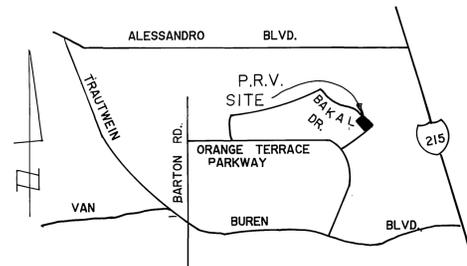


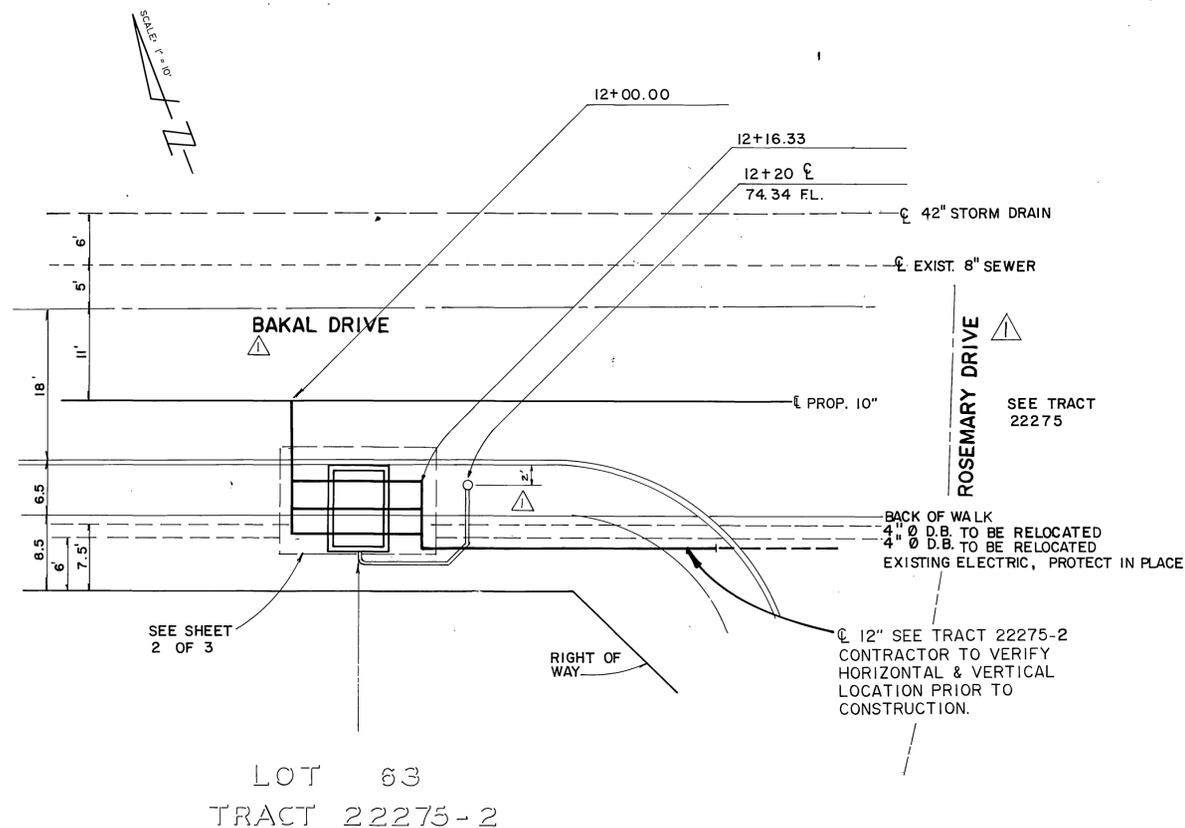
PRESSURE REDUCING VALVE

GENERAL NOTES FOR CONSTRUCTION OF WATER PIPELINES (STEEL)

- Water system shall be constructed by the Developer for dedication to Western Municipal Water District and shall comply to all District requirements plus those requirements of all other public governing bodies.
- Construction of the water system shall not commence until a final map has been approved and recorded by Riverside County.
- Construction, materials, testing and inspection shall comply with Western Municipal Water District's Standards and Specifications, and shall meet or exceed the requirements of Riverside County and the American Water Works Association (AWWA) Standards. Failure to meet any of the above requirements will be cause for rejection.
- Developer must certify that all streets are constructed to final grade prior to commencement of construction of water system.
- Pipe fittings, valves and appurtenances shall be of the pipe pressure class (NOT W.W.P. Class) shown on the profile of these plans.
- 12-inch and under pipe to be C.M.L. & A.W. steel pipe and have 12 gauge wall thickness.
- Minimum cover over pipe to be 48" inches. Refer to plan and profile drawing for cover required for pipe when conditions require more depth.
- Whenever a waterline encounters a storm drain pipe or other obstruction and crossing over the obstruction will result in less than 48" inches of cover over the watermain, it shall cross under the obstruction (minimum 6" clear).
- Contractor shall shore all trenches and conduct all construction and operations in accordance with CAL-OSHA requirements.
- Pipe shall be handled so as to protect pipe, joints, lining and coating, and carefully bedded to provide continuous bearing and prevent uneven settlement. Pipe shall be protected against floatation at all times. Open ends shall be sealed at all times when construction is not in progress.
- Pipe joints shall not be deflected at any angle greater than that maximum angle recommended by the pipe manufacturer.
- Full welds to be double pass, minimum.
- Taps of pipeline shall have District approved reinforced saddle outlets welded to pipe.
- Connections to existing WMWD pipelines to be accomplished only by Western Municipal Water District forces.
- Backfill shall be compacted to a relative density of 90%; equivalent to the surrounding ground; or County Standard, whichever is greater.
- Test pressure shall be 150% of pipe Class Rating. (ie: Class 150=225 psi test pressure) Maximum allowable leakage is 5 gallons/inch of pipe dia./mi of pipe length/24 hrs. No visible leakage is permitted. Minimum test duration is 4 hrs. District inspector to inspect test using District provided pressure gauge. Inspector time spent inspecting and required retests (including rate and overhead) shall be at the expense of the developer.
- Fittings shall be fabricated steel or forged steel. All fittings to be cement mortar lined. No cast iron fittings shall be allowed.
- Pipe connections shall be bell and spigot rubber-gasket joints unless otherwise shown on drawings. Upon written approval by the Engineer weld-bell slip joint pipe may be used.
- Open trench at any one time shall be limited to 500 feet along road right-of-way, unless otherwise approved in writing by the Engineer. Trench shall be backfilled and compacted at the conclusion of each day.
- Surface improvement damaged or removed as a result of the contractor's operations shall be reconstructed by the contractor to the County Standards.
- The developer shall provide one set of prints showing all "As-Built" conditions.
- Water lines to be installed after construction of curb and gutter but prior to placement of cross-gutters, spandrels, sidewalks, and paving.
- Water meters to be located in the fields as directed by the Developer and approved by W.M.W.D. Developer to provide "As-Built" showing stationing of service lateral connections.
- Any revision to these drawings must be approved in writing by W.M.W.D.
- Contractor shall determine depth and location of existing underground facilities prior to trenching.



VICINITY MAP
N.T.S.



GENERAL NOTES

- All materials, materials testing and inspection shall be in accordance with the requirements of the district standards. Failure to meet these requirements will be cause for rejection.
- District shall be notified at least 48 hours prior to construction.
- Contractor shall shore all excavations in accordance with CAL-OSHA requirements.
- Unless otherwise approved by District, vaults and electrical equipment shall be located behind existing or future curbs.
- Details of vaults for all PRV station sizes shall be submitted to district for approval.
- Elect/tele/ tv conduits ect. shall be located to clear the pressure reducing valve facilities.
- Refer to standard dwg. no. W-1562 for electrical equipment details.
- All std. wt. piping and fitting shall be epoxy lined with 10 mils min. (2-coats, 5 mils ea.) of keysite 750 or approved equal and field wrapped or field painted per District specification.
- All CML piping shall be asphalt wrapped (AW) or primed and field painted per District specification, all buried piping shall be cement mortar coated (CMC) or asphalt wrapped (AW) per District specification.
- One (1) pipe support shall be furnished and installed under all lines within PRV vault, per detail hereon.
- Pressure class shall be class 150.

APPROVED FOR CONSTRUCTION BY
WESTERN MUNICIPAL WATER DISTRICT

[Signature]
CHIEF ENGINEER, R.C.E. 17984
12-26-89
DATE

VOID AFTER 1 YEAR FROM THIS DATE

WATER CERTIFICATION

22275
I CERTIFY THAT THE DESIGN OF THE WATER SYSTEM IN TRACT NO. 15 IS IN ACCORDANCE WITH THE WATER SYSTEM EXPANSION PLANS OF THE WESTERN MUNICIPAL WATER DISTRICT AND THAT THE WATER SERVICE, STORAGE AND DISTRIBUTION SYSTEM WILL BE ADEQUATE TO PROVIDE WATER SERVICE TO SUCH TRACT. THIS CERTIFICATION DOES NOT CONSTITUTE A GUARANTEE THAT IT WILL SUPPLY WATER TO SUCH TRACT AT ANY SPECIFIC QUANTITIES, FLOWS OR PRESSURES FOR FIRE PROTECTION OR ANY OTHER PURPOSE.

[Signature]
CHIEF ENGINEER R.C.E. 17984
12-26-89
DATE

NOTE:

PUBLIC WORKS DEPARTMENT APPROVAL IS FOR LOCATION OF P.R.V. STATION AND DISCHARGE CONDUIT ONLY.

Underground Service Alert

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422-4133
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE

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PREPARED UNDER THE DIRECTION OF:

[Signature]
REGISTERED CIVIL ENGINEER NO. 122139
EXPIRATION DATE: DATE: 12/31/89

APPROVED BY:

6/24/82



J.F. Davidson Associates, Inc.

ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
3880 Lemon Street, Suite 300 P.O. Box 493 Riverside, CA 92502 (714) 686-0844 FAX 714-686-5954
11200 S. Mt. Vernon Ave., Suite "D" Colton, CA 92324 (714) 825-1082
73-080 El Paseo, Suite 106 Palm Desert, CA 92260 (919) 348-6681 FAX 919-340-0529

SCALE: AS SHOWN
DATE: SEPT. 1989

BENCH MARK: V.B. 10-64 ELEV. 1700.670 DATE: 1971
BRASS DISK FLUSH & MARKED V.B. 10-64 0.6 MI. E. ON VAN BUREN BLD. FROM C.L. INT. OF VAN BUREN & WOOD RD., 205 N. VAN BUREN @ THE N.E. SIDE OF GRANITE BOULDERS, ON TOP OF 3x15'x18' BOULDER

MARK REVISIONS
DESIGNED BY T.A.G. DRAWN BY A.S. CHECKED BY J.O.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *[Signature]* DATE: 1/29/90
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF P.W. ENGR.

TRACT 22275-2

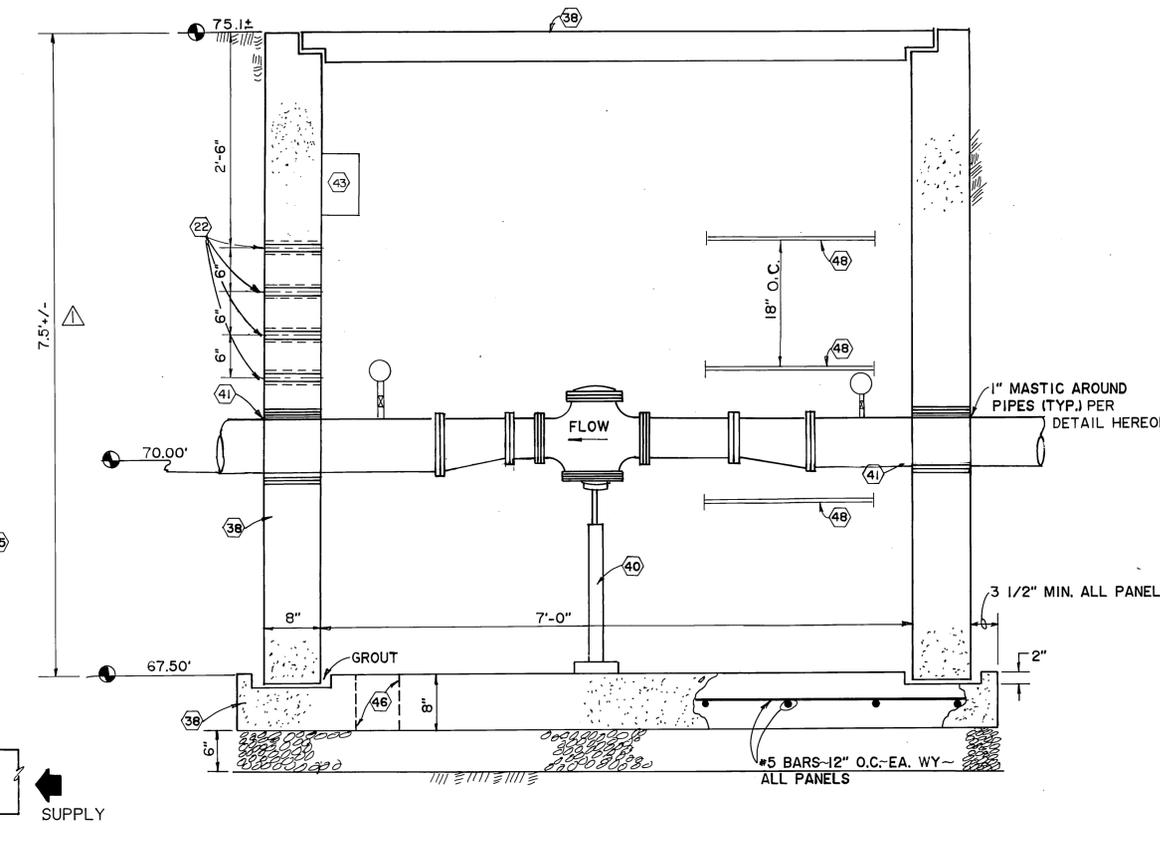
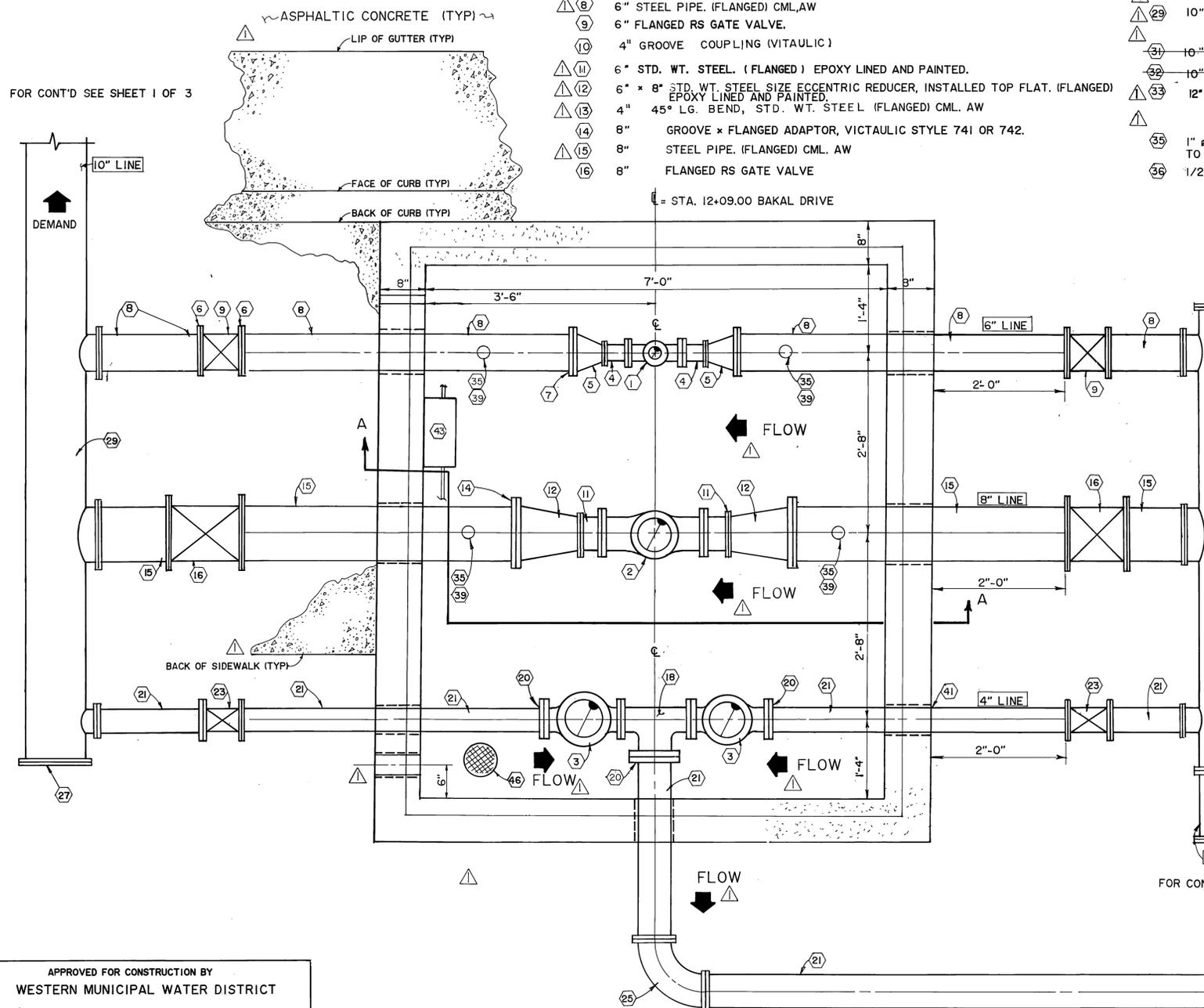
P.R.V. STATION
TITLE SHEET

HORIZ. SCALE: 1" = 100'
VERT. SCALE: 1" = 10'

PROJECT NO.
R-3009 A
SHEET 1 OF 3
FILE NO.: 891304

MECHANICAL MATERIALS LIST

- ① PRIMARY 3" PRESSURE REDUCING, AND CHECK VALVE FLANGED ENDS, STAINLESS STEEL TRIM, EPOXY LINED, W/POSITION INDICATOR; CLA-VAL MODEL 90G-01 ABKC-X101 OR OTHER MODEL AS INDICATED BY THE DISTRICT.
- ② SECONDARY 6" PRESSURE REDUCING, PRESSURE SUSTAINING, CHECK VALVE, FLANGED ENDS, STAINLESS STEEL TRIM, EPOXY LINING, POSITION INDICATOR, CLA-VAL MODEL 92G-02 BKC-X101 OR OTHER MODEL AS INDICATED BY THE DISTRICT.
- ③ 4" PRESSURE RELIEF AND CHECK VALVE, FLANGED ENDS, STAINLESS STEEL TRIM, EPOXY LINING, DELRIN SLEEVE, CLA-VAL MODEL 90G-01AS.
- ④ 3" STD. WT. STEEL. (FLANGED) EPOXY LINED AND PAINTED.
- ⑤ 3" x 6" ECCENTRIC REDUCER, STD. WT. INSTALLED TOP FLAT. (FLANGED) EPOXY LINED AND PAINTED.
- ⑦ 6" GROOVE x FLANGED ADAPTOR, VICTAULIC STYLE 741.
- ⑧ 6" STEEL PIPE. (FLANGED) CML, AW
- ⑨ 6" FLANGED RS GATE VALVE.
- ⑩ 4" GROOVE COUPLING (VITAULIC)
- ⑪ 6" STD. WT. STEEL. (FLANGED) EPOXY LINED AND PAINTED.
- ⑫ 6" x 8" STD. WT. STEEL SIZE ECCENTRIC REDUCER, INSTALLED TOP FLAT. (FLANGED) EPOXY LINED AND PAINTED.
- ⑬ 4" 45° LG. BEND, STD. WT. STEEL (FLANGED) CML. AW
- ⑭ 8" GROOVE x FLANGED ADAPTOR, VICTAULIC STYLE 741 OR 742.
- ⑮ 8" STEEL PIPE. (FLANGED) CML. AW
- ⑯ 8" FLANGED RS GATE VALVE
- ⑰ 4" TEE W/6" LONG, GROOVED END PIPE WELDED (WITH 1/8" WEEP HOLE AT BOTTOM)
- ⑱ 12" x 12" TEE STEEL (FLANGED) CML. AW
- ⑳ 4" GROOVE x FLANGE ADAPTOR. (VITAULIC)
- ㉑ 4" STEEL PIPE (FLANGED) CML, AW
- ㉒ 2" P.V.C. WALL PENETRATION CAST IN PLACE WITH PLUG
- ㉓ 4" RS GATE VALVE.
- ㉔ 4" 90° LR BEND, STD. WT. STEEL (FLANGED)
- ㉕ 4" 180° LR BEND, STD. WT. STEEL.
- ㉖ 10" BLIND FLANGE
- ㉗ 10" STEEL PIPE. (FLANGED)
- ㉘ 10" SIZE SLIP-ON FLANGE
- ㉙ 10" SIZE FLANGED SIDE-OUTLET W/WRAPPER REINF. PER AWWA M-11, CML/CMC.
- ㉚ 12" BLIND FLANGE
- ㉛ 1" 3000lb. COUPLING W/1" CORP. STOP AND BRONZE REDUCER BUSHING TO 1/2" BRASS COMPRESSION COUPLING.
- ㉜ 1/2" COPPER TUBING, PRESSURE SENSING LINE TO CHART RECORDER
- ㉝ UNDER SIDEWALK DRAIN, PER CITY OF RIV. STD. DWG. 411 SIZED TO ACCEPT TOTAL POTENTIAL DISCHARGE FLOW SHOWN HEREON.
- ㉞ PRECAST CONCRETE VAULT WITH BOTTOM SECTION, FULL OPEN TORSION HINGED, STEEL PARKWAY LID, (TRAFFIC LID MAYBE ADDED AT THE OPTION OF THE DISTRICT.)
- ㉟ 3/4" 3000lb. COUPLING WITH 3/4" CORP. STOP (JONES J-50), BRONZE REDUCER BUSHING AND 4" FACE LIQUID FILLED PRESSURE GAUGE, WIKA 213.40 L.M, 0-200 PSI DOWN STREAM AND 0-300 PSI UPSTREAM.
- ㊱ CONSTRUCT AND INSTALL PIPE SUPPORTS PER DETAIL HEREON.
- ㊲ CONSTRUCT WALL PENETRATIONS PER DETAIL HEREON.
- ㊳ 2 PEN CHART RECORDER PLACE PER INSPECTOR WITH COPPER TUBING COMPLETE, IN PLACE, AND OPERATIONAL.
- ㊴ 12" STEEL PIPE. (FLANGED) CML, AW
- ㊵ 4" SCH. 80 P.V.C. THREADED COUPLING (FOR BREAKAWAY)
- ㊶ DISCHARGE UNIT PER DETAIL HEREON.
- ㊷ CONSTRUCT MANHOLE STEPS PER WMWD STANDARD.



APPROVED FOR CONSTRUCTION BY
WESTERN MUNICIPAL WATER DISTRICT

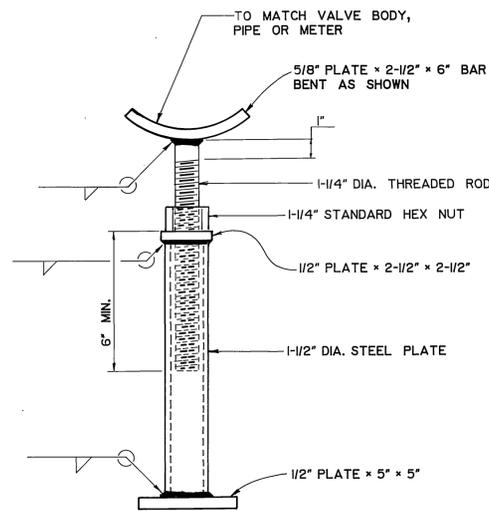
 CHIEF ENGINEER, R.C.E. 17984
 DATE: 12-26-89
 VOID AFTER 1 YEAR FROM THIS DATE

FOR CONT'D
 SEE SHEET 3 OF 3

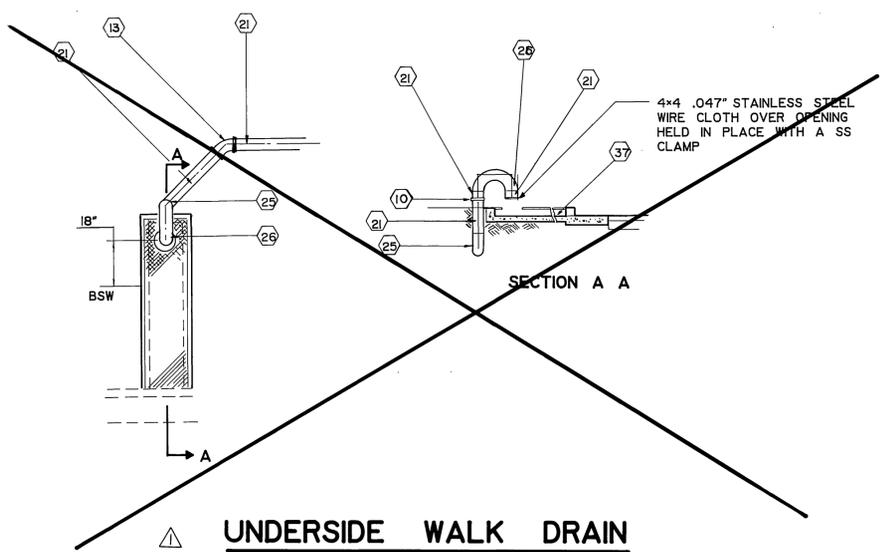
SECTION A-A

NOTE:
 PUBLIC WORKS DEPARTMENT APPROVAL IS FOR LOCATION OF P.R.V. STATION AND DISCHARGE CONDUIT ONLY.

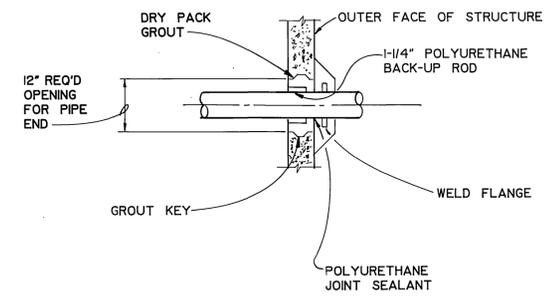
<p>Underground Service Alert</p> <p>Call: TOLL FREE 1-800-422-4133</p> <p>TWO WORKING DAYS BEFORE YOU DIG</p>	<p>PRIVATE ENGINEERING NOTE</p> <p>CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</p> <p>DATE: 6/30/97</p>	<p>PREPARED UNDER THE DIRECTION OF: REGISTERED CIVIL ENGINEER NO. 178750 EXPIRATION DATE: DATE: 12/7/89</p> <p>APPROVED BY: </p>	<p>J.F. Davidson Associates, Inc. ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE</p> <p>3880 Lemon Street, Suite 300 P.O. Box 483 Riverside, CA 92502 (714) 825-1082 FAX 714-825-9554</p> <p>11200 S. Mt. Vernon Ave., Suite "D" Calton, CA 92234 (619) 346-6691 FAX 619-340-0529</p> <p>73-080 El Paseo, Suite 106 Palm Desert, CA 92250 (619) 346-6691 FAX 619-340-0529</p> <p>SCALE: 1" = 1' BENCH MARK: DATE: SEPT. 1989 SEE SHEET No. 1</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>MARK</th> <th>REVISIONS</th> <th>APPR.</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>REVISED MATERIALS LIST, ADDED FLOW DIRECTION, RELOCATED CABLE PENETRATION, ADDED VAULT DEPTH DIM., ADDED CURB, GUTTER AND SIDEWALK, ADDED CITY NOTE</td> <td></td> <td>12/1/89</td> </tr> </table> <p>DESIGNED BY: T.A.G. DRAWN BY: G.E.L. CHECKED BY: J.A.O.</p>	MARK	REVISIONS	APPR.	DATE	1	REVISED MATERIALS LIST, ADDED FLOW DIRECTION, RELOCATED CABLE PENETRATION, ADDED VAULT DEPTH DIM., ADDED CURB, GUTTER AND SIDEWALK, ADDED CITY NOTE		12/1/89	<p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p> <p>APPROVED BY: PRINCIPAL ENGINEER PARK DEPARTMENT TRAFFIC DIVISION CHIEF P.W. ENGR.</p> <p>APPROVED BY: DIRECTOR OF PUBLIC WORKS</p> <p>DATE: 1/29/90</p>	<p>TRACT 22275-2 P.R.V. STATION LAYOUT</p> <p>PROJECT NO. R-3009 A SHEET 2 OF 3 FILE NO.: 8911304</p> <p>HORIZ. SCALE: 1" VERT. SCALE: 1"</p>
MARK	REVISIONS	APPR.	DATE											
1	REVISED MATERIALS LIST, ADDED FLOW DIRECTION, RELOCATED CABLE PENETRATION, ADDED VAULT DEPTH DIM., ADDED CURB, GUTTER AND SIDEWALK, ADDED CITY NOTE		12/1/89											



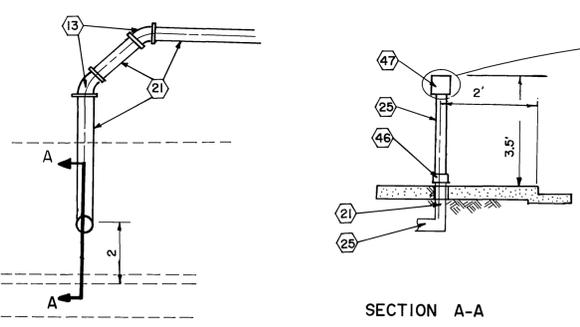
ADJUSTABLE STEEL PIPE VALVE SUPPORT
N. T. S.



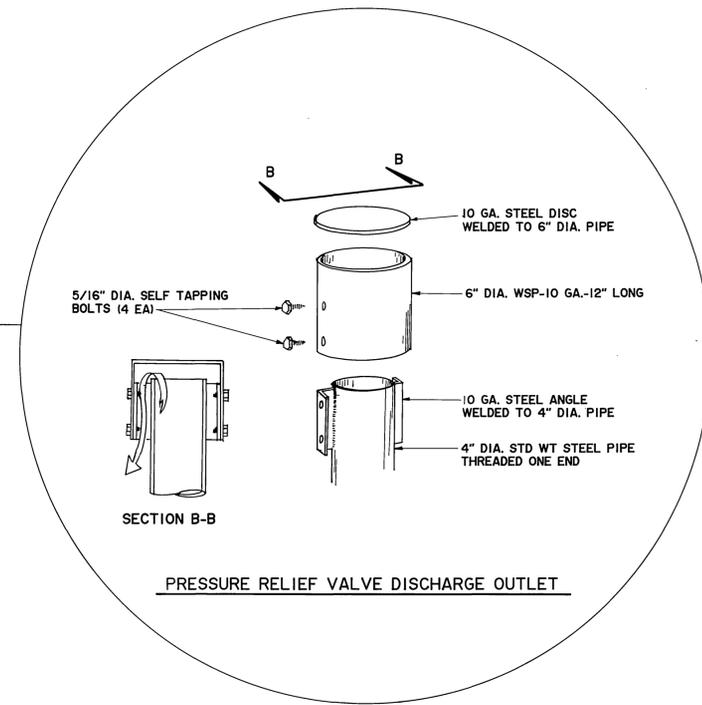
UNDERSIDE WALK DRAIN
N. T. S.



TYPICAL WALL PENETRATION
N. T. S.



SURGE DISCHARGE
N. T. S.



PRESSURE RELIEF VALVE DISCHARGE OUTLET

APPROVED FOR CONSTRUCTION BY:
WESTERN MUNICIPAL WATER DISTRICT
[Signature]
CHIEF ENGINEER, R.C.E. 17984
DATE: 12.20.89
VOID AFTER 1 YEAR FROM THIS DATE

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PREPARED UNDER THE DIRECTION OF:
[Signature]
REGISTERED CIVIL ENGINEER NO. 17530
EXPIRATION DATE: DATE: 12/4/89

APPROVED BY:
SCALE: AS SHOWN
DATE: SEPT. 1989

J.F. Davidson Associates, Inc.
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
3880 Lemon Street, Suite 300 P.O. Box 463 Riverside, CA 92502 (714) 686-0844 FAX 714-686-9954
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73-080 El Paseo, Suite 106 Palm Desert, CA 92260 (619) 345-9651 FAX 619-340-0529

MARK	REVISIONS	APPR.	DATE
	DELETED UNDERSIDE WALK DRAIN, ADDED CITY NOTE, ADDED SURGE DISCHARGE DETAIL		
DESIGNED BY	DRAWN BY	CHECKED BY	
T.A.G.	C.M.F.	J.A.O.	

CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS			
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	<i>[Signature]</i>	1/21/90	<i>[Signature]</i>
PARK DEPARTMENT			DIRECTOR OF PUBLIC WORKS
TRAFFIC DIVISION			
CHIEF P.W. ENGR.			DATE: 1/29/90

TRACT 22275-2
P.R.V. STATION DETAILS
HORIZ. SCALE: 1" = 10'
VERT. SCALE: 1" = 10'

PROJECT NO.
R-3009 A
SHEET 3 OF 3
FILE NO.: 8911304