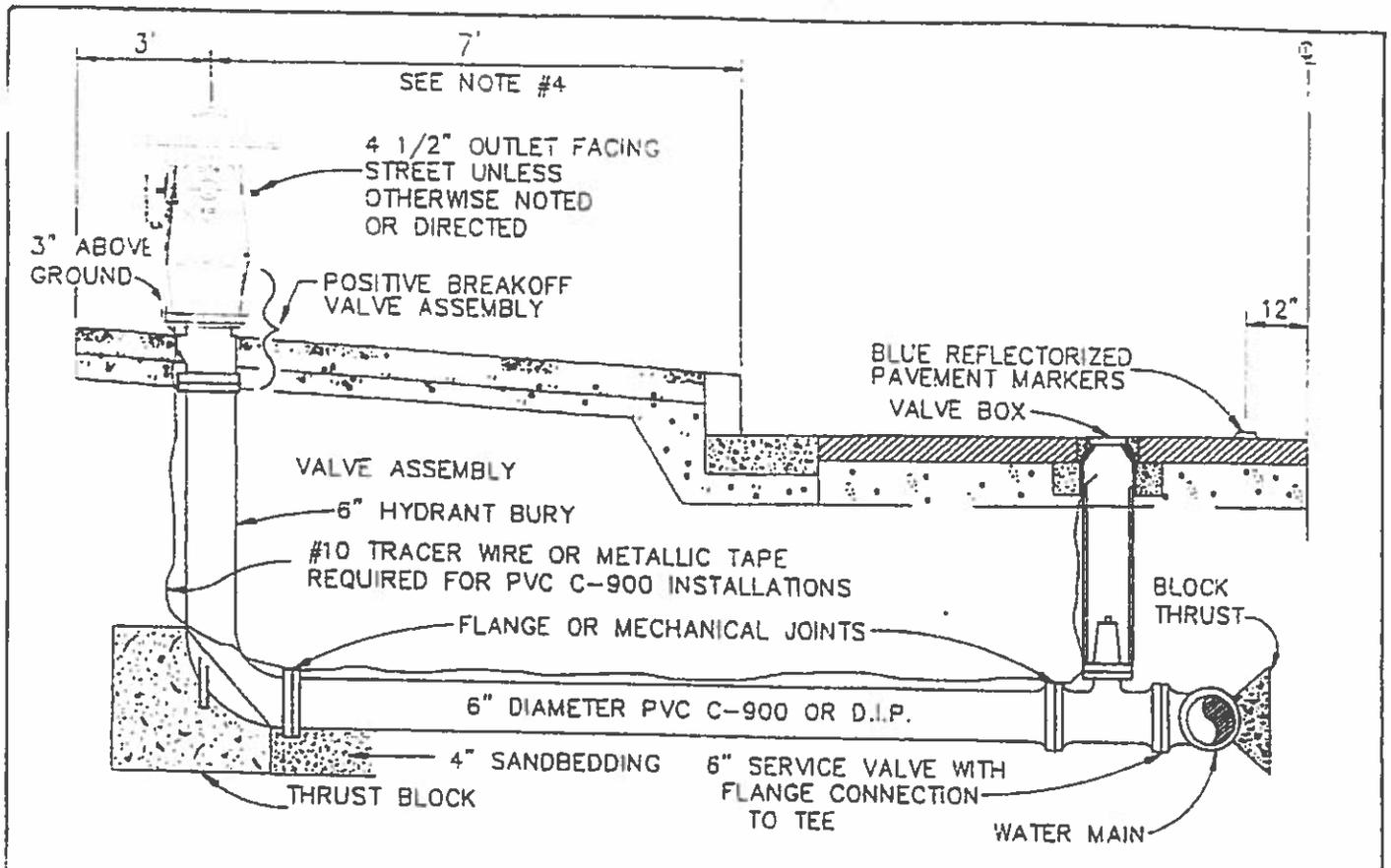


## **SECTION B WATER IMPROVEMENTS**

- B-1 Fire Hydrant Assembly- Clow 869 Series
- B-2 Standard water valve cluster
- B-3-3 Water Service Domestic & Fire service
- B-3-4 Utility Water Box B24
- B-4-1 Backflow Prevention Assembly
- B-4-2 Backflow Prevention Assembly Specification & Notes
- B-5 Backflow Prevention Assembly Enclosure
- B-6 Water Tie-in detail with three valve cluster
- B-7 Water Main Vertical Offset Detail
- B-8 Air & Vacuum Release Valve Assembly
- B-9-1 Blow Off Valve Assembly
- B-9-2 Blow Off Assembly Notes
- B-10 Bypass Connection Assembly
- B-11 Thrust Block Details
- B-12 Upward Thrust Block Details
- B-13 Water Sewer Separation Requirements
- B-14 Pressure Reducer Backflow Preventer Assembly
- B-15-1 Corrosion Protection with Mg Anode
- B-15-2 Anode Connection Detail



NOTES.

1. HYDRANT SHALL HAVE 1 - 4 1/2" NST PUMPER OUTLET AND 2 - 2 1/2" NST HOSE OUTLETS, AND SHALL BE LONG BEACH MODEL 430, CLOW MODEL 860, OR APPROVED EQUAL.
2. POSITIVE BREAKOFF VALVE ASSEMBLY SHALL BE LONG BEACH LB-400 DUCTILE IRON OR APPROVED EQUAL.
3. COMPANION VALVE SHALL BE A CITY STANDARD GATE VALVE. SEE DETAIL B-2. THRUST BLOCK SHALL HAVE A MINIMUM BEARING SURFACE OF 8 SQUARE FEET.
4. FOR STANDARD 5' SIDEWALK, CONCRETE PAD SHALL 4'-6" X 5' AND SHALL SLOPE AT 2% TOWARD THE STREET. CONCRETE SHALL BE CLASS 520-C-2500 AND SHALL FINISHED TO SIDEWALK SPECIFICATIONS. IN AREAS WITH EXISTING PARK STRIP, THE HYDRANT SHALL BE 3' FROM THE FACE OF CURB.
5. HYDRANT ASSEMBLY SHALL PASS HYDRO-STATIC, LEAKAGE, DISINFECTION AND FIRE FLOW TESTS PER CITY STANDARDS.
6. HYDRANTS SHALL BE LOCATED AS SHOWN ON THE PLANS APPROVED BY THE CITY ENGINEER AND MUST HAVE A MINIMUM OF 5' CLEARANCE FROM ANY DRIVEWAY.
7. WHEN A HYDRANT IS LOCATED AT AN INTERSECTION, BLUE REFLECTORIZED MARKERS SHALL BE PLACED ON EACH STREET.

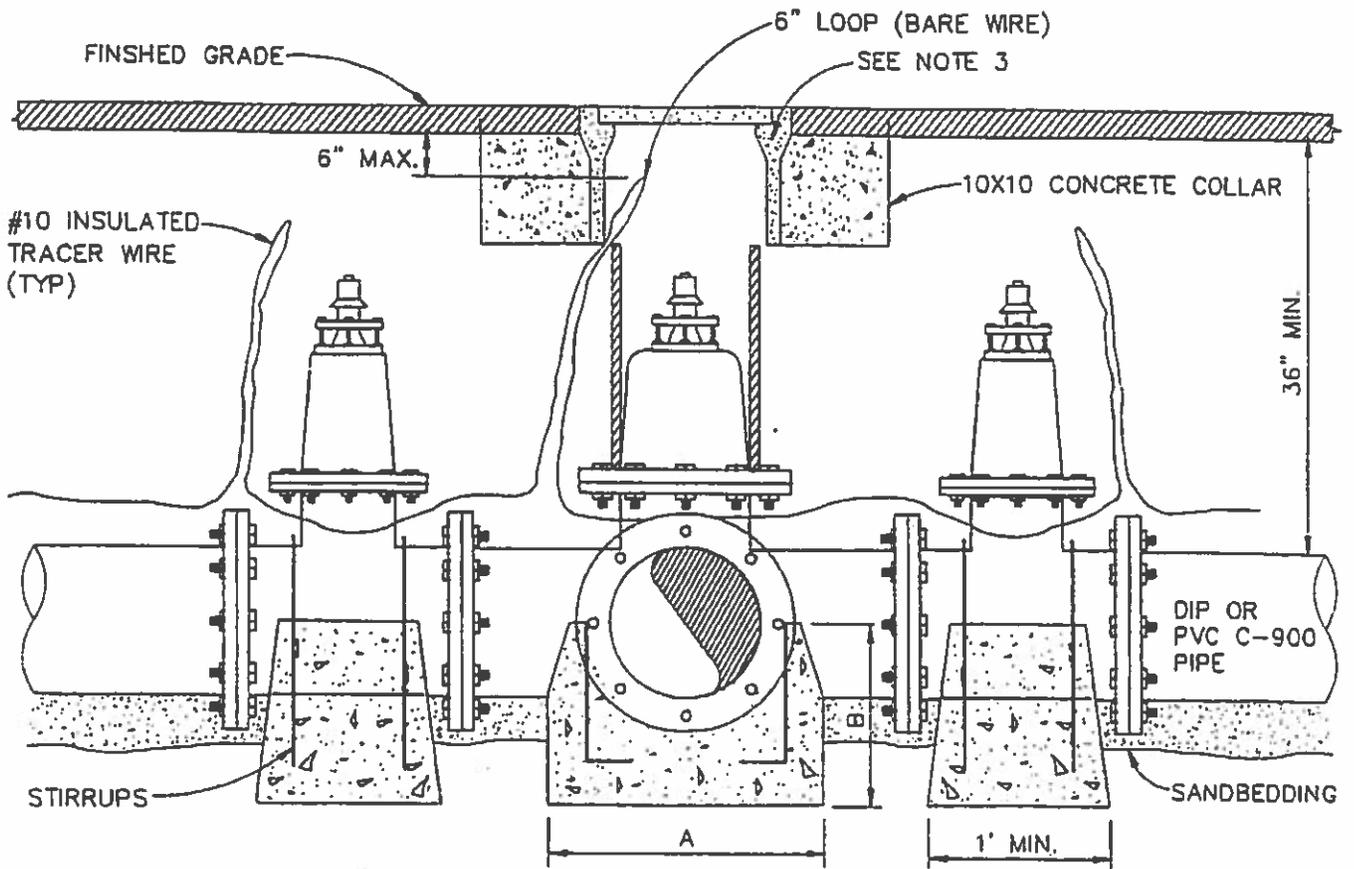
FIRE HYDRANT ASSEMBLY

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED: *[Signature]*

DATE	APRIL 30, 1992
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DETAIL	B-1 SHEET 1 OF 1



GATE VALVE SIZE	ANCHOR BLOCK DIMENSIONS	
	A (FT)	B (FT)
6	1.50	1.00
8	1.50	1.00
10	2.00	1.50
12	2.00	1.50

STANDARD WATER VALVE

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

MAX H. BRIDGES R.C.E. 24152- EXP. 12/31/93

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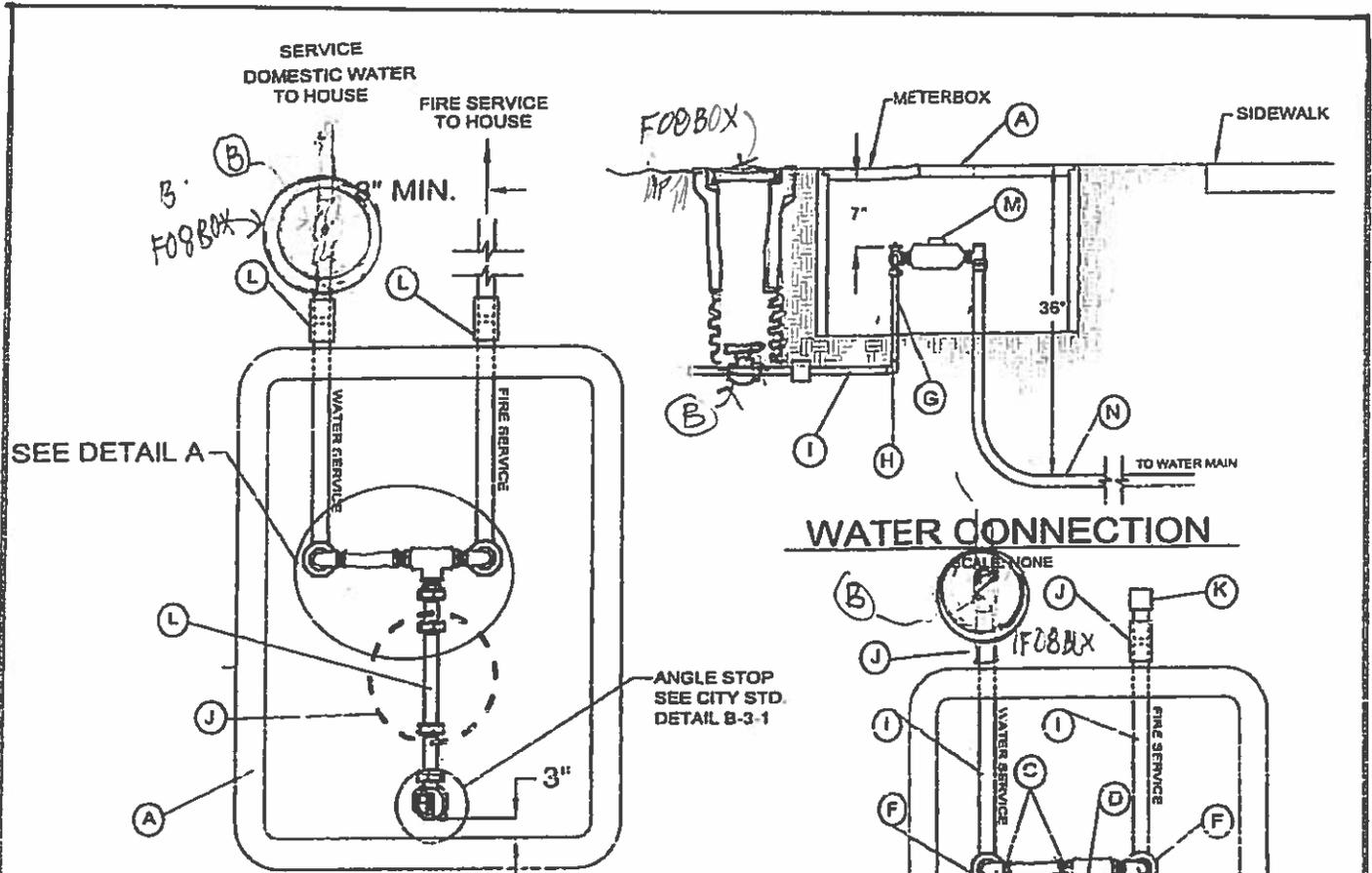
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DETAIL

B-2

SHEET 1 OF 1



**DETAIL KEY**

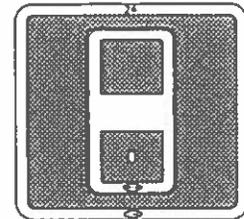
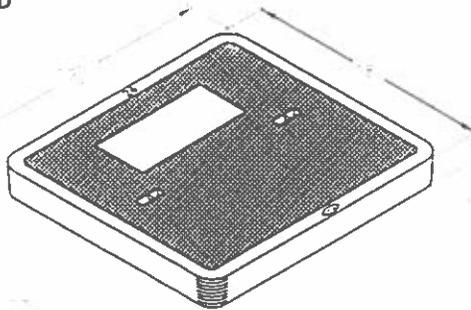
- |  |  |
|--|--|
| (A) CHRISTY 838 METERBOX WITH FIBERLYTE LID (SEE NOTE NO. 3) | (H) 2 - 1" 90° BRASS ELBOW                                   |
| (B) BALL VALVE WITH PADWING - 1" - B11-444W-NL               | (I) 2 - 1" X 12" BRASS NIPPLE                                |
| (C) 3 - CLOSE X 1" - BRASS NIPPLE                            | (J) 2 - 1" BRASS COUPLER IRON PIPE THREAD                    |
| (D) 1 - 1" BRASS TEE   | (K) 2 - 1" PVC MIP PLUG (REMOVE WHEN CONTINUED TO STRUCTURE) |
| (E) 2 - 1" ST 90° BRASS                                      | (L) 11" SPACER   |
| (F) 2 - 1" BRASS UNION                                       | (M) 1 - 1" METER SWIVEL X FIP (INSTALLED BY CITY / S.S.W.D.) |
| (G) 2 - 1" X 6" BRASS NIPPLE                                 | (N) 1" POLYETHYLENE TUBING (CTS) (SDR8)                      |

- NOTES:**
- METER SIZE NO LESS THAN 1" METER SUPPLIED BY CITY
  - SEPARATE PRIVATE SERVICE LINES ARE REQUIRED FOR DOMESTIC WATER AND FIRE. SERVICE LINES SHALL BE INSTALLED BY THE CUSTOMER AND SHALL BE PER UNIFORM PLUMBING CODE.
  - WATER METER BOX SHALL BE CHRISTY 838 WITH B38 FIBERLYTE LID. THE LID SHALL BE CORE DRILLED TO ACCEPT REMOTE METER READING SENSOR AND METER READING LID.
  - CUSTOMER SHALL INSTALL SUITABLE CONTROL VALVES ON EACH PRIVATE SERVICE LINE ON THE RISER TO EACH BUILDING.
  - THE MAXIMUM NUMBER OF DWELLING UNITS CONNECTED TO A COMBINATION RESIDENTIAL DOMESTIC AND FIRE SPRINKLER SERVICE SHALL NOT EXCEED ONE(1) DWELLING UNIT PER SERVICE. PROJECTS WHICH PROPOSE TO EXCEED THIS LIMITATION MUST INCLUDE A SEPARATE, DEDICATED FIRE SERVICE AND WATER SERVICE LINE FOR EACH RESIDENTIAL UNIT.
  - CONNECTIONS TO COPPER SERVICE LINES SHALL BE FLARED FITTINGS WITH POLYETHYLENE TUBING (CTS) (SDR8); INSTALL #10 INSULATED TRACER WIRE
  - THE CITY ENGINEER HAS THE AUTHORITY TO MODIFY THE REQUIREMENTS OF THIS STANDARD DETAIL AS NECESSARY TO ACCOMMODATE NON-TYPICAL SITUATIONS.

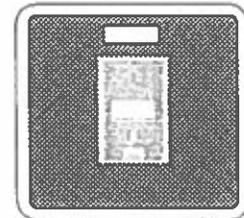
<b>TITLE</b>		<b>COMBINATION DOMESTIC &amp; FIRE SERVICE</b>	
AUTOCAD BY: <b>LOUIE C. GUEVARA</b>	SCALE: <b>NONE</b>	APPROVED:	<b>STANDARD PLAN</b>
REVIEWED BY:	REVISED: <b>3/14</b>		<b>B-3-2</b>
CITY OF SAN JUAN BAUTISTA STANDARDS			

- Etched polypropylene face
- Face anchored in concrete
- Ultra-violet inhibitor
- Exceeds ASTM-D1693 Standards for Environmental Stress Cracking Resistance

**Reinforced Concrete Lid  
No. B24D  
52 lbs.**

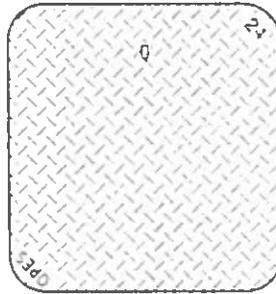
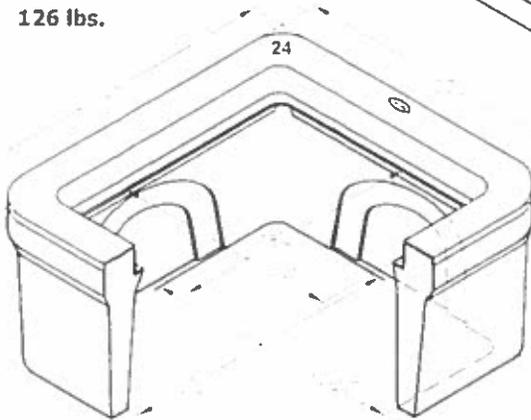


**B24E**

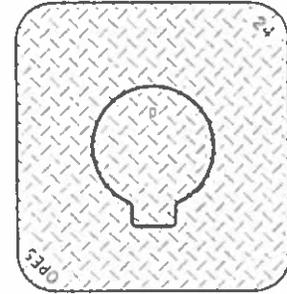


**B24G**

**Dual Meter Box  
No. B24 BOX  
126 lbs.**



**B24-61D**



**B24-61G**

A high density reinforced designed to permit installation of 2 meters in the same box. One reading lid enables both meters to be read. Non-setting shoulders positioned to maintain grade and facilitate back filling. Approximate dimensions and weight shown.

Dicacste Ordering Code	Item	Approx. Shipping Weight	Description
B24BOX	BOX	126 lbs.	B24 Utility Box (20" x 19") - 12 per pallet
B24D	LID	52 lbs.	Reinforced Concrete Lid
B24E	LID	52 lbs.	Reinforced Concrete Lid with 7" x 13 1/2" Concrete Reading Lid
B24G	LID	20 lbs.	Reinforced Concrete Lid with 5" x 8" Cast Iron, Self-Closing, Reading Lid with Frame
B24-61D	COVER	43 lbs.	Steel Checker Plate Cover
B24-61G	COVER	42 lbs.	Steel Checker Plate Cover with 10" Round, Self-Closing Reading Lid
B24X12	EXTENSION	164 lbs.	12" Reinforced Concrete Box Extension - 12 per pallet

Galvanizing available on all steel covers



**B24 BOX**

FILE NAME B24\_ISO

**B24 DUAL METER BOX**

20-214" - 12"

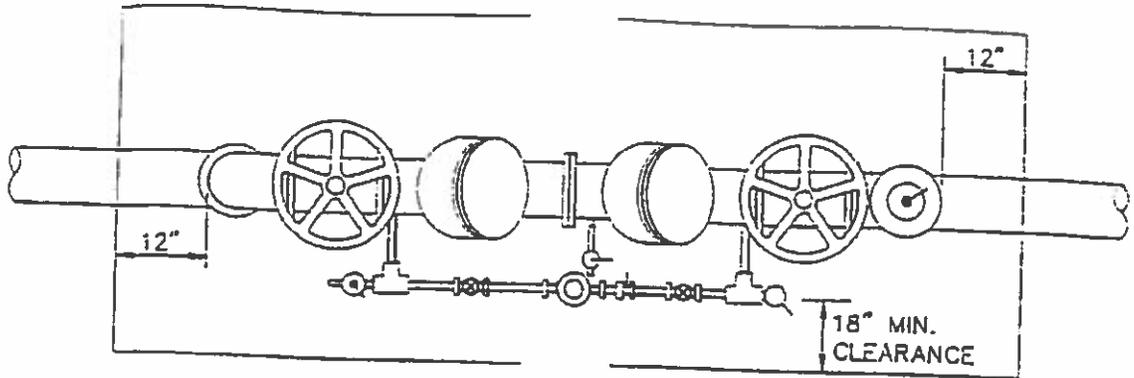
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DATE

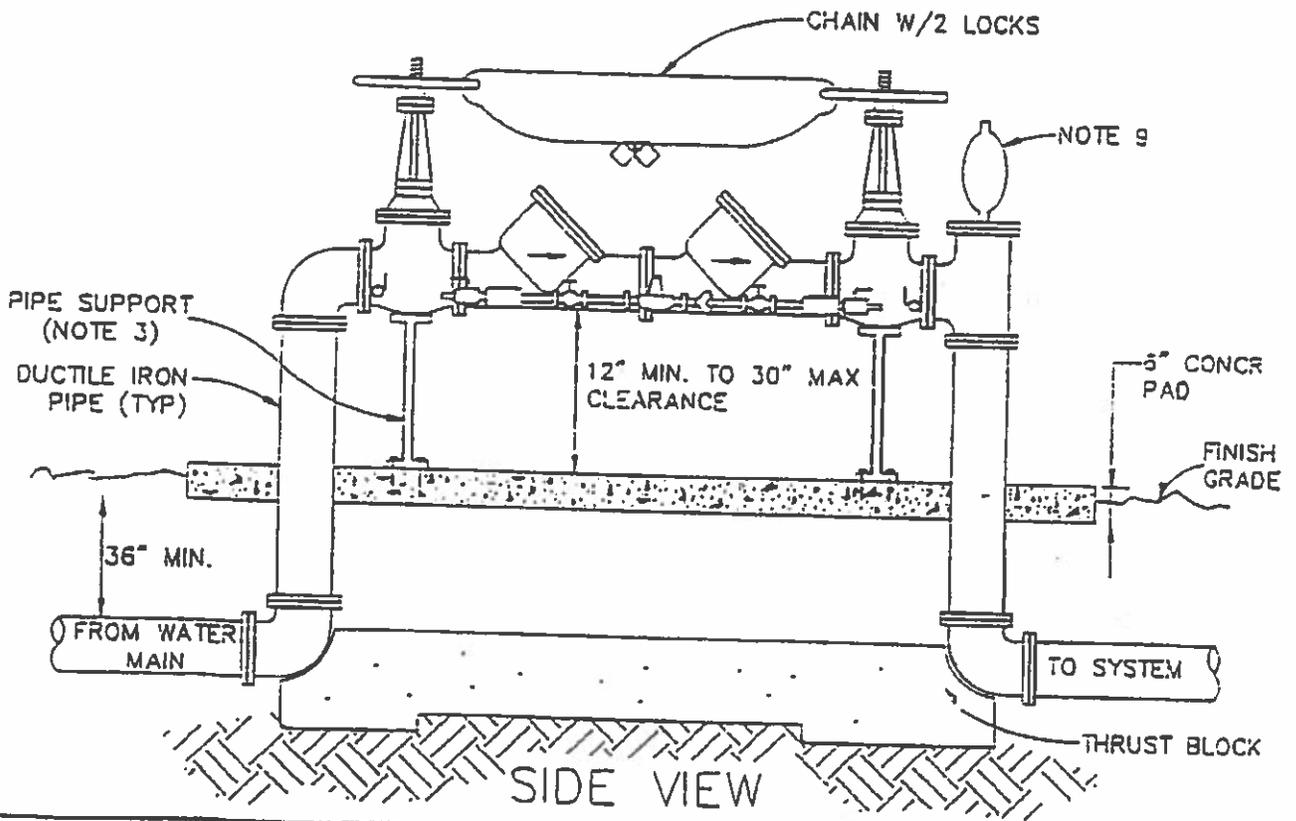
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DETAIL

**R-3-4**



TOP VIEW



SIDE VIEW

BACKFLOW PREVENTION ASSEMBLY  
FOR FIRE PREVENTION SYSTEM

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*Max H. Bridges*  
MAX H. BRIDGES R.C.E. 24152 - EXP. 12/31/93

DATE

APRIL 30, 1992

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DETAIL

B-4-1

SHEET 1 OF 2

NOTES:

1. DOUBLE DETECTOR CHECK VALVE BACKFLOW PREVENTION ASSEMBLIES SHALL BE FEBCO MODEL 806 DDC, AMES MODEL DCCA 3000 OR APPROVED EQUAL. ENTIRE ASSEMBLIES INCLUDING GATE VALVES, TEST COCKS AND BYPASS METER SHALL BE PROVIDED AS A COMPLETE UNIT.
2. TEST COCKS FOR BACKFLOW PREVENTERS SHALL BE PROVIDED WITH STANDARD 3/4" IRON PIPE BY MALE GARDEN HOSE THREAD ADAPTERS.
3. BACKFLOW PREVENTERS SHALL BE SUPPORTED BY 2" DIAMETER GALVANIZED STEEL PIPE SADDLE SUPPORTS WITH FLANGE ADAPTERS BOLTED TO CONCRETE PAD. PAINT THE ASSEMBLY WITH COLOR MATCHING THE BACKFLOW PREVENTER.
4. ALL MECHANICAL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO THE LATEST REVISION OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES APPROVED LIST FOR CROSS-CONNECTION.
5. NO TEES OR OTHER CONNECTIONS SHALL BE ALLOWED BETWEEN THE PUBLIC WATER SUPPLY AND BACKFLOW PREVENTER ASSEMBLY. INSTALL BACKFLOW PREVENTER ASSEMBLY AS CLOSE AS PRACTICABLE TO THE WATER MAIN.
6. O.S.&Y. VALVES REQUIRED ON FIRE SERVICE (U.L. LISTED) RATED 175 PSI WORKING AND 350 PSI HYDROSTATIC TEST PRESSURE. HAND WHEELS ON O.S.&Y. VALVES SHALL BE CHAINED AND LOCKED. USE 3/8" GALVANIZED CHAIN WITH LOCK BETWEEN VALVES. CHAIN SHALL BE DOUBLE LOCKED, ONE LOCK WILL BE SUPPLIED BY THE CITY OF HOLLISTER.
7. THRUST BLOCK SHALL BE CLASS 420-C-2000 P.C.C.
8. ASSEMBLY SHALL BE PROTECTED BY GUARD POSTS FILLED WITH CONCRETE WHEN LOCATED NEAR TRAFFIC OR AS OTHERWISE DIRECTED BY THE CITY ENGINEER.
9. AIR RELEASE VALVE SHALL BE APCO NO. 50, 1/2" FOR 3" TO 6" SERVICES AND 3/4" FOR 8" TO 12" SERVICES.
10. DEVICE MUST BE ACCESSIBLE FOR TESTING AND MAINTAINANCE.
11. REQUIRE TEST OF BACKFLOW PREVENTION DEVICE BY A CERTIFIED INDIVIDUAL PRIOR TO ACCEPTANCE.
12. ALL ASSEMBLIES SHALL BE PROTECTED BY AN ENCLOSURE. SEE STANDARD PLAN NO. B-5

**BACKFLOW PREVENTION ASSEMBLY**  
FOR FIRE PREVENTION SYSTEM

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

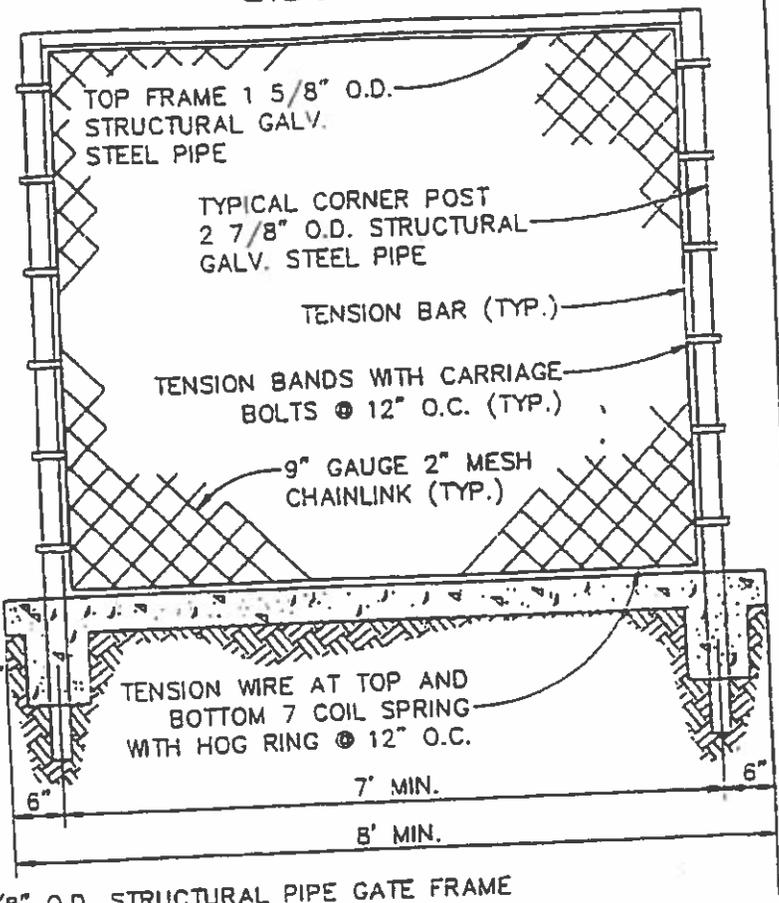
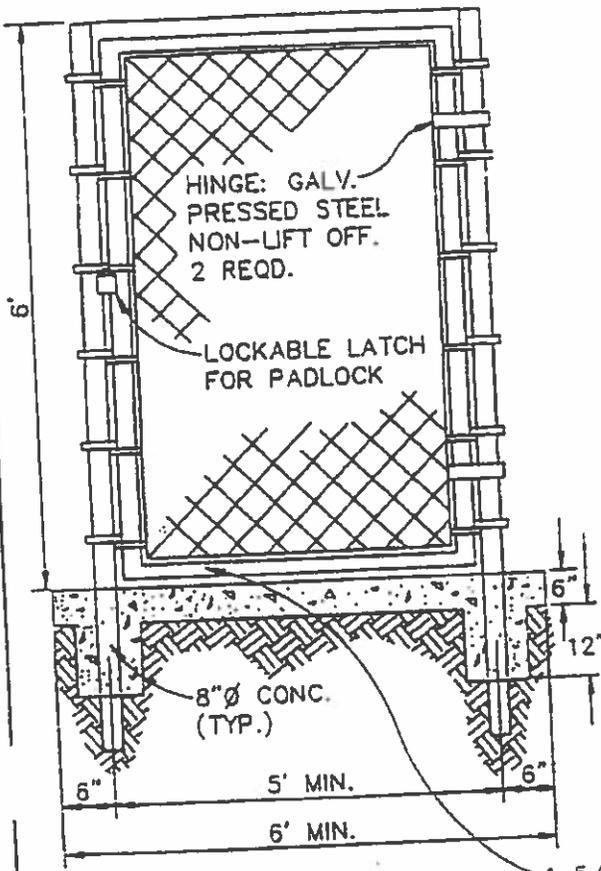
APPROVED:

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MAX H. BRIDGES R.C.E. 24152- EXP. 12/31/93

DATE	APRIL 30, 1992
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DETAIL B-4-2	SHEET 2 OF 2

FRONT VIEW

SIDE VIEW



1 5/8" O.D. STRUCTURAL PIPE GATE FRAME  
GALV. STEEL, WELDED ALL CORNERS

NOTES:

1. GATE TO BE ON END OF CLOSURE.
2. WHERE TWO B.P.D.'S ARE INSTALLED PARALLEL, ENCLOSURE IS TO BE TWICE THE WIDTH SHOWN, AND SUPPLIED WITH DOUBLE GATE WITH DOUBLE DROP ROD FOR LATCHING.
3. ALL ENCLOSURES TO HAVE CHAIN LINK TOPS.
4. CONCRETE PAD TO BE 520-C-2500 P.C.C.. TOP OF PAD TO BE LEVEL, AND SET 2" MINIMUM ABOVE EXISTING SOIL LEVEL.
5. BROOM FINISH ON CONCRETE PAD.

BACKFLOW PREVENTION ASSEMBLY ENCLOSURE  
FOR FIRE PREVENTION SYSTEM

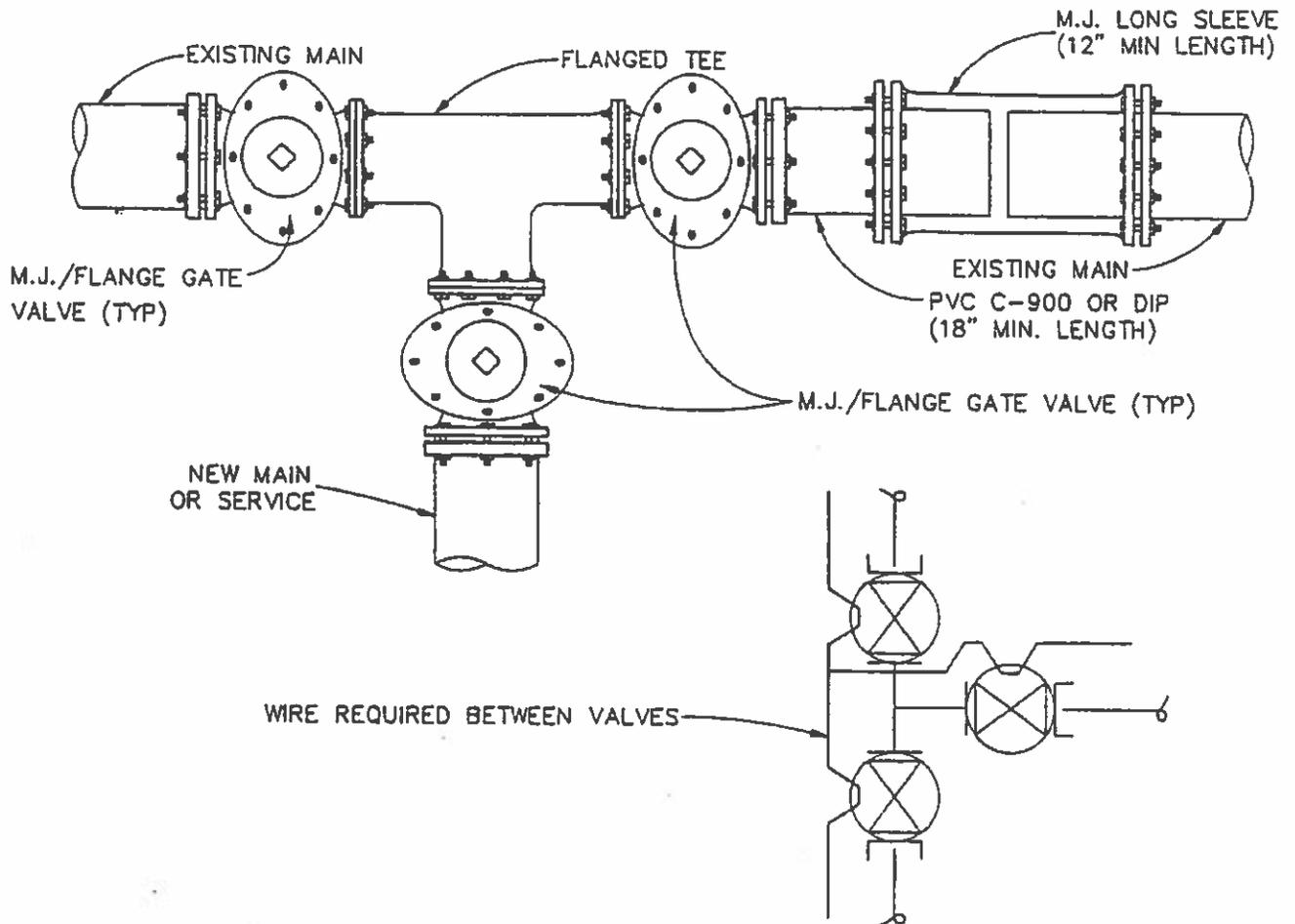
**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

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DATE	APRIL 30, 1992
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DETAIL	B-5
SHEET 1 OF 1	



NOTES:

1. NOTIFY PUBLIC WORKS INSPECTOR 72 HRS. MIN. PRIOR TO WATER TIE-IN ON EXISTING WATER MAIN. MAIN SHUT-DOWN WILL BE COORDINATED BY PUBLIC WORKS INSPECTOR.
2. ALL EXISTING VALVES TO BE OPERATED BY APPROPRIATE AGENCY.
3. ALL FITTINGS SHALL BE CAST IRON.
4. POUR THRUST BLOCKS AS PER STANDARD PLAN B-11.
5. ALL PIPES & FITTINGS SHALL BE DISINFECTED WITH LIQUID CHLORINE PRIOR TO INSTALLATION PER CITY STANDARDS.
6. ALL FITTINGS MUST BE ONSITE AND ALL FITTINGS EXCEPT M.J. LONG SLEEVE TO BE ASSEMBLED PRIOR TO WATER SYSTEM SHUT-DOWN.

WATER TIE-IN DETAIL W/VALVE CLUSTER

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

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DATE

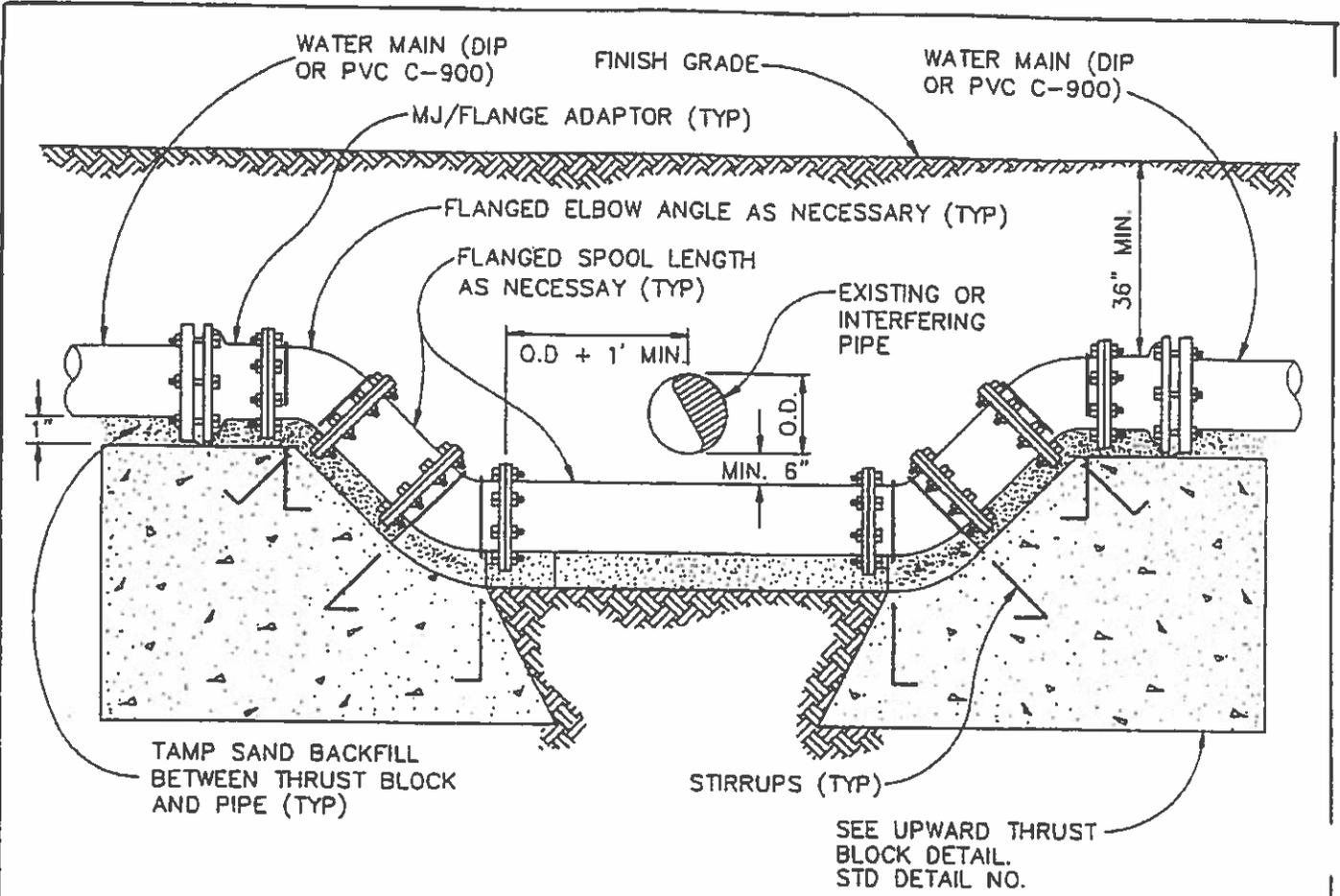
APRIL 30, 1997

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DETAIL

B-6

SHEET 1 OF 1



NOTES:

1. FLANGES, NUTS & BOLTS TO BE CLEAR OF CONCRETE.
2. ALL ELBOWS SHALL BE CAST IRON.
3. ALL SPOOLS SHALL BE DUCTILE IRON WITH PLOYWRAP OR BITUMINOUS COATING.
4. ALL EXPOSED STIRRUPS SHALL BE PAINTED WITH TWO COATS OF KOPPERS 505, TNEMEC 46-450, AMERON OR EQUAL 15 MILS EACH COAT
5. THRUST BLOCKS SHALL BE CLASS 420-C-2000 P.C.C.
6. CONCRETE SHALL NOT COME IN CONTACT WITH PVC PIPE.
7. ANY ALTERNATIVES TO THE PREFERRED FLANGE FITTING OFFSET SHALL REQUIRE ENGINEERING DEPARTMENT REVIEW AND APPROVAL.
8. STIRRUPS TO BE #4 REBAR.

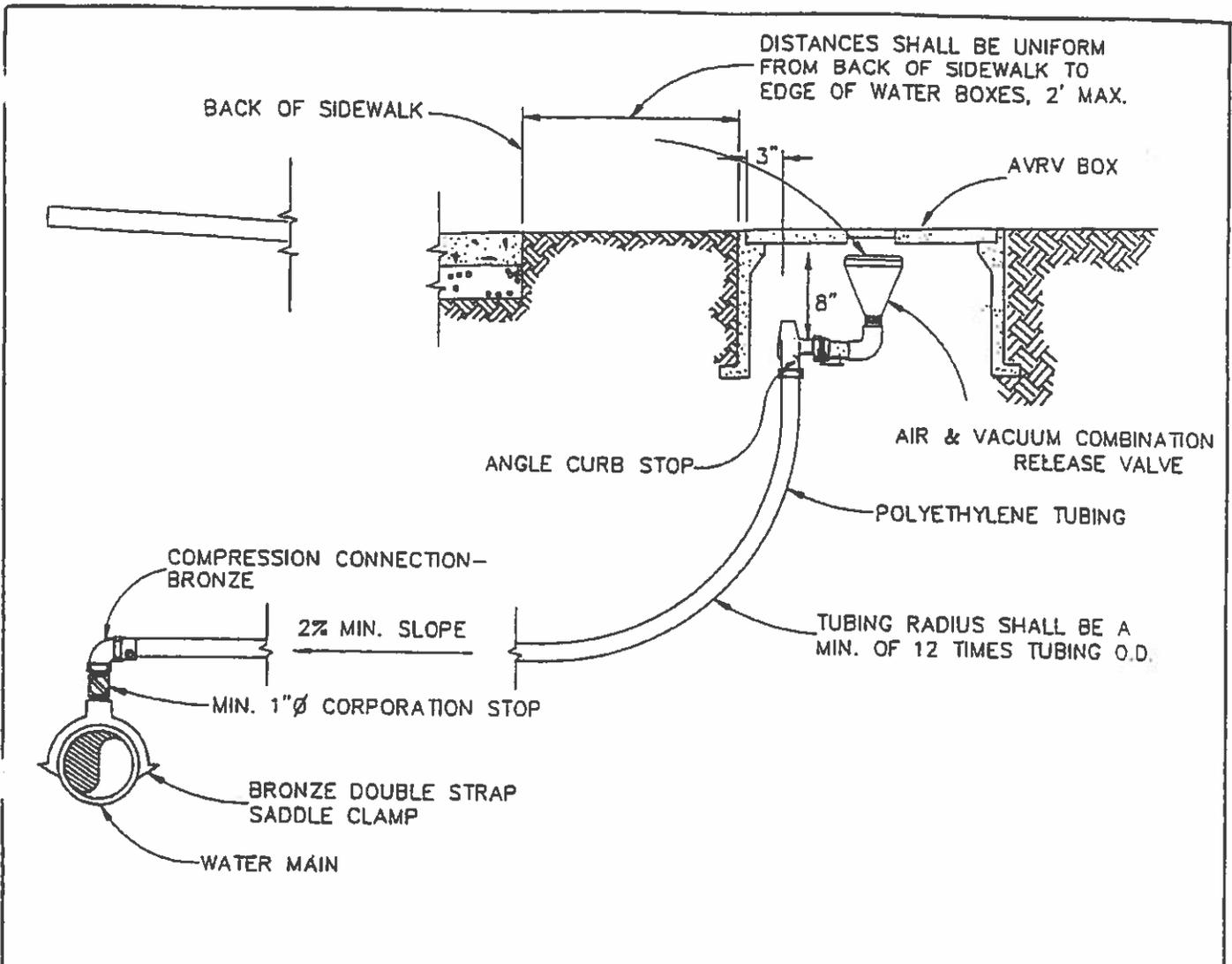
WATER MAIN VERTICAL OFFSET

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

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DETAIL	B-7
SHEET 1 OF 1	



NOTES:

1. INSTALL AIR AND VACUUM COMBINATION RELEASE VALVE ASSEMBLY AT THE HIGH POINT ON WATER MAIN.
2. AIR AND VACUUM COMBINATION RELEASE VALVE ASSEMBLY SHALL BE 1" DIAMETER MINIMUM APCO OR APPROVED EQUAL.
3. AIR AND VACUUM COMBINATION RELIEF VALVE BOX SHALL BE CHRISTY B36 WITH FL36D LID OR APPROVED EQUAL.

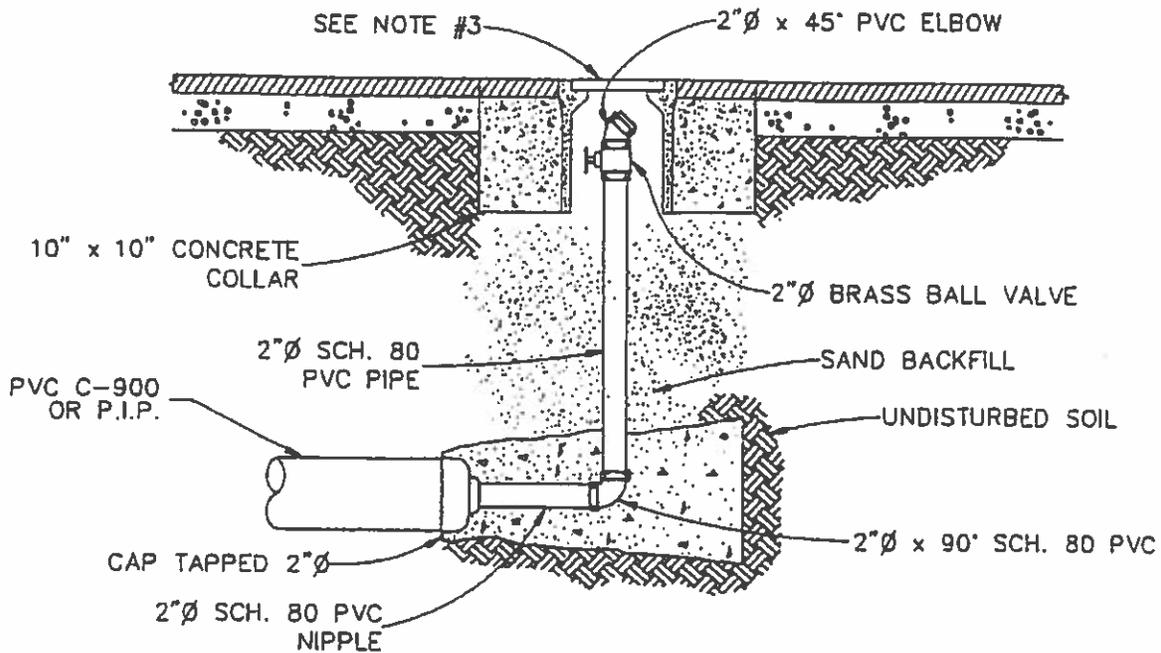
AIR AND VACUUM COMBINATION RELEASE VALVE ASSEMBLY

**CITY OF SAN JUAN BAUTISTA**

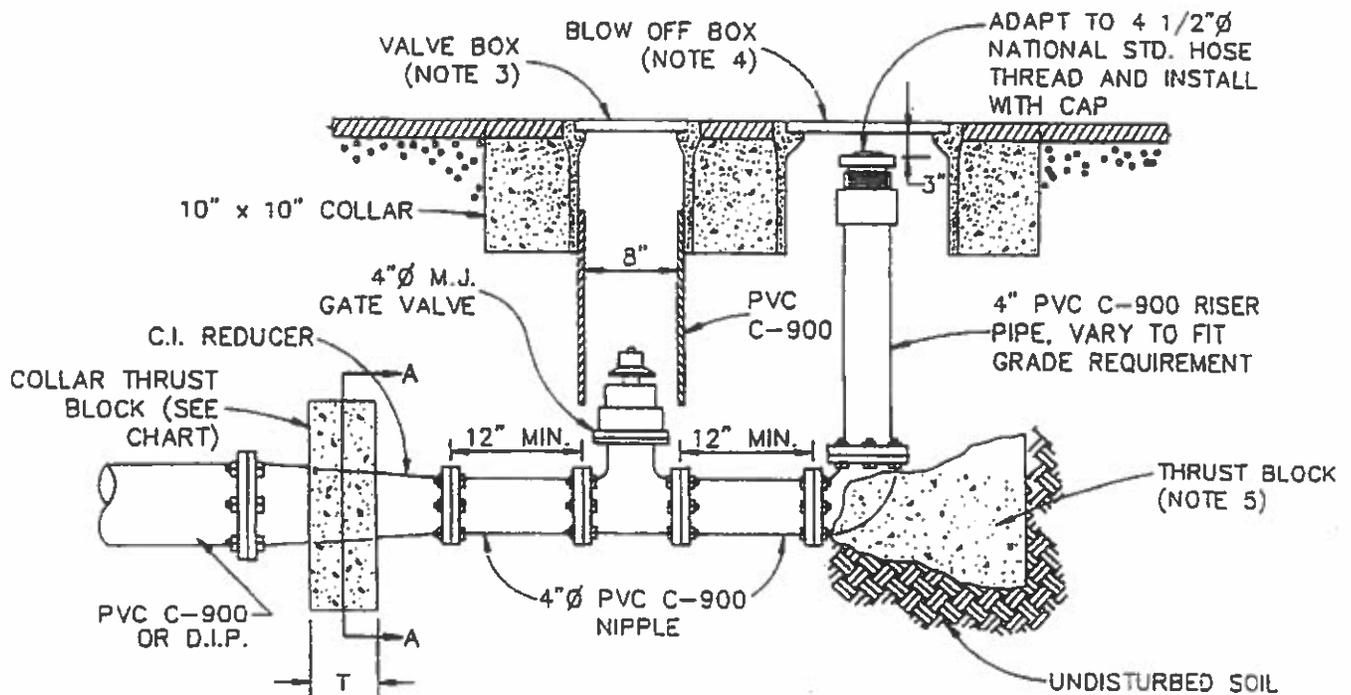
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DETAIL	B-8



FOR 8"  $\phi$  AND SMALLER WATER MAIN



FOR 10"  $\phi$  AND LARGER WATER MAIN

BLOW OFF VALVE ASSEMBLY

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*[Signature]*

DATE

APRIL 30, 1992

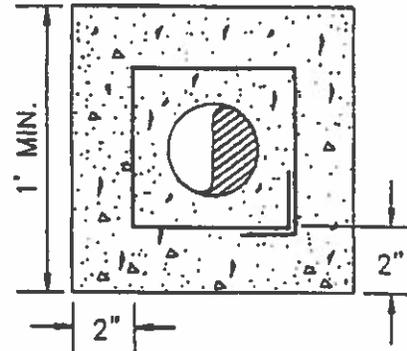
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B-9-1

SHEET 1 OF 2

REDUCERS	COLLAR THRUST BLOCK	
	T (in.)	BEARING AREA (s.f.)
10"∅ x 4"∅	6"	9
12"∅ x 4"∅	8"	13



SECTION A - A

NOTES:

1. ALL P.V.C. PIPES SHALL BE A.W.W.A. C-900 CLASS 150 OR SCH. 80 AS NOTED.
2. CONCRETE COLLAR AND THRUST BLOCK SHALL BE CLASS 420-C-2000 P.C.C.
3. VALVE BOX SHALL BE CHRISTY G5 BOX WITH G5C TRAFFIC LID OR APPROVED EQUAL.
4. BLOW OFF BOX SHALL BE CHRISTY G8 WITH G5C TRAFFIC LID OR APPROVED EQUAL.
5. THRUST BLOCK ON THE 90° ELBOW SHALL HAVE A MINIMUM BEARING SURFACE OF 4 SQUARE FEET.

BLOW OFF ASSEMBLY

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*Max H. Bridges*

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DATE

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B-9-2

SHEET 2 OF 2

DOUBLE CHECK VALVE ASSEMBLY (SEE NOTE #3)

SHUT-OFF VALVE (TYP)

1/8" STEEL PLATE WITH HANDLE

MIN 2" GALVANIZED OR TYPE "K" COPPER PIPE (TYP)

CORPORATION STOP (TYP)

EXISTING WATER MAIN

NEW WATER MAIN (DIP OR PVC C-900)

TRENCH BOTTOM

M.J./FLANGE ADAPTORS

BRONZE SERVICE SADDLE DOUBLE STRAP (TYP)

SANDBEDDING

NOTES:

1. THE CONTRACTOR SHALL NOT OPERATE AGENCY VALVES. 48 HOURS NOTICE IS REQUIRED FOR OPERATION BY AGENCY.
2. UPON ACCEPTANCE OF THE NEW WATER SYSTEM, THE CONTRACTOR SHALL REMOVE THE 2" BYPASS AND THE STEEL PLATE THEN SHUT-OFF COCKS AND INSTALL PLUGS IN EACH CORPORATION STOP.
3. THE DOUBLE CHECK VALVE ASSEMBLY SHALL BE FEBCO 805Y OR APPROVED EQUAL.
4. SHUT-OFF BOTH VALVES ON THE DOUBLE CHECK VALVE ASSEMBLY DURING PRESSURE TESTING AND DISINFECTION OF THE NEW WATER MAIN.
5. SIZE OF BYPASS MAY BE INCREASED AS DIRECTED BY CITY ENGINEER.

BYPASS CONNECTION TO NEW MAINS

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

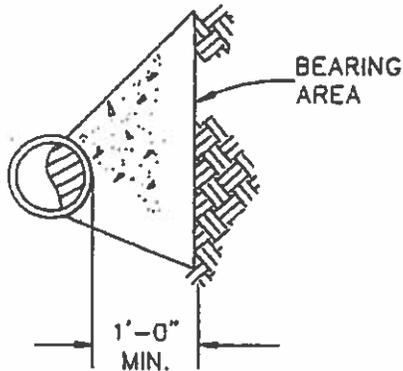
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DATE	APRIL 30, 1992
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DETAIL	B-10

SHEET 1 OF :

THRUST BLOCK AREA REQUIRED - SQUARE FEET

TYPE OF FITTING		90° BEND	45° BEND	22.5° BEND	11.25° BEND	TEE	TEE W/ PLUG	CROSS W/ PLUG	CROSS W/ PLUGS
TYPICAL INSTALLATION									
SIZE OF PIPE	6"	6	4	2	1	6	6	6	6
	8"	10	6	3	2	10	10	10	10
	10'	15	8	4	2	16	15	16	15
	12'	21	11	6	3	22	21	22	21



SECTION

NOTES

1. JOINTS, FITTINGS AND FACES OF PLUGS TO BE KEPT CLEAR OF CONCRETE.
2. BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL.
3. THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS 420-C-2000 OR STRONGER P.C.C.
4. STIRRUPS TO BE #4 REBAR EMBEDDED IN THRUST BLOCK TO A DEPTH EQUAL TO 3/4 OF PIPE OUTSIDE DIAMETER. STIRRUP HOOKS TO BE SHAPED 90° BEND WITH LENGTH EQUIVALENT TO 1/2 PIPE O.D.
5. THRUST BLOCK AREA IS BASED ON TEST PRESSURE OF 150 PSI AND A HORIZONTAL SOIL BEARING STRENGTH OF 1500 PSI.
6. EXPOSED STIRRUPS SHALL BE PAINTED WITH TWO COATS OF KOPPERS 505, TNEMEC 46-450', AMERON OR EQUAL, 15 MILS EACH COAT.

THRUST BLOCK DETAIL

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*Max H. Bridges*

MAX H. BRIDGES R.C.E. 24152- EXP. 12/31/93

DATE

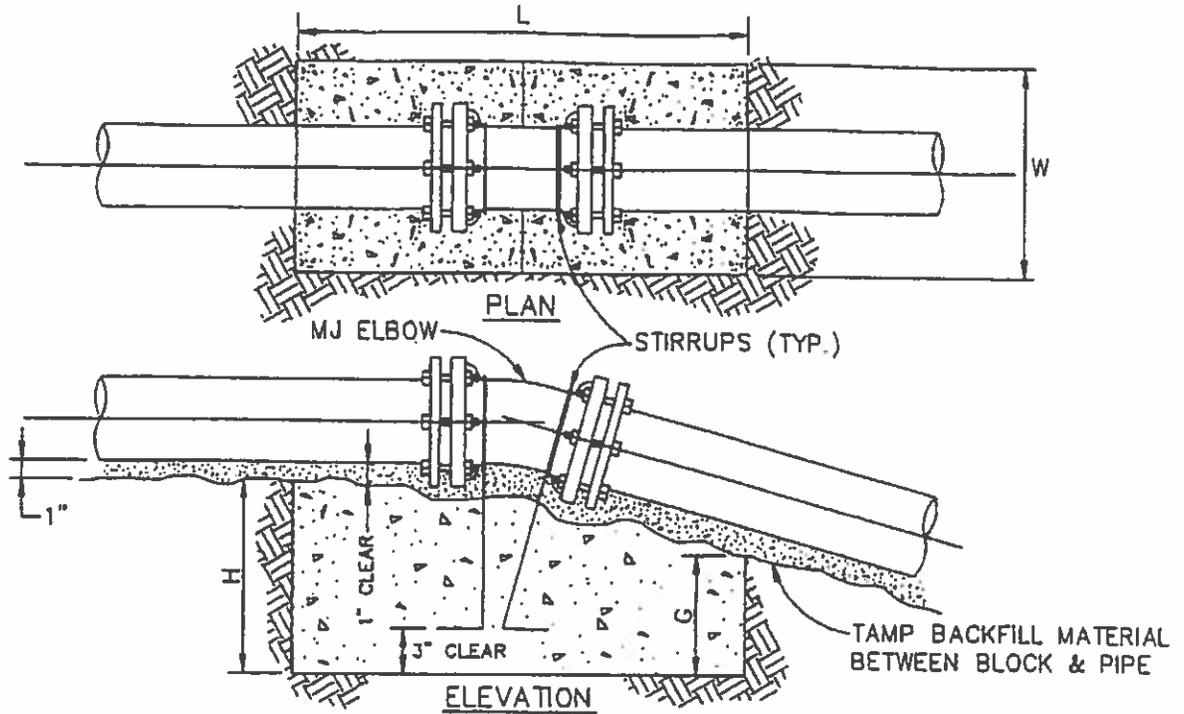
APRIL 30, 1992

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DETAIL

B-11

SHEET 1 OF 1



THRUST BLOCK DIMENSION - UPWARD THRUST															
PIPE SIZE	11 1/4' BEND					22 1/2' BEND					45' BEND				
	L	W	H	G	BAR	L	W	H	G	BAR	L	W	H	G	BAR
6"	3.0	2.0	2.0	1.0	4	4.0	2.0	3.0	1.0	4	5.0	3.0	3.0	1.0	4
8"	3.5	2.5	2.0	1.0	4	4.5	3.0	3.0	1.0	4	6.0	3.0	4.0	1.5	4
10"	4.0	3.0	2.5	1.0	4	5.0	4.0	3.5	1.5	5	6.0	4.0	4.5	1.5	5
12"	4.0	3.5	3.0	1.5	4	5.0	4.0	3.5	2.0	5	7.0	4.0	5.0	2.5	5

NOTES:

1. DIMENSIONS L, W, H, AND G ARE IN FEET.
2. THRUST BLOCK DIMENSIONS BASED ON 150 PSI TEST PRESSURE AND CONCRETE OF 150 PCF UNIT WEIGHT.
3. EXPOSED STIRRUPS TO BE PAINTEND WITH TWO COATS OF KOPPERS 505, TNE MEC 46-450, AMERON OR EQUAL TO 15 MILS EACH COAT.
4. THRUST BLOCKS SHALL BE CLASS 420-C-2000 P.C.C.
5. FLANGES, NUTS & BOLTS SHALL BE CLEAR OF CONCRETE.
6. ANY ALTERNATIVES TO THE PREFERRED M.J. FITTING & THRUST BLOCK SHALL REQUIRE ENGINEERING DEPARTMENT REVIEW & APPROVAL.
7. STIRRUPS TO BE #4 REBAR.

UPWARD THRUST BLOCK DETAIL

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*Max H. Bridges*

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DATE

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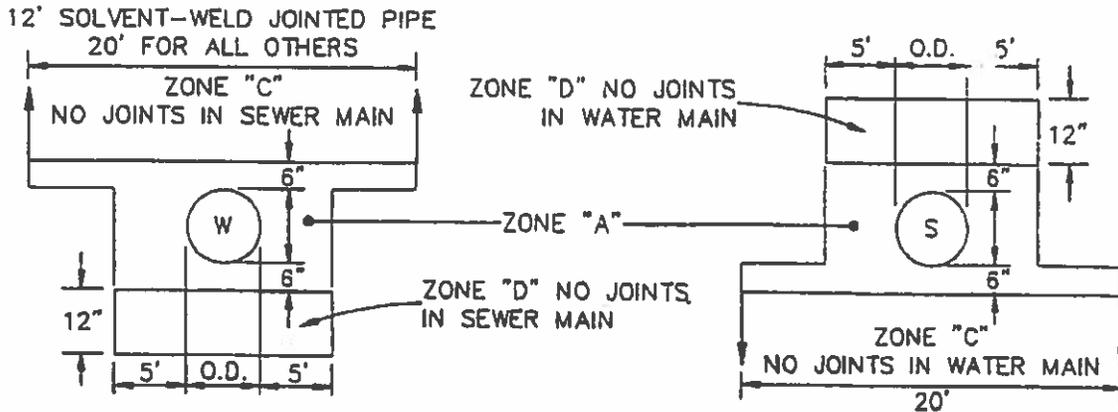
B-12

SHEET 1 OF 1

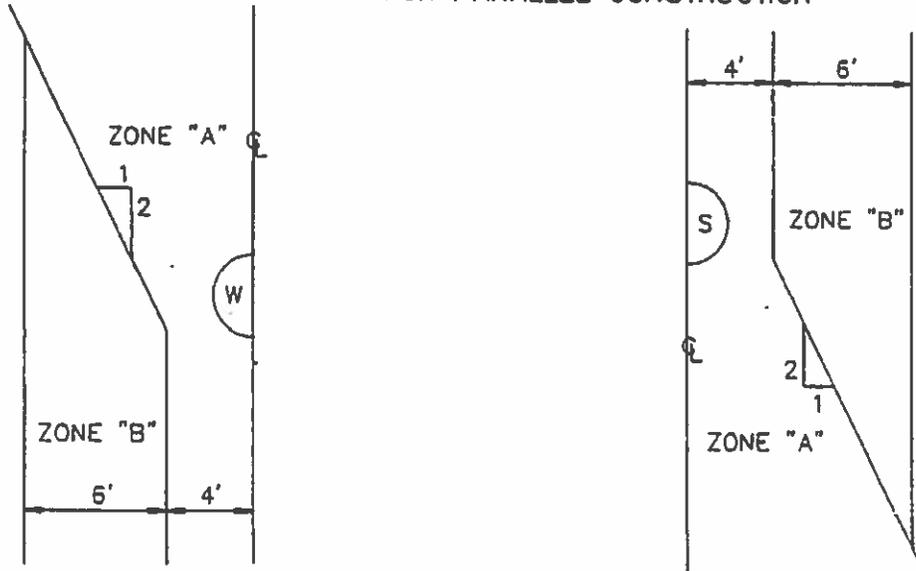
NEW SEWER MAIN

NEW WATER MAIN

TRENCH SECTION FOR PERPENDICULAR CONSTRUCTION



TRENCH SECTION FOR PARALLEL CONSTRUCTION



NOTES:

1. PARALLEL CONSTRUCTION WILL BE ALLOWED ONLY WHEN 10' HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LINES CANNOT BE MAINTAINED, AND ONLY AS APPROVED BY THE CITY ENGINEER.
2. ZONE "A" - CONSTRUCTION PROHIBITED.
3. ZONE "B" - SEWER MUST BE SOLVENT WELD JOINT COMPOSITE PIPE, OR WATER MUST BE AWWA C-900, CLASS 200, OR D.I.P. CLASS 50.
4. ZONE "C" & "D" - SEWER & WATER PIPE TO MEET CITY STANDARD REQUIREMENTS.
5. ALL DIMENSIONS ARE MINIMUM AND APPLY ONLY TO GRAVITY SEWER MAINS. THE ZONES ILLUSTRATED ARE NOT APPLICABLE WITH SEWER PRESSURE MAINS.
6. REQUIREMENTS APPLY TO BOTH SANITARY SEWER AND STORM SEWER.

**WATER/SEWER SEPARATION REQUIREMENTS**

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

APPROVED:

*Max H. Bridges*  
MAX H. BRIDGES R.C.E. 24152- EXP. 12/31/93

DATE

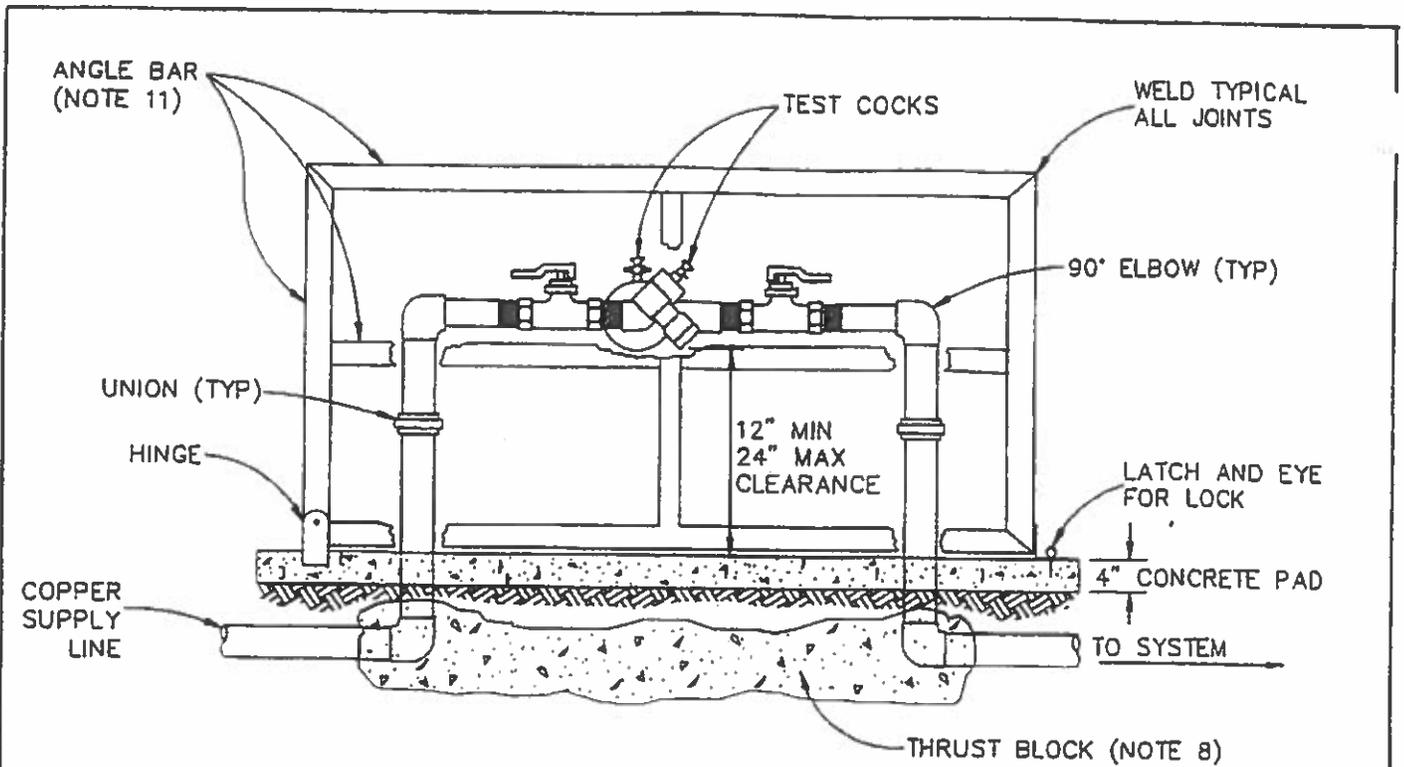
APRIL 30, 1992

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DETAIL

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SHEET 1 OF 1



**NOTES:**

1. REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLIES SHALL BE FEBCO 825Y OR APPROVED EQUAL. THE ENTIRE ASSEMBLY SHALL BE PROVIDED AS A UNIT, INCLUDING BALL VALVES & TEST COCKS.
2. NO CONNECTIONS OR TEES WILL BE ALLOWED BETWEEN WATER METER & REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTER.
3. ALL TUBING SHALL BE TYPE "K" COPPER.
4. INSTALLATIONS USING THREADED OR SOLDERED FITTINGS SHALL INCLUDE ONE THREE PART UNION ON EACH SIDE OF THE ASSEMBLY, SOLDER SHALL BE LEAD FREE.
5. DEVICE MUST BE ACCESSIBLE FOR TESTING & MAINTANCE.
6. ASSEMBLY SHALL CONFORM TO THE LATEST REVISION OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES APPROVED LIST FOR CROSS-CONNECTION.
7. A TEST OF THE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER BY A CERTIFIED INDIVIDUAL SHALL BE REQUIRED.
8. THRUST BLOCK SHALL BE CLASS 420-C-2000 P.C.C.
9. CONCRETE PAD TO BE 520-C-2500 P.C.C. TOP OF PAD TO BE LEVEL AND SET 1" MINIMUM ABOVE EXISTING SOIL LEVEL.
10. PAINT CAGE WITH 2 COATS OF RUSTOLEUM MED. GREEN.
11. CAGE DIMENSIONS 24" WIDE x 36" HIGH x 42" LONG. PROVIDE HINGE AS SHOWN WITH LATCH FOR PAD LOCK, SUPPLY 3 KEYS TO CITY.
12. THE CAGE SHALL BE HEAVY EXPANDED FLAT METAL WELDED TO 1 1/2" X 1 1/2" X 1/8" ANGLE BAR.

**REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTER**  
(2"Ø & SMALLER)

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS

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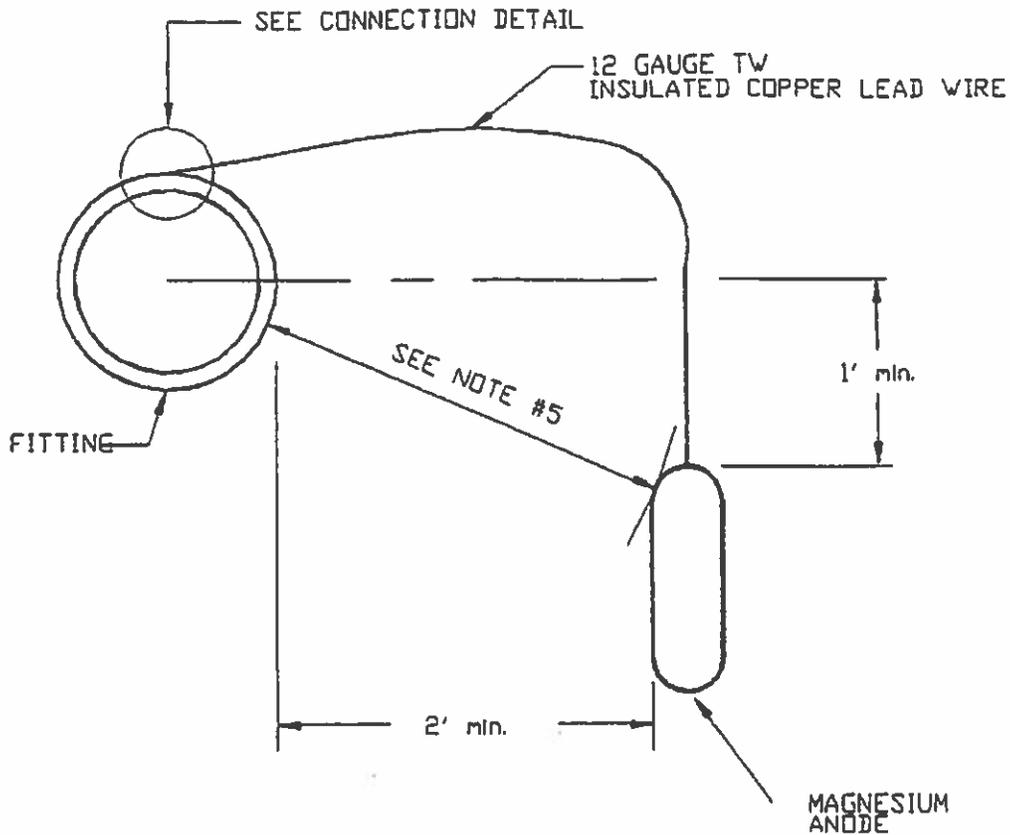
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NOTES:

1. SEE STANDARD PLAN B-15-2 FOR CONNECTION DETAIL AND FOR ANODE DETAIL.
2. MIX EPOXY PUTTY(EPOXY BOND PLUMBER SEAL) AS DIRECTED AND APPLY FIRMLY TO PROVIDE A WATER TIGHT SEAL AT LEAST 1/4" THICK OVER CONNECTION WELD, BARE WIRE AND BARE PIPE.
3. OVERLAP CONNECTION COATING AND WIRE INSULATION BY 1/2".
4. ANODE IS SHOWN INSTALLED VERTICALLY. IT MAY BE INSTALLED HORIZONTALLY IF MORE CONVENIENT.
5. 3 FOOT MINIMUM RADIAL CLEARANCE IS REQUIRED BETWEEN THE ANODE AND THE FITTING.
6. INSULATED COPPER LEAD WIRE SHALL BE CONTINUOUS WITH NO SPLICES.

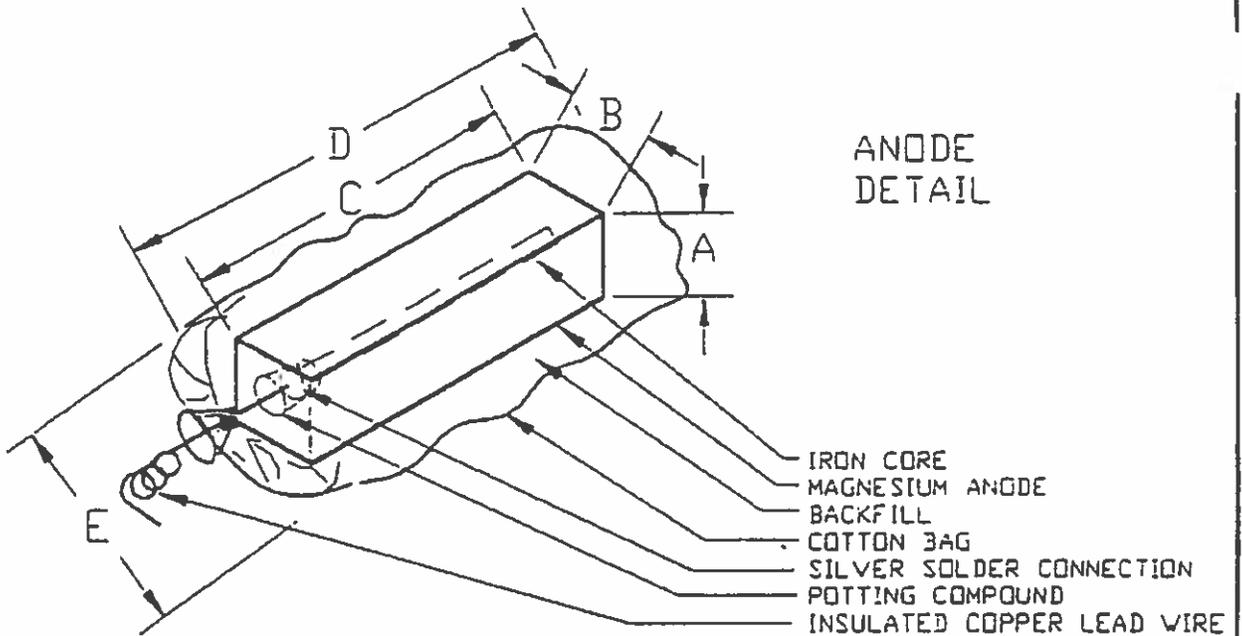
CORROSION PROTECTION WITH Mg ANODE

**CITY OF SAN JUAN BAUTISTA**

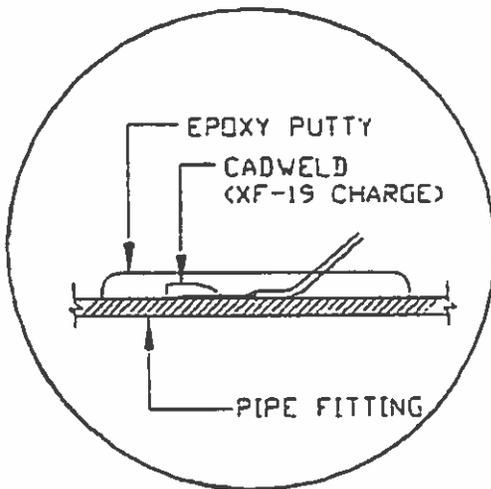
STANDARD PLANS

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DETAIL	B-15-1
SHEET 1 OF 2	



FITTING SIZE NOMINAL DIA.	NOMINAL DIMENSION					MAGNESIUM WEIGHT IN POUNDS	TOTAL WEIGHT IN POUNDS
	A	B	C	D	E		
6' - 8'	3'	3'	13.5'	15.5'	6'	9 LBS.	23 LBS.
10' - 12'	4'	4'	17'	19'	6.5'	17 LBS.	42 LBS.
14' - 24'	5'	5'	21'	23'	8'	32 LBS.	70 LBS.



CONNECTION  
DETAIL

SEE STANDARD PLAND B-15-1 FOR CONNECTION  
NOTES.

ANODE AND CONNECTION DETAILS

**CITY OF SAN JUAN BAUTISTA**

STANDARD PLANS/

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