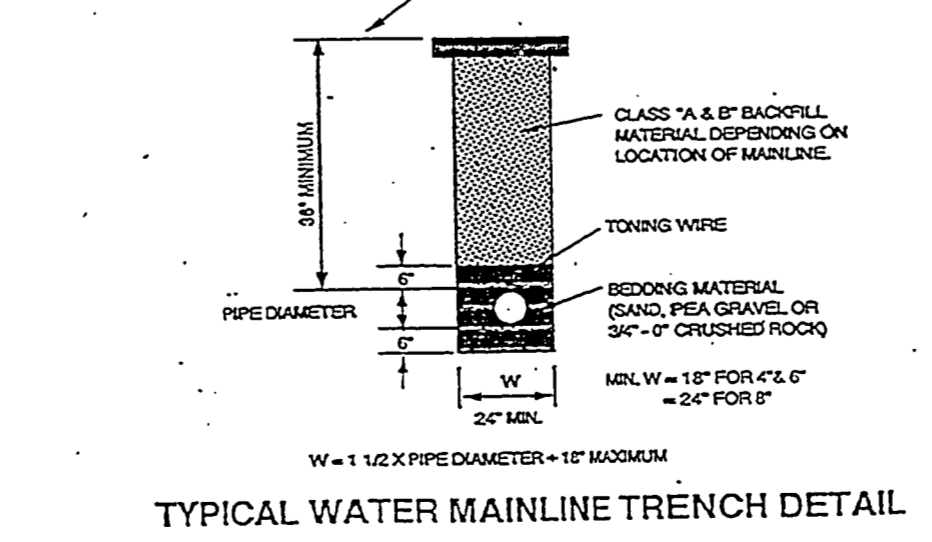
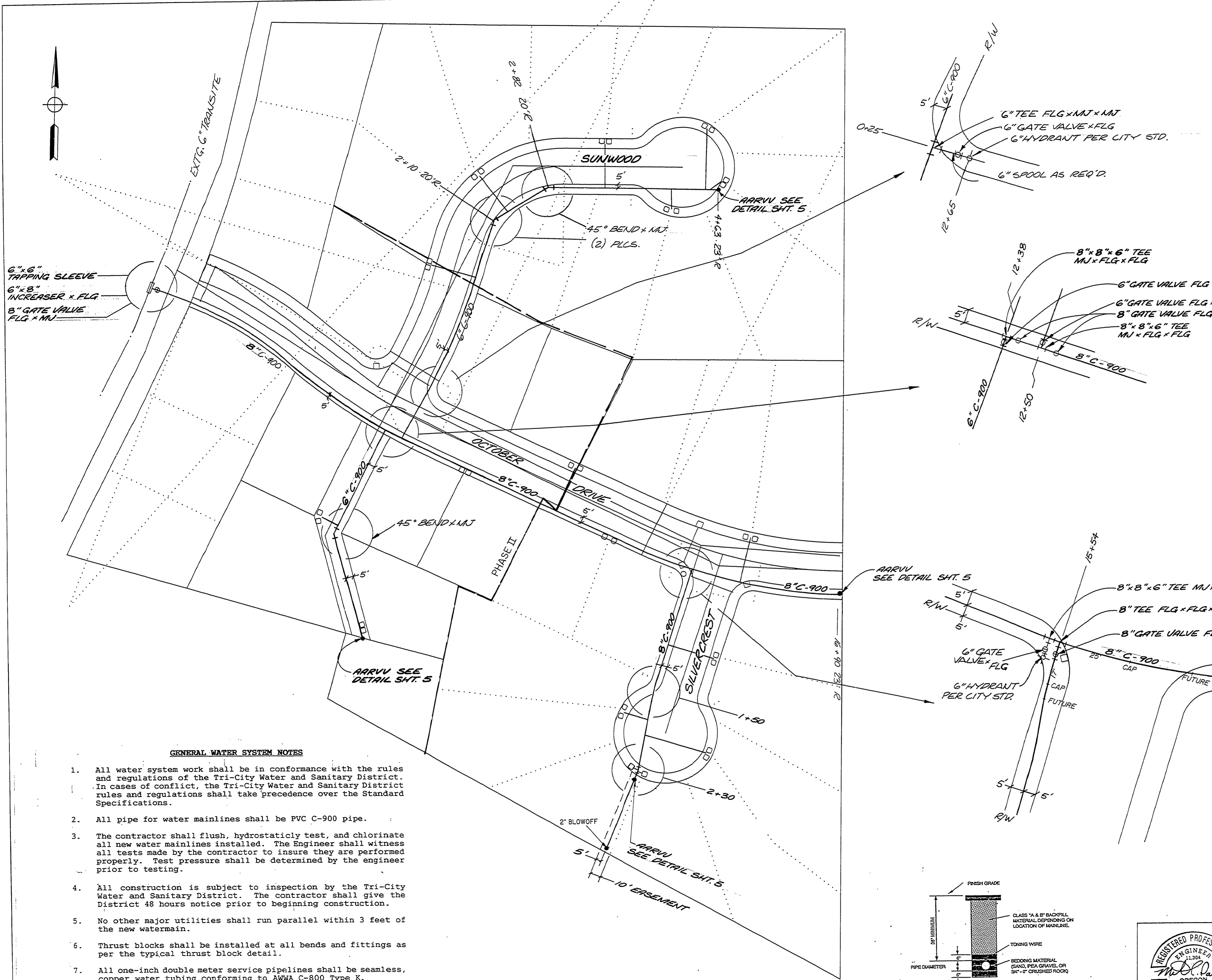
BEARING AREA THRUST BLOCKING IN SQUARE FEET

FITTING SIZE	TEE, WYE, PLUG, OR CAP	90 DEG. BEND PLUGGED CROSS	TEE PLUGGED ON RUN	45 DEG. BEND	22 1/2 DEG. BEND	11 1/4 DEG. BEND
4	3.6	5.1	5.0	3.6	2.8	1.4
6	7.5	10.6	10.5	7.5	5.7	2.8
8	12.9	18.2	18.1	12.9	9.9	5.0
10	19.4	27.4	27.2	19.4	14.8	7.4
12	27.4	38.7	38.4	27.4	21.0	10.5

NOTE: ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 200 P.S.I. AND AN ALLOWABLE SOIL BEARING STRESS OF 1,000 P.S.F. PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/200) x (1,000/SOIL BEARING STRESS) x (TABLE VALUE)

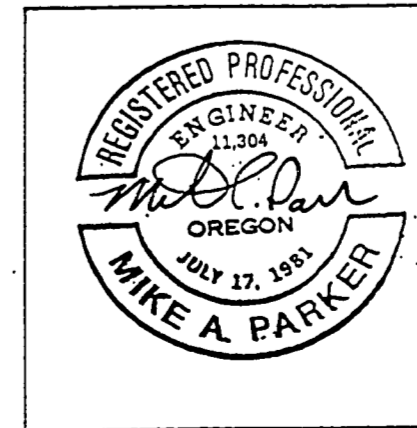
NOTES:

1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCLOSED ON THE PLANS.
4. IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED BELOW, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIAL SPECIFICATIONS.
5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS, TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.



GENERAL WATER SYSTEM NOTES

1. All water system work shall be in conformance with the rules and regulations of the Tri-City Water and Sanitary District. In cases of conflict, the Tri-City Water and Sanitary District rules and regulations shall take precedence over the Standard Specifications.
2. All pipe for water mainlines shall be PVC C-900 pipe.
3. The contractor shall flush, hydrostatically test, and chlorinate all new water mainlines installed. The Engineer shall witness all tests made by the contractor to insure they are performed properly. Test pressure shall be determined by the engineer prior to testing.
4. All construction is subject to inspection by the Tri-City Water and Sanitary District. The contractor shall give the District 48 hours notice prior to beginning construction.
5. No other major utilities shall run parallel within 3 feet of the new watermain.
6. Thrust blocks shall be installed at all bends and fittings as per the typical thrust block detail.
7. All one-inch double meter service pipelines shall be seamless, copper water tubing conforming to ANWA C-800 Type K.



Rev.	Date	Description
A	4/13/94	MODIFICATIONS PER TRI-CITY WATER & SANITARY DISTRICT
2	12-19-94	AS BUILT'S PHASE II
3	7/8/97	AS-BUILT'S - PHASE 3

i.e. ENGINEERING
 1205 S.E. Court Street
 Roseburg, Oregon 97470
 PHONE (503) 873-0166
 FAX (503) 440-9392

Project Name: **VALLEY ESTATES**

Title: **WATERLINE PLAN**

DES JK	PROJECT NO. 144-01
DWG DF	DATE: SEPT. 1992
CHK MP	SCALE: AS NOTED
APP MP	SHEET 4 OF 5

RD905WAT

OCTOBER DR. - CO. RD. #905
 SUNWOOD CT. - CO. RD. #905A
 SILVERCREST CT. - CO. RD. #905B.

RD905WAT