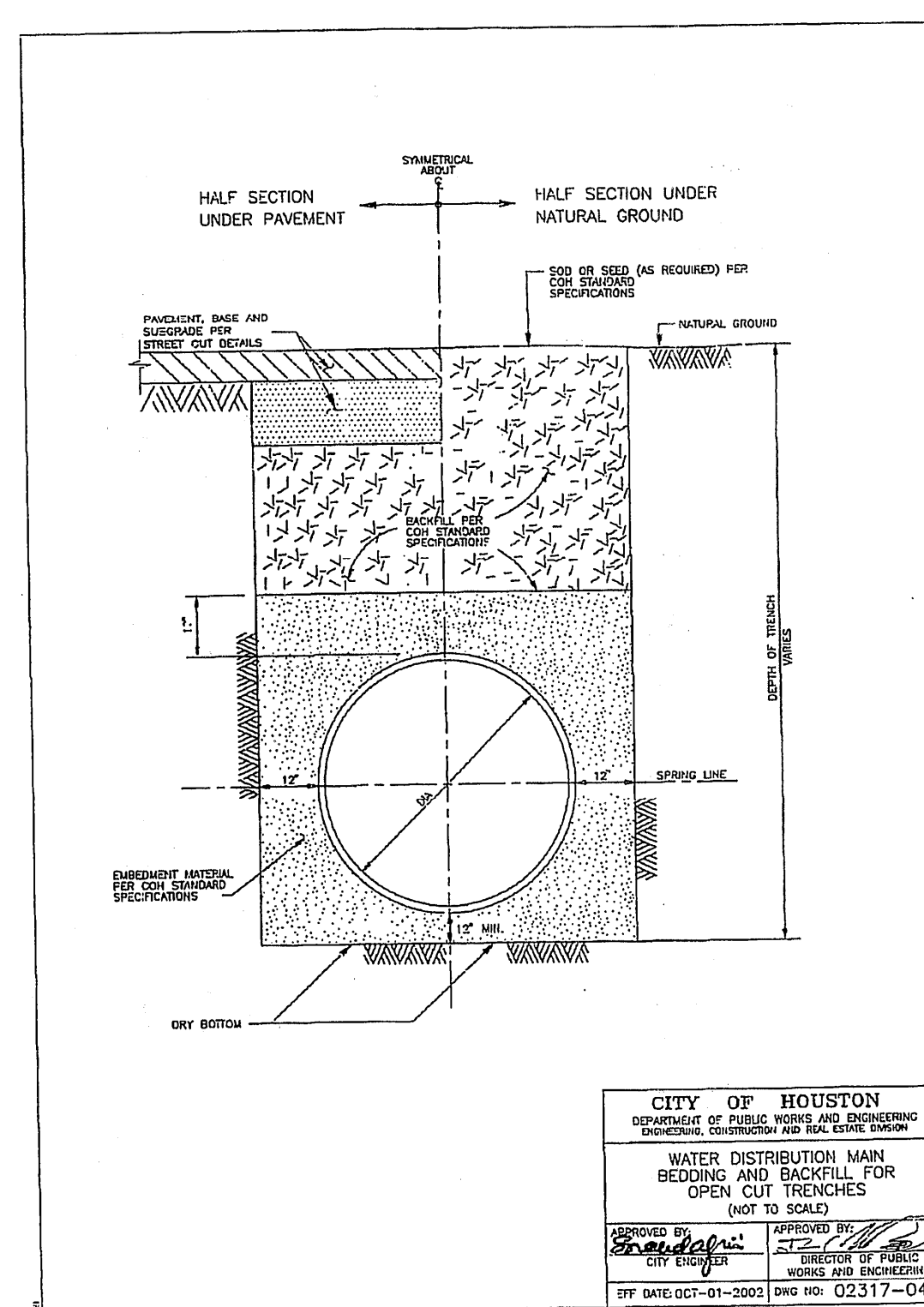
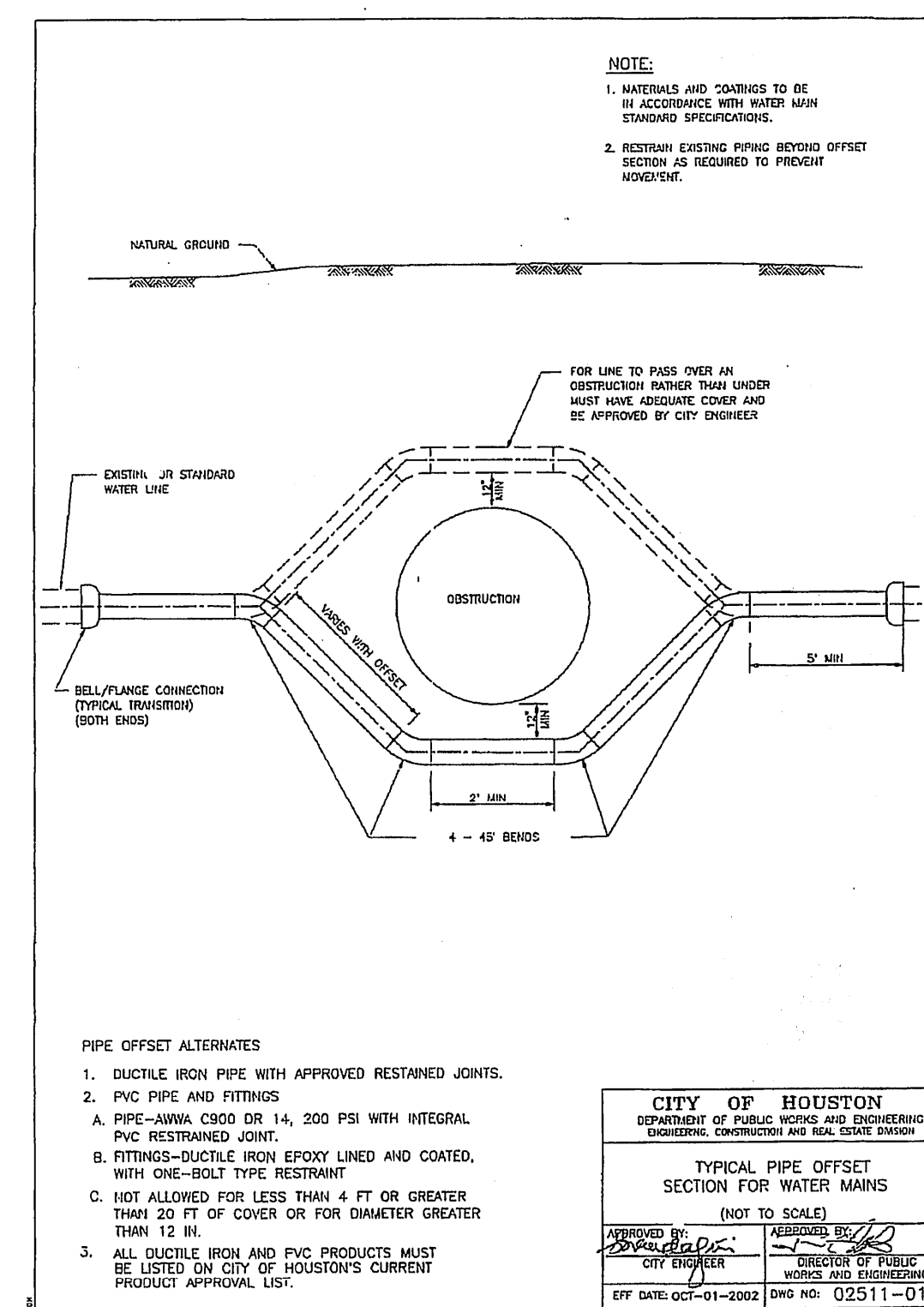
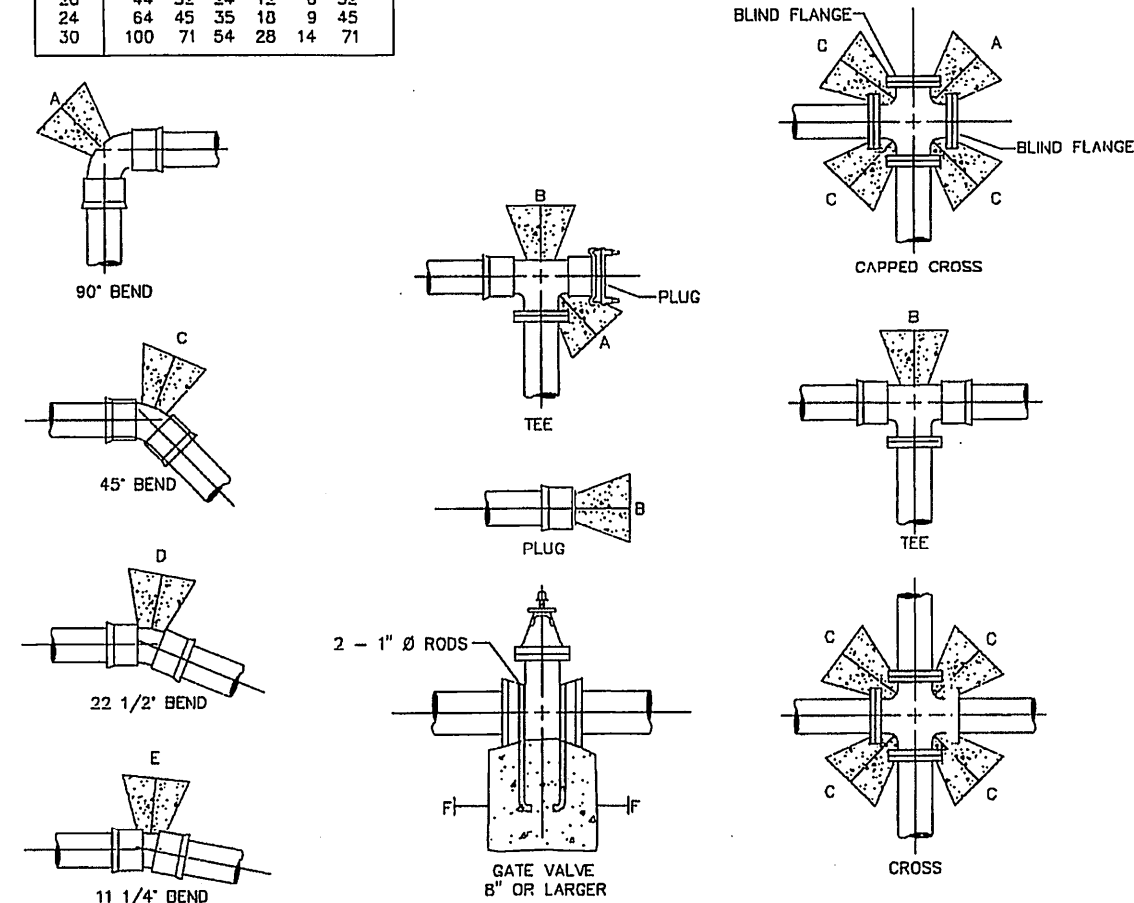


PIPE SIZE (IN.)	MINIMUM BEARING AREA AGAINST UNDISTURBED SOIL (SQ. FT.)				
	A	B	C	D	E
4	2	2	1	1	2
6	4	3	1	1	3
8	6	5	2	2	4
10	8	6	3	2	5
12	10	8	4	3	6
14	12	10	5	4	7
16	14	12	6	5	8
18	16	14	7	6	9
20	18	16	8	7	10
24	22	20	10	9	12
30	28	24	12	11	15

NOTES:
1. THRUST IS BASED ON A WORKING PRESSURE OF 150 P.S.I.
2. BEARING AREA IS BASED ON A SAFE SOIL BEARING LOAD OF 1000 P.S.F.
3. BLOCKING SHALL BEAR AGAINST FITTINGS ONLY AND SHALL BE CLEAR OF THE JOINT.



PIPE TAPPING SCHEDULE

WATER MAIN TYPE AND DIAMETER	SERVICE SIZE			
	3/4"	1"	1 1/2"	2"
4" CAST IRON OR DUCTILE IRON	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
4" ASBESTOS (EXISTING) CEMENT	WSSS	WSSS	DSS, WSSS	DSS, WSSS
4" PVC (AWWA C900)	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
6" AND 8" ASBESTOS (EXISTING) CEMENT	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
8" AND 10" PVC (AWWA C900)	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
12" CAST IRON OR DUCTILE IRON	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
12" ASBESTOS (EXISTING) CEMENT	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
12" PVC (AWWA C900)	DSS, WSSS	DSS, WSSS	DSS, WSSS	DSS, WSSS
16" AND 18" CAST IRON OR DUCTILE IRON	DWSSS	DWSSS	DWSSS	DWSSS
16" AND 18" ASBESTOS (EXISTING) CEMENT	DWSSS	DWSSS	DWSSS	DWSSS
16" AND 18" PVC (AWWA C900)	DWSSS	DWSSS	DWSSS	DWSSS

DSS - DUAL STRAP SADDLES
WSSS - WIDE BAND STRAP SADDLES
DWSSS - DUAL WIDE BAND STRAP SADDLES

SERVICE TAPS TO BE MADE IN THIS ZONE EXCEPT FOR PVC FASTAP

SLOW-OFF & CHLORINATION TAPS ARE MADE IN VERTICAL POSITION

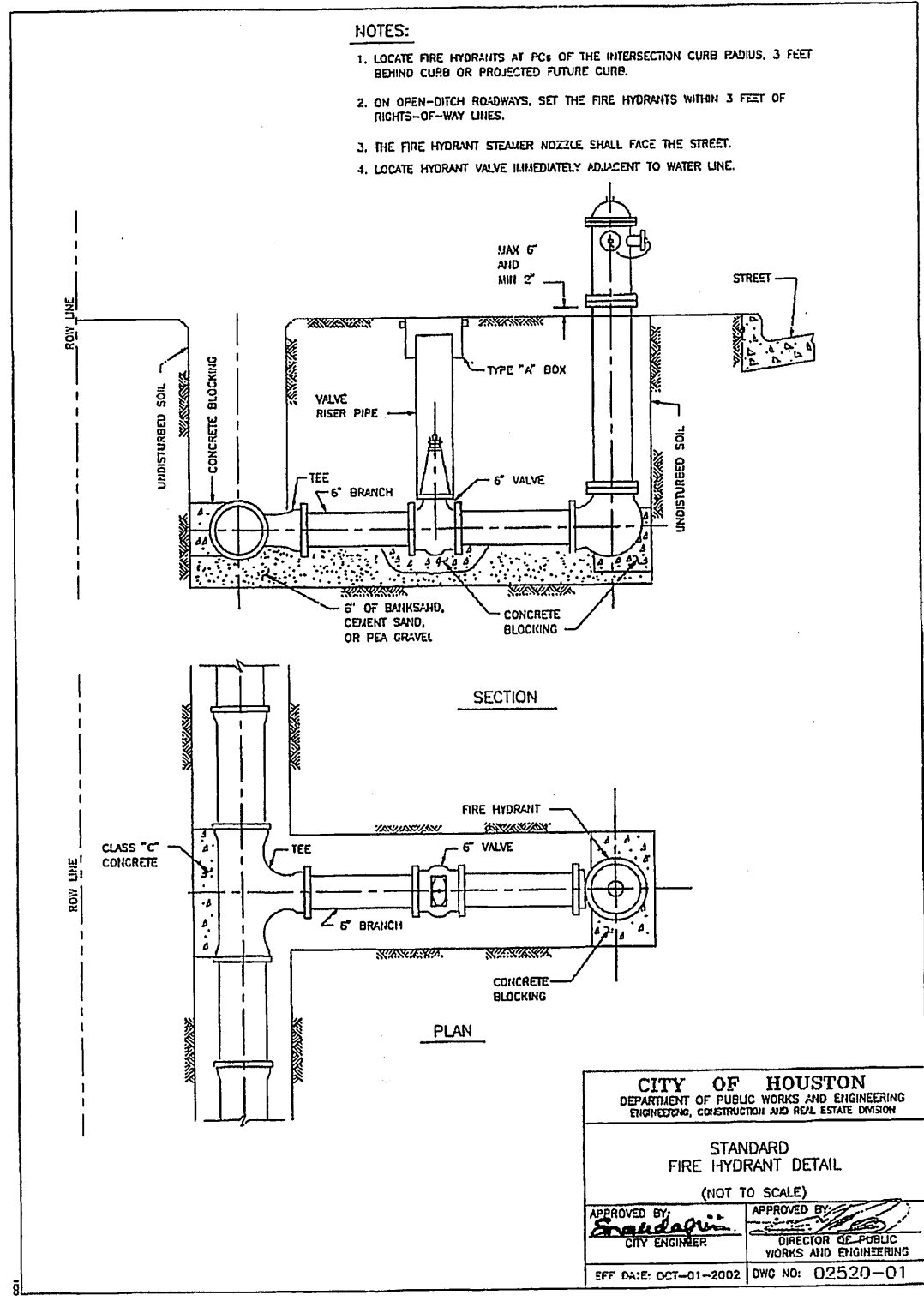
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
EQUIPMENT, CONSTRUCTION AND REAL ESTATE DIVISION

SERVICE TAPS (NOT TO SCALE)

APPROVED BY: [Signature]
CITY ENGINEER

APPROVED BY: [Signature]
DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: OCT-01-2002 DWG NO: 02512-02



VILLAS AT WILLOWBROOK

WATER DETAILS

WATER: [Signature] 9/15
ST. & BRIDGE: [Signature] 9/15
STORMWATER: [Signature] 9/15
TRAFFIC: SWQ

FILE NO:
DRAWING SCALE: N/A
SCALE: NONE
SHEET No: 16 OF 24

40820
HOUSTON, TEXAS

PROVIDENT CONSULTING, INC.
1405 ALLSTON ST.
HOUSTON, TEXAS 77008
(713)802-1019

BOBBY K. WILSON
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REGISTERED PROFESSIONAL ENGINEER
09-01-05