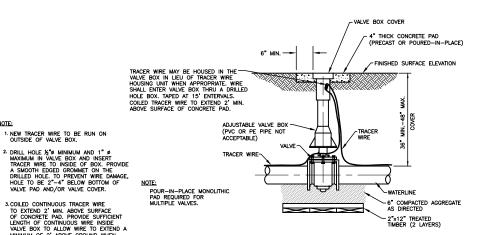


- CONSOLIDATED WATERWORKS DISTRICT NO. 1 AND/OR ALL APPLICABLE LOCAL FIRE DISTRICT CODES.
- 3. ALL HYDRANTS SHALL FACE ROADWAY UNLESS SPECIFIED BY OTHER PROJECT ENGINEER.
- 4. CHECK EACH SURFACE ELEVATION LOCATION TO SET BARREL HEIGHT.
- 5. ALL HYDRANTS SHALL TO BE SET PLUMB AND LEVEL.
- 6. PRIOR TO BACKFILL, WRAP FROM VALVE TO HYDRANT WITH 8 MIL. POLYETHYLENE VISQUEEN. PUNCH HOLES IN FILM TO DRAIN GROUND WATER.
- . ALL RODS TO BE STAINLESS STEEL AND CLAMPS TO BE DOUBLE HOT DIPPED GALVANIZED.
- FOR SHORT SUPPLY PIPES, HYDRANTS SHALL EITHER BE RODDED DIRECTLY TO VALVES, OR USE ANCHOR COUPLINGS.



TYPICAL VALVE, BOX AND TRACER WIRE INSTALLATION

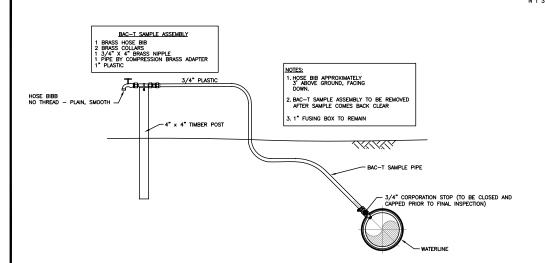
-CONCRETE PADS

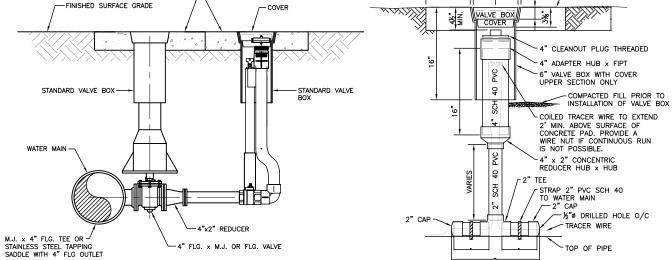
SURFACE OF 2' x 2' x 4"
CONCRETE PAD

## TYPICAL FIRE HYDRANT INSTALLATION

**BAC-T SAMPLE STATION** 

**PROFILE** 





7%"

FLUSHING APPARATUS

NTS

TRACER WIRE HOUSING UNIT

CONSOLIDATED WATERWORKS DISTRICT NO. 1

8814 MAIN STREET P.O. BOX 630 HOUMA, LOUISIANA 70361

DATE: DATE: STANDARD WATERMAIN DETAILS & GENERAL NOTES REVISIONS REMARKS: APRIL. 2010 FOR DATE: SCALE: WATER LINE CONSTRUCTION REVISIONS DESIGNED BY COMPILED BY: APPROVED BY: REMARKS: NOT TO SCALE FILE: ACAD\DIST\AREA3\2-14B

**GENERAL NOTES:** 

- 1. CONTRACTOR SHALL COMPLY WITH THE SPECIFICATIONS REQUIRED BY WATERWORKS DISTRICT
- 2. ALL MATERIALS SHALL BE MANUFACTURED DOMESTICALLY.
- 3. CONTRACTOR SHALL PROTECT ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION AND SHALL NOTIFY THE RESPECTIVE UTILITY COMPANIES BY NOTIFYING LA ONE CALL AT LEAST 48 HOURS IN ADVANCE PRIOR TO COMMENCING CONSTRUCTION.
- 4. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT PRIVATE PROPERTY AND TO ALLOW FOR THE PASSAGE OF VEHICLES AND PEDESTRIANS IN DEVELOPED AREAS.
- 5. ALL EXISTING STRUCTURES DAMAGED OR AFFECTED BY THE SUBDIVISION/ DEVELOPMENT SHALL BE REPLACED OR RESTORED TO THEIR ORIGINAL CONDITION.
- 6. CONTRACTOR SHALL FIELD VERIFY THE DEPTH OF EXISTING MAINS PRIOR TO ORDERING VALVES TO ASSURE THAT THERE WILL BE SUFFICIENT COVER FOR VALVE BOX.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND FIELD VERIFYING EXISTING WATER MAINS AND ALL OTHER UTILITIES IN CONFLICT WITH NEW WATER MAINS TO BE INSTALLED.
- . IF ASBESTOS—CEMENT (AC) PIPE IS ENCOUNTERED CONTRACTOR SHALL NOT FURTHER DISTURB NOR EXPOSE THE PIPE. AC PIPE SHALL BE HANDLED IN ACCORDANCE WITH THE DISTRICTS APPROVED RESOLUTION DATED APRIL 18, 2005.
- 9. ALL PIPE SHALL BE POLYVINYLCHLORIDE (PVC), AWWA C-900; DUCTILE IRON (DI) CLASS 150 OR POLYETHYLENE, (PE) ASTM 3408, SDR11, SERIES 4000. PIPE MATERIAL SHALL BE HOMOGENOUS UNLESS OTHERWISE APPROVED BY THE DISTRICT.
- 10. ALL FITTINGS SHALL BE EPOXY COATED DUCTILE IRON WITH CEMENT-LINED INTERIOR.
- 11. ALL BOLTS BELOW GROUND TO BE CORTEN OR 316 STAINLESS STEEL. ALL BOLTS ABOVE GROUND AND FLANGE CONNECTIONS TO BE 316 STAINLESS STEEL. ALL BOLTS TO BE TEE OR HEX HEAD. ANTI-SEIZE COMPOUND IS TO BE USED ON STAINLESS STEEL BOLTS AND
- 12. NO. 10 AWG STRANDED COPPER (BLUE) TRACER WIRE, AND BLUE WARNING TAPE SHALL BE USED. ALL TRACER WIRE SPLICES TO BE CONNECTED WITH DIRECT BORE SPLICE KIT, PART NO. 0544007-09964, AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL. PROVIDE STRAIN RELIEF BY A SQUARE KNOT WITH TWO OF THE TRACER WIRES AND INSTALLING THE SPLICE KIT ON THE TAG ENDS. TRACER WIRE SHALL BE SECURELY TAPED (DUCT TAPE) TO THE TOP CENTERLINE OF THE WATERLINE AT 15-FOOT INTERVALS.
- A TRACER WIRE HOUSING UNIT SHALL BE PROVIDED ON THE WATER MAIN BETWEEN VALVES SPACED GREATER THAN 1500-FEET.
- 14. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36-INCH COVER AND A MAXIMUM OF 48-INCH COVER MEASURED FROM THE FINISHED SURFACE ELEVATION TO THE TOP OF PIPE. A 18-INCH MINIMUM BLEARANCE FROM INVERT TO TOP OF PIPE BELOW ROADSIDE DITCHES AND A 36-INCH MINIMUM BELOW SUBMERGED CROSSINGS, LARGE DITCHES OR CANAL CROSSINGS SHALL BE PROVIDED. BOLTED CONNECTIONS ARE NOT PERMITTED FOR WATER MAIN INSTALLATIONS IF THE DEPTH OF COVER FROM FINISHED SURFACE ELEVATION TO TOP OF PIPE EXCEEDS 4.0-FEET, UNLESS AS OTHERWISE INDICATED AND SPECIFIED ON THE APPROVED CONDITIONAL (PRELIMINARY) PLAN.
- 15. ALL VALVES AND DUCTILE FITTINGS ARE TO BE RESTRAINED AND WRAPPED WITH 8 MIL POLYURETHANE.
- ALL DUCTILE IRON (DI) WATER MAINS SHALL HAVE A MINIMUM OF 8 MIL POLYURETHANE ENCASEMENT.
- 17. ALL PIPE SHALL BE PROPERLY RESTRAINED IN ACCORDANCE WITH THE TABLE INDICATED ON THE APPLICABLE DETAIL OF THESE STANDARD DRAWINGS.
- 18. ALL FIRE HYDRANTS TO BE PLACED WITHIN THE 5-FOOT WIDE "EXCLUSIVE" WATERWORKS SERVITUDE. VALVES AND HYDRANTS SHALL NOT BE LOCATED WITHIN DITCH OR DITCH EMBANKMENTS. CONCRETE VALVE BOX PAD OR HYDRANT SHALL BE AT LEAST 12-INCHES CLEAR FROM TOP OF DITCH EMBANKMENT.
- 19. LENGTHS OF PIPE BETWEEN SEPARATE MJ FITTINGS LESS THAN 4-FEET APART SHALL BE
- ALL EXISTING VALVES OR FITTINGS REMOVED ARE TO BE CLEANED AND RETURNED TO THE DISTRICT'S YARD LOCATED AT 8814 MAIN STREET.
- 21. CONCRETE VALVE BOX PADS SHALL BE 4-INCHES THICK AND SHALL BE RECTANGULAR, SQUARE OR CIRCULAR. VALVE BOX SHALL BE CENTRALLY LOCATED WITHIN THE CONCRETE PAD. MINIMUM DISTANCE BETWEEN EDGE OF CONCRETE AND EDGE OF VALVE BOX SHALL BE 6-INCHES. PADS MAY BE PRE-CAST CONCRETE. PROVIDE A MONOLITHIC, POURED-INL-PLACE PAD WHEN THE CENTERLINE DISTANCE BETWEEN ADJACENT VALVES IS LESS THAN 2-FEET.
- ALL NEW WATER MAINS ARE TO BE PRESSURE TESTED IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS. PROVIDE 24-HOUR ADVANCE NOTICE.
- 23. DISINFECTING PROCEDURES FOR WATER MAINS SHALL BE IN ACCORDANCE WITH PART XII, LOUISIANA ADMINISTRATIVE CODE, TITLE 51, AND ANSI/AWWA C651-05 OR LATEST REVISION.
- 24. APPLICABLE SATISFACTORY HEALTH DEPARTMENT SANITARY TEST
  RESULTS TO BE FURNISHED TO THE DISTRICT AS A PREREQUISITE FOR FINAL APPROVAL
  SPACING BETWEEN SAMPLE POINTS (BAC—T STATIONS) SHALL NOT EXCEED 1,000 LINEAR
  FEET UNLESS AS OTHERWISE INDICATED AND SPECIFIED ON THE APPROVED CONDITIONAL
  (PRELIMINARY) PLAN. ALL DEAD END LINES MUST HAVE A SAMPLE POINT. THE LOCATION
  (AND ADDRESS OF THE PROPERTY (AND POINT NUMBER) OF ALL REQUIRED SAMPLE POINTS ARE INDICATED ON THIS APPROVED CONDITIONAL (PRELIMINARY) PLAN.
- 25. PROVIDE AN APPROVED FLUSHING APPARATUS AT ALL DEAD ENDS AS DESIGNATED BY THE DISTRICT. THE FLUSHING APPARATUS SHALL BE A STANDARD FIRE HYDRANT (SEE DETAIL 1) OR A 2-INCH WET BARREL MODEL VB2000B AS MANUFACTURED BY WATER PLUS CORPORATION (SEE DETAIL 4), OR APPROVED EQUAL. THE 2-INCH WET BARREL FLUSHING APPARATUS SHALL BE HOUSED INSIDE A STANDARD 5 ¼-INCH VALVE BOX WITH COVER SET TO FINISHED SURFACE ELEVATION WITH CONCRETE VALVE PAD.
- 26. A REPRESENTATIVE OF THE APPLICABLE FIRE DISTRICT MUST BE NOTIFIED AND INVITED TO THE REQUIRED FINAL INSPECTION. PROVIDE 48—HOURS ADVANCE NOTICE.

AREA:

SHEET

1 OF 4