



Perry Park Water and Sanitation District
5676 West Red Rock Drive
Larkspur, Colorado 80118
303.681.2050
www.ppwsd.org

Service Line - General Information Summary

Site Plans

- ✚ The District has one original site plan for the property that is noted as approved by the District.
- ✚ The Service Line Installer must have one original site plan that is noted as approved by the District at the job site at all times. This original site plan cannot have any notes or markings other than those made by the District.
- ✚ The Service Line Installer must follow the site plan exactly.
- ✚ All water and sewer taps must be witnessed by District.

Water Service Line

- ✚ Meter pit must be installed at the property line.
- ✚ Meter pit cannot be concrete.
- ✚ Meter pit must be 24 inches.
- ✚ Meter pit lid and curb stop must be minimum 3 feet from driveway.
- ✚ The final elevation of the meter pit is very important.
- ✚ 4 to 1 maximum slope must be maintained 3 feet around the meter pit vault.
- ✚ The material for the pipe is K-Copper or DR9 HDPE.
- ✚ Lock tight compression fittings must be used.
- ✚ Water and sewer services must be ten feet apart from property line to foundation.
- ✚ Natural bedding, with no rocks can be used after April 1 and before December 1.
- ✚ Road base or Class 6 squeegee must be used between December 1 and April 1.
- ✚ Water marking tape must be installed in trenches, one backhoe bucket above pipe.
- ✚ A 6 foot minimum of coverage is required over water service line.
- ✚ The water will remain off and the meter pit lid locked until the final / meter pit inspection has been completed.

Sewer Service Line

- ✚ Clean-outs must be installed at every bend.
- ✚ Property line clean-out must be 2 foot from driveway.
- ✚ The sewer pipe must be straight between clean-outs.
- ✚ 45 degrees is the biggest bend allowed.
- ✚ The material for the pipe is SDR-35.
- ✚ No glue is allowed except for a District approved sewer service drop.
- ✚ Water and sewer service lines must be ten feet apart from property line to foundation.
- ✚ Sewer marking tape must be installed in trenches, one backhoe bucket above pipe.
- ✚ A 3 foot minimum of coverage is required over gravity sewer service line.
- ✚ A 6 foot minimum of coverage is required over a pressurized sewer line.

Inspections

- ✚ Inspections must be scheduled twenty four hours in advance.
- ✚ Cancellation of inspection must be made by 9am the day of the inspection.
- ✚ Winter inspections (December 1 thru April 1) are scheduled between 10am and 2pm.
- ✚ All other inspections are scheduled between 9am and 3pm.
- ✚ A failed inspection will result in a \$50 failed inspection fee.
- ✚ A no-show is considered a failed inspection.
- ✚ Not having the approved site plan at the inspection is considered a failed inspection.
- ✚ A short notice inspection may be scheduled for a \$50 inspection fee.

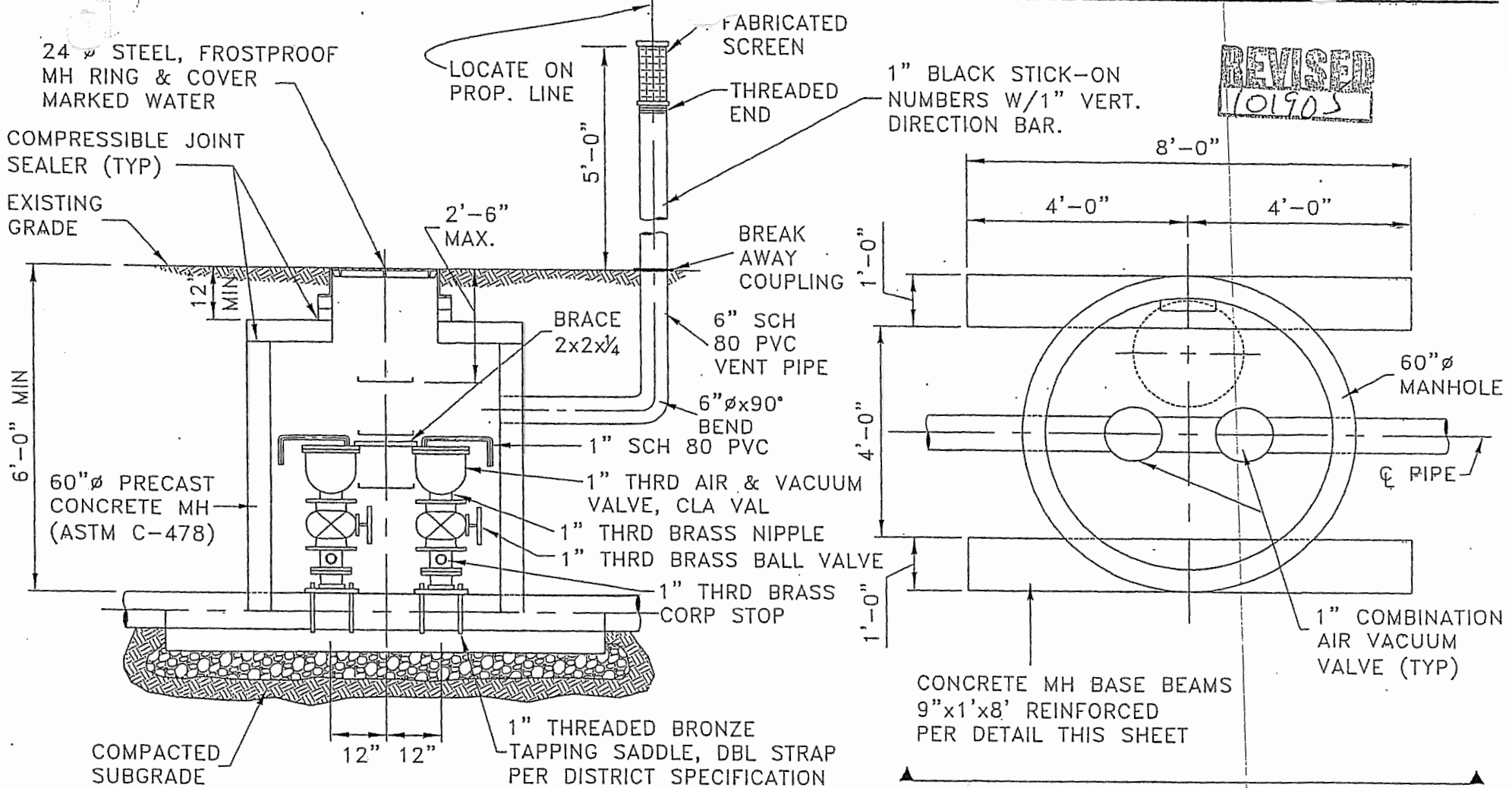
Warranty

- ✚ Materials and Labor under warranty for one year.



CONSTRUCTION STANDARDS AND SPECIFICATIONS
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SECTION

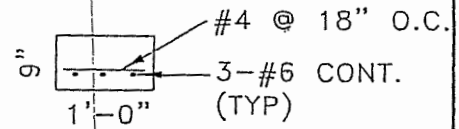
PLAN

**AIR & VACUUM VALVE
 INSTALLATION**

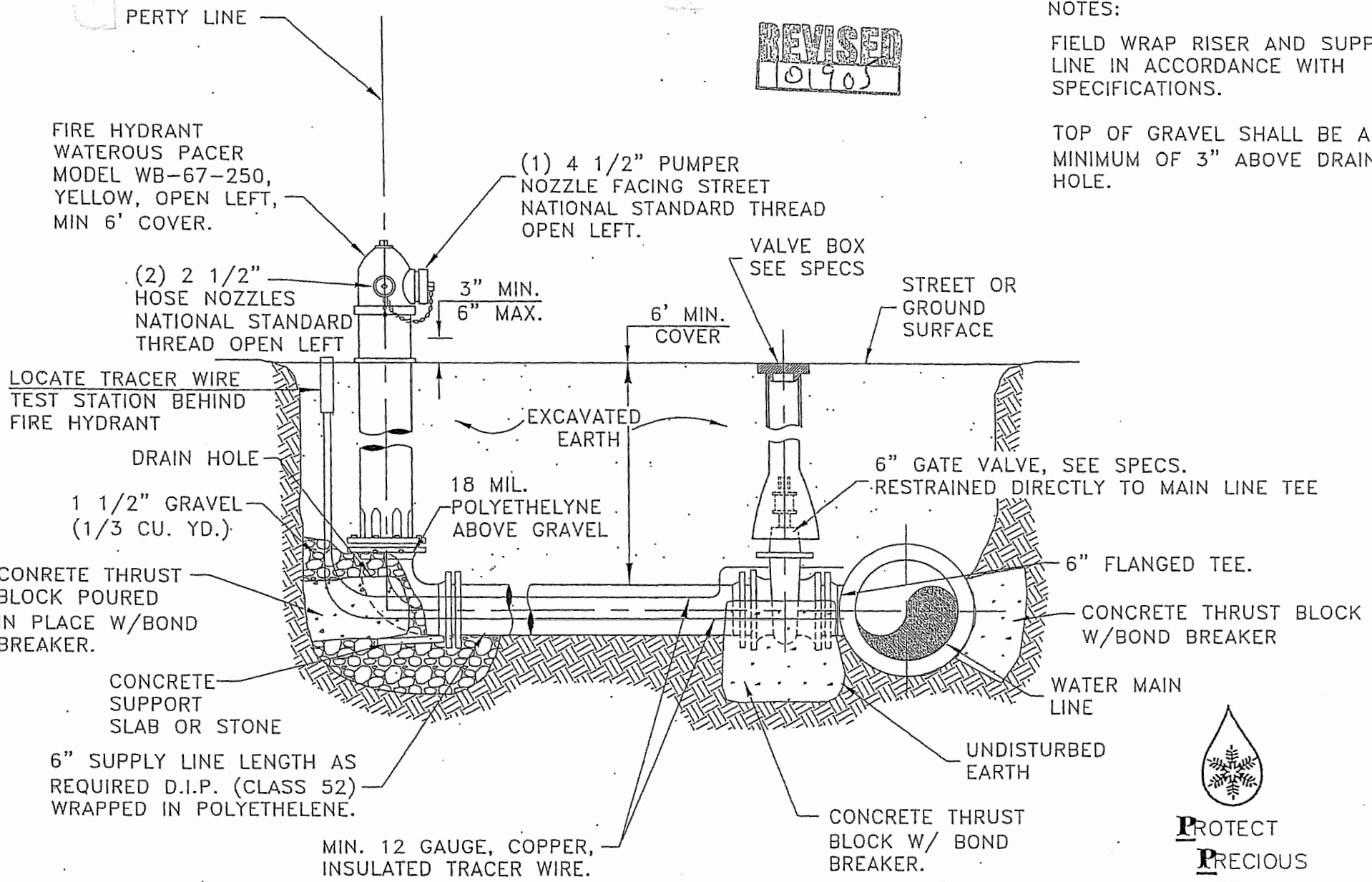
N.T.S.

PERRY PARK WATER & SANITATION DISTRICT
 LAST REVISION 11-22-02

FOOTING DETAIL



**PROTECT
 PRECIOUS
 WATER
 SUPPLY**



REVISED
01905

NOTES:

FIELD WRAP RISER AND SUPPLY LINE IN ACCORDANCE WITH SPECIFICATIONS.

TOP OF GRAVEL SHALL BE A MINIMUM OF 3" ABOVE DRAIN HOLE.

FIRE HYDRANT ASSEMBLY DETAIL

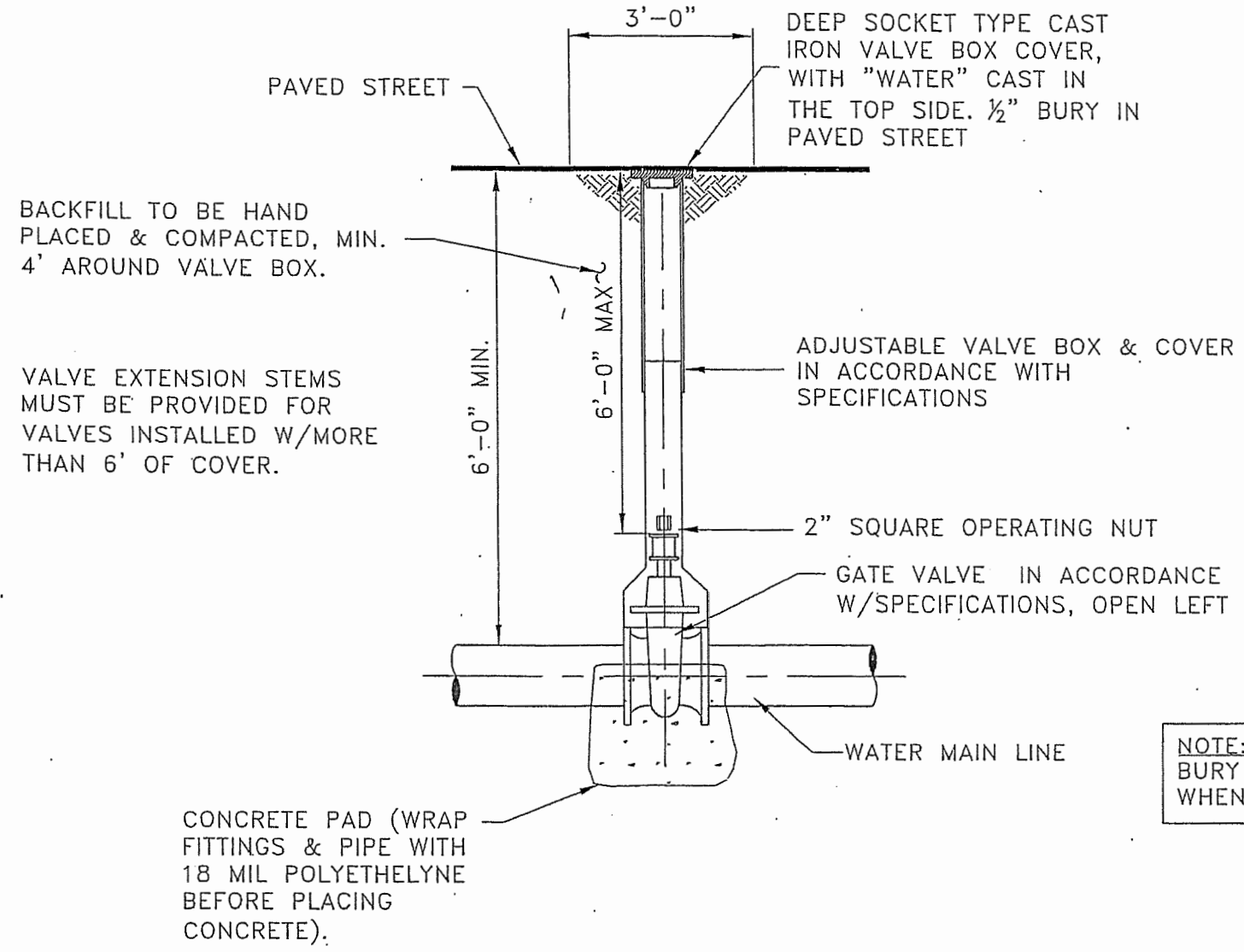
N.T.S.

LAST REVISION 11-22-02

PERRY PARK WATER & SANITATION DISTRICT



REVISED
12/19/05



PROTECT
PRECIOUS
WATER
SUPPLY

NOTE:
BURY VALVE COVER 3" to 6"
WHEN IN ROAD SHOULDER.

GATE VALVE ASSEMBLY DETAIL

N.T.S.

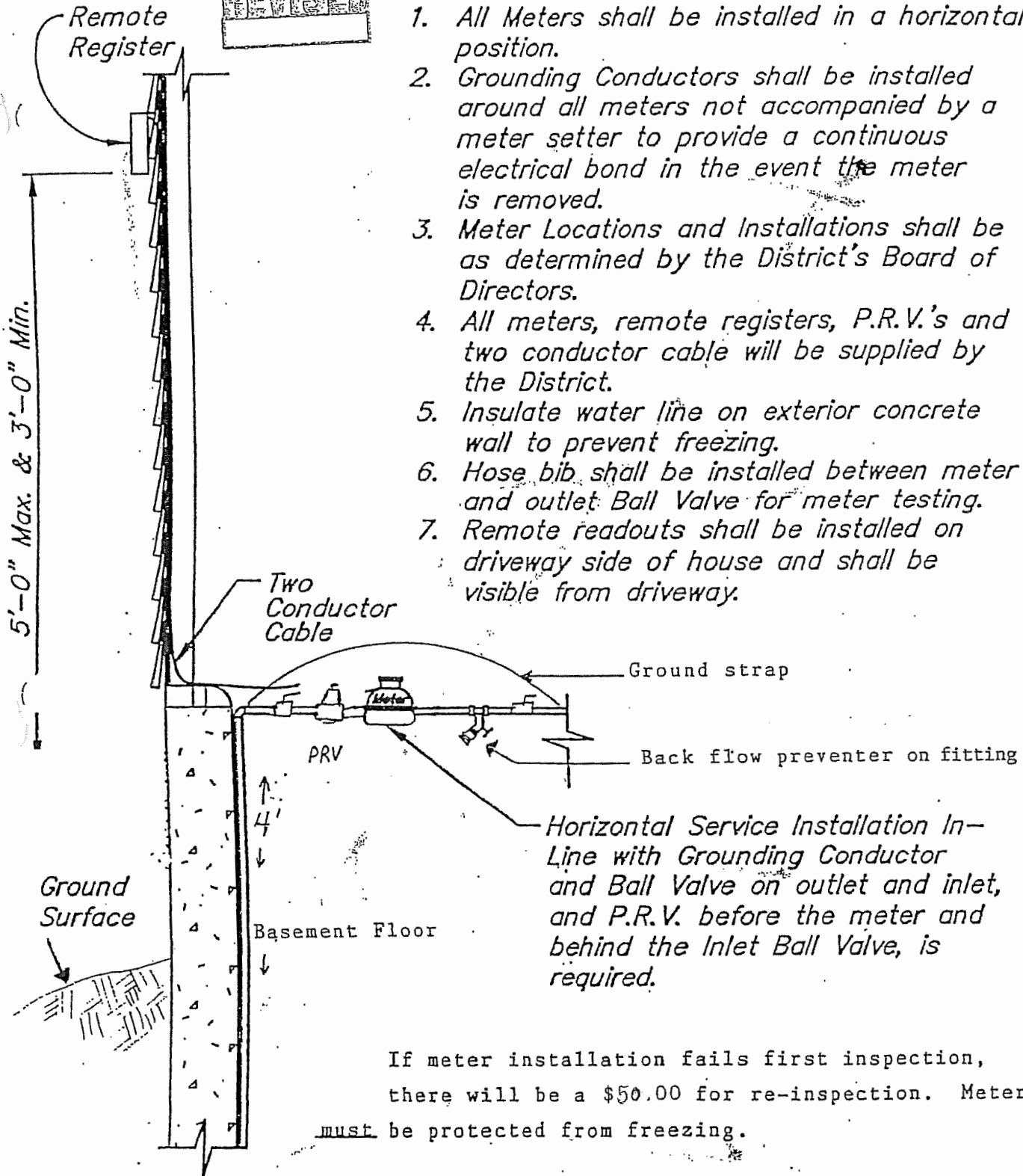
LAST REVISION 12-14-05

PERRY PARK WATER & SANITATION DISTRICT

REVISED

NOTES:

1. All Meters shall be installed in a horizontal position.
2. Grounding Conductors shall be installed around all meters not accompanied by a meter setter to provide a continuous electrical bond in the event the meter is removed.
3. Meter Locations and Installations shall be as determined by the District's Board of Directors.
4. All meters, remote registers, P.R.V.'s and two conductor cable will be supplied by the District.
5. Insulate water line on exterior concrete wall to prevent freezing.
6. Hose bib shall be installed between meter and outlet Ball Valve for meter testing.
7. Remote readouts shall be installed on driveway side of house and shall be visible from driveway.

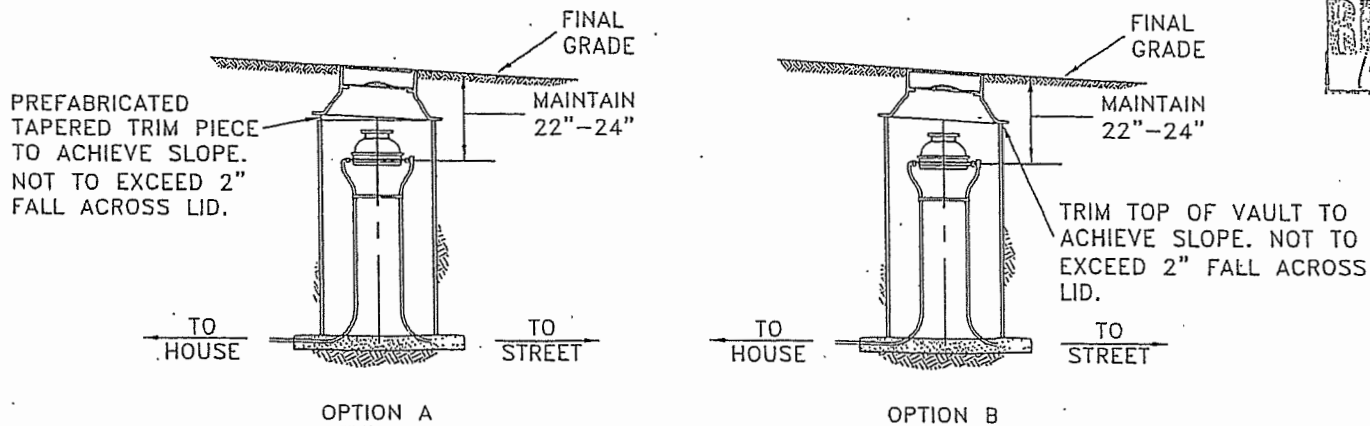


If meter installation fails first inspection, there will be a \$50.00 for re-inspection. Meters must be protected from freezing.

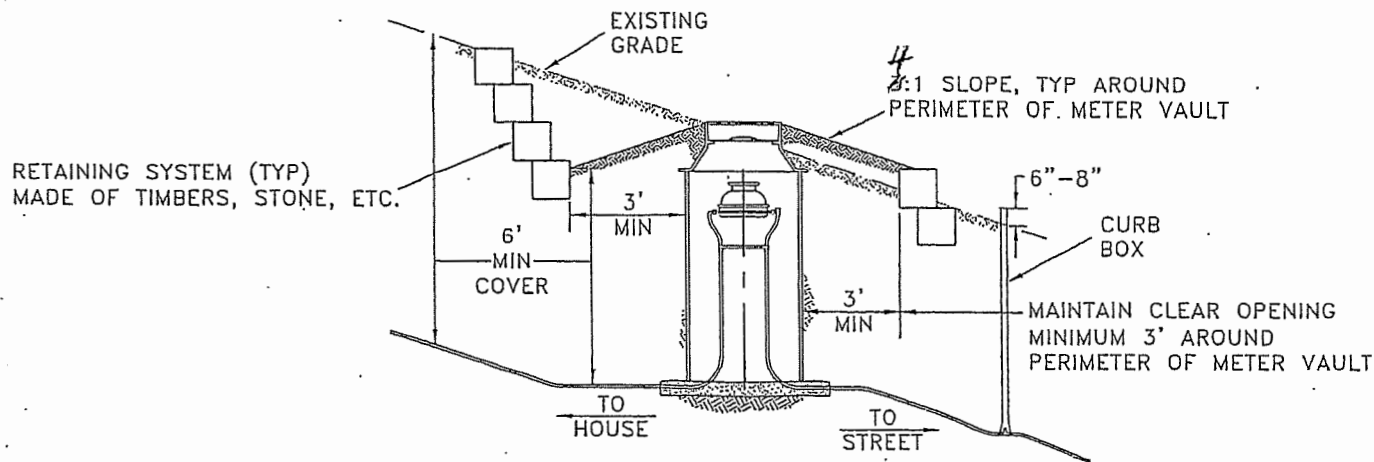
681-2050

CONSTRUCTION STANDARDS	IN-HOUSE METER INSTALLATION	PERRY PARK WATER & SANITATION DISTRICT
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REVISED
10/9/05



ACCEPTABLE OPTIONS FOR GRADE ADJUSTMENTS FOR COVERS



**METER VAULT
GRADING DETAIL**

N.T.S.

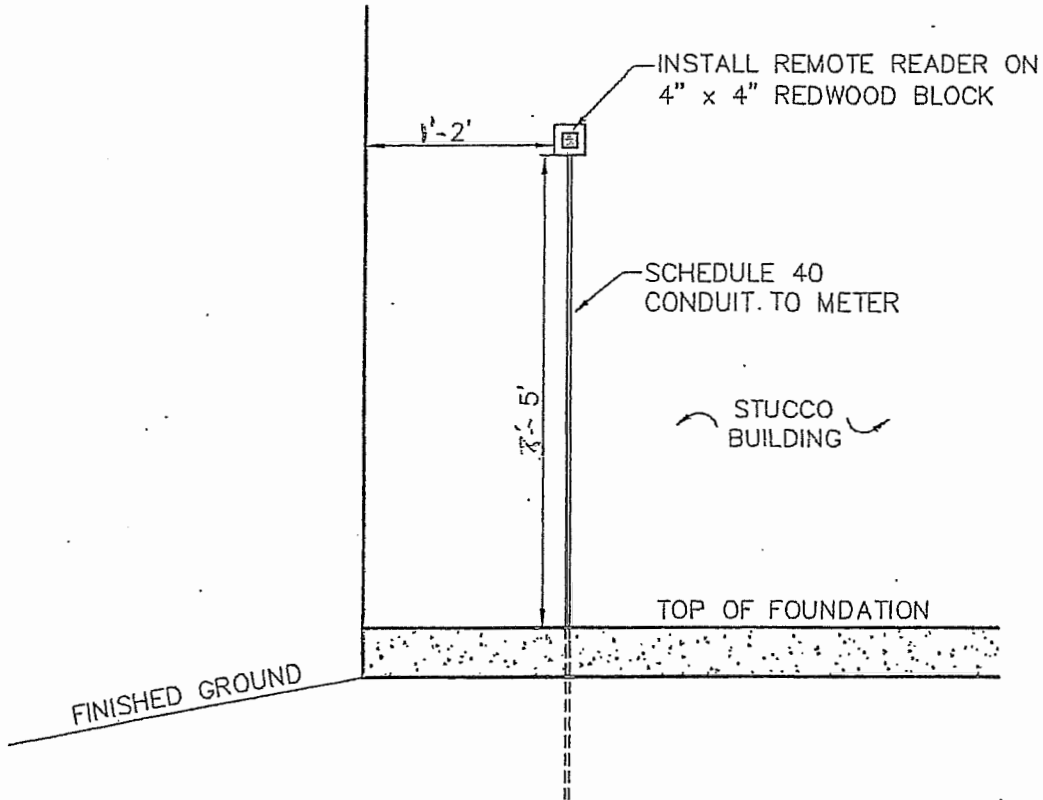


LAST REVISION 6-23-2003

PERRY PARK WATER & SANITATION DISTRICT

11-24-08

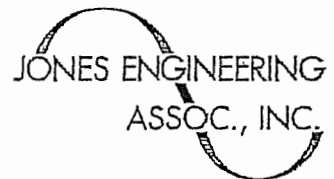
Remote: 3' to 5' above grade
1' to 2' from corner



OK
S. M...
OK D. Miller

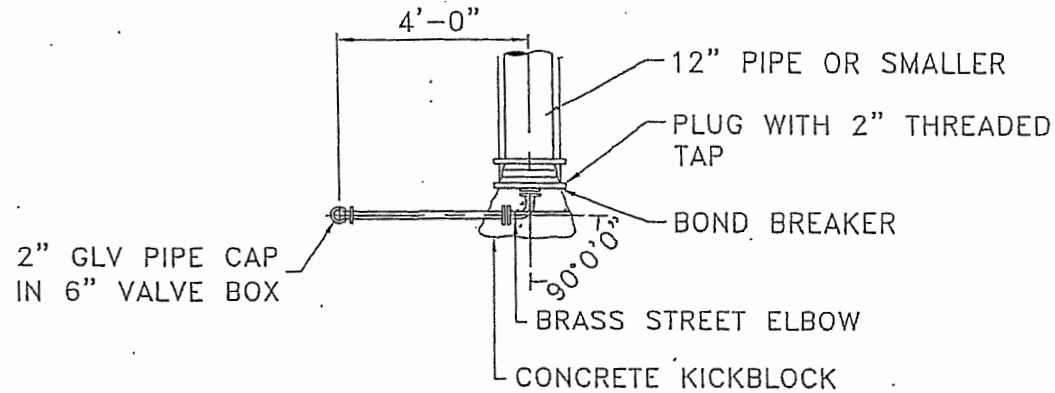
REMOTE READER DETAIL

PERRY PARK RIDGE
JOB NO. 6017
APRIL 17, 2008
SHEET 1 OF 1

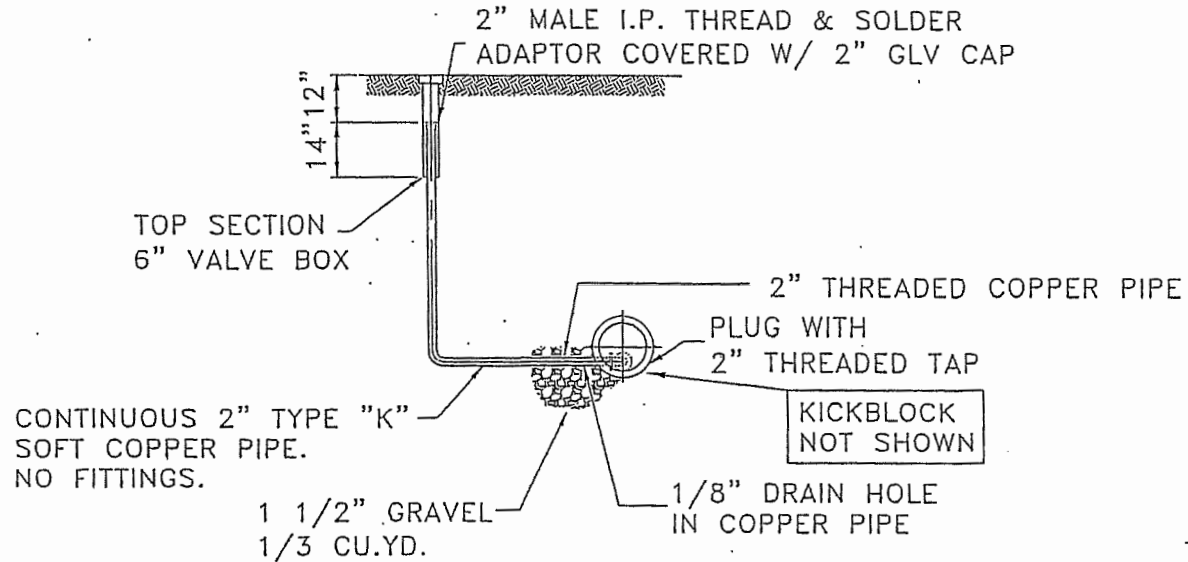


2120 W. Littleton Blvd., Suite 205
Littleton, Colorado 80120
Phone: 303-738-0283 Fax: 303-738-0285

REVISED
101905



PLAN
N.T.S.



TEMPORARY BLOW OFF
ASSEMBLY

N.T.S.

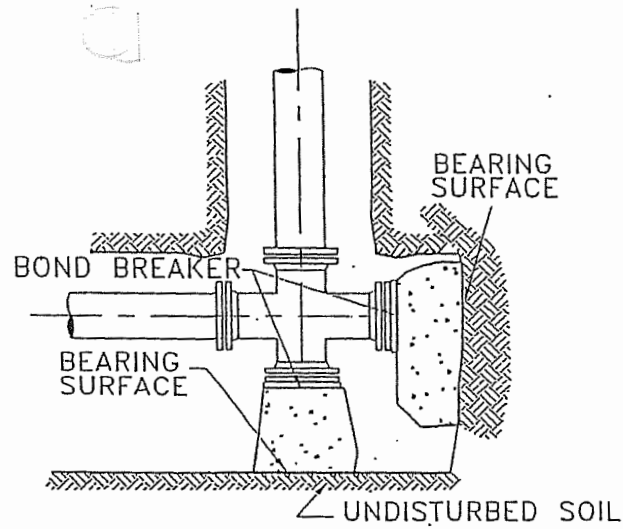


PROTECT
PRECIOUS
WATER
SUPPLY

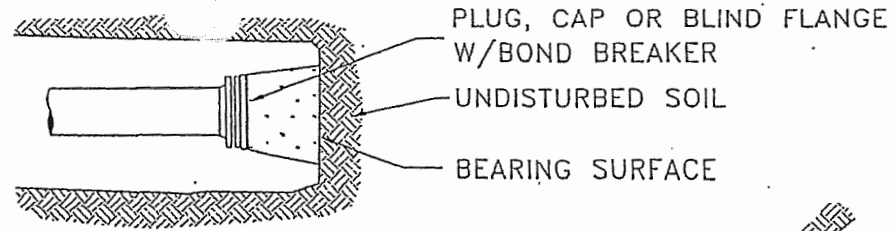
LAST REVISION 11-22-02

PERRY PARK WATER & SANITATION DISTRICT

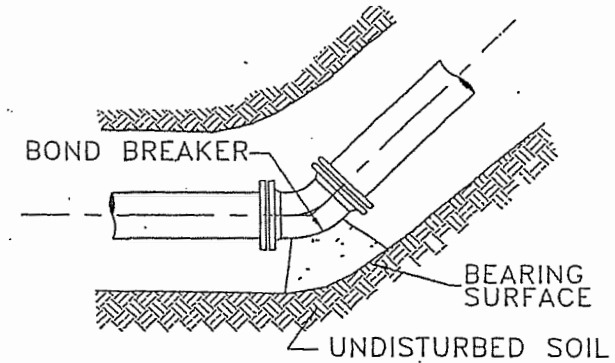
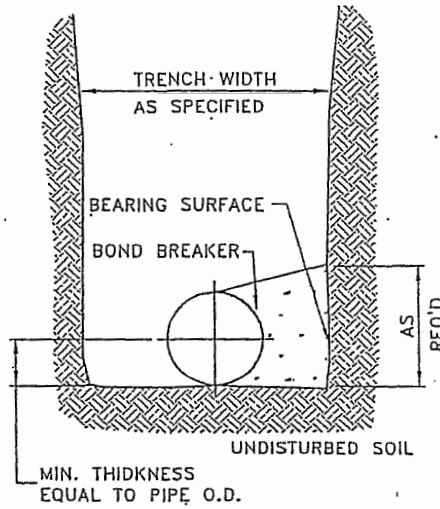
REVISED
5-12-06



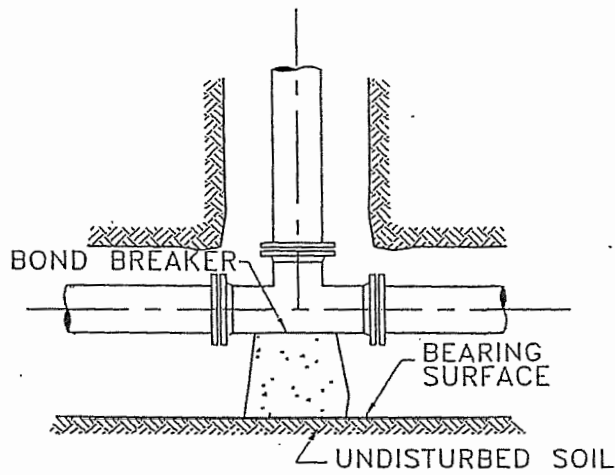
CROSS W/DEAD
END BRANCHES



DEAD END



BEND-HORIZONTAL OR
BOTTOM OF VERTICAL



TEE

MIN. THRUST BLOCK DIM.

150 PSI WATER PRESSURE 2000 PSF SOIL BEAR. LD.		
PIPE SIZE DIA.	WIDTH	DEPTH
6"	2'-0"	2'-0"
8"	2'-9"	2'-6"
10"	3'-6"	3'-0"
12"	4'-0"	3'-9"
14"	4'-6"	4'-6"
16"	5'-0"	5'-0"

THRUST BLOCK DETAIL

N.T.S.

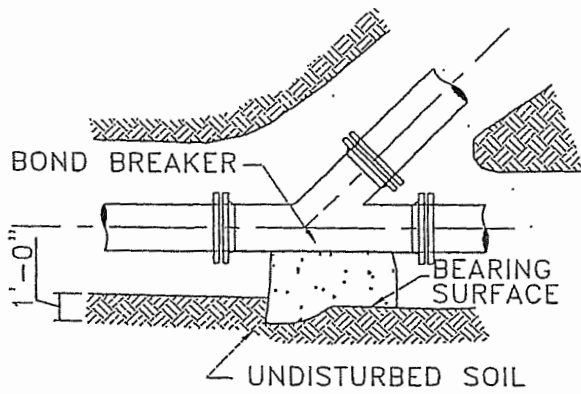
PERRY PARK WATER & SANITATION DISTRICT

SHT 1 OF 2

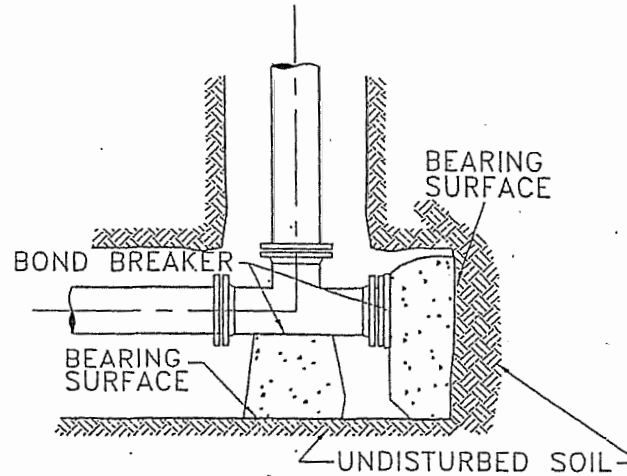


**PROTECT
PRECIOUS
WATER
SUPPLY**

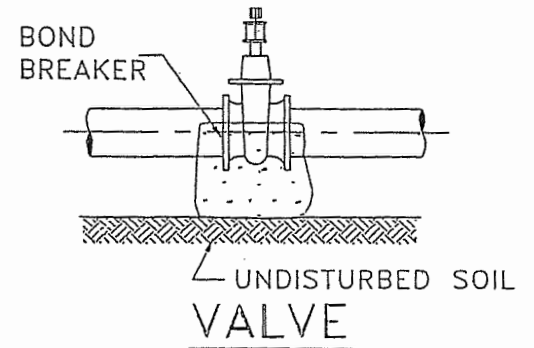
REVISED
10/90



WYE



TEE/DEAD END ON RUN



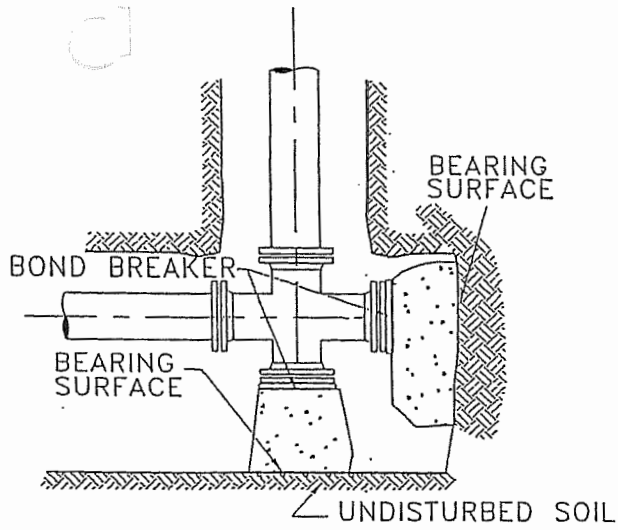
THRUST BLOCK DETAIL

N.T.S.

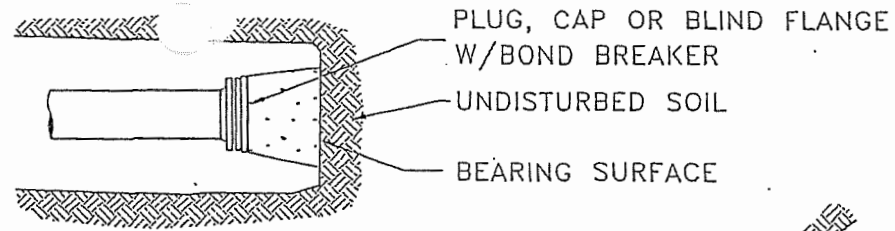
PERRY PARK WATER & SANITATION DISTRICT



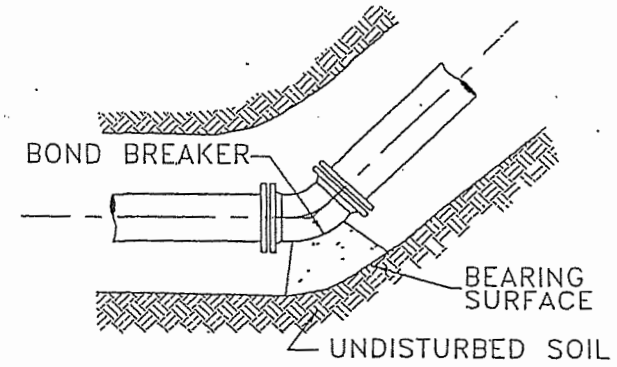
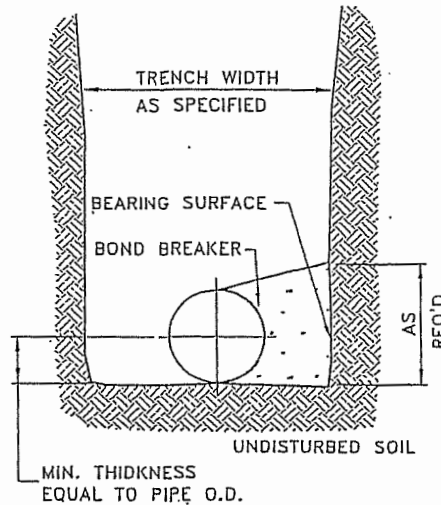
**PROTECT
PRECIOUS
WATER
SUPPLY**



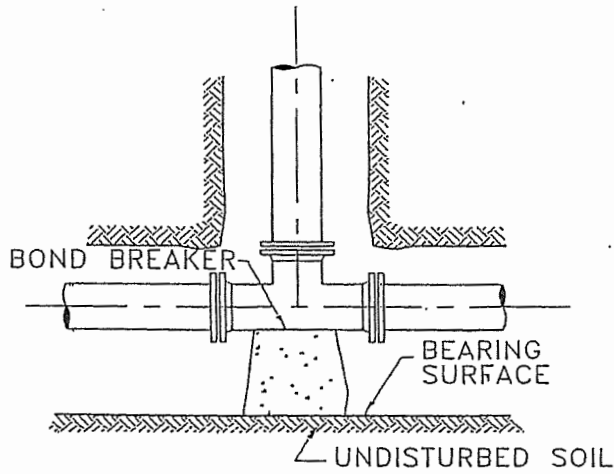
CROSS W/DEAD
END BRANCHES



DEAD END



BEND-HORIZONTAL OR
BOTTOM OF VERTICAL



TEE

MIN. THICKNESS
EQUAL TO PIPE O.D.

MIN. THRUST BLOCK DIM.

150 PSI WATER .PRESSURE 2000 PSF SOIL BEAR. LD.		
PIPE SIZE DIA.	WIDTH	DEPTH
6"	2'-0"	2'-0"
8"	2'-9"	2'-6"
10"	3'-6"	3'-0"
12"	4'-0"	3'-9"
14"	4'-6"	4'-6"
16"	5'-0"	5'-0"

THRUST BLOCK DETAIL

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT

REVISED
5-12-06

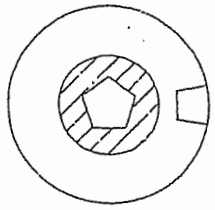


**PROTECT
PRECIOUS
WATER
SUPPLY**

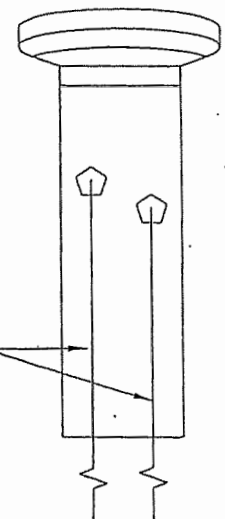
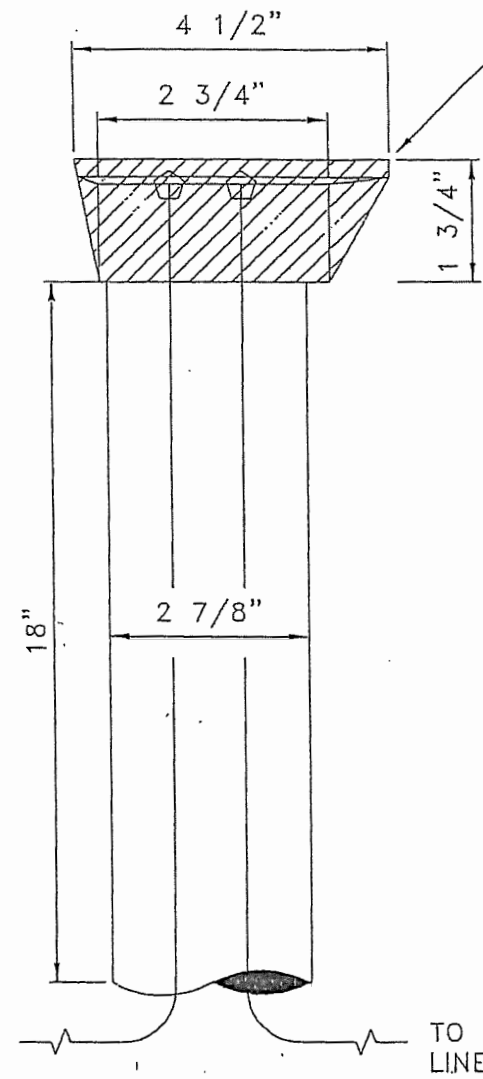
SHT 1 OF 2

REVISED
10/19/05

LOCKING LID, SEE SECTION, PLAN VIEW THIS SHEET.



LOCKING LID
PLAN VIEW



LOCKING LID
SECTION

MINIMUM 16 GAUGE.
COPPER, INSULATED
TRACER WIRE. WIRE
TO BE CONTINUOUS
BETWEEN TEST STATIONS
W/O SPLICES.

NOTE: TEST STATION
TO HAVE 2
TERMINALS.

TRACER WIRE TEST STATION DETAIL

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT

LAST REVISION 11-22-02



PROTECT
PRECIOUS
WATER
SUPPLY

REVISED
10/19/05

REMOTE READOUT CONDUIT
SCH. 40 SOLVENT WELD.
CORE OPENING IN THE SIDE
OF VAULT AT LOCATION
SHOWN.

RADIUS AND LENGTH OF NEW COPPER
SERVICE PIPE TO VARY AS REQUIRED
TO ADJUST GRADE BETWEEN METER
YOKE AND EXISTING SERVICE LINE.

METER SIZE	"A"
5/8" x 3/4"	24"
1" & LARGER	*

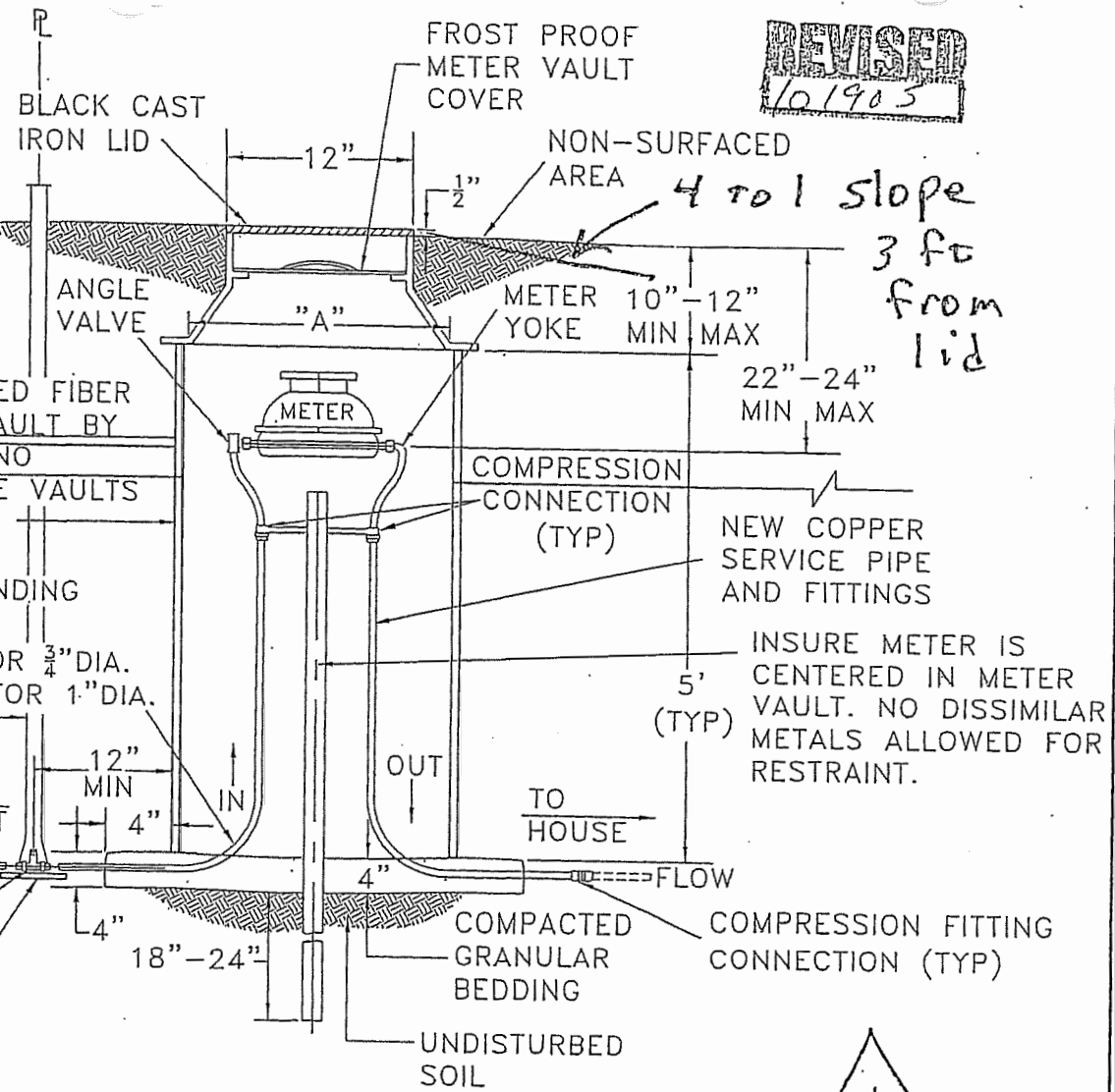
DETECTABLE
WARNING TAPE

MIN. BENDING
RADIUS:
R=6" FOR 3/4" DIA.
R=10" FOR 1" DIA.

CURB
BOX

CURB STOP LOCATE
ON PROPERTY LINE

6"x12"x2 2/3"
CONCRETE
BLOCK



4 to 1 slope
3 ft
from
lid

NEW COPPER
SERVICE PIPE
AND FITTINGS

INSURE METER IS
CENTERED IN METER
VAULT. NO DISSIMILAR
METALS ALLOWED FOR
RESTRAINT.

**ELEVATION
SECTION**

WATER METER ASSEMBLY

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT



**PROTECT
PRECIOUS
WATER
SUPPLY**

* CONSULT WITH DISTRICT FOR SIZE
DETERMINATION BEFORE INSTALLING METER
VAULT.

NOTE:
PRESSURE REGULATING VALVE TO BE
INSTALLED AT METER (SEE PLAN VIEW).
NEEDED AND REQUIRED BY PERRY PARK
WATER AND SANITATION DISTRICT.

ALL COMPONENTS OF METER VAULT TO
BE FROM THE SAME MANUFACTURER.

MIN 95% COMPACTION OF DISTURBED
SOIL AROUND VAULT AND SERVICE LINE
TRENCHES, MAX 24" LIFTS. DISTRICT'S
REPRESENTATIVE HAS THE AUTHORITY TO
REQUIRE COMPACTION TESTING AT
CONTRACTOR'S EXPENSE.

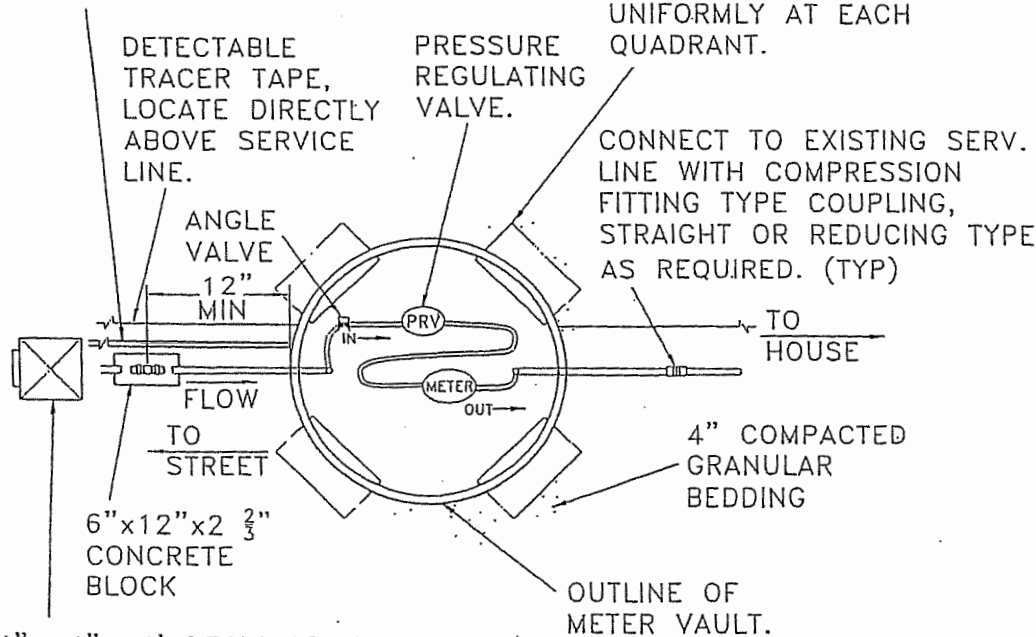
LAST REVISION 6-23-2003

REVISED
101905

SCH. 40 SOLVENT WELD CONDUIT.
CORE OPENING INTO SIDE OF METER
VAULT. SILICONE SEAL BOTH ENDS
OF CONDUIT.

4ea 6"W x 12"L x 2 2/3"
PRECAST CONCRETE BASE
BLOCKS TO BE PLACED
UNIFORMLY AT EACH
QUADRANT.

4 to 1



- NOTE:
- THE DISTRICT MUST APPROVE THE FINAL LOCATION OF THE METER VAULT PER APPROVED SITE PLAN.
 - IN SLOPED SURFACE AREAS, THE VAULT COVER SHALL BE ADJUSTED TO GRADE BY SKEWING ONLY THE COVER.
 - IN SLOPED NON-SURFACED AREAS THE VAULT COVER SHALL BE SET 1/2" ABOVE THE HIGHEST ADJACENT EXISTING ELEVATION AND THE AREA AROUND THE VAULT REGRADED AT 4:1 MAXIMUM SLOPE.
 - SURFACE DRAINAGE SHALL BE DIRECTED AWAY FROM METER VAULT STRUCTURE.
 - METER, METER YOKE, DETECTABLE TRACER TAPE AND PRV VALVE TO BE PURCHASED FROM DISTRICT.
 - THE DISTRICT REQUIRES INSTALLATION OF A BALL VALVE IN THE HOUSE AT CUSTOMER POINT OF DISCONNECT.
 - IN THE EVENT SPECIAL CIRCUMSTANCES ARISE WHICH DO NOT ALLOW FOR CONFORMANCE TO THE STANDARDS, CONSULT THE DISTRICT AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
- THE DISTRICT AUTHORIZED REPRESENTATIVE HAS THE AUTHORITY TO REQUIRE ADDITIONAL WORK AS NEEDED PRIOR TO FINAL ACCEPTANCE.

4"x 4"x 4' REDWOOD FENCE
POST WITH BRONZE, BRASS
OR BLACK PLASTIC FENCE
POST CAP. POST TO EXTEND
24"-30" ABOVE FINAL GRADE.
FINAL PLACEMENT OF REMOTE
READOUT POST TO BE
DETERMINED BY THE DISTRICT.
POST TO BE DIRECTLY IN LINE
W/CURB STOP & METER VAULT.

PLAN SECTION WATER METER ASSEMBLY

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT



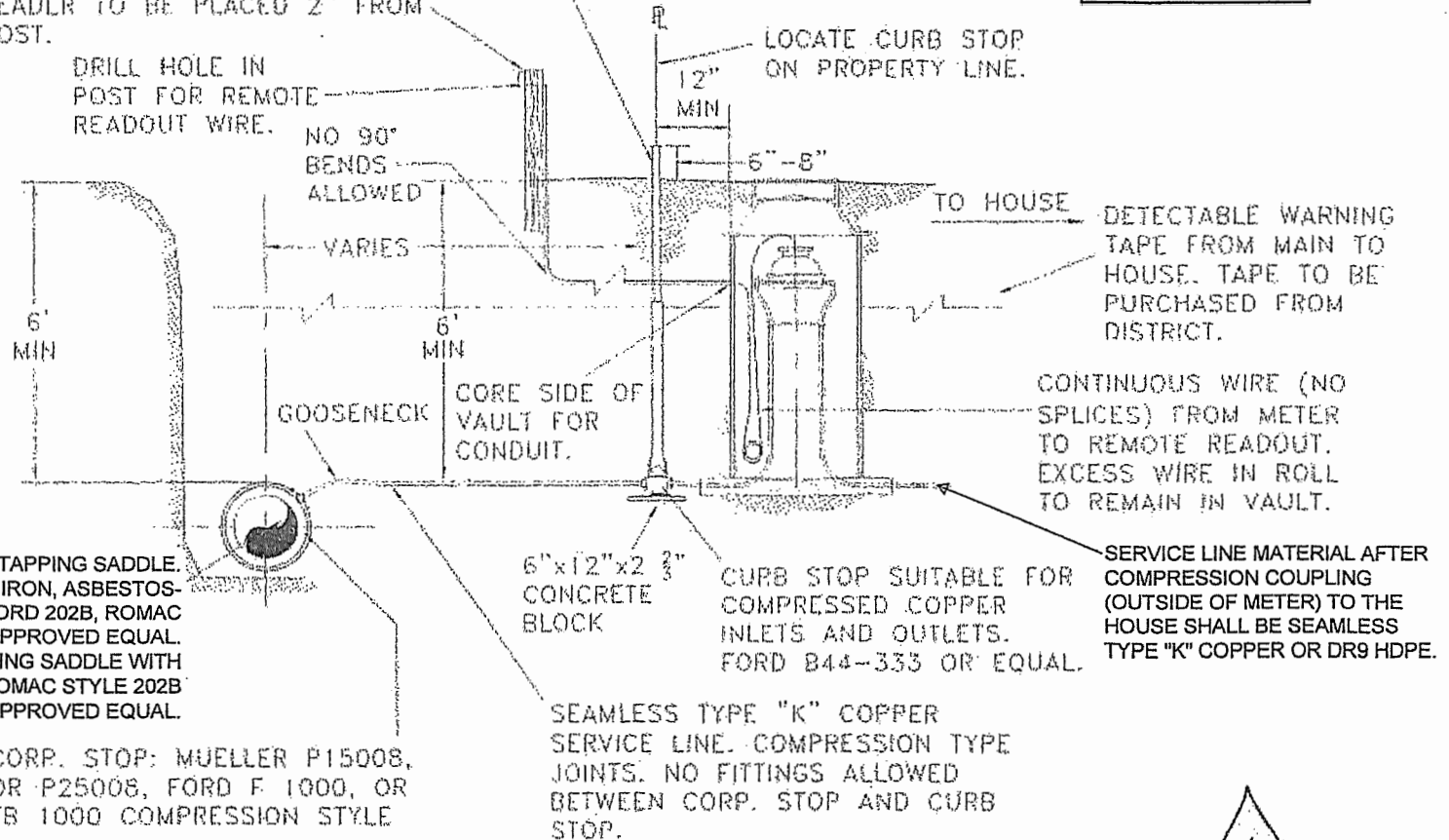
**PROTECT
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WATER
SUPPLY**

LAST REVISION 6-23-2003

REDWOOD FENCE POST WITH BLACK PLASTIC, BRONZE, OR BRASS POST CAP. SILICONE SEAL BOTH ENDS OF CONDUIT. REMOTE READER TO BE PLACED 2" FROM TOP OF POST.

CURB BOX McDONALD BOX ARCH TYPE 5601.

LAST REVISION
05-21-2018



NOTE:
SERVICE LINE MATERIAL SHALL HAVE THE FOLLOWING CLEARLY MARKED ON THE PIPE; FOR HDPE - CLASS, SIZE, NAME OR TRADEMARK OF MANUFACTURER, DATE OF MANUFACTURER, AND DEFLECTION ANGLE FOR BENDS. FOR COPPER: TYPE, NAME OR TRADEMARK OF MANUFACTURER, AND COUNTRY OF ORIGIN.

WATER TAP CURB STOP & METER VAULT

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT

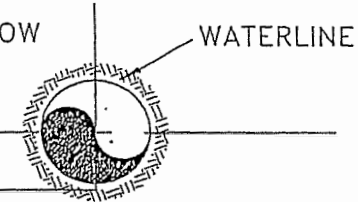
LAST REVISION 05-21-2018



REVISED
10/19/05

NOTE:
ENCASEMENT TO BE CONSTRUCTED 10'
ON EACH SIDE OF ϕ OF WATER MAIN
WHEN REQUIRED BY SPECIFICATIONS.

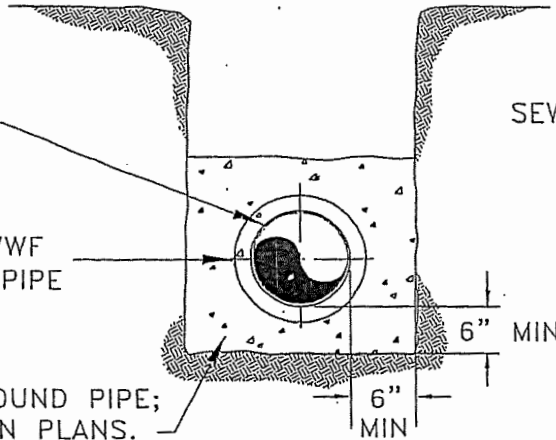
CONC ENCASEMENT WILL BE
REQD ON SEWERLINE WHEN
CLEAR VERT DIST FROM
WATERLINE IS LESS THAN
1'-6", WATERLINE IS BELOW
SEWER, OR HORZ DIST IS
LESS THAN 10' BETWEEN
LINES



WASTEWATER
MAINLINE

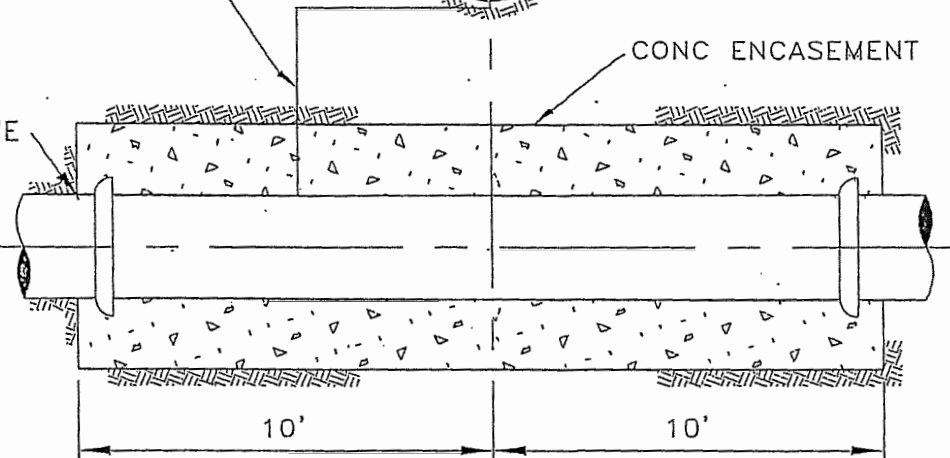
6"x 6" 10/10 WWF
2" CLEAR FROM PIPE

CONCRETE COVER AROUND PIPE;
LENGTH AS SHOWN ON PLANS.
MINIMUM STRENGTH=2000 PSI



SEWER LINE

CONC ENCASEMENT



ϕ OF WATERLINE

NOTE:
CONC ENCASEMENT REQD
IN ALL CASES WHERE
SEWER LINE IS ABOVE
THE WATERLINE



PROTECT
PRECIOUS
WATER
SUPPLY

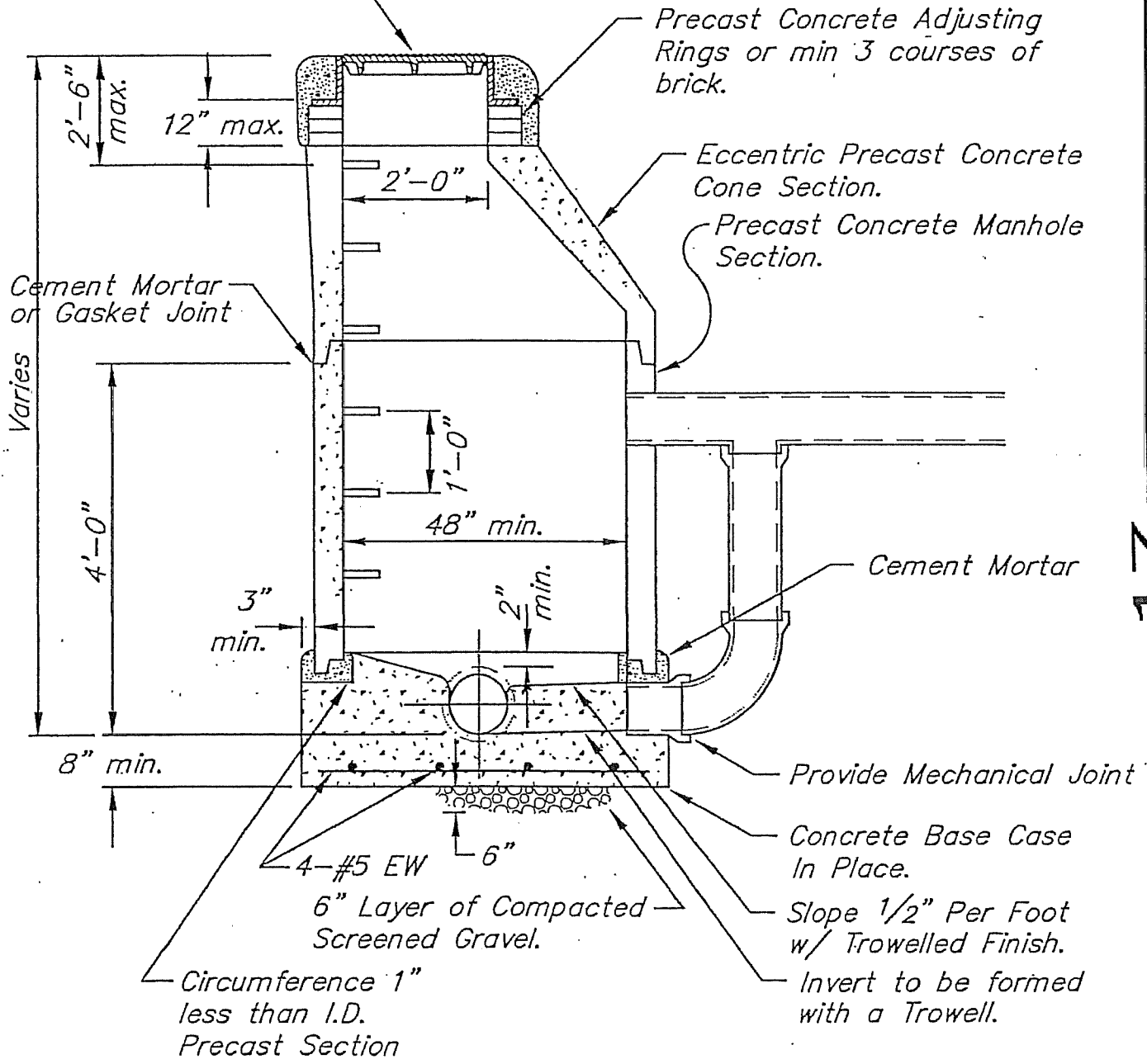
CONCRETE ENCASEMENT OF SEWER DETAIL

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT

REVISED
11/23/05

24" Cast Iron Manhole Ring & Cover set parallel to finished surface. Set 6" below surface in unpaved street.



Adopted 10/7/87 Resolution 87-128

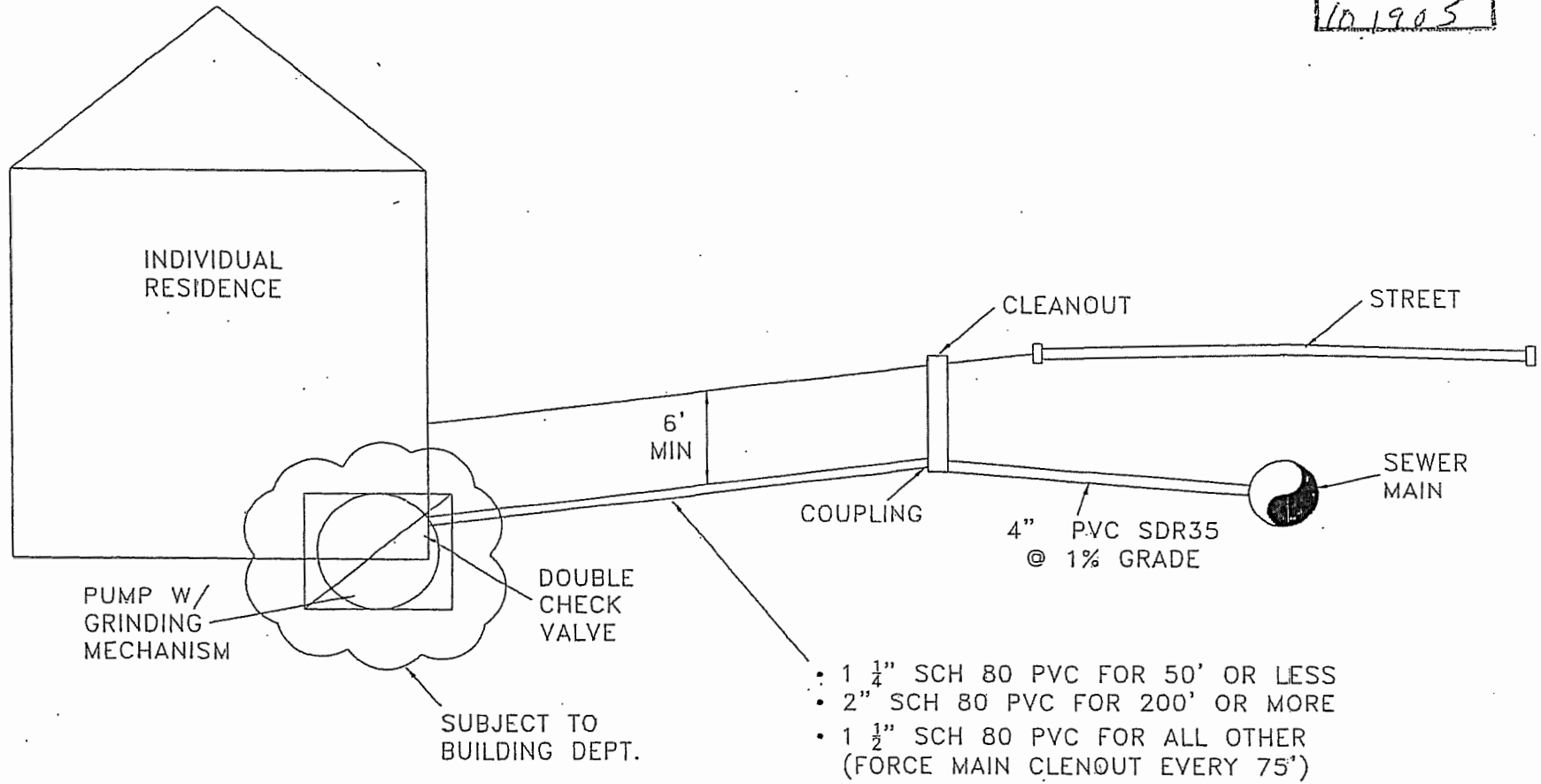
CONSTRUCTION
STANDARDS

DROP
MANHOLE

PERRY PARK WATER &
SANITATION DISTRICT

17

REVISED
10.19.05



INDIVIDUAL SEWER
SERVICE FORCE MAIN

N.T.S.

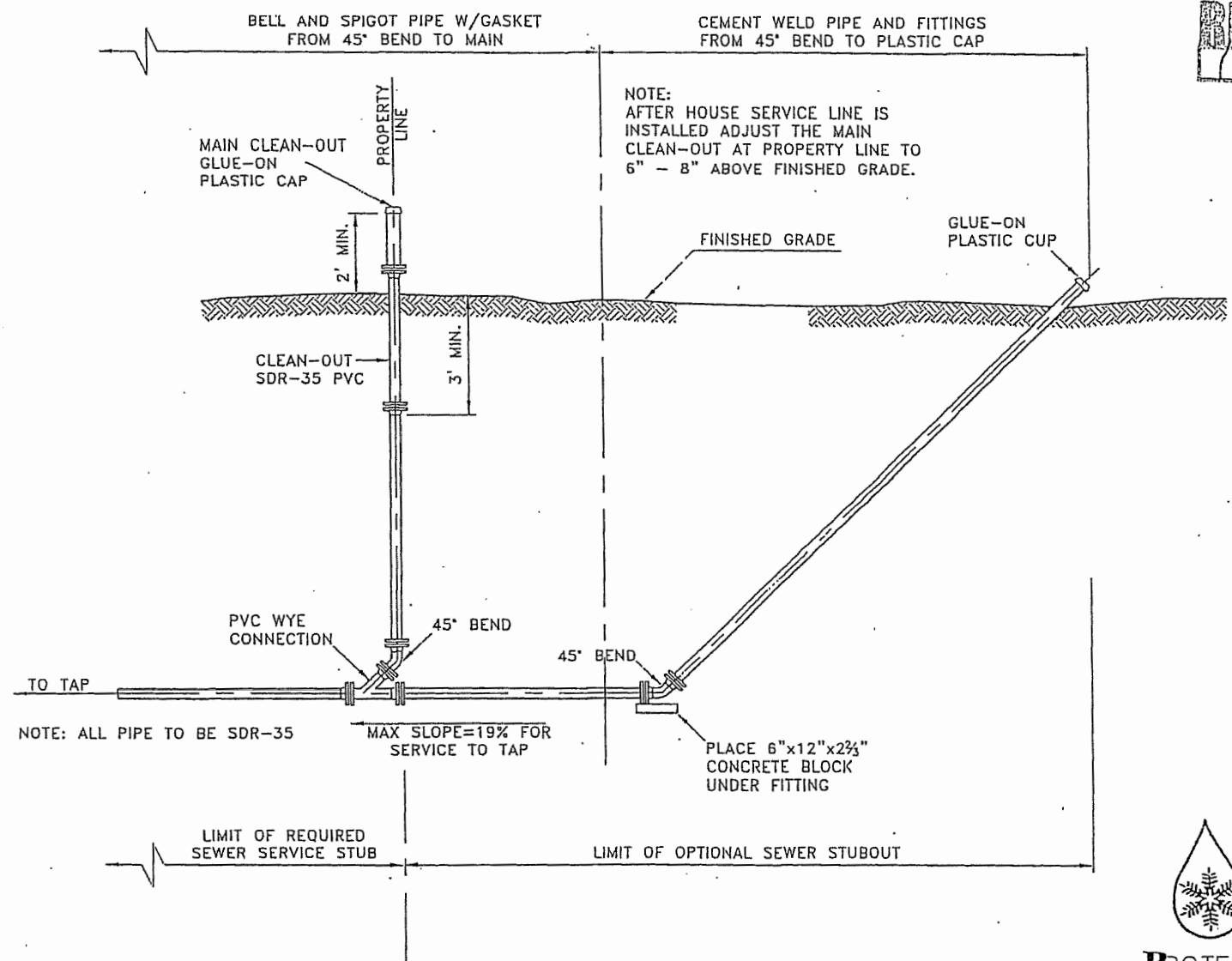
PERRY PARK WATER & SANITATION DISTRICT

LAST REVISION 3/13/2003



PROTECT
PRECIOUS
WATER
SUPPLY

REVISED
101905



NOTE:
AFTER HOUSE SERVICE LINE IS
INSTALLED ADJUST THE MAIN
CLEAN-OUT AT PROPERTY LINE TO
6" - 8" ABOVE FINISHED GRADE.

NOTE: ALL PIPE TO BE SDR-35

MAX SLOPE=19% FOR
SERVICE TO TAP

PLACE 6"x12"x2 1/2"
CONCRETE BLOCK
UNDER FITTING

OPTIONAL SEWER STUBOUT DETAIL

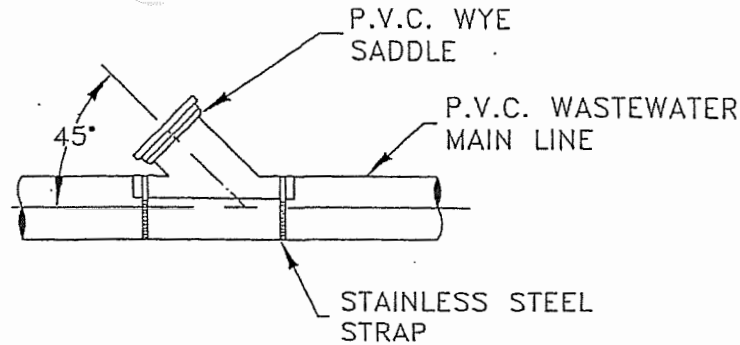
N.T.S.

LAST REVISION 5/19/2005 **PERRY PARK WATER & SANITATION DISTRICT**



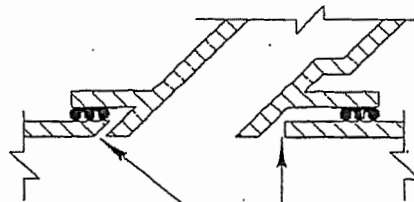
PROCEDURE FOR MAKING GASKETED SEWER SADDLE CONNECTION

1. PLACE SADDLE IN POSITION ON PIPE. USE SADDLE AS A TEMPLATE AND MARK GUIDE FOR HOLE CUT IN. REMOVE SADDLE FROM PIPE.
2. USING HOLE GUIDE MARK, CUT HOLE THROUGH PIPE WALL OUTSIDE THE HOLE GUIDE MARK BY THE THICKNESS OF THE SADDLE STEM. THE DIAMETER OF THE HOLE SHOULD NOT EXCEED THE OUTSIDE DIAMETER OF THE SADDLE STEM BY MORE THAN 1/4". USE A HAND KEYHOLE OR POWER SABER TO CUT THE HOLE. FOR MOST SABER SAWS WITH HEAVY DUTY BLADES, THE BLADE SHOULD BE HELD HORIZONTALLY ACROSS THE PIPE AND PRESSED DOWNWARD UNTIL IT PENETRATES THE PIPE WALL. THEN THE BLADE CAN BE BROUGHT TO THE VERTICAL POSITION AND THE HOLE CUT COMPLETED. FOR WYE SADDLES, CUT OR BEVEL THE DOWNSTREAM END OF THE HOLE AT A 45° ANGLE TO ALLOW THE SADDLE STEM TO FIT.
3. WIPE CLEAN AND DRY BOTH THE UNDERSIDE OF THE SADDLE AND THE MATING SURFACE OF THE PIPE.
4. POSITION SADDLE OVER THE HOLE. PLACE THE TWO (2) STAINLESS STEEL HOSE CLAMPS AROUND THE PIPE AND THROUGH THE SLOTS AT EACH END OF THE SADDLE SKIRT. CHECK TO SEE THAT THE SADDLE STEM IS RECESSED IN THE HOLE AND THAT THE STRAPS ARE AT RIGHT ANGLES TO THE PIPE SURFACE.
5. ALTERNATELY TIGHTEN STRAPS WITH A LARGE SCREWDRIVER WITH A GOOD GRIP UNTIL THE MAXIMUM TORQUE HAS BEEN REACHED BY HAND. THE MINIMUM TORQUE APPLIED SHOULD BE 5 FT-LBS.
6. BACKFILL SHOULD BE CAREFULLY SELECTED AND TAMPED AROUND PIPE AND SADDLE TO PROVIDE FIRM AND CONTINUOUS SUPPORT FOR BOTH.



PLAN
VIEW

NOTE:
IF SADDLES ARE NOT PROPERLY POSITIONED THE RUBBER GASKET MAY NOT BE TOUCHING THE PIPE, POSSIBLY RESULTING IN A LEAK.



DO NOT CUT HOLE OVERSIZED

EITHER CUT OR BEVEL THIS SIDE OF HOLE IN PIPE AT 45° ANGLE SO SADDLE STEM WILL FIT PROPERLY

45°
SADDLE
N.T.S.

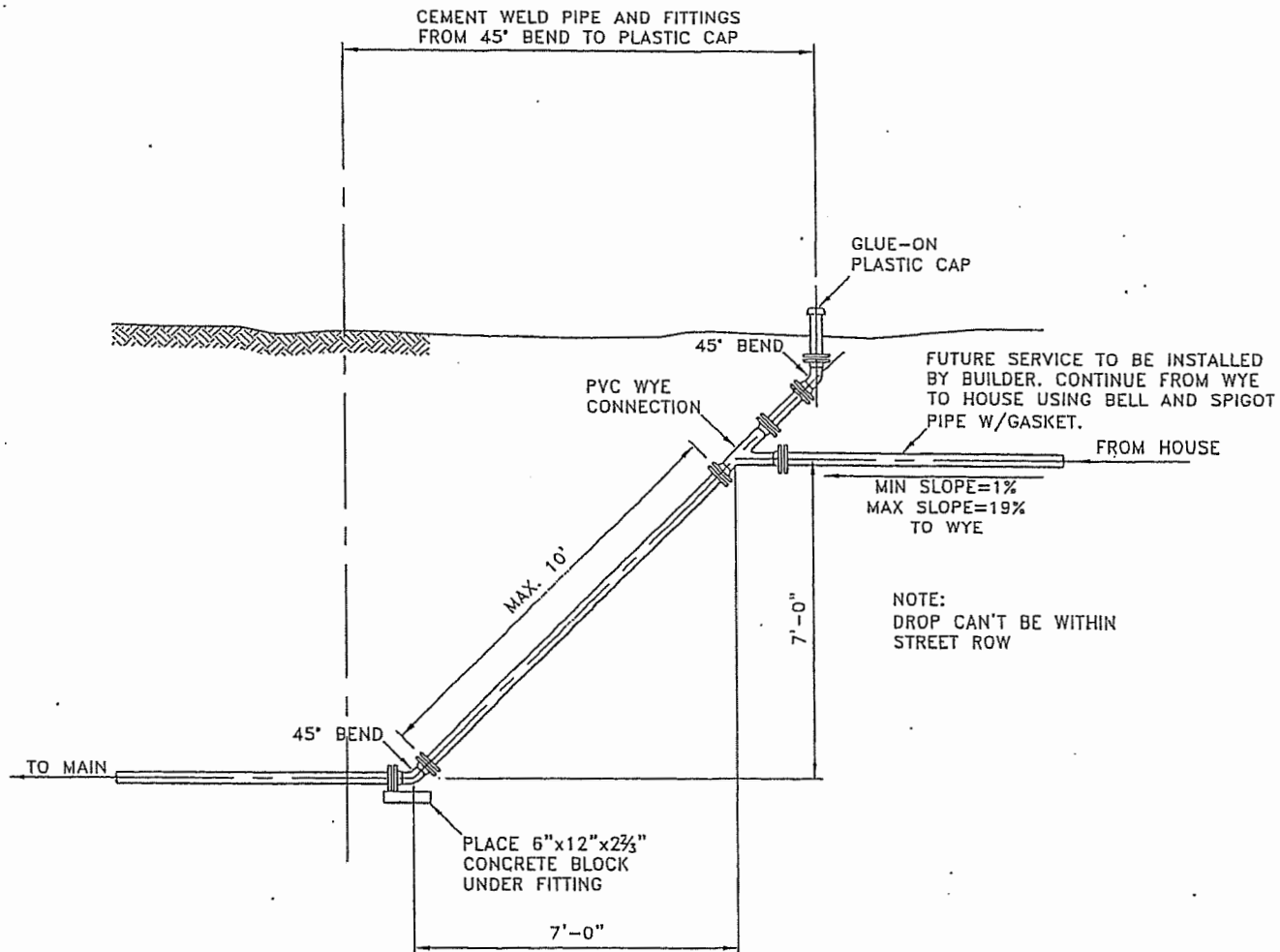
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10/19/05



The **Engineering** Company

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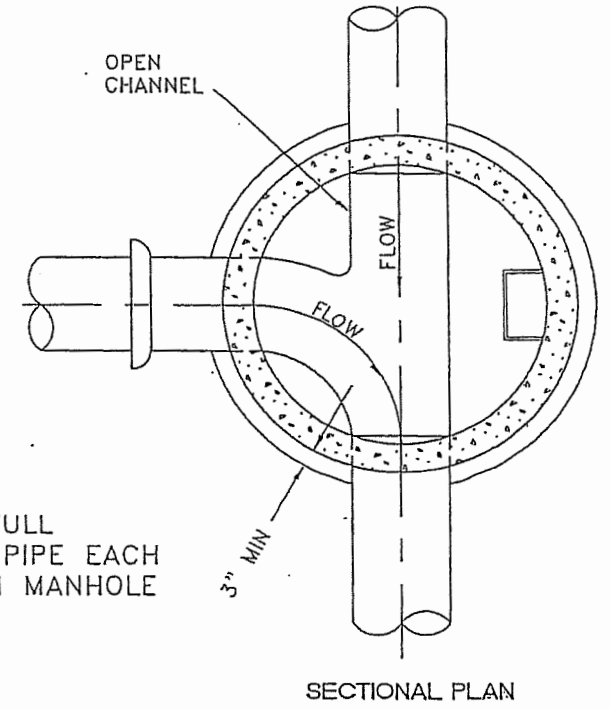
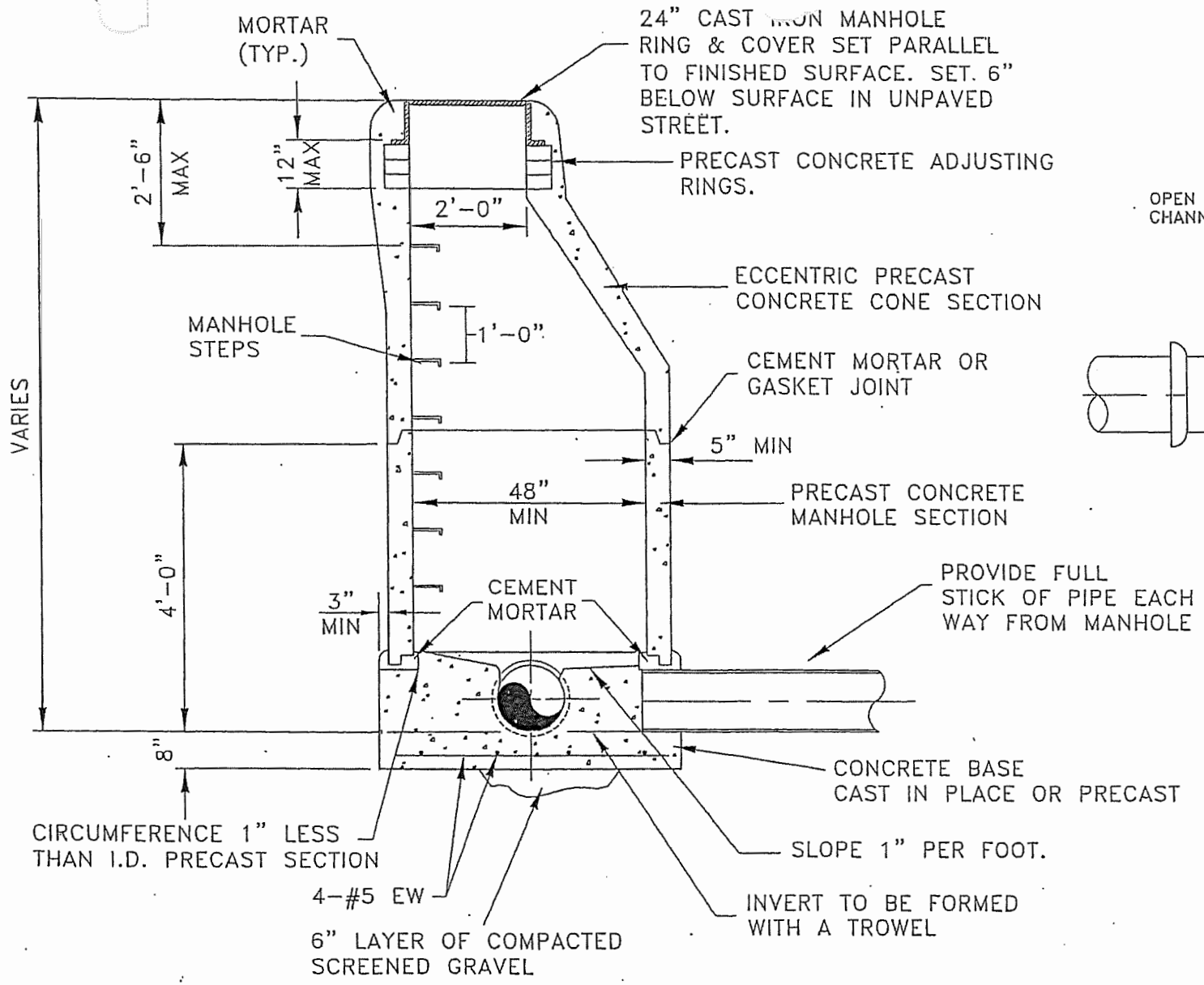
SEWER SERVICE DROP

N.T.S.



LAST REVISION 3/15/2005 **PERRY PARK WATER & SANITATION DISTRICT**

REVISED
10/19/05



STANDARD MANHOLE

N.T.S.

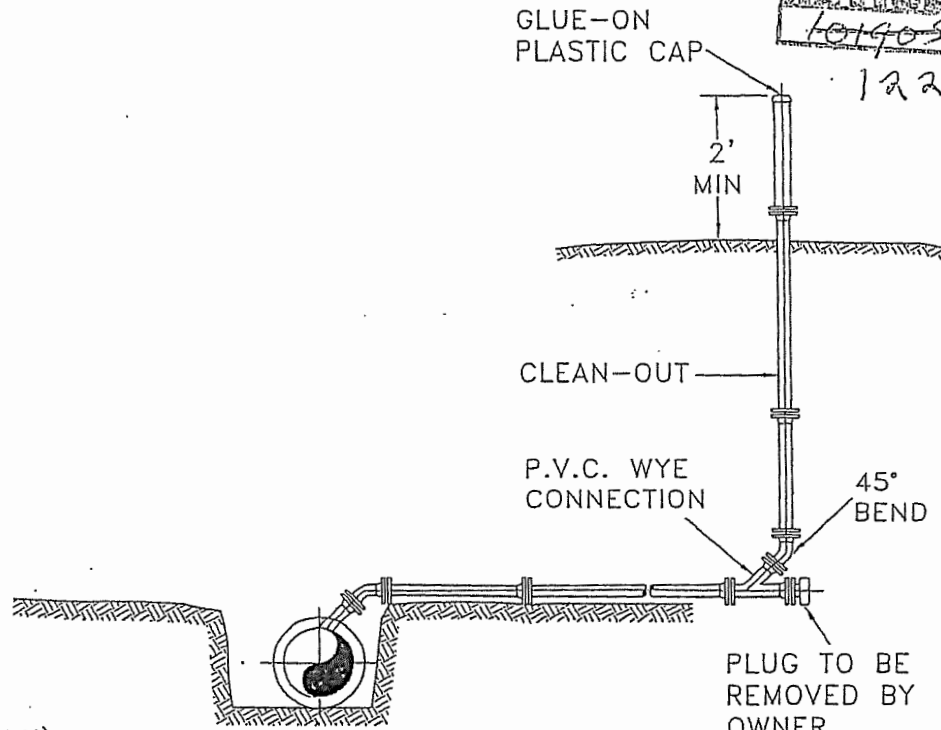
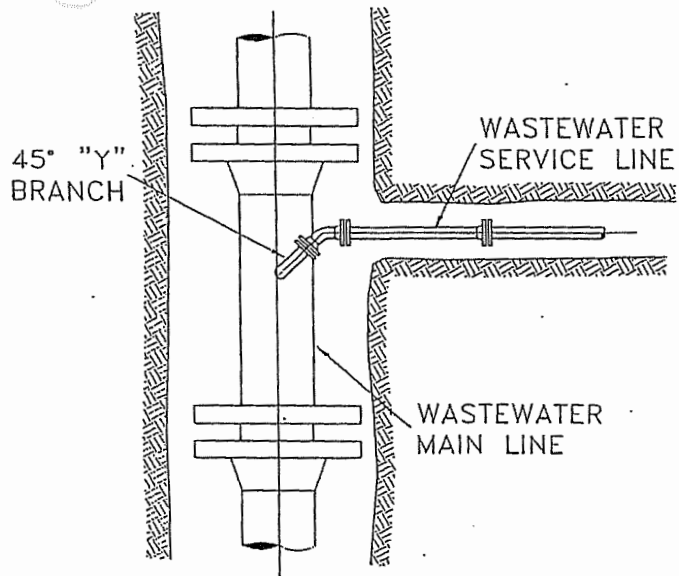
PERRY PARK WATER & SANITATION DISTRICT



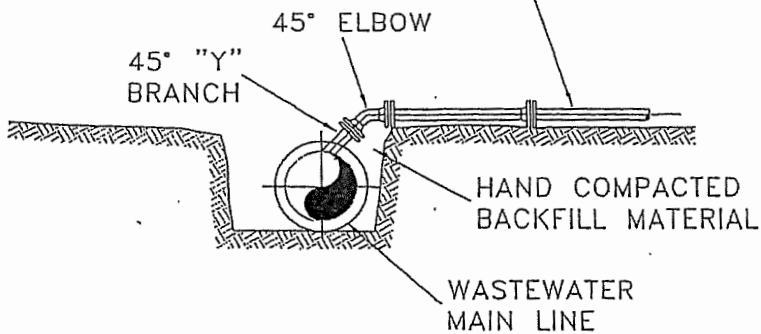
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122005



WASTEWATER SERVICE LINE
 MIN SLOPE- 1/8" PER FOOT
 MAX SLOPE- 2 1/4" PER FOOT (19%)



NOTE:
 THE SEWER SERVICELINE IS REQUIRED
 TO EXTEND TO THE PROPERTY LINE AND
 INCLUDE A CLEANOUT AT THE END.

* BENDS LARGER THAN 45° WILL
 NOT BE ALLOWED ON SERVICE
 LINES

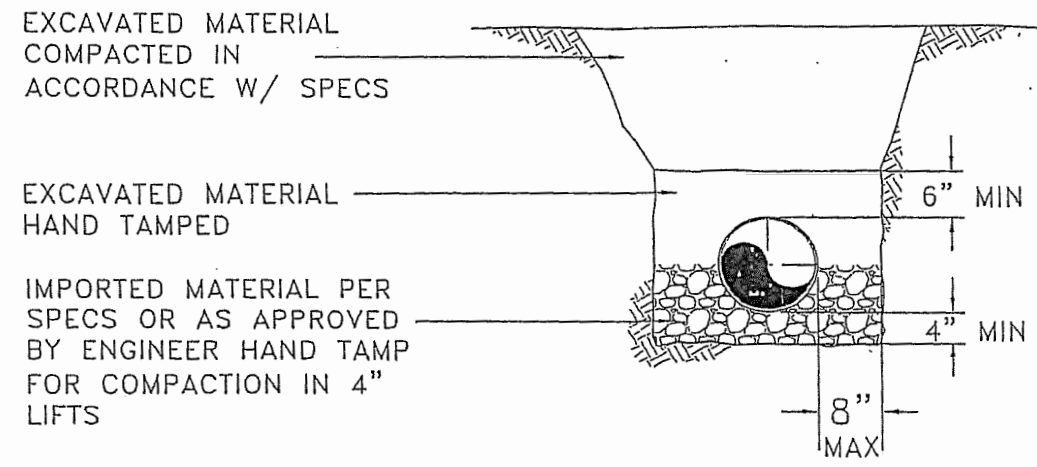
WYE CONNECTION

N.T.S.



**PROTECT
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 WATER
 SUPPLY**

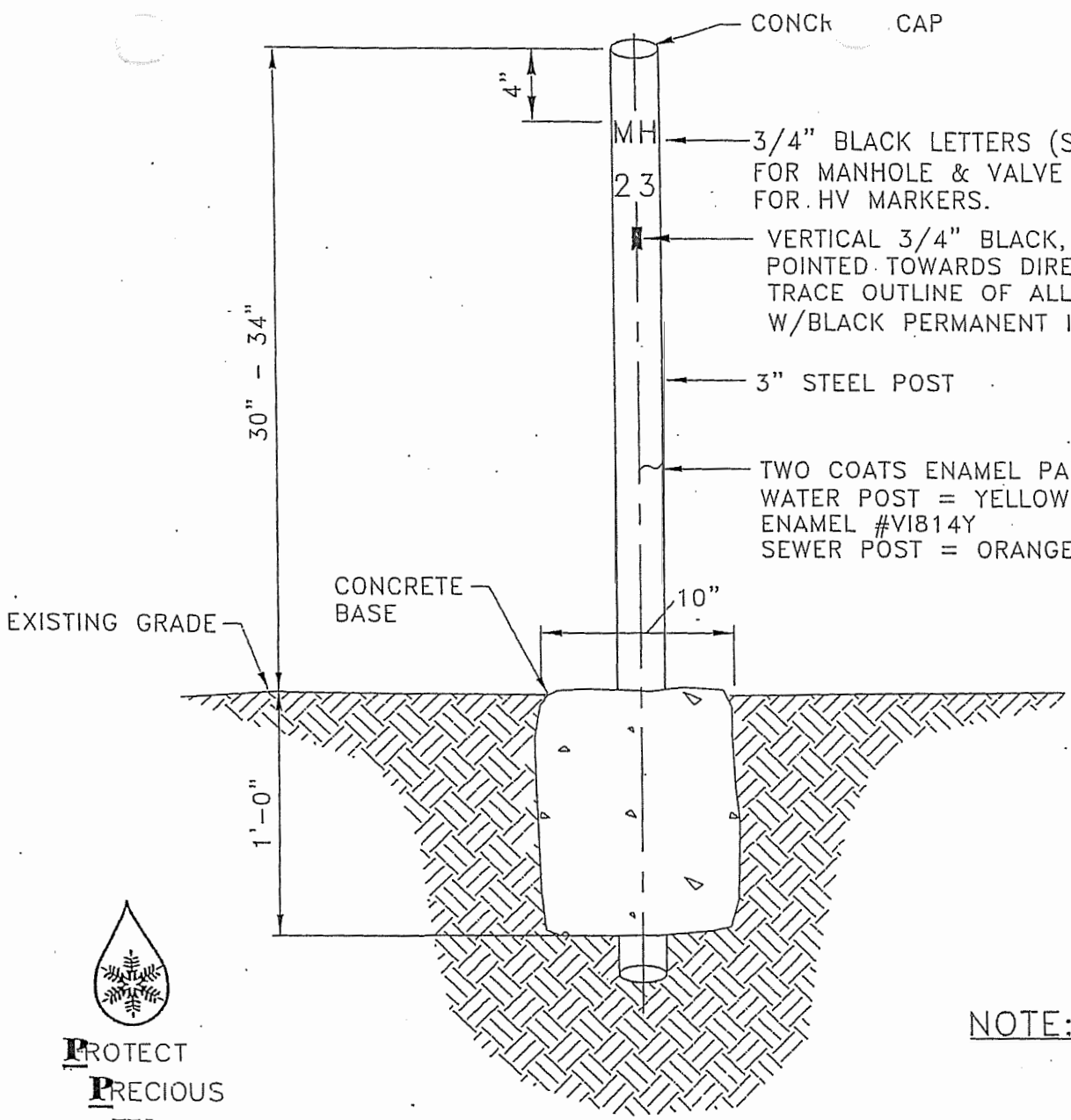
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PVC AND DIP
BEDDING DETAIL
1 OF 1

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CONCR CAP

4"

MH

23

30" - 34"

EXISTING GRADE

CONCRETE BASE

10"

1'-0"

3/4" BLACK LETTERS (STICK ON), PER DISTRICT SPECIFICATIONS. FOR MANHOLE & VALVE MARKERS, 1/2" BLACK LETTERS FOR HV MARKERS.

VERTICAL 3/4" BLACK, DIRECTIONAL INDICATOR LINE POINTED TOWARDS DIRECTION OF MARKED FEATURE. TRACE OUTLINE OF ALL NUMBERS & LETTERS W/BLACK PERMANENT INK MARKER PEN.


3" STEEL POST

TWO COATS ENAMEL PAINT. WATER POST = YELLOW 57WYEL, WATEROUS BRIGHT YELLOW HYDRANT. ENAMEL #V1814Y SEWER POST = ORANGE

LETTERING:

V	=	MAIN LINE VALVE
HV	=	FIRE HYDRANT VALVE
MH	=	MANHOLE

NOTE: POST MUST BE LOCATED ON PROPERTY LINE.


PROTECT
PRECIOUS
WATER
SUPPLY

VALVE AND MANHOLE MARKER POST

N.T.S.

PERRY PARK WATER & SANITATION DISTRICT

LAST REVISION 11-22-02