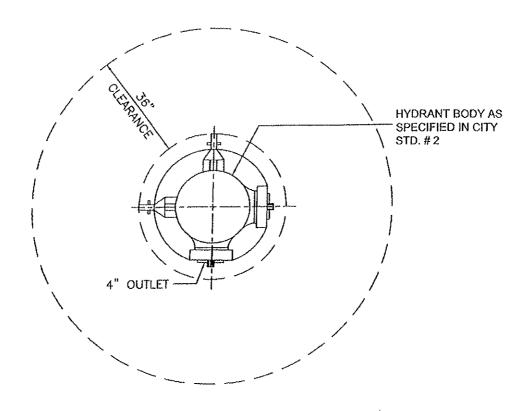


Hallouri paritabali paritaban keripan dari garapatah pertah keripi keripan diliburi pinggan pertah p

FIRE HYDRANT CLEARANCE REQUIREMENT DETAIL



<u>PLAN VIEW</u> (TYPICAL)

NOTES

DRAWING NOT TO SCALE,

NO WALLS, FENCES, GUARD POSTS, LANDSCAPING, MATERIAL, ETC., SHALL BE PLACED WITHIN THREE FEET OF A FIRE HYDRANT.

3-05-12 CITY OF POMONA
PUBLIC WORKS DEPARTMENT

AUPDATED CLEARANCE DETAILS

11/08 PW
FIRE HYDRANT CLEARANCE
REQUIREMENT DETAIL

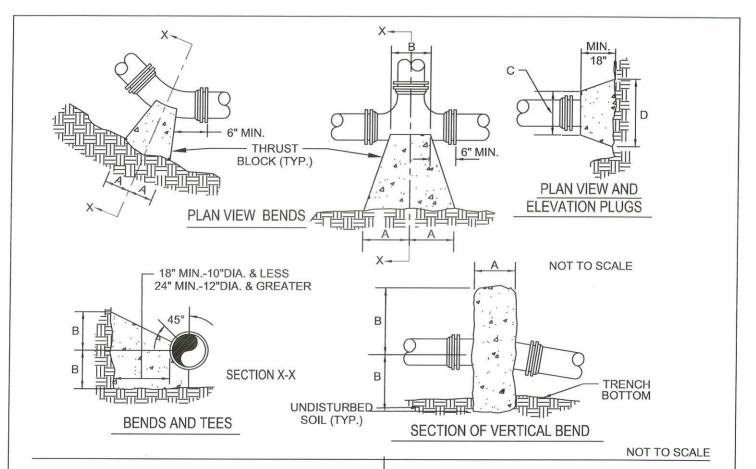
DRAWN BY: NH
CHECKED BY: RG/UT

STANDARD

2A

REVISIONS

DATE INITIAL APPROVED BY: PW DIRECTOR



THRUST BLOCK CONSTRUCTION NOTES:

- 1. ALL THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
- 2. FOR VERT. BEND DOWN IN EXCESS OF $11\%^\circ$ BEND, ANCHORAGE SHALL BE NO. 6 REBAR OVER FITTING.
- 3. FOR VERTICAL BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZONTAL BEN.
- 4. GLANDS AND BOLTS SHALL BE PROTECTED FROM CONCRETE BY PLASTIC 6 MM FILM WHEN POURING THRUST BLOCKS.
- 5. ALL THRUST BLOCKS AND SUPPORT CONCRETE SHALL BE 2,000 PSI READY MIX 28-DAY CONCRETE.

THRUST BLOCK DIMENSIONS

PIPE	90° E	END	45° E	BEND	22 1/2	22 1/2° BEND		BEND 11 1/4° BEND) TEE		PLUG	
SIZE	Α	В	Α	В	Α	В	Α	В	Α	В	С	D	
4"	8"	12"	8"	8"	6"	6"	6"	6"	11"	9"	6"	10"	
6"	18"	12"	8"	10"	8"	8"	8"	8"	11"	10"	12"	18"	
8"	18"	13"	10"	10"	8"	8"	8"	8"	11"	12"	12"	24"	
10"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	16"	30"	
12"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	16"	30"	
16"	26"	20"	16"	18"	11"	13"	11"	13"	18"	20"	20"	36"	

RENE GUERRERO, CITY ENGINEER RCE NO. 66263	2/19/1 _{DA}	S ATE	CITY OF POMONA PUBLIC WORKS DEPARTMENT				
			THRUS	ST BLOCKS			
			DETAILS	S & NOTES			
⚠ UPDATED DETAIL	2/14	GM	DRAWN BY: NH CHECKED BY: GM/PS/DA	STANDARD	7		
REVISIONS	DATE	INITIAL	ASSAULT SERVICES SERVICES SERVICES SERVICES SERVICES	STANDARD	3		

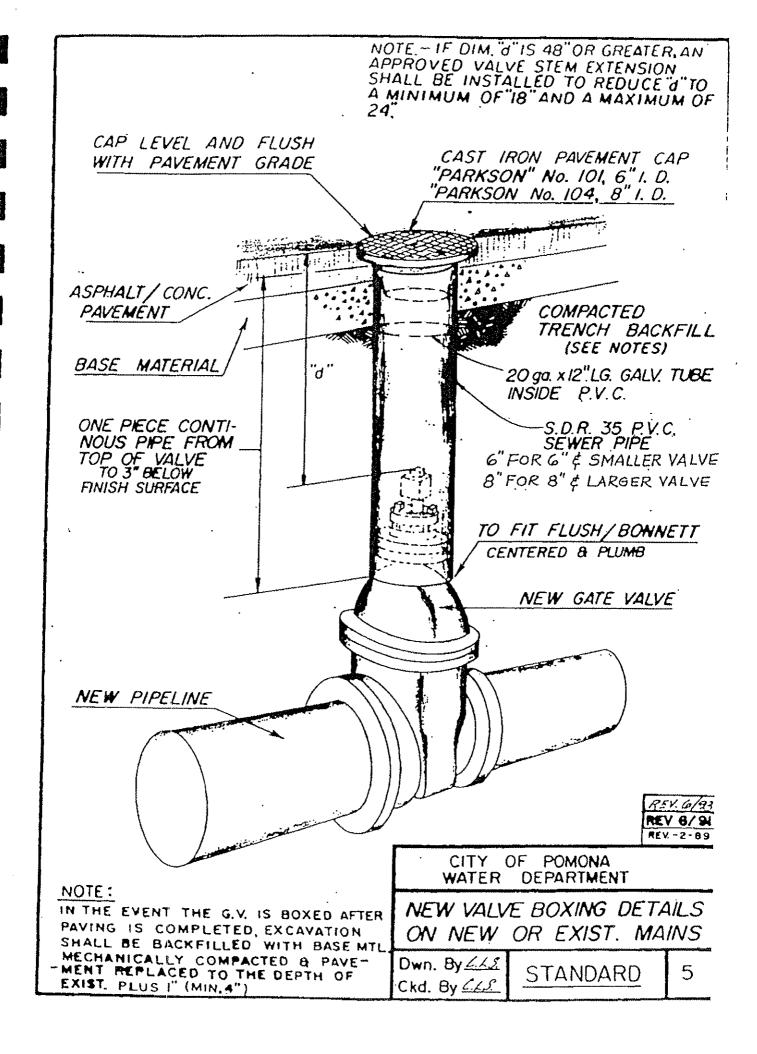
THRUST FORCE (LBS) WITH 150 PSI WATER PRESSURE

PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE OR DEAD END
4"	4,300	2,300	1,200	1,000	3,000
6"	8,700	4,700	2,400	1,800	6,100
8"	14,800	8,000	4,100	3,000	10,500
10"	24,000	12,900	6,600	4.200	17,000
12"	33,800	18,300	9,300	5,800	24,000

BEARING LOADS FOR THRUST BLOCKS

SOIL TYPE	RECOMMENDED BEARING LOADS
	FOR THRUST BLOCKS (LBS / SF)
PEAT	0
CLAY	500
SAND	1,000
SAND & GRAVEL	1,500
SAND & GRAVEL CEMENTED WITH CLAY	2,000
SHALE	5,000

RENE GUERRERO, CITY ENGINEER RCE NO. 66263	2/19/15 DATE	CITY OF POMONA PUBLIC WORKS DEPARTMENT				
		THRUS	ST BLOCKS			
		THRUST FORCE	& BEARING LOA	ADS		
⚠ UPDATED DETAIL	2/14 GM	DRAWN BY: NH CHECKED BY: GM/PS/DA	STANDARD	4		
REVISIONS	DATE INITIAL	APPROVED BY: DP	017111071110			



NOTE-IF DIM "d" IS 48" OR GREATER AN APPROVED
VALVE STEM EXTENSION SHALL BE INSTALLED
TO REDUCE "d" TO A MINIMUM OF 18" AND A
MAXIMUM OF 24."

CAP LEVEL AND FLUSH
WITH PAVEMENT GRADE
"PARKSON" No. 101.6" 1.0.

*REPLACE A. C. WITH 4"
MIN. OR EXIST. + 1"
WHICHEVER IS GREATER

**REPLACE A. C. WITH 4"
WHICHEVER IS GREATER

**CAST IRON PAVEMENT CAP
"PARKSON" No. 101, 6" I. D.
"PARKSON" No. 104, 8" I. D.

**PARKSON" No. 104, 8" I. D.

**A444 GALV. TUBE
**A444 INSIDE P.V.C.

ASPHALT / CONC.
PAVEMENT /

EXIST. BASE MATERIAL

RAISING P.V.C. GATE
BOXING -CUT 6"-12" BELOW GRADE
ADD P.V.C. COUPLING & -SHORT PIECE OF S.D.R.
35 P.V.C. TO WITHIN 2"-3"
OF FINISH GRADE, INSERT NEW 20 ga. GALV.
SLIP TOP IN PVMT. AREA

WITH AGGRE-GATE BASE MATERIAL P.V.C. COUPLING

S.D.R. 35 P.V.C. SEWER PIPE
8" FOR VALVES 8" & LARGER
6" FOR VALVES 6" & SMALLER
IN ACCORDANCE WITH
SECTION 51 OF THE
SPECIFICATIONS.

TO FIT FLUSH/BONNETT

EXIST. GATE VALVE

EXIST S.D.R. 35 P.V.C. SEWER PIPE

EXIST. PIPELINE

REV-2-89

* CONCRETE PAVEMENT

REPLACE WITH P. C. C. TO EXIST. + |"
IF COVERED WITH A. C. CAP

REPLACE WITH A. C. TO EXIST. + |"

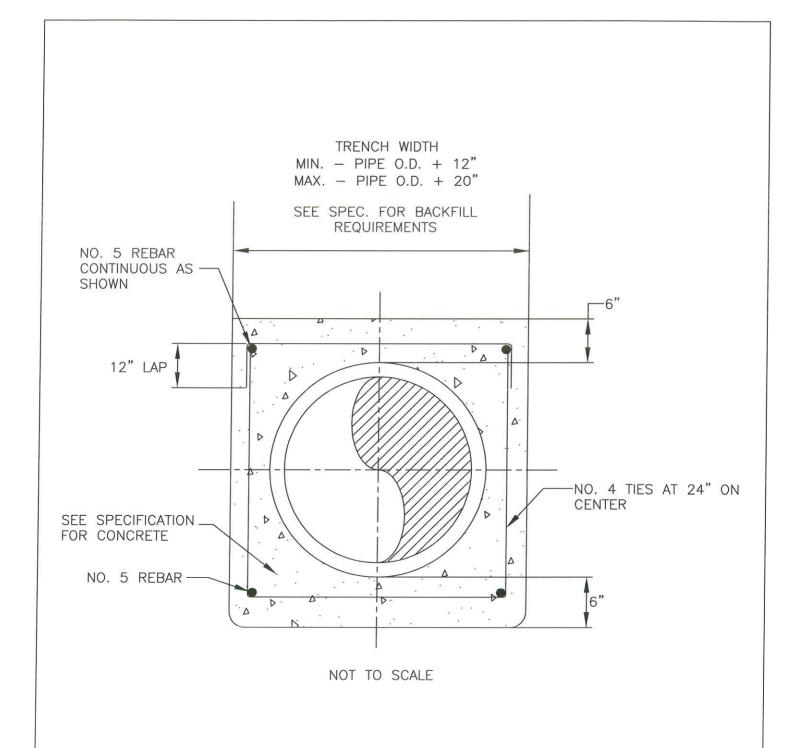
CITY OF POMONA WATER DEPARTMENT

ADJUSTING P.V.C.-GV. BOX ON EXISTING MAINS

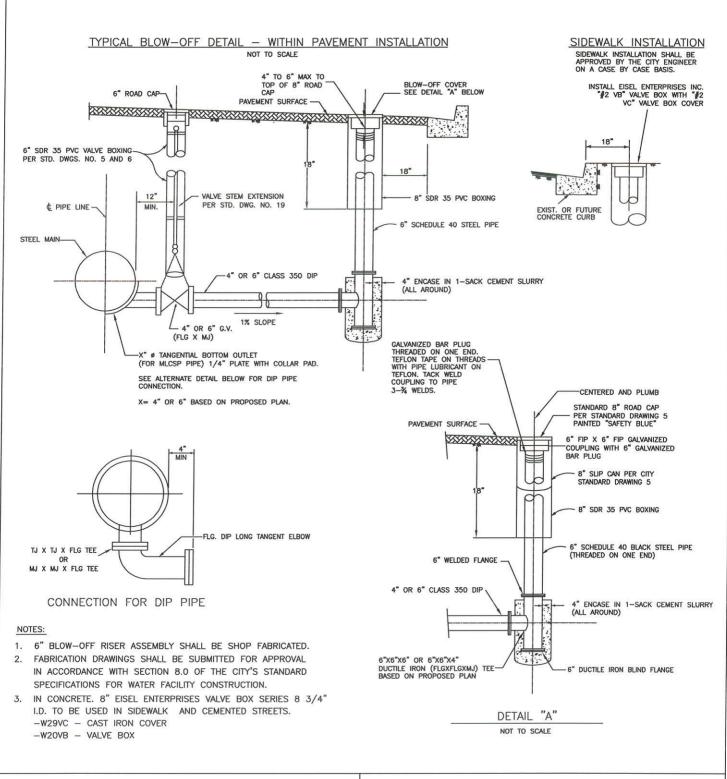
Dwn. By <u>CLS</u> Ckd. By <u>CLS</u>

STANDARD

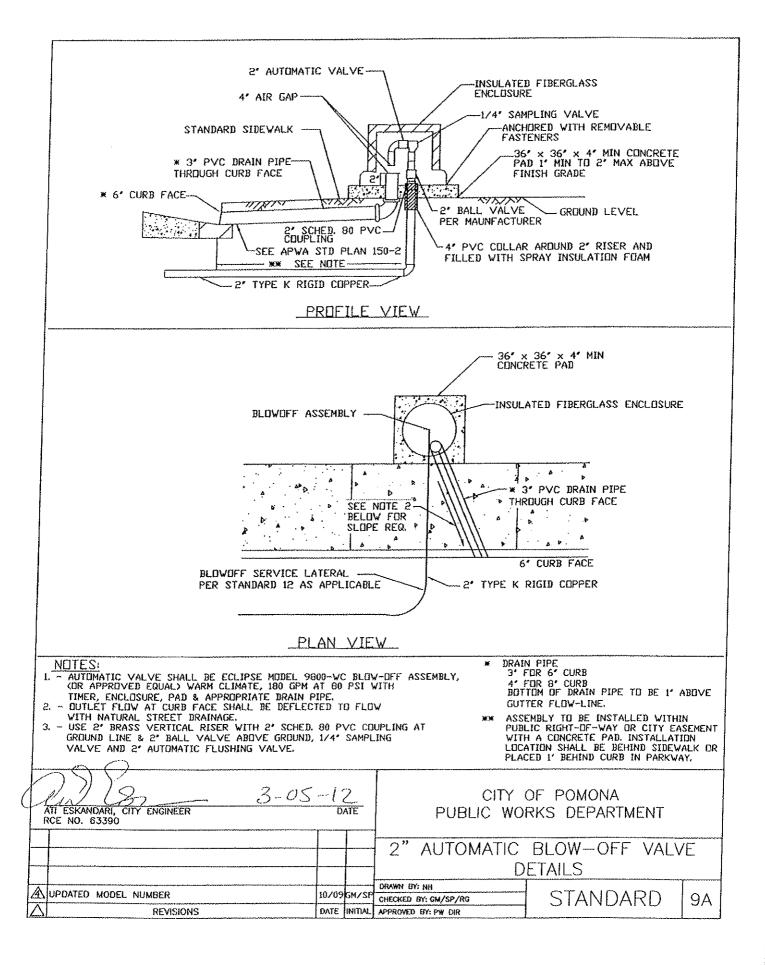
6



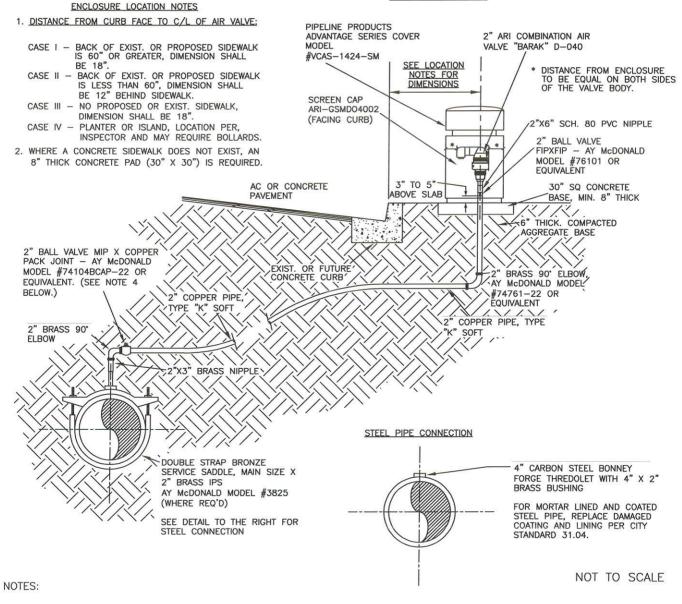
	Pene J. RENE GUERRERO, CITY ENGINEER RCE NO. 66263	CITY OF POMONA PUBLIC WORKS DEPARTMENT				
				CONCRETE EN	ICASEMENT DETAI	IL
_				DRAWN BY: NH		
<u> </u>	UPDATED DETAIL	2/14	GM	CHECKED BY: GM/DA/PS	STANDARD I	7
\triangle	REVISIONS	DATE	INITIAL	APPROVED BY: DP	01/11/12/11/12	,



RENE GUERRERO, CITY ENGINEER RCE NO. 66263	CITY OF POMONA PUBLIC WORKS DEPARTMENT				
			4" OR 6" B	LOW-OFF DETAIL	
⚠ UPDATED DETAIL REVISIONS	1/14 DATE	GM INITIAL	DRAWN BY: NH CHECKED BY: GM/AC/DA APPROVED BY: DP	STANDARD	9

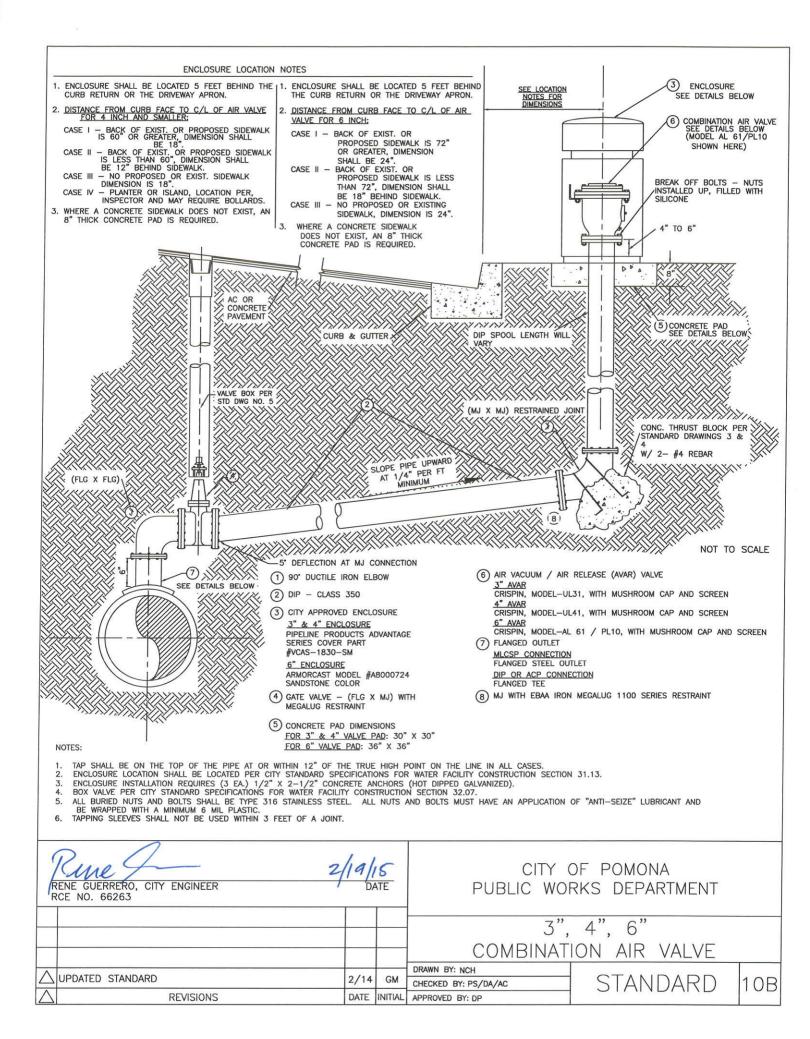


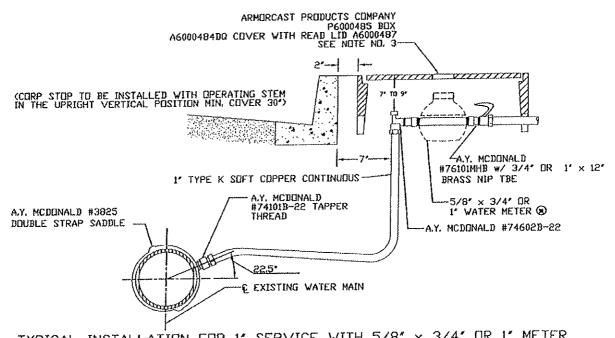
PROFILE VIEW



- MAINTAIN CONTINUOUS POSITIVE SLOPE FROM MAIN TO AIR RELEASE/AIR VACUUM VALVE.
- SLIP OR COPPER FITTINGS WITH SILVER SOLDER BRAZING (STA-SILV. 15) MAY BE USED IN LIEU OF COPPER PACK JOINTS.
- ENCLOSURE INSTALLATION REQUIRES (3 EA.) 1/2" X 2-1/2" CONCRETE ANCHORS (HOT DIPPED GALVANIZED). BOX VALVE PER CITY WATER STANDARD SPECIFICATIONS SECTION 32.07.
- TAPPING SLEEVES SHALL NOT BE USED WITHIN 3 FT. OF A JOINT.

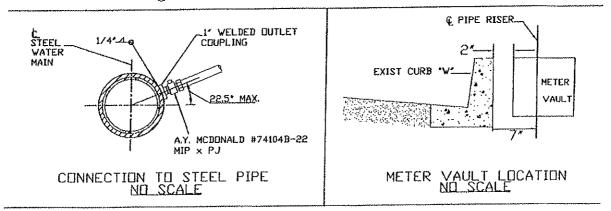
	RENE GUERRERO, CITY ENGINEER RCE NO. 66263	2/19/	15 ATE	CITY OF POMONA PUBLIC WORKS DEPARTMENT			
\triangle	UPDATED PER CURRENT INSTALLATION PROCEDURE	1/15	GM				
				2" COMBINA	ATION AIR VALVE		
				DRAWN BY: NH/LO CHECKED BY: GM/DA	STANDARD	1 Ο Δ	
Δ	REVISIONS	DATE	INITIAL		STANDARD		





TYPICAL INSTALLATION FOR 1" SERVICE WITH 5/8" \times 3/4" OR 1" METER NO SCALE

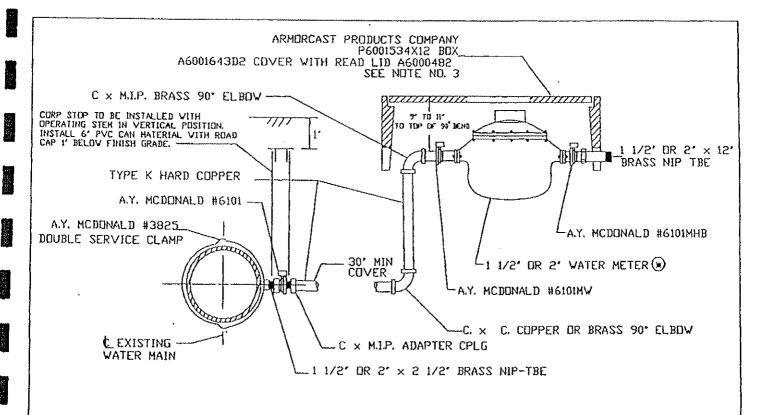
→ WATER METER FURNISHED BY CITY



NOTES:

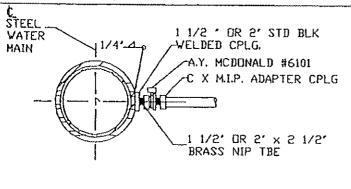
- 1. CONTRACTOR SHALL CHISEL A 'W' ON CURB FACE TO INDICATE SERVICE SADDLE CORPORATION STOP LOCATION.
- 2. CONTRACTOR SHALL FLUSH SERVICE LINE, IN THE PRESENCE OF CITY INSPECTOR, PRIOR TO ACCEPTANCE.
- 3. CONTRACTOR SHALL FURNISH A TRAFFIC-RATED METER BOX, COVERS & LIDS FOR SERVICES INSTALLED BEHIND 'ROLL' TYPE CURB.
- 4. ALL SPECIFIED MANUFACTURERS AND MODELS ARE TYPICAL, BUT MAY HAVE AN APPROVED EQUAL PRODUCT.
- 5. ALL FITTINGS SHALL BE NO GREATER THAN 0.25% LEAD CONTENT

ļ	mary promised		
	ATT ESKANDARI, CITY ENGINEER RCE NO. 63390	3-05-12 DATE	CITY OF POMONA PUBLIC WORKS DEPARTMENT
	UPDATE PER AB 1953	1/10 PV	INSTALLATION OF 1" SERVICE
-			WITH 5/8"X3/4" OR 1" METERS
-			DRAWN BY: NH
	Ì		CHECKED BY: GM/SP/RG STANDARD 11
L	REVISIONS	DATE INITI	AL APPROVED BY: PW DIRECTOR

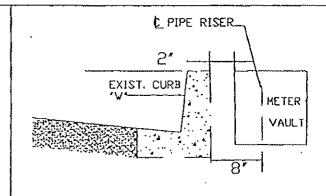


TYPICAL INSTALLATION FOR 1 1/2" & 2" SERVICE & METER NO SCALE

* WATER METER FURNISHED BY CITY



CONNECTION TO STEEL PIPE NO SCALE



METER VAULT LOCATION
NO SCALE

NOTES

- 1. CONTRACTOR SHALL CHISEL A 'V' DN CURB FACE TO INDICATE SERVICE LOCATION.
- 2. CONTRACTOR SHALL FLUSH SERVICE LINE, IN THE PRESENCE OF CITY INSPECTOR, PRIOR TO ACCEPTANCE.
- 3. CONTRACTOR SHALL FURNISH TRAFFIC-RATED METER BOX COVERS & LIDS WHERE REQUIRED DUE TO LOCATION.

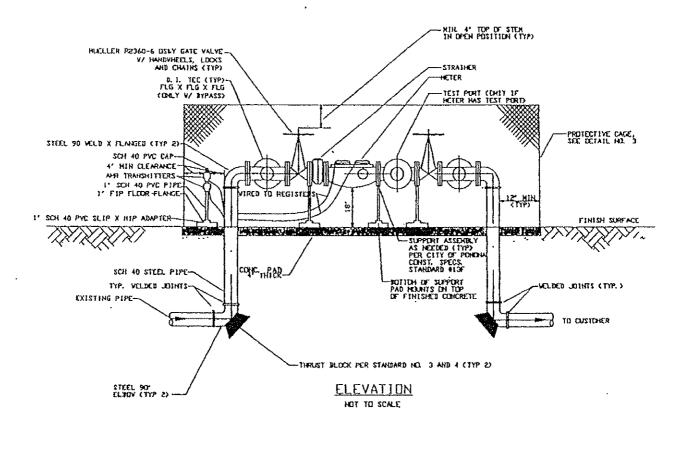
CITY OF POMONA
PUBLIC VORKS DEPARTMENT
INSTALLATION OF 1 1/2' & 2'
SERVICES & METERS

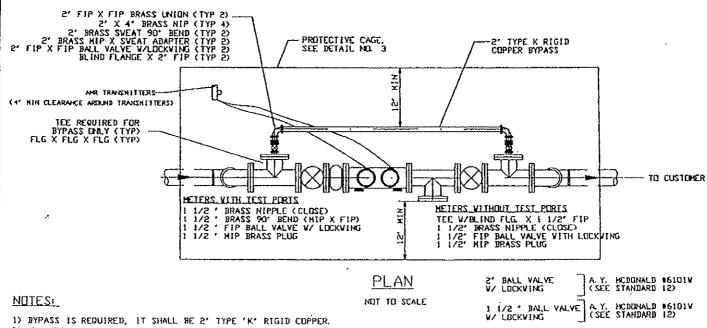
CHECKED BY: EV EV
CHECKED BY: RG [R. G.

STANDARD

12

RET. 6/00 251. 1/06 151. 1/06





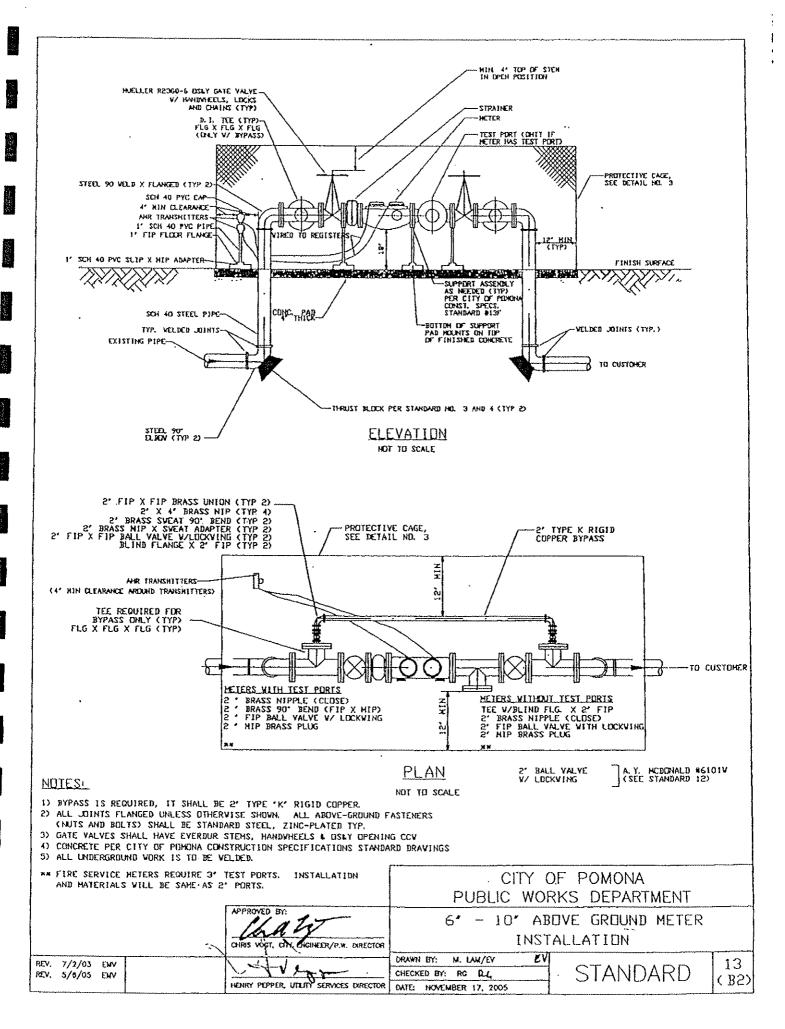
A.Y. HCDUNALD #6101V (SEE STANDARD 12) W/ LBCKVING

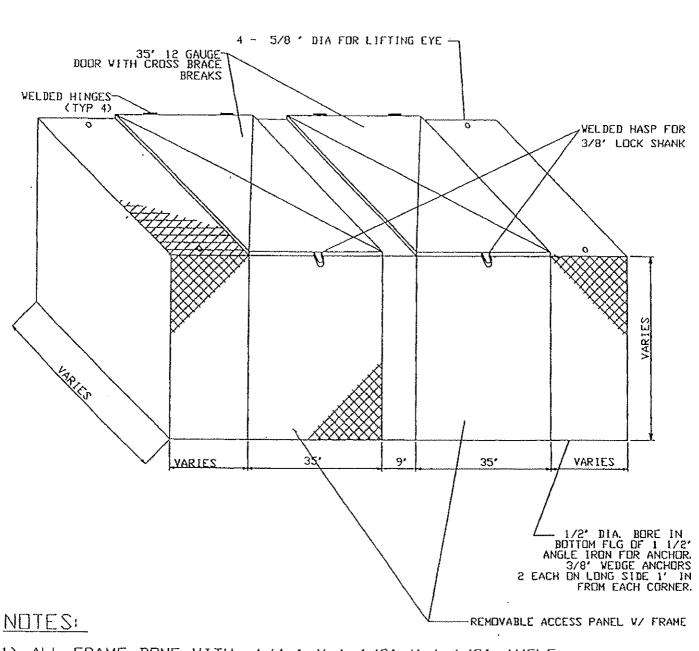
- 2) ALL JOINTS FLANGED UNLESS DIHERVISE SHOWN. ALL ABOVE-GROUND FASTENERS (NUTS AND BOLTS) SHALL BE STANDARD STEEL, ZINC-PLATED TYP.

 3) GATE VALVES SHALL HAVE EVERDUR STEMS, HANDWHEELS & DS&Y OPENING CCV
- 4) CONCRETE PER CITY OF PUHONA CONSTRUCTION SPECIFICATIONS STANDARD DRAVINGS 5) ALL UNDERGROUND WORK IS TO BE VELDED.

· CITY OF POMONA PUBLIC WORKS DEPARTMENT APPROVED BY: 3" - 4" ABOVE GROUND METER INSTALLATION NGINEER/P.W. DIRECTOR ٤٧ DRAWN BY: H. LAM/EV 13 STANDARD CHECKED BY: RC PLA HOURY PEPPER, UNLITY SERVICES DIRECTOR (SA) DATE: NOVEMBER 17, 2005

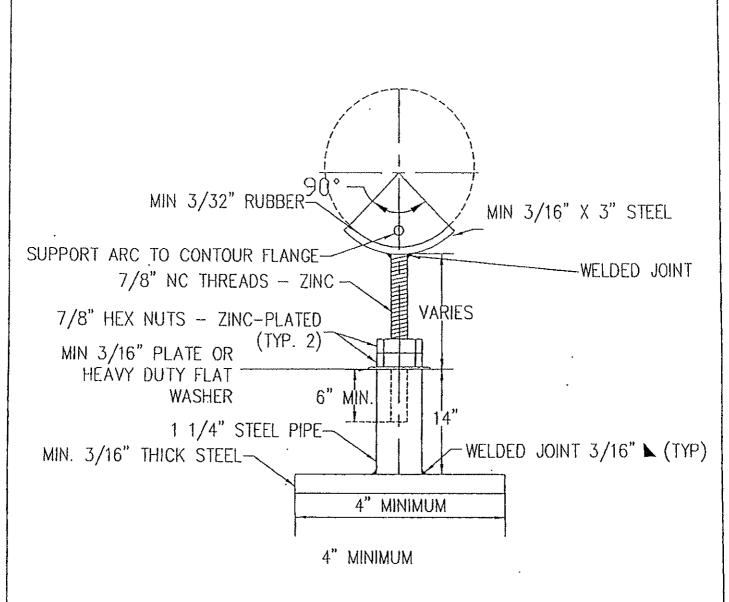
REV. 7/2/03 DAV REV. 5/6/05 DAV





- 1) ALL FRAME DONE WITH 1/4 ' X 1-1/2' X 1-1/2' ANGLE
- 2) SCREEN SIZE ND. 9 3/4 *

L/ SURLIN SIZE NU,	7 - 3/4			
	F		DF POMONA RKS DEPARTMENT	
-6	and by		ITY CAGE FOR ABOVER INSTALLATION	E
REV. 5/8/05 EMV HENRO	PEPPER, UTALITY SERVICES DIRECTION DATE: NOVEMBER		STANDARD	13 (C)
	•	****		

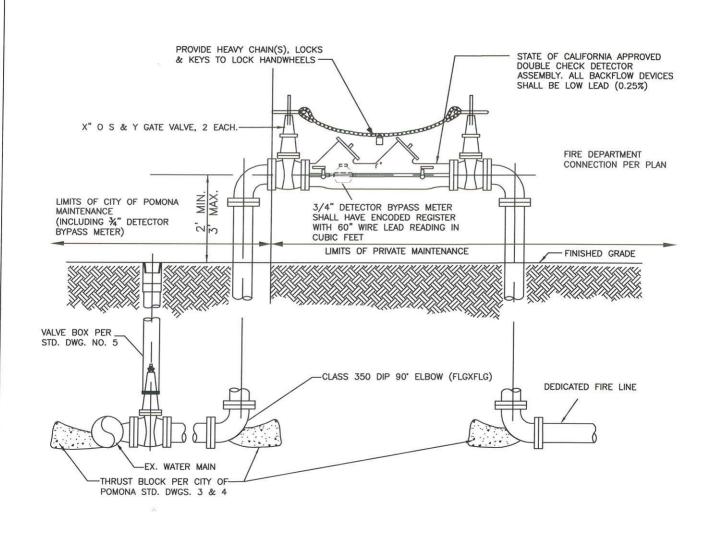


NOTE: PRIMER AND COLD GALVANIZED PAINT ON ALL BARE STEEL.

CITY OF POMONA
PUBLIC WORKS DEPARTMENT

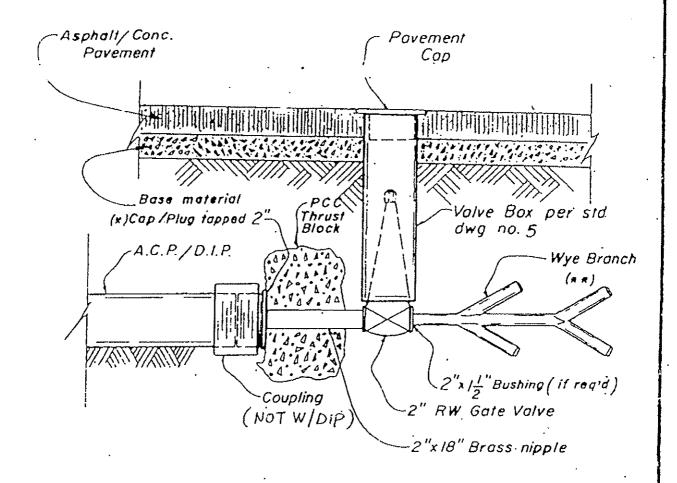
APPROVED BY:
CHRIS VOOT, CITY/ENCHEER/P.W. DIRECTOR

OFFICIAL CHRIS VOOT, CITY/ENCHEER/P.W. DIR



APPROVED X" DOUBLE CHECK DETECTOR ASSEMBLY (NOT TO SCALE)

RENE GUERRERO, CITY ENGINEER RCE NO. 66263		S ATE	(E)(3)(3) (3)	OF POMONA RKS DEPARTMENT	
			DOUBL	E CHECK	
			DETECTO	R ASSEMBLY	
△ UPDATED DETAIL	2/14	GM	DRAWN BY: NH CHECKED BY: AC/DA/PS	STANDARD	14
REVISIONS	DATE	INITIAL	APPROVED BY: DP	017111071110	1 1



NOTES:

 $\frac{1}{1-1} \text{ If D.I.P., main tap shall be } 2\frac{1}{2}" \frac{\pi}{2} 2\frac{1}{2}" \times 2" \text{ Insul. Bushing } (\pi)$

2- Wye branch shall be Mueller: H-15345 for 11/2" x 1" - two brench
H-15340 for 11/2" x 1" - three branch
H-15350 for 2" x 1" - four branch (* *)

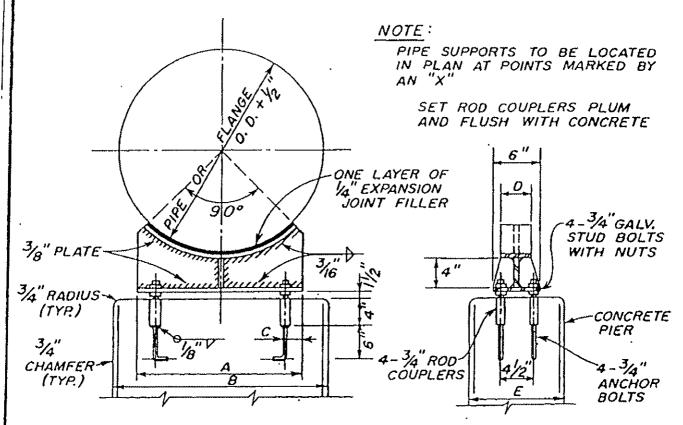
CITY OF POMONA
WATER DEPARTMENT

WYE BRANCH ASSEMBLY DETAIL

Drown By <u>J. C. M.</u> Check By <u>C. S.</u>

STANDARD

Sht. 15



PIPE SUPPORT DETAIL

-NO SCALE-

DIMENSIONS IN INCHES										
NOMINAL.		PPORT OR F	1	SUPPORTING PIPE FLANGE						
PIPE SIZE	C	D	E	A	8	A	В			
6	2	4	12	10	16	10	16			
8 & 10	2	4	12	10	20	14	20			
12 & 14.	2	4	12	12	22	16	22			
16 B 18	2	4	12	14	26	20	26			
20 8 22	3	5	12	16	28	22	28			
24	3	5	12	18	30	24	30			
26	4	5	12	20	32	26	32			
30	4	5	12	24	36	30	36			
34	4	5	15	26	40	34	40			
36	5	6	15	28	42	36	42			
42	5	6	18	32	46	40	46			
48	6	6	18	38	50	44	50			
54	6	6	18	42	56	50	56			
60	6	6	18	46	60	54	60			

NOTES

I. - GALVANIZE AFTER FABRICATION

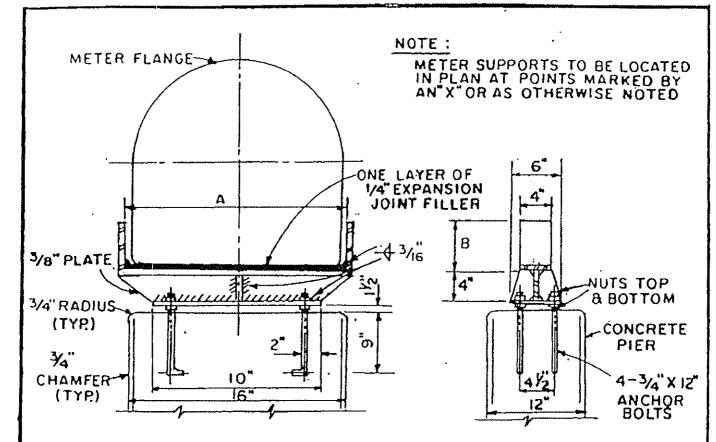
CITY OF POMONA WATER DEPARTMENT

PIPE SUPPORT DETAIL

DWN. BY Landaid CKO. BY L. SIMER

STANDARD

16



METER PIPE SUPPORT DETAIL

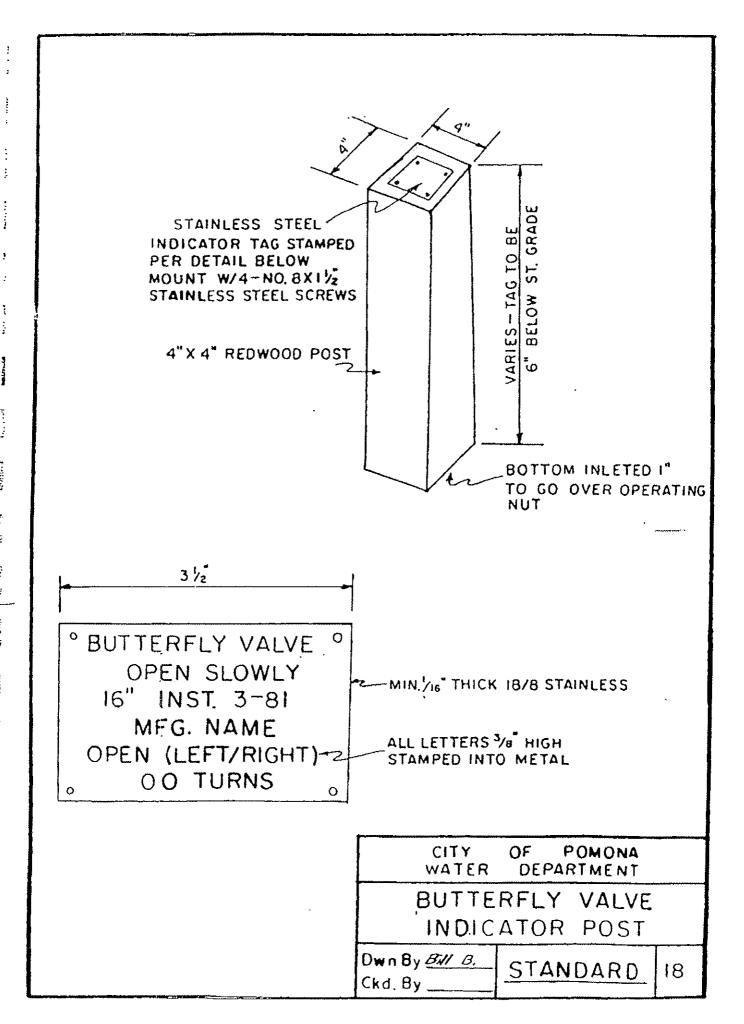
-NO SCALE-

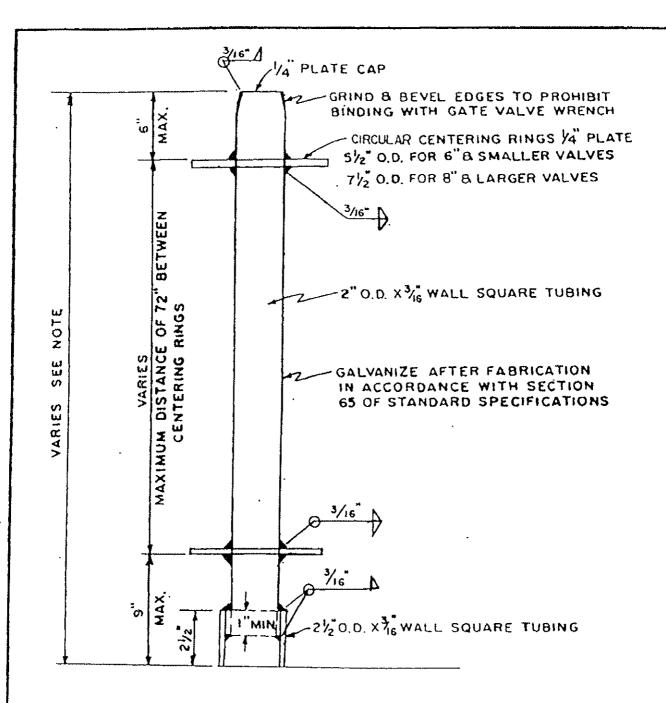
DIN	MENSION	S IN	INCHES			
METER SIZE	3	4	6	8	10	12
A-DIMENSION	81/4	93/4	113/4	141/4	1634	20
B-DIMENSION	3	4	4	5	5	5

NOTES:

- I. GALVANIZE AFTER FABRICATION
- 2.— CONTRACTOR MAY AT HIS OPTION FABRICATE SUPPORT FROM A 4" H-BEAM.

CITY OF POMONA WATER DEPARTMENT						
METER PIPE SUPPORT DETAIL						
OWN. BY BILL STANDARD CKD. BY L. SINCE	17					





NOTE:

LENGTH WILL BE DEPENDENT UPON DISTANCE FROM TOP OF VALVE TO FINISH GRADE. TOP OF EXTENSION SHALL BE NO LESS THAN 18" OR MORE THAN 24" FROM FINISH GRADE.
MINIMUM LENGTH OF EXTENSION 30."

CITY OF POMONA
WATER DEPARTMENT

VALVE STEM

EXTENSION DETAIL

DWN. BY BILL B. STANDARD

CKO. BY <u>2. SHUEL</u>

STANDARD

19

