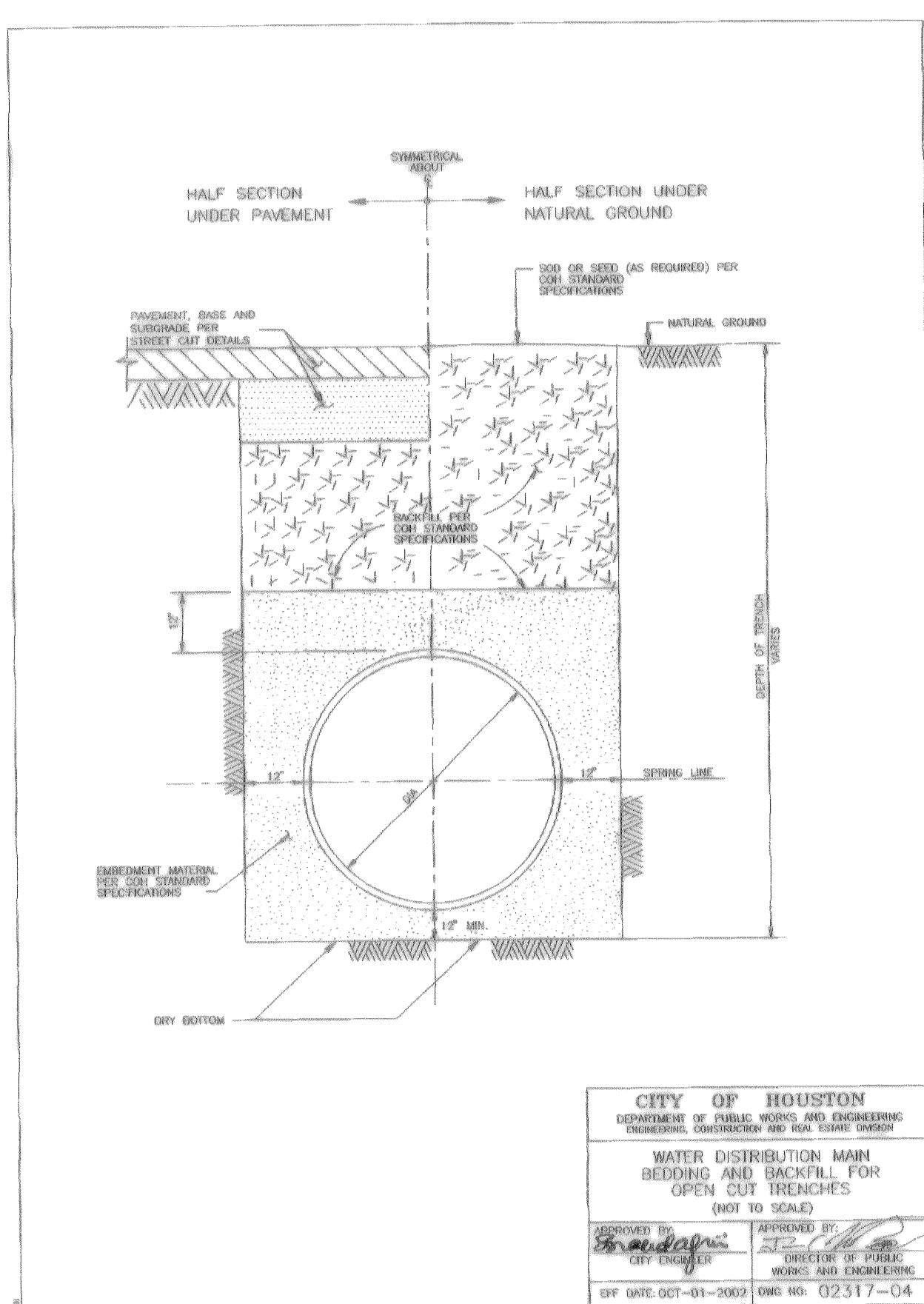


**NOTE:**  
1. SELECT BACKFILL FOR ROAD PAVEMENT, FLEXIBLE BASE MATERIAL FOR ASPHALT PAVEMENT.

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**BEDDING AND BACKFILL AUGER PIT AND AUGER HOLE**  
(NOT TO SCALE)

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

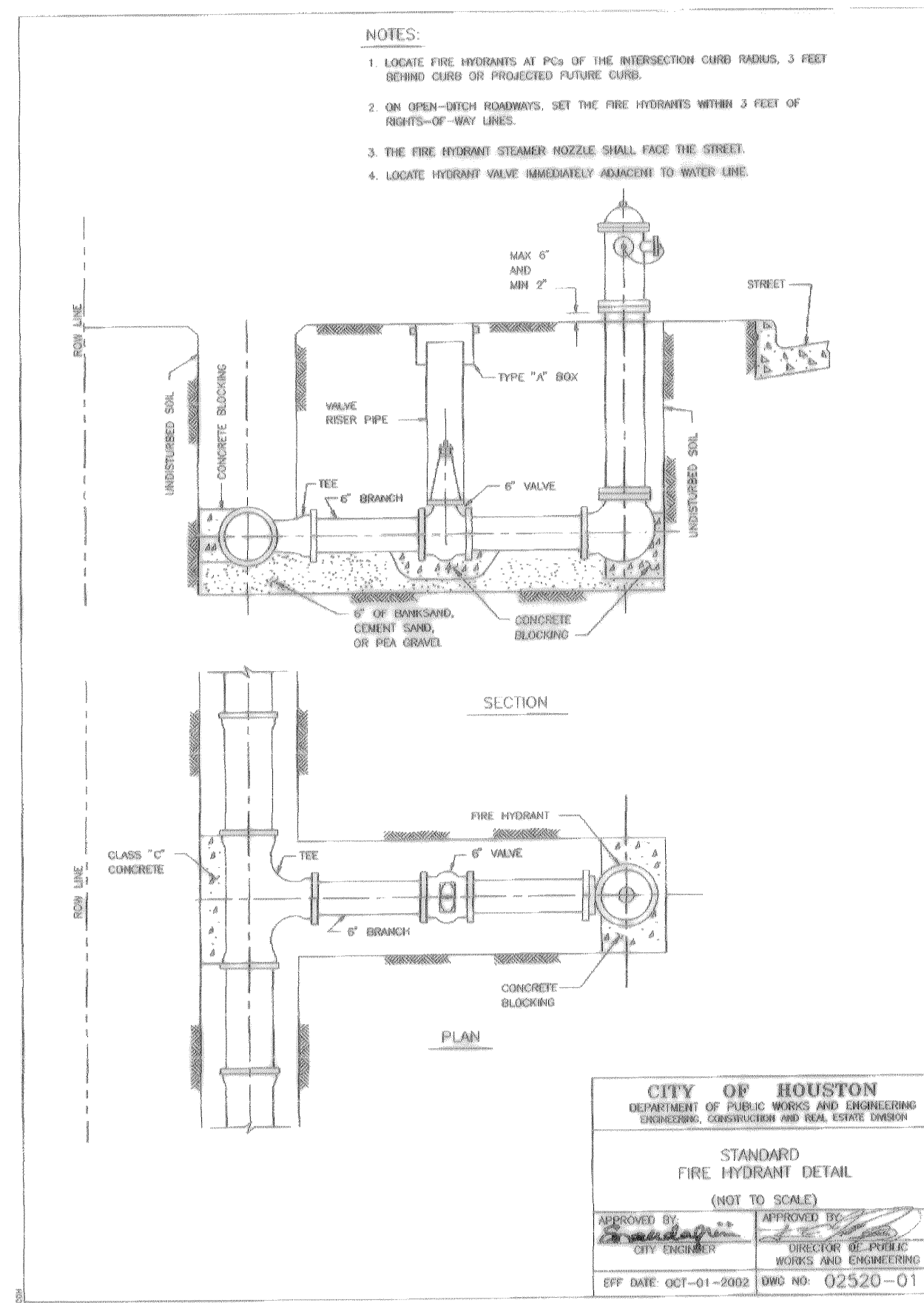
OFF DATE: OCT-01-2002 DWG NO. 02447-01



**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**WATER DISTRIBUTION MAIN BEDDING AND BACKFILL FOR OPEN CUT TRENCHES**  
(NOT TO SCALE)

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

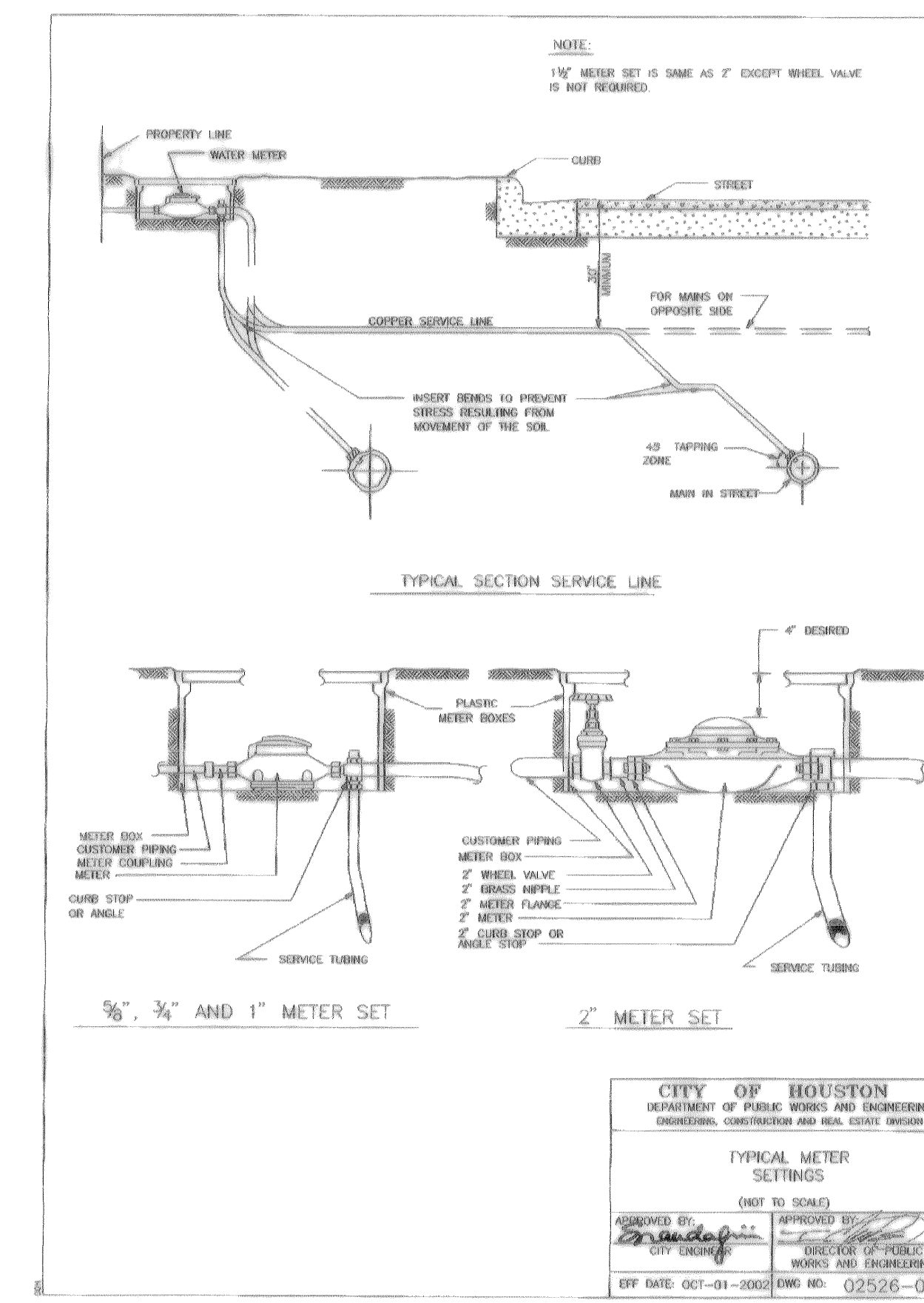
OFF DATE: OCT-01-2002 DWG NO. 02517-04



**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**STANDARD FIRE HYDRANT DETAIL**  
(NOT TO SCALE)

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

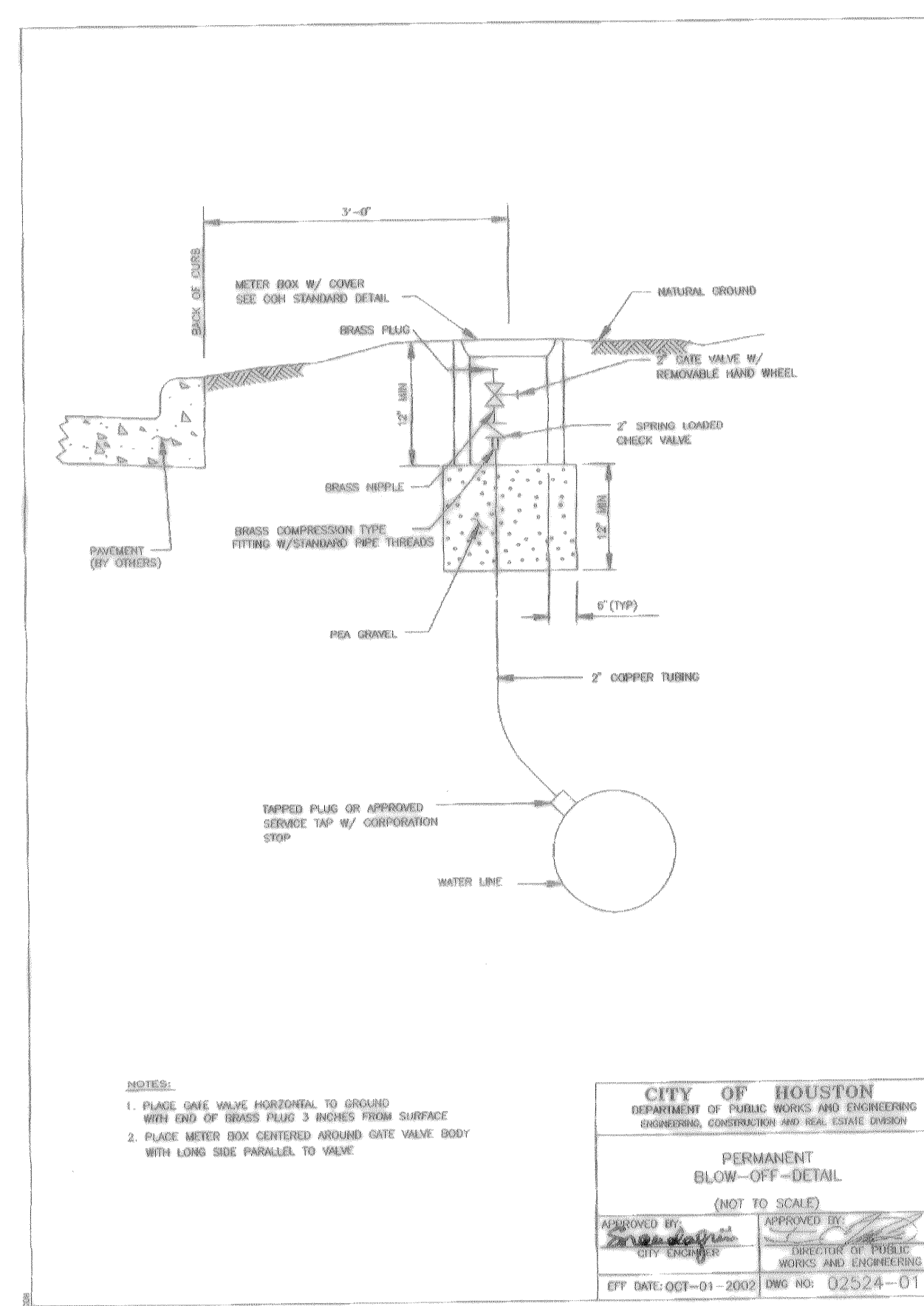
OFF DATE: OCT-01-2002 DWG NO. 02520-01



**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**TYPICAL METER SETTINGS**  
(NOT TO SCALE)

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

OFF DATE: OCT-01-2002 DWG NO. 02526-01



**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**PERMANENT BLOW-OFF-DETAIL**  
(NOT TO SCALE)

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

OFF DATE: OCT-01-2002 DWG NO. 02524-01

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

DSS - DUAL STRAP SADDLES  
WESS - WIDE BAND STRAP SADDLES  
DWESS - DUAL WIDE BAND STRAP SADDLES

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING  
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION  
**SERVICE TAPS**  
(NOT TO SCALE)

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

OFF DATE: OCT-01-2002 DWG NO. 02512-02

**STANDARD PROFILE LEGEND**

CENTER LINE OF R.O.W. \_\_\_\_\_  
PROPERTY LINE N & E \_\_\_\_\_  
PROPERTY LINE S & W \_\_\_\_\_  
DITCH OR CURB N & E \_\_\_\_\_  
DITCH OR CURB S & W \_\_\_\_\_

AT LEAST 48 HOURS BEFORE EXCAVATING IN STREET R.O.W. OR EASEMENTS CALL UTILITY COORDINATING COMMITTEE.  
1-800-245-4545

**PRIVATE UTILITY LINES SHOWN**

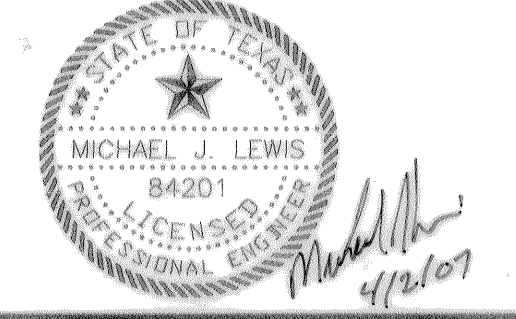
CenterPoint Energy/ Gas Facilities \_\_\_\_\_  
CenterPoint Energy/ Electric Facilities \_\_\_\_\_

S.B.C. VALID FOR ONE YEAR  
APPROVED ONLY FOR CROSSING UNDERGROUND DUCTILES UNLESS NOTED. VALID AT TIME OF REVIEW ONLY.

CenterPoint Energy/ Electric Facilities  
APPROVED ONLY FOR CROSSING UNDERGROUND DUCTILES UNLESS NOTED. VALID AT TIME OF REVIEW ONLY.

CABLE COMPANY \_\_\_\_\_

**NOTE:**  
LOCATIONS OF EXISTING UTILITY LINES ARE BASED ON AVAILABLE CONSTRUCTION PLANS.



App.	Revisions	Date	No.

**AS-BUILTS 3-16-07**

**MUNICIPAL UTILITY DISTRICT NO. 191**  
**HARGRAVE ROAD**  
**DETAIL SHEET**

**ASPEN CIVIL DESIGN**

(832) 607-3551 Fax 14019 S.W. Freeway, Suite 301-278  
(281) 265-3551 Fax Sugar Land, Texas 77478

**CITY OF HOUSTON**  
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

WATER	WASTEWATER	TRAFFIC
ST. & BRIDGE	STORMWATER	SWG

FILE NO.: 225071-0  
DRAWING SCALE:  
VERT: 1"=2'  
HORIZ: 1"=20'  
SHEET: 9 OF 10