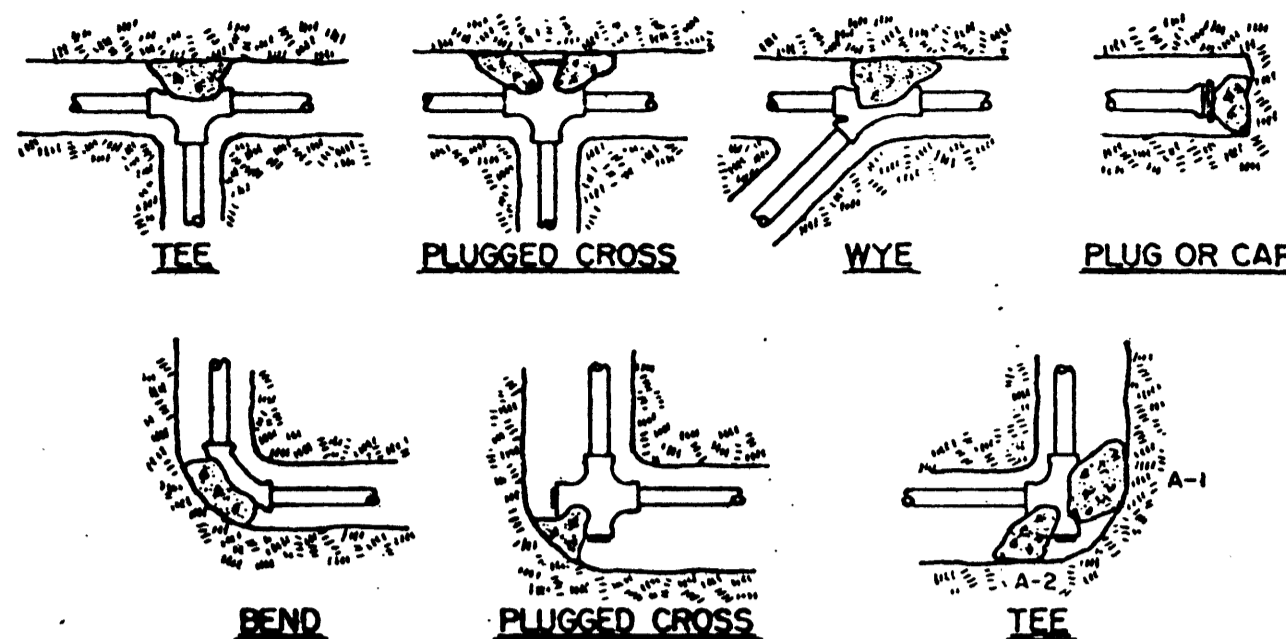
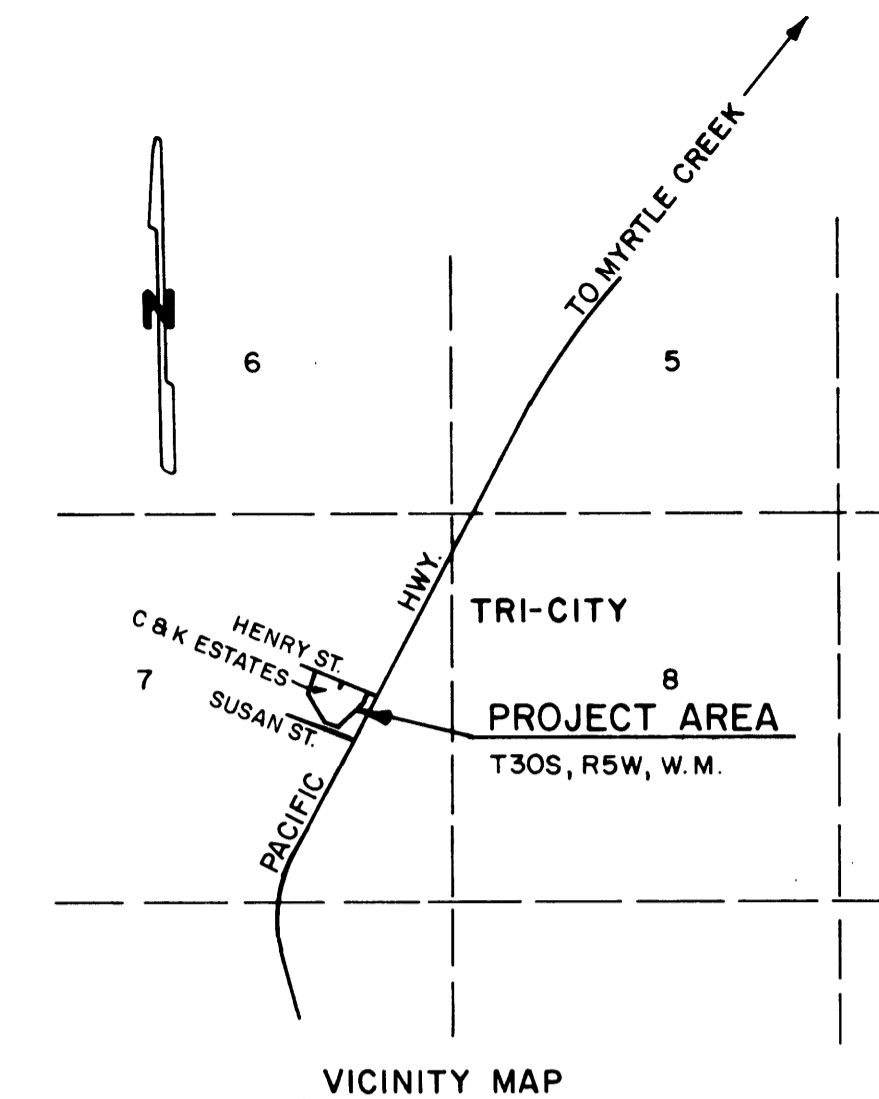


C & K BUILDERS, MYRTLE CREEK, OREGON

C & K ESTATES, TRI-CITY, OREGON

STREET, WATER & SANITARY SEWER IMPROVEMENTS

FILED
 Date: 2/7/2012 By: HWT
 This survey consists of:
 Map:
 Narrative:
 Corner Rpt:
 DOUGLAS COUNTY
 SURVEYOR



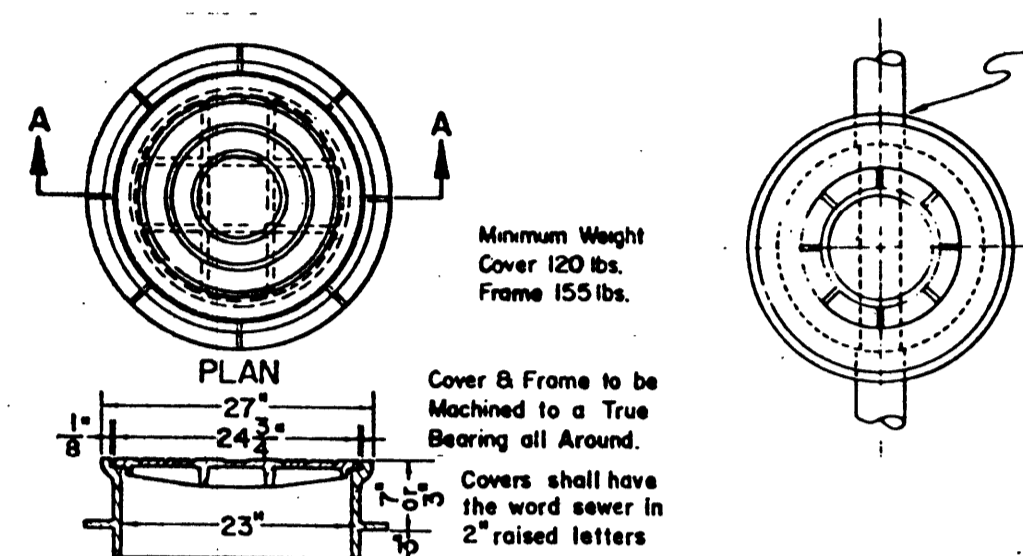
- NOTES:
1. Concrete thrust blocking to be poured against undisturbed earth.
 2. Keep concrete clear of joint and accessories.
 3. The required thrust bearing areas for special connections are shown encircled on the plans: e.g. (15) indicates 15 square feet bearing area required.
 4. If not shown on 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.

BEARING AREA OF THRUST BLOCKS IN SQ. FT.

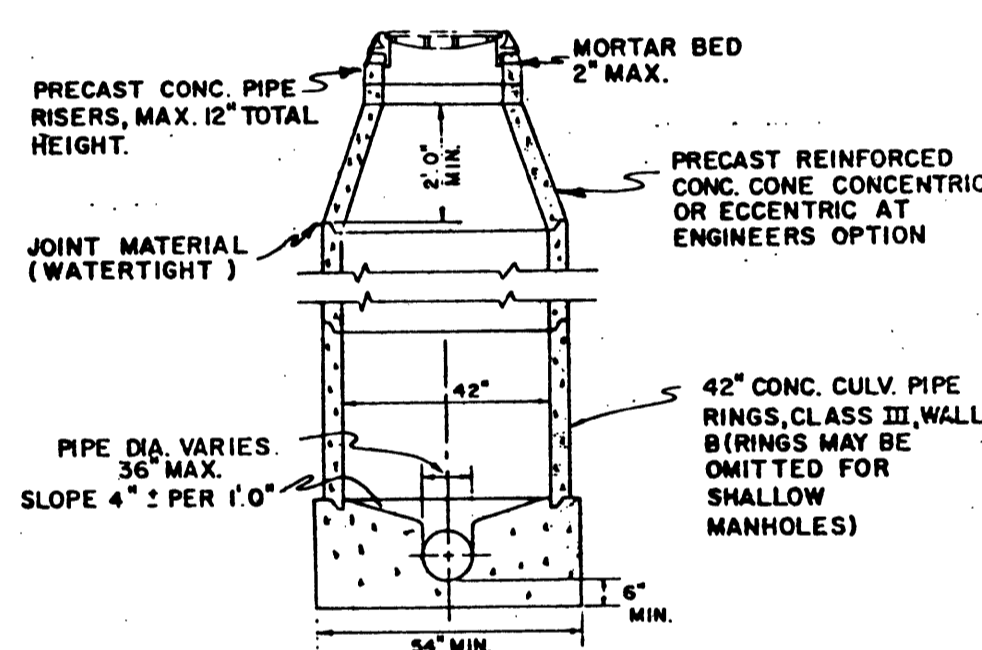
Fitting Size	Tee, Wye Plug or Cap	90° Bend Plugged Cross	Tee Plug on Run	45° Bend	22-1/2° Bend	11-1/4° Bend
4	1.0	1.4	1.9	1.4	1.0	---
6	2.7	3.0	4.3	3.0	1.6	1.0
8	3.8	5.3	7.6	5.4	2.9	1.5
10	5.9	8.4	11.8	8.4	4.6	2.4
12	8.5	12.0	17.0	12.0	6.6	3.4
14	11.5	16.3	23.0	16.3	8.9	4.6
16	15.0	21.3	30.0	21.3	11.6	6.0
18	19.0	27.0	38.0	27.0	14.6	7.5
20	23.5	33.3	47.0	33.3	18.1	9.4
24	34.0	48.0	68.0	48.0	26.2	13.6

NOTE: Above bearing areas based on test pressure of 150 p.s.i. and an allowable soil bearing stress of 2,000 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).

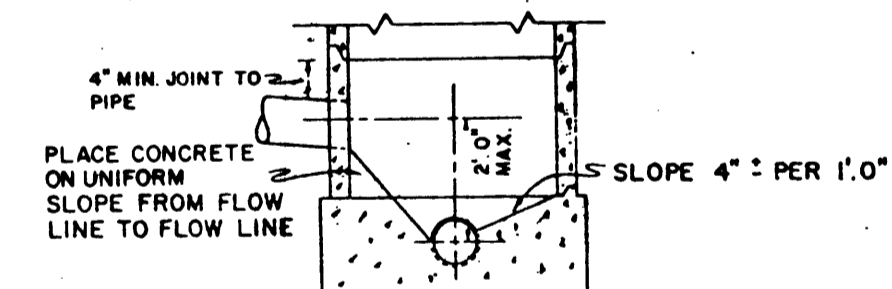
THRUST BLOCK DETAIL



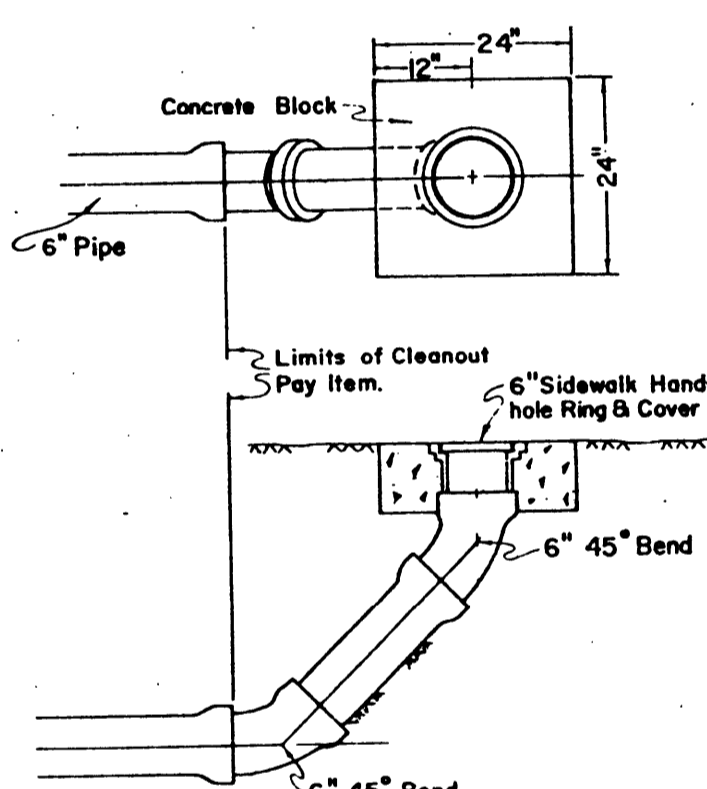
MANHOLE RING & COVER



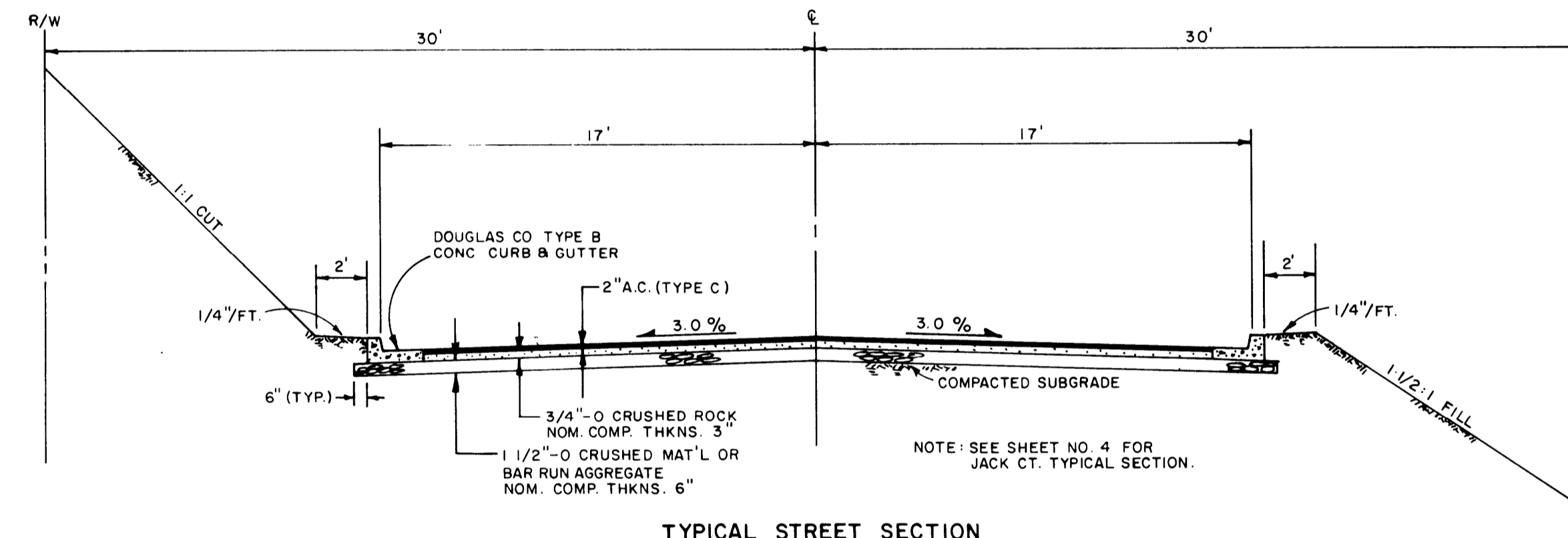
MANHOLE TYPE A



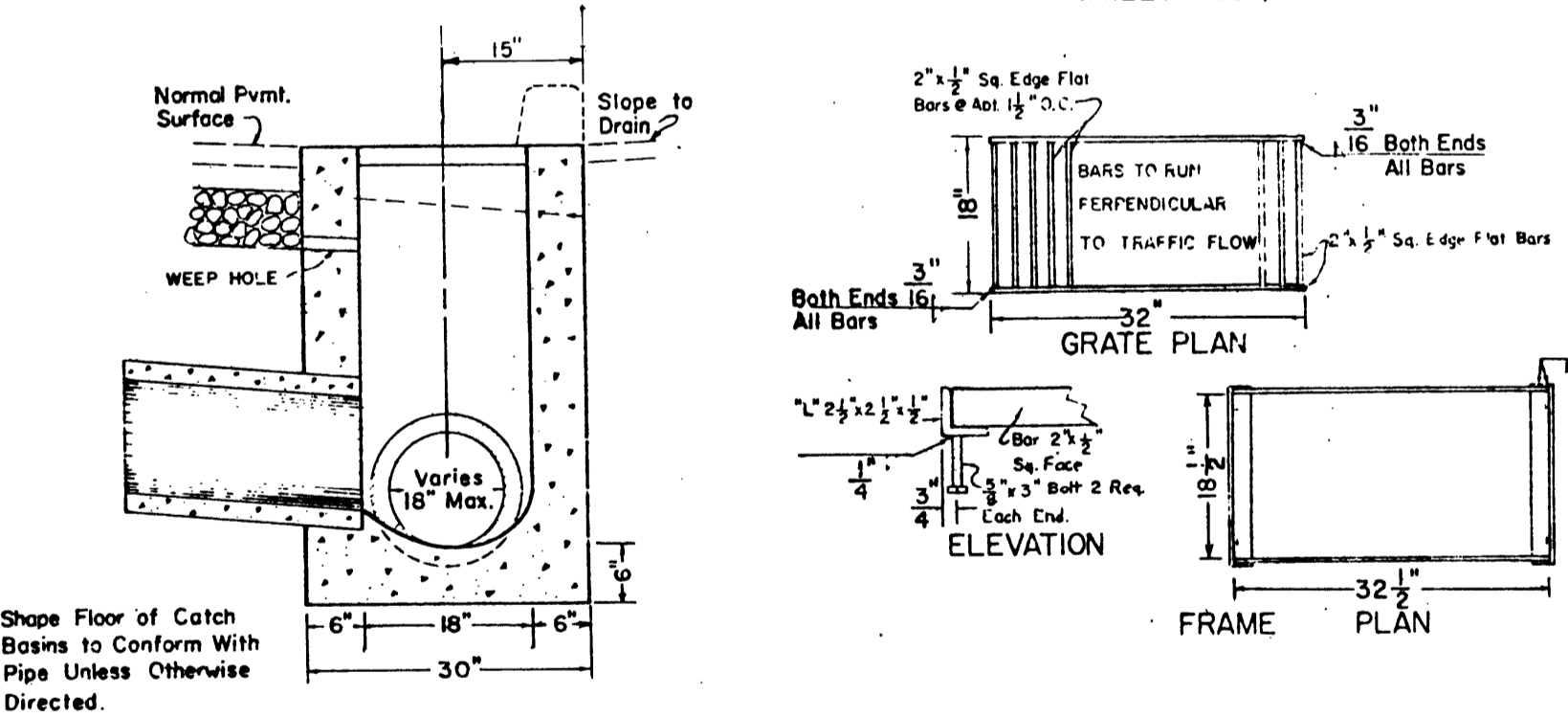
TYPICAL MANHOLE HAVING FALL LESS THAN 2'0" (DOUGLAS CO. STANDARD)



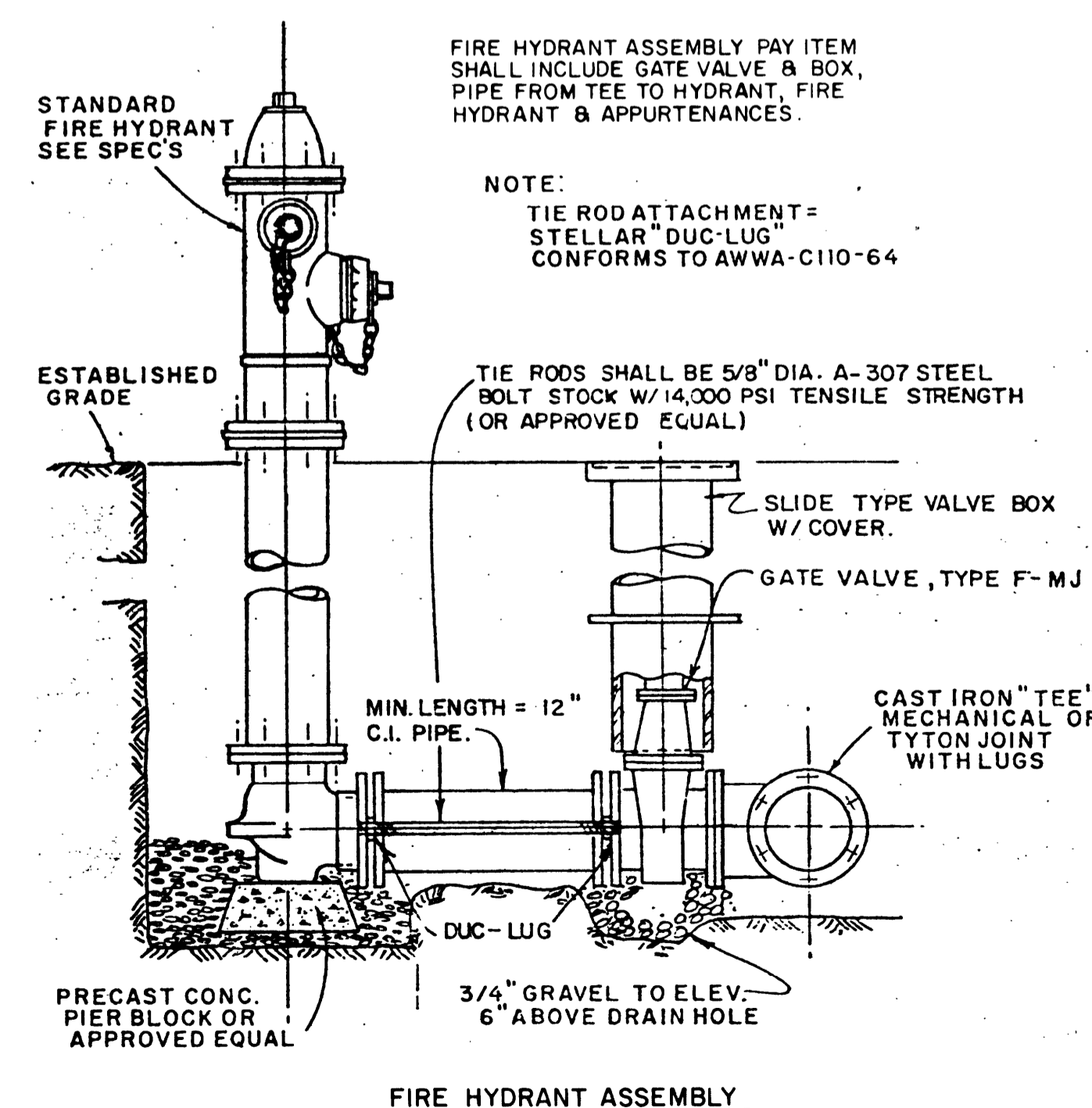
CLEANOUT DETAIL (DOUGLAS CO. STANDARD)



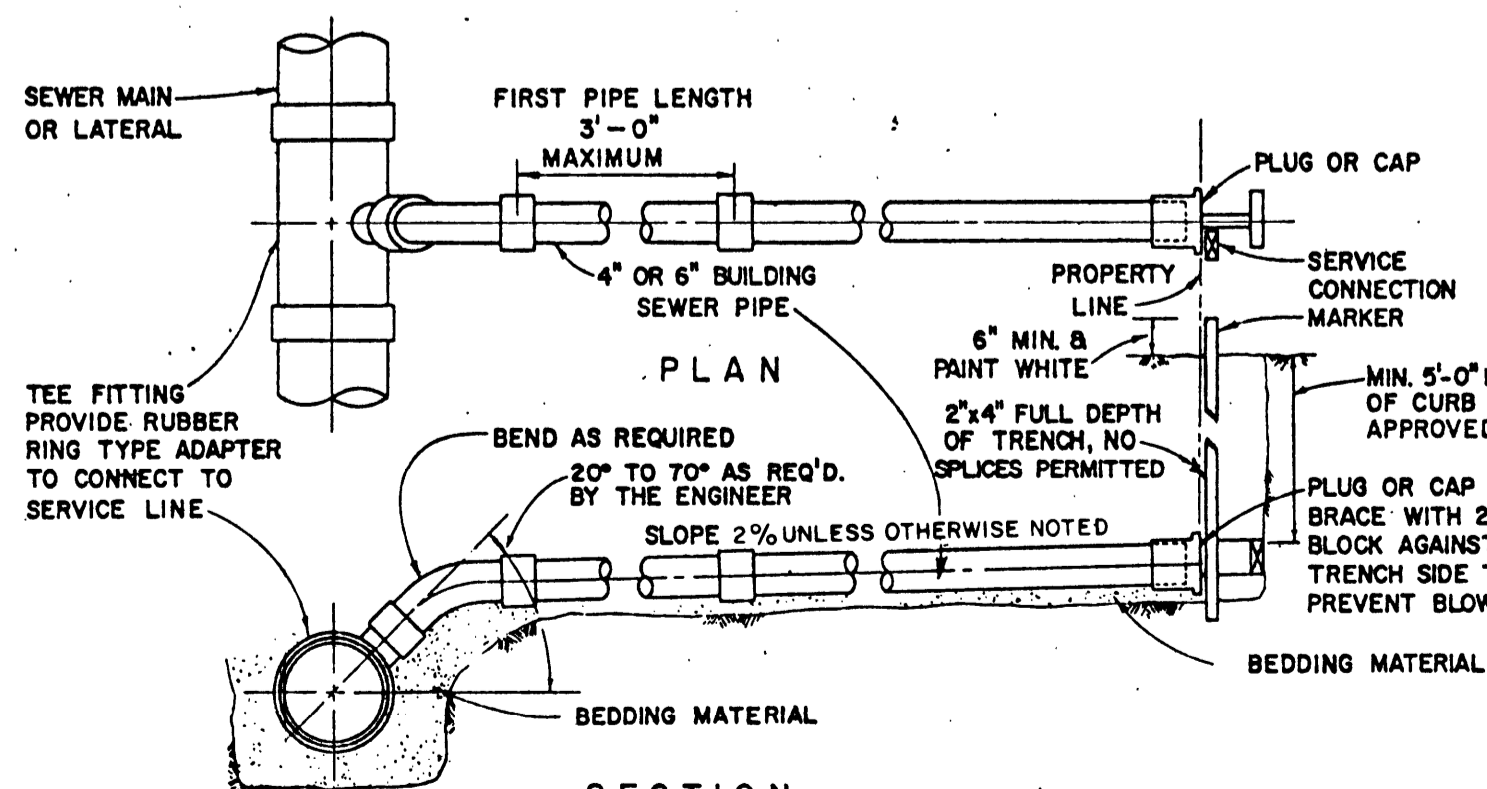
TYPICAL STREET SECTION (MILLY AVE.)



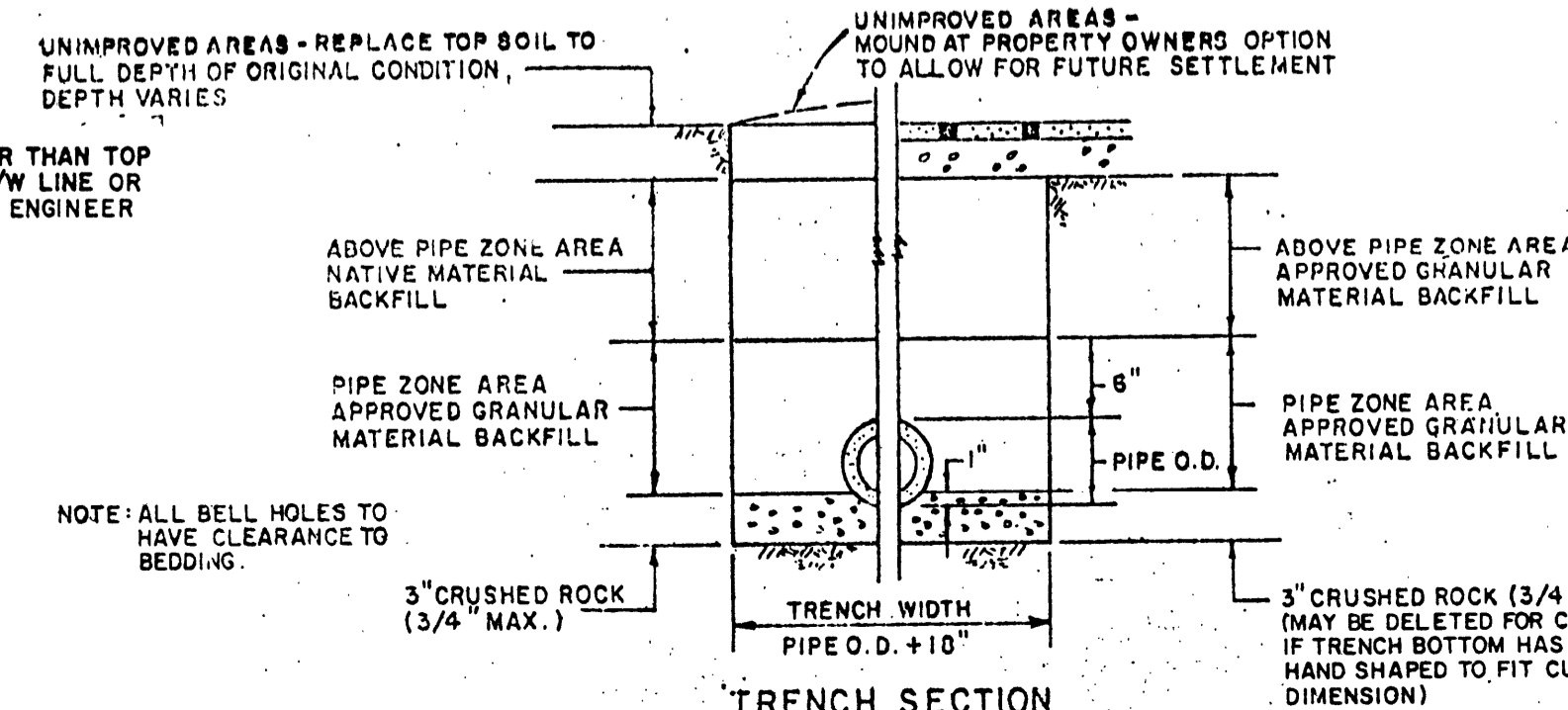
CATCH BASIN DETAIL (DOUGLAS CO. STANDARD TYPE B)



FIRE HYDRANT ASSEMBLY



SECTION STANDARD SERVICE CONNECTION (DOUGLAS CO. STANDARD)



TRENCH SECTION

- INDEX OF SHEETS
1. INDEX & MISCELLANEOUS DETAILS
 2. MILLY AVE.- STREET & STORM DRAINAGE IMPROVEMENTS
 3. MILLY AVE.- WATER & SANITARY SEWER IMPROVEMENTS
 4. JACK CT.- STREET, WATER & SANITARY SEWER IMPROVEMENTS

DOUGLAS COUNTY PUBLIC WORKS DEPT.
APPROVED
 By: [Signature] Date: 4-4-11

C & K BUILDERS		MYRTLE CREEK, OREGON	
C & K ESTATES		INDEX & MISCELLANEOUS DETAILS	
C & G ENGINEERING		ENGINEERING ARTS BUILDING	
3276 Commercial, S. E.		SALEM, OREGON	
DSGN. CPW	DRWG. PIW	CHKD.	SCALE NONE
DATE		FEB., 1977	