



Republic of the Philippines  
**METRO KIDAPAWAN WATER DISTRICT**  
 Lanao, Kidapawan City  
 Tel nos. (064)577-1533, 577-1865, Fax # (064) 572-5555  
 E-mail Address: [metrokidapawan\\_wd@yahoo.com](mailto:metrokidapawan_wd@yahoo.com)  
 Website: [www.metrokidapawanwd.gov.ph](http://www.metrokidapawanwd.gov.ph)  
 "Committed to Service, Development and Self-Reliance"



**REQUEST FOR QUOTATION**

PR No. : 0923-017

DATE : \_\_\_\_\_

JO No. : \_\_\_\_\_

Name of Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Business Permit No: \_\_\_\_\_  
 TIN No.: \_\_\_\_\_

Please quote your best offer for the item/s described below, subject to the Terms and Conditions provided at the dorsal portion of this Request for Quotation. Submit your quotation duly signed by you or your duly authorized representative not later than \_\_\_\_\_, 2023.

JINKY P. MORENO  
 Procurement Assistant A

After having carefully read and accepted the Terms and Conditions below, I/we submit our quotation/s for the item/s as follows:

ITEM #	ITEM DESCRIPTION	Approved Budget of the Contract	OFFER						REMARKS
			PRICE				Compliance with technical specifications		
			QTY.	UNIT	UNIT PRICE	TOTAL	YES	NO	
	PhP: _____	<b>319,428.00</b>							
1	PIPES AND FITTINGS ((SEE ATTACHED TERMS OF REFERENCE))		1.00	LOT				<input type="checkbox"/>	<input type="checkbox"/>

**Please submit the following requirements:**

- Mayor's Permit
- Professional License/Curriculum (Consulting Services)
- Philgeps Registration Number
- PCAB License (Infra)
- Income Business Tax Return
- Omnibus Sworn Statements
- Manufacturer's PNS
- DTI Certificate

**OTHER TERMS AND CONDITIONS:**

- The mode of payment is within  Six (6) months upon issuance of IAR  Three (3) months upon issuance of IAR  Two (2) months upon issuance of IAR  One (1) month upon issuance of IAR.
- Bidders shall provide correct and accurate information required in this form.
- Bidders may quote for any at all times except for one (1) lot requisition.
- Price quotation/s must have:
  - validity - Thirty (30) Calendar days
  - inclusion of tax
  - Quotations exceeding the Approved Budget for the Contract shall be r
  - Award of contract shall be made to the lowest quotation ( for goods ar
  - Erasures or overwriting is not allowed unless signed by duly authorized representative/s.
- The item/s shall be delivered within Thirty (30) days / months from receipt of Notice to Proceed (NTP) with Purchase Order & Notice of Award (NOA) and Job Order Contract & Notice of Award (NOA).
- The awardee shall notify two (2) days before its delivery of goods and services.
- The MKWD shall have the right to inspect and/or to test the goods to confirm their conformity to the technical specifications.
- Liquidated damages equivalent to one tenth of one percent (0.001%) of the value of the goods not delivered within the prescribed delivery period shall be imposed per day of delay. The MKWD shall rescind the contract once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, without prejudice to other courses of action and remedies open to it.



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			PRICE			Compliance with technical specifications		REMARKS
			QTY.	UNIT	UNIT PRICE	TOTAL	YES	
PhP: <u>319,428.00</u>								
ITEM CODE	DESCRIPTION		UNIT	QTY	UNIT PRICE	AMOUNT		
08-283-002	ADAPTER, ADAPTER 100MM MJ/F()		pc	1.00				
08-785-037	VALVE, VALVE RELEASE AIR 50MM D-040 (COMBINATION AIR())		pc	1.00				
08-343-001	CLAMP, CLAMP 100MM X 19MM SADDLE()		pc	2.00				
08-343-025	CLAMP, CLAMP 100MM X 50MM SADDLE()		pc	1.00				
08-374-003	COUPLING, COUPLING 100MM SLEEVE TYPE PVC()		pc	11.00				
08-403-001	ELBOW, ELBOW 100MM X 22.5DEG MJ/MJ()		pc	2.00				
08-403-003	ELBOW, ELBOW 100MM X 45DEG MJ/MJ()		pc	6.00				
08-455-001	END, END CAP 100MM()		pc	2.00				
08-731-002	TEE, TEE 100MM X 100MM MJ/F()		pc	1.00				
08-111-018	VALVE, VALVE CHECK 100MM (CI)()		pc	1.00				
08-785-019	VALVE, VALVE GATE 100MM F/F()		pc	1.00				
08-785-046	VALVE, VALVE GATE 100MM MJ/MJ (MS-NRS)()		pc	4.00				
08-785-066	VALVE, VALVE PAD COVER 150MM()		pc	5.00				
08-836-001	WYE, WYE 100MM X 100MM MJ/MJ()		pcs	1.00				

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SIRRY P. MORENO

Procurement Assistant A

After having carefully read and accepted the Terms and Conditions below, I/we submit our quotation/s for the item/s as follows:

ITEM #	ITEM DESCRIPTION	Approved Budget of the Contract	OFFER				COMPLIANCE		REMARKS
			PRICE			with technical specifications			
PhP: _____		<b>319,428.00</b>	QTY.	UNIT	UNIT PRICE	TOTAL	YES	NO	

GRAND TOTAL: \_\_\_\_\_

Signature Over Printed Name: \_\_\_\_\_

Contact Number (Landline/Cellphone)/Email Address \_\_\_\_\_

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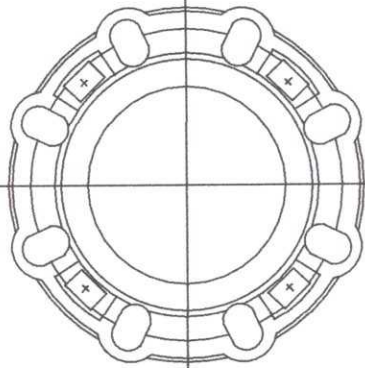


### TERMS OF REFERENCE

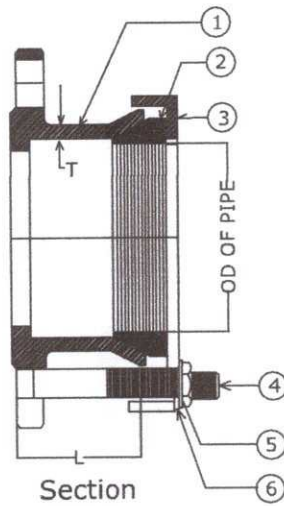
<b>PURPOSE</b>	<b>SLAUGHTER HOUSE DL INST., POBLACION MAK</b>		
<b>PARTICULARS</b>	<input checked="" type="checkbox"/> PR <input type="checkbox"/> JO No.:	<b>Date:</b>	August 14, 2023
<b>ITEMS, SPECIFICATIONS, AND DESCRIPTIONS</b>			
<b>ITEM 1 1 LOT PROCUREMENT OF PIPES AND FITTINGS FOR SLAUGHTER HOUSE DL INST., POBLACION MAK</b>			
<b>SPECIFICATIONS/INCLUSION:</b>			
1 Adapter 100mmØ MJ/F	1	pc	
2 ARV 50mm D-040 (Combination Air) MT	1	pc	
3 Clamp 100mmØ x 19mmØ Saddle (CI)	2	pcs	
4 Clamp 100mmØ x 50mmØ Saddle (CI)	1	pc	
5 Coupling Sleeve Type for PVC 100mmØ	11	pcs	
6 Elbow 100mmØ x 22.5° MJ/MJ (CI)	2	pcs	
7 Elbow 100mmØ x 45° MJ/MJ (CI)	6	pcs	
8 End Cap 100mm MJ/MJ	2	pcs	
9 Tee 100mmØ x 100mmØ MJ/F (CI)	1	pc	
10 Valve 100mmØ Check CI	1	pc	
11 Valve Gate 100mmØ F/F (MS-NRS)	1	pc	
12 Valve Gate 100mmØ MJ/MJ (MS-NRS)	4	pcs	
13 Valve Pad Cover 150mm (Steel)	5	pcs	
14 Wye 100mmØ x 100mmØ MJ/MJ (CI)	1	pc	
(Page 1 of 1)			

**Note:** For more than 6 items attach separate TOR Form. For More specifications attach necessary supporting document/s.

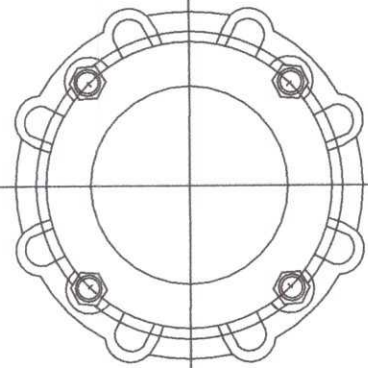
<b>SOURCE OF FUND</b>	<b>APP/PPMP Item No.:</b>	
	<b>Account No.:</b>	
<b>MODES AND TERMS OF PAYMENT</b>	Full payment within 12 months upon issuance of I.A.R	
<b>REQUIRED SERVICES</b>		
<input type="checkbox"/> Free Delivery	Others specify:	
<input type="checkbox"/> Free Product Demonstration		
<input type="checkbox"/> Free Installation		
<b>REQUIRED CERTIFICATIONS/ PERMITS</b>	<b>Business Permit, PhilGEPS Registration</b>	
	<b>MANUFACTURER'S PNS AND DTI CERTIFICATE</b>	
<b>QUALIFICATIONS</b>	N/A	
<b>AREA OF DELIVERY</b>	MKWD Manongol Reservoir Complex, Brgy. Manongol, Kidapawan City	
<b>DATE OF DELIVERY (MATERIALS)</b>	within 30 DAYS upon issuance of NOA/NTP	
<b>TIME OF DELIVERY</b>	9:00AM TO 4:00PM every weekdays	
<b>WARRANTY PERIOD</b>	One (1) Year	
<b>RETENTION</b>	<b>Amount:</b>	10%
	<b>Duration:</b>	1 month
<b>TAX INCLUSIVE</b>	Tax included in ABC	
<b>OTHER CONDITIONS AND CONSTRAINTS</b>		
Prepared by:	Reviewed by:	
<b>CANUTO A. CODILLA, JR., CE, MPA</b>	<b>RAMIL A. CONDEZ, CE, RMP, MBA</b>	
Division Manager A-PDD	Department Manager A - ECD	
Noted by:	Approved/Disapproved by:	
<b>WILSPER LISANDRO M. ALQUEZA, CE, RMP, MBA</b>	<b>STELLA M. GONZALES, MPS</b>	
AGM for Operations	General Manager	



Left Side View



C.I. Adaptor Flange/Mech.



Right Side View

**C.I. ADAPTOR FLANGE/MECH.**

NOMINAL SIZE	OD OF PIPE PVC	L	T	BOLT GLAND		
				NO. OF BOLT	BOLT SIZE	BOLT HOLE
50	63	78	78	2-4	11	14
63	75	78	7	2-4	11	14
75	90	78	7	4	11	14
100	110	78	7.2	4	11	14
150	160	78	7.8	4	11	14
200	225	78	8.4	4	15	18
250	280	90	9	6	15	18
300	315	90	9.6	6	15	18

PARTS	MATERIALS	ASTM
1. BODY	1. CAST IRON	A-126 CLASS B
2. RUBBER SEAL	2. RUBBER	EPDM, NBR, SBR
3. GLAND RING	3. CAST IRON	A-126 CLASS B
4. BOLTS	4. STEEL	A-307 GRADE B
5. NUTS	5. STEEL	A-307 GRADE B
6. WASHER	6. STEEL	A-307 GRADE B

**NOTES:**

1. ALL DIMENSION ARE IN MILLIMETER
2. MATERIAL IS CAST IRON CONFORM TO ASTM A-126 CLASS B
3. MATERIAL OF BOLTS NUTS & WASHER IS STEEL CONFORM TO ASTM A-307 GRADE B, GALVANIZED AS PER ASTM A-153.
4. SPECIFICATION OF FLANGE CONFORMING TO AWWA STANDARDS
5. INTERIOR & EXTERIOR 100% FOOD GRADE EPOXY POWDER

**TECHNICAL STANDARD DETAILS**



PLANNING AND DESIGN DIVISION  
OF METRO KIDAPAWAN WATER DISTRICT

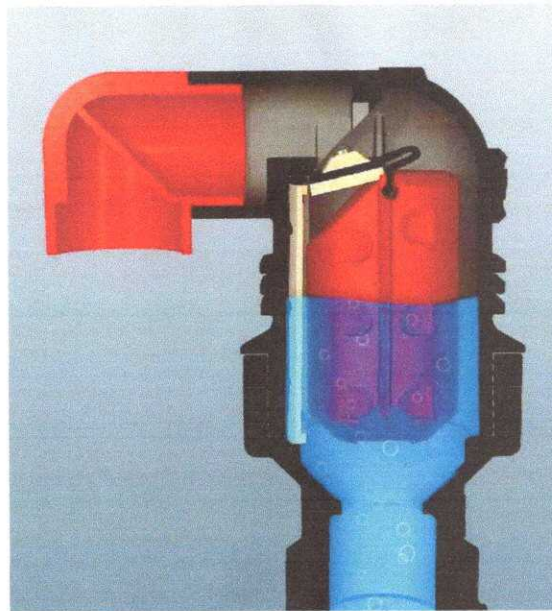
SCALE: N.T.S BY: DESIGN UNIT

C.I ADAPTOR FLANGE  
MECHANICAL

DATE:  
FEBRUARY 2021

DWG. NO.:  
01

REVISIONS	
BY	DATE



## AIR RELEASE VALVE D-040 COMBINATION AIR




### MATERIALS AND PROTECTION

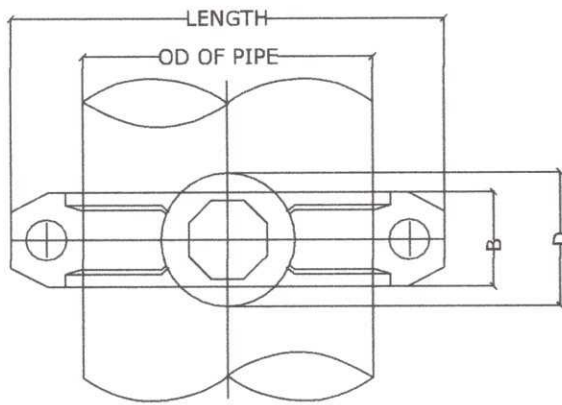
- Body: High-strength composite materials
- All parts made of corrosion-resistant materials
- D-040 body is protected by a shell made of Cast Iron ASTM A48 CL.35B.
- Dynamic design for high velocity air discharge while preventing premature closure
- Innovative rolling seal mechanism

### APPLICATION RANGE

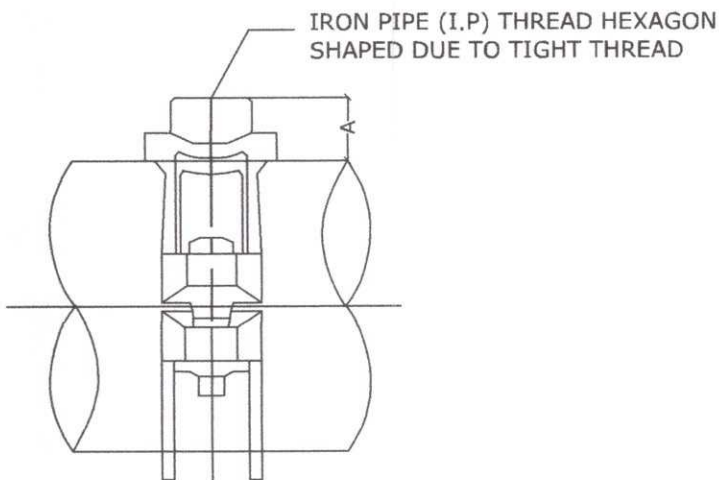
Working pressure range:	0.2-16bar
Maximum Operation temperature:	60°C
Maximum Intermittent temperature:	90°C
Available Sizes:	25mm
	50mm

## TECHNICAL STANDARD DETAILS

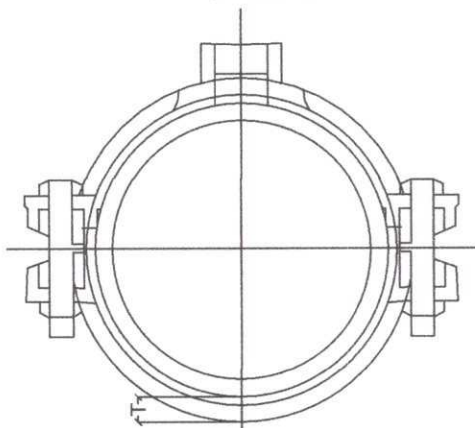
	 	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	AIR RELEASE VALVE D-040 COMBINATION AIR		REVISIONS BY    DATE
		SCALE:    N.T.S    BY:    DESIGN UNIT	DATE: JANUARY 2023	DWG.    NO.: 01	BY    DATE



TOP VIEW



SIDE VIEW



FRONT VIEW

NOMINAL PIPE SIZE	OD OF PIPE PVC	L	B	D MAX	T	A	MAX (I.P.) THREAD TAP DESIGNATION
50	63	122	43	70	12	28	1"
75	90	152	43	70	12	30	1"
100	110	185	50	78	12	32	2"
150	160	240	50	84	14	33	2"
200	225	310	50	84	16	43	2"

NOTES:

1. MATERIALS IS CAST IRON CONFORMING TO ASTM A-126 LASS B
2. MATERIAL OF BOLTS & NUTS IS STAINLESS STEEL CONFORM TO ASTM A-276 TYPE 304 OR 316
3. MATERIALS OF RUBBER RING GASKET WITH NARROW RAISED RIDGES IS NEOPRENE IN COMPLIANCE TO ISO 4633 CLASS 70 AND SUITABLE FOR DRINKING WATER
4. COATING IS ELECTROSTATICALLY APPLIED EPOXY POWDER
5. SADDLE SHALL NOT LEAK OR BREAK WHEN TESTED UNDER A PRESSURE OF 3000 PSI

**TECHNICAL STANDARD DETAILS**



PLANNING AND DESIGN DIVISION  
OF METRO KIDAPAWAN WATER DISTRICT

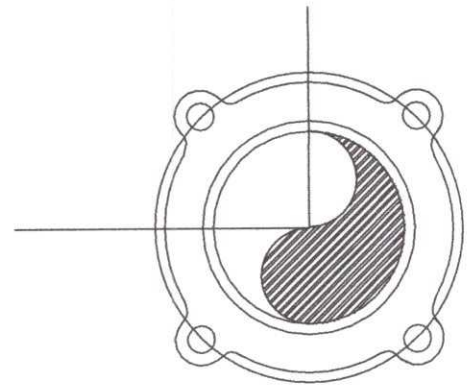
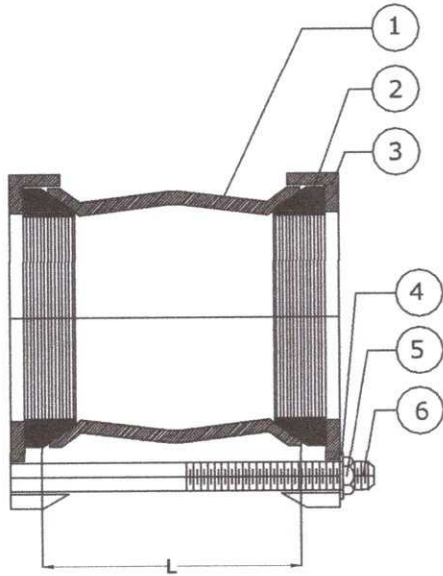
SCALE: N.T.S BY: DESIGN UNIT

C.I SADDLE CLAMP FOR PVC

DATE: FEBRUARY 2021

DWG. NO.: 01

REVISIONS	
BY	DATE



RIGHT SIDE VIEW

C.I SLEEVE TYPE COUPLING

PARTS:	MATERIALS:	ASTM
1. BODY SLEEVE	CAST IRON	ASTM A-126 CLASS B
2. RUBBER SEAL	RUBBER	EPDM, NBR, SBR
3. GLAND RING	CAST IRON	ASTM A-126 CLASS B
4. WASHER	STEEL	ASTM A-307 GRADE B
5. NUTS	STEEL	ASTM A-307 GRADE B
6. BOLTS	STEEL	ASTM A-307 GRADE B

NOMINAL SIZE	OUTSIDE DIAMETER PVC	L	T
50	50	178	5
63	63	178	5
75	75	178	5
100	100	178	5
150	150	178	5
200	200	178	6
250	250	178	6
300	300	178	6

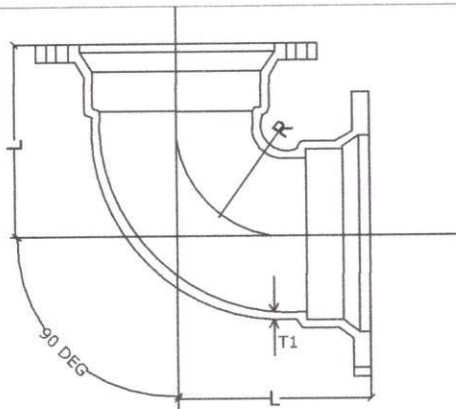
NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER UNITS
2. MATERIAL IS CAST IRON CONFORM TO ASTM A-125 CLASS B
3. MATERIAL OF BOLTS NUTS & WASHER ARE STEEL CONFORM TO ASTM A-307 GRADE B, ASTM A-563 RESPECTIVELY AND HOT DIP GALVANIZED AS PER ASTM A-153
4. INTERIOR & EXTERIOR COATING IS EXPOXY POWDER

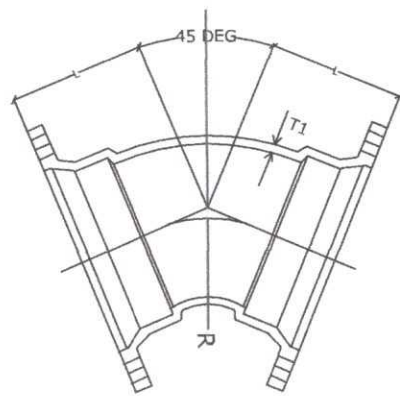
**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	C.I SLEEVE TYPE COUPLING		REVISIONS
		DATE: FEBRUARY 2021	DWG. NO.: 01	BY DATE
SCALE: N.T.S	BY: DESIGN UNIT			

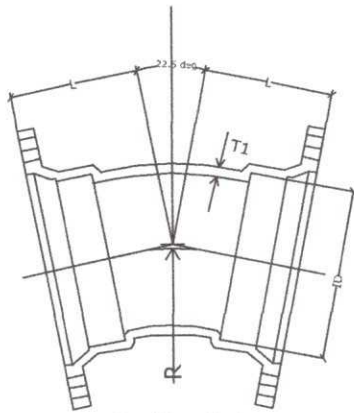




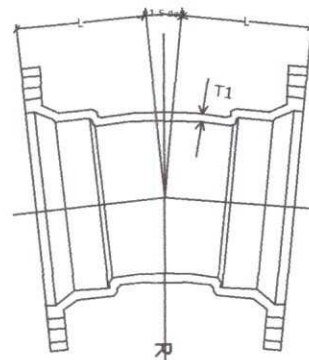
Section A-A  
C.I Elbow Mech. Type  
90 Degree for PVC Pipe



Section A-A  
C.I Elbow Mech. Type  
45 Degree for PVC Pipe



Section A-A  
C.I Elbow Mech. Type  
22.5 Degree for PVC Pipe



Section A-A  
C.I Elbow Mech. Type  
11.5 Degree for PVC Pipe

NOMINAL SIZE	ID	T1	90 DEGREES		45 DEGREES		22.5 DEGREES		11.25 DEGREES	
			R	L	R	L	R	L	R	L
50	69	7.0	47	125	62	95	63.7	90	129	90
75	96	7.0	102	152	92	101.6	192	90	387.3	90
100	116	7.2	165	165	122	114.3	255.1	101	515.8	101
150	166	7.8	152	203	184	135	382.5	127	774.7	127
200	231	8.4	178	229	214	152	345	140	901.7	140
250	166	9.0	228	290	276	155	574.5	165	1160.5	165
300	321	9.6	254	335	336	186	701.5	190	1417.6	190

NOTES:

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2. MATERIAL IS CAST IRON CONFORMING TO ASTM A-126 CLASS B.
3. MATERIAL OF BOLTS & NUTS IS STEEL CONFORM TO ASTM A-307 GRADE B. AND HOT DIP GALVANIZED AS PER ASTM A-153
4. COATING IS BITUMINOUS COALTAR ENAMEL 50 MICRONS THICK. FITTINGS SHALL BE LINED WITH CEMENT MORTAL CONFORMING TO AWWA -104
5. GASKET MATERIAL SHALL BE SBR, NBR, OR EPDM CONFORMING TO ISO 4633 CLASS 70, AND SUITABLE FOR DRINKING WATER.
6. THE DESIGN POLYGON TYPE
7. THIS PRODUCT CONFORMS TO REQUIRED HYDROSTATIC TESTING SPECIFICATION OF AWWA C-110 AND LWUA STANDARDS

## TECHNICAL STANDARD DETAILS



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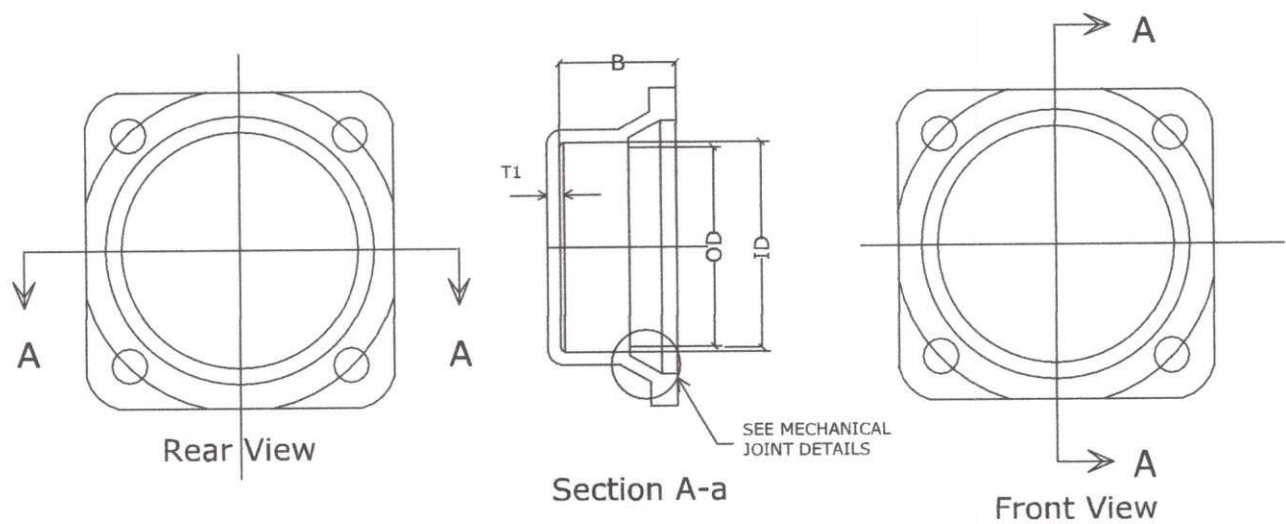
C.I ELBOW MECHANICAL TYPE 90  
deg., 45 deg., 22.5 deg., & 11.25 deg.  
for PVC

DATE:  
FEBRUARY 2021

DWG. NO.:  
01

REVISIONS

BY DATE



C.I End Cap Mech . Type

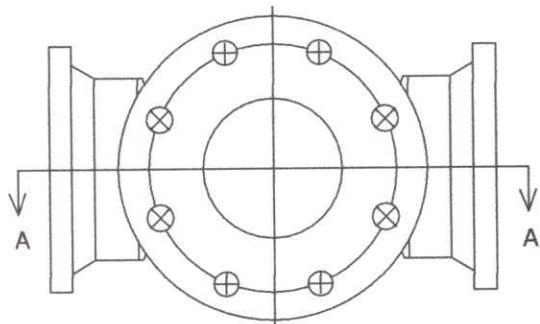
SIZE	OD OF PIPE PVC	ID	B	T1
50	63	69	63.5	7
75	90	96	63.5	7
100	110	116	63.5	7.2
150	160	166	63.5	7.8
200	225	231	63.5	8.4
250	280	286	63.5	9
300	315	321	63.5	9.6
300	355	361	63.5	9.6

NOTES:

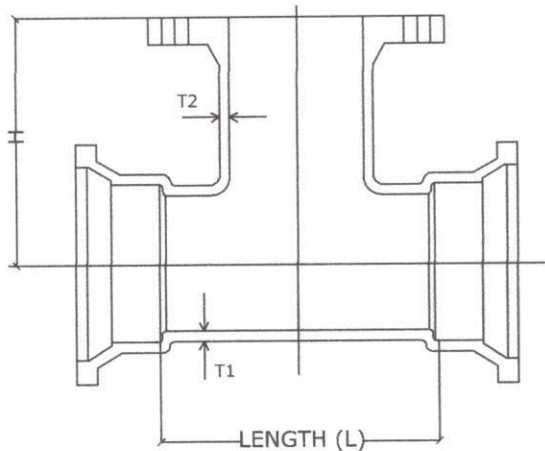
1. ALL DIMENSIONS ARE IN MILLIMETER UNITS
2. MATERIAL IS CAST IRON CONFORMING TO ASTM A-126 CLASS B.
3. MATERIAL OF BOLTS & NUTS IS STEEL CONFORM TO ASTM A-307 GRADE B. AND HOT DIP GALVANIZED AS PER ASTM A-153
4. COATING IS BITUMINOUS COALTAR ENAMEL 50 MICRONS THICK. FITTINGS SHALL BE LINED WITH CEMENT MORTAL CONFORMING TO AWWA C-104
5. GASKET MATERIAL SHALL BE SBR, NBR, OR EPDM CONFORMING TO ISO 4633 CLASS 70, AND SUITABLE FOR DRINKING WATER.
6. THIS DESIGN IS POLYGON TYPE

**TECHNICAL STANDARD DETAILS**

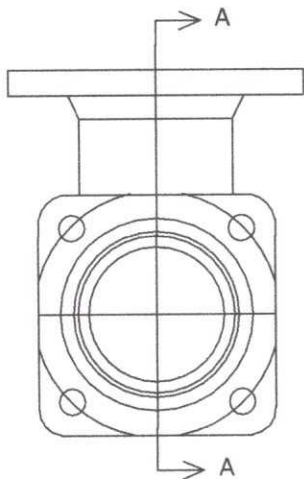
	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT		C.I END CAP MECHANICAL TYPE FOR PVC		REVISIONS BY DATE	
	SCALE: N.T.S	BY: DESIGN UNIT	DATE: FEBRUARY 2021	DWG. NO.: 01		



Top View



Section A-A  
C.I Tee Mech Flange



Side View

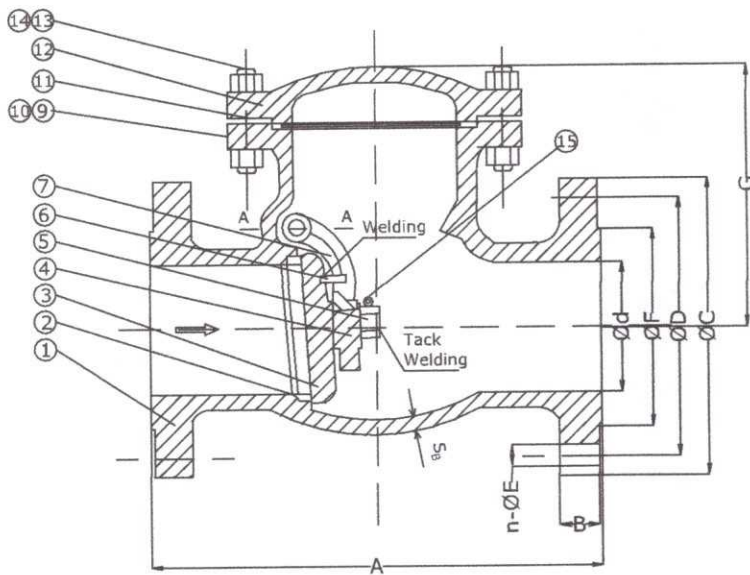
SIZE		L	H	T1	T2
RUN	BRANCH				
50	50	130	140	7	7
75	50	170	165	7	7
75	75	170	165	7	7
100	50	145	165	7.2	7
100	75	170	175	7.2	7
100	100	190	180	7.2	7.2
150	50	160	190	7.8	7
150	75	170	200	7.8	7
150	100	195	210	7.8	7.2
150	150	255	220	7.8	7.8
200	50	165	215	8.4	7
200	75	175	225	8.4	7
200	100	200	230	8.4	7.2
200	150	255	245	8.4	7.8
200	200	315	260	8.4	8.4
250	50	165	265	9	7
250	75	180	225	9	7
250	100	200	230	9	7.2
250	150	260	245	9	7.8
250	200	315	260	9	8.4
250	250	375	260	9	9
300	50	180	295	9.6	7
300	75	180	295	9.6	7
300	100	205	300	9.6	7.2
300	150	260	310	9.6	7.8
300	200	320	320	9.6	8.4
300	250	380	330	9.6	9
300	250	435	340	9.6	9.6

NOTES:

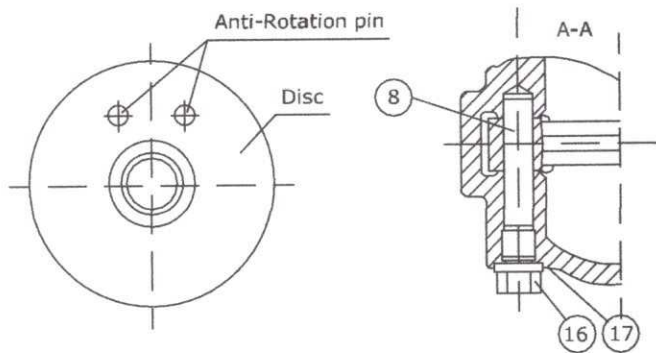
1. ALL DIMENSIONS ARE IN MILLIMETER UNITS
2. MATERIAL IS CAST IRON CONFORMING TO ASTM A-126 CLASS B.
3. MATERIAL OF BOLTS & NUTS IS STEEL CONFORM TO ASTM A-307 GRADE B. AND HOT DIP GALVANIZED AS PER ASTM A-153
4. COATING IS BITUMINOUS COALTAR ENAMEL 50 MICRONS THICK. FITTINGS SHALL BE LINED WITH CEMENT MORTAL CONFORMING TO AWWA C-104
5. GASKET MATERIAL SHALL BE SBR, NBR, OR EPDM CONFORMING TO ISO 4633 CLASS 70, AND SUITABLE FOR DRINKING WATER.
6. SPECIFICATION OF FLANGE CONFORM TO AWWA STANDARD

**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	C.I TEE MECHANICAL/ FLANGE		REVISIONS	
		DATE: FEBRUARY 2021	DWG. NO.: 01	BY	DATE
SCALE: N.T.S	BY: DESIGN UNIT				



COMPONENT	
1. BODY	ASTM A216-WCB
2. SEAT	ASTM A105N+STL
3. DISC	ASTM A105N+13%Cr
4. WASHER	ASTM A276-410
5. NUT	ASTM A276-304
6. ANTI-ROTATION PIN	AISI 1035
7. HINGE ARM	ASTM A216-WCB
8. HINGE PIN	ASTM A240-410
9. NAMEPLATE	ASTM A240-304
10. RIVET	ASTM A240-304
11. GASKET	304+GRAPHITE
12. COVER	ASTM A216-WCB
13. BOLT	ASTM A193-B7
14. NUT	ASTM A194-2H
15. SPLIT PIN	ASTM A276-304
16. PLUG	ASTM A276-410
17. GASKET	ASTM A276-304



**NOTES:**

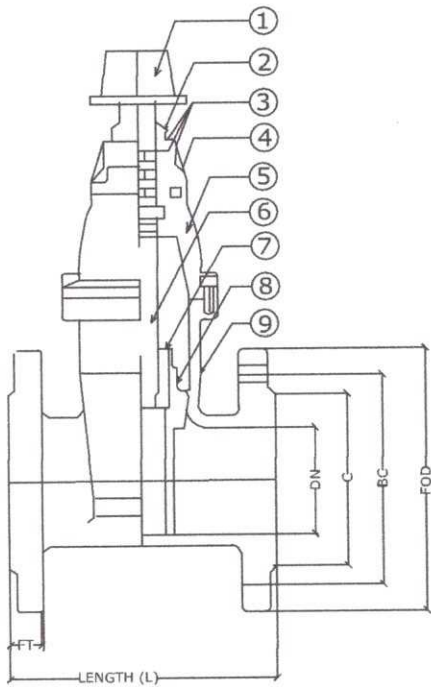
1. MATERIAL IS IN CONFORMANCE TO ASTM A216 WCB
2. MATERIALS IS CLASS 150 CAST IRON
3. DESIGN SHALL BE IN CONFORMANCE TO API 594, ANSI B16.34
4. INSPECTION AND TEST: API 598
5. SHELL HYDRO 450 PSI
6. SEAT HYDRO 315 PSI
7. MARKING SYSTEM MSS-SP-25

**C.I CHECK VALVE DETAILS**  
(in mm)

NOMINAL SIZE	d	A	B	C	D	n	E	F	G	S <sub>B</sub>	WEIGHT kg
50	51	203	16	150	120.7	4	19	92.1	130	8.6	18
63	64	216	18.3	180	139.7	4	19	104.8	155	9.7	22
75	76	241	19.5	190	152.4	4	19	127	170	10.4	30
100	102	292	24.3	230	190.5	8	19	157.2	229	11.2	40
125	127	330	24.3	255	215.9	8	22	185.7	269	11.9	57
150	152	356	25.9	280	241.3	8	22	215.9	271	11.9	68
200	203	495	29	345	298.5	8	22	269.9	341	12.7	127
250	254	622	30.6	405	362	12	25	323.8	403	14.2	216
300	305	698	32.2	485	431.8	12	25	381.0	471	16	325

**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT		C.I CHECK VALVE		REVISIONS	
					BY	DATE
	SCALE: N.T.S	BY: DESIGN UNIT	DATE: JANUARY 2023	DWG. NO.: 01		



**NOTES:**

1. TECHNOLOGY CONDITION ON DESIGN AND MANUFACTURE IN CONFORMITY TO ANSI/AWWA C-509-1994.
2. RESILIENT SEATED WEDGE MADE OF DUCTILE IRON WITH ASTM A-536 65-45-12 FULLY ENCAPSULATED WITH NBR/EPDM RUBBER COATED.
3. 50mm SQUARE OPERATING NUT WITH ARROW MARK FOR OPENING DIRECTION.
4. COUNTERCLOCKWISE OPENING DIRECTION
5. RATED WORKING PRESSURE 16 BARS MINIMUM
6. COATING & LINING SHALL CONFORM TO AWWA C-550 ELECTROSTATICALLY APPLIED EPOXY POWDER OR EQUIVALENT.
7. GATE VALVE SHOULD BE NON-RISING STEM (NRS)

**PARTS:**

1. OPERATING NUT
2. SPLASH MOTE SEAT RING
3. O-RING (3)
4. O-RING
5. BONNET
6. STEM (COLD ROLLED THREAD)
7. STEM NUT
8. WEDGE
9. VALVE BODY

**MATERIALS**

- CAST IRON  
 RUBBER  
 RUBBER  
 RUBBER  
 CAST IRON  
 STAINLESS STEEL  
 BRONZE  
 DUCTILE IRON ENCAPSULATED  
 CAST IRON

**ASTM:**

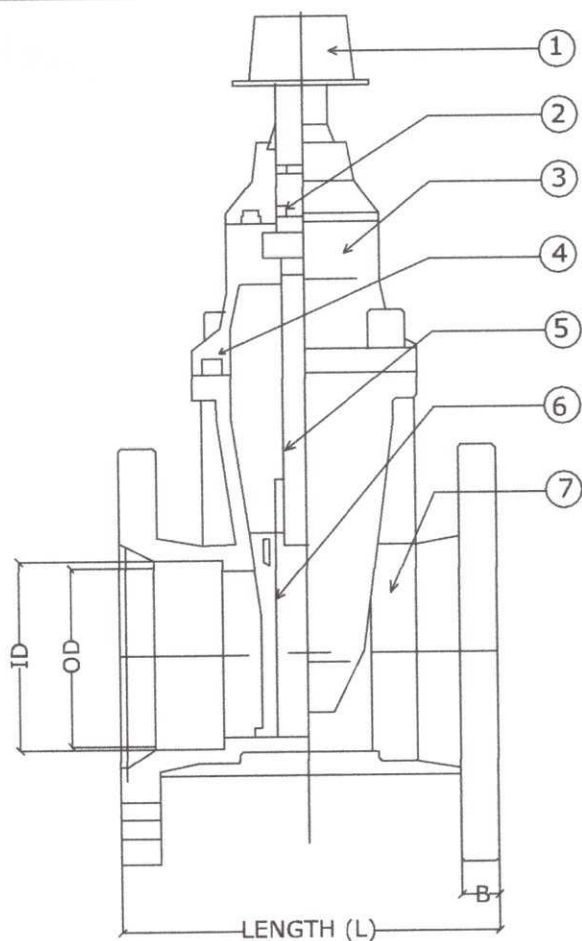
- A-126 CLASS B  
 NBR  
 NBR  
 NBR  
 A-126 CLASS B  
 ANSI 420  
 B62 C83600  
 A-536 W/ NBR/EPDM COATED  
 A-126 CLASS B

DN	LENGTH (L)	D DIA.	C	FOD	BC	NO. OF BOLT	BOLT SIZE DIA	BOLT HOLE DIA
50	178	20	100	152.4	120.6	4	16	19
75	203	24	132	190.5	152.4	4	16	19
100	229	24	156	228.6	190.4	8	16	19
150	267	28	211	279.4	241.0	8	20	23
200	292	32	266	342.9	298.4	8	20	23
250	330	36	319	406.4	362.0	12	22	25
300	356	42	370	482.6	431.8	12	22	25

GATE VALVE FLANGE TYPE  
 RESILIENT SEATED WEDGE TYPE  
 AWWA C-509

**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	GATE VALVE FLANGE TYPE RESILIENT WEDGE TYPE		REVISIONS	
		DATE: FEBRUARY 2021	DWG. NO.: 01	BY	DATE
SCALE: N.T.S	BY: DESIGN UNIT				



- COMPONENT
1. OPERATING NUT
  2. O-RING
  3. BONNET
  4. GASKET BONNET
  5. STEM
  6. WEDGE
  7. VALVE BODY


C.I GATE VALVE MECHANICAL JOINT TYPE

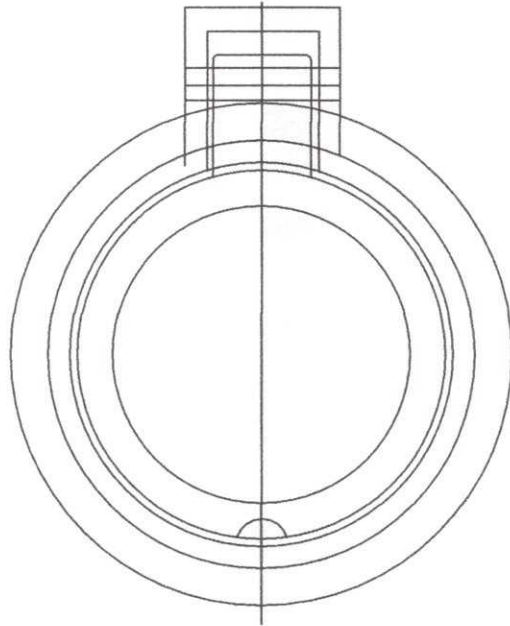
DN	OUTSIDE DIAMETER (OD)	INSIDE DIAMETER (ID)	LENGTH (L)	B
50	63	65	178	15.9
63	75	79	178	15.9
75	90	94	203	19.1
100	110	114	229	19.1
150	160	164	267	19.1
200	225	229	291	20.0
250	280	284	330	20.0

NOTES:

1. TECHNOLOGY CONDITION ON DESIGN AND MANUFACTURE IN CONFORMITY TO ANSI/AWWA C-509-1994.
2. RESILIENT SEATED WEDGE MADE OF DUCTILE IRON WITH ASTM A-536
3. 50mm SQUARE OPERATING NUT WITH ARROW MARK FOR OPENING DIRECTION.
4. COUNTERCLOCKWISE OPENING DIRECTION
5. RATED WORKING PRESSURE 16 BARS MINIMUM
6. COATING & LINING SHALL CONFORM TO AWWA C-550 ELECTROSTATICALLY APPLIED EPOXY POWDER OR EQUIVALENT.
7. GATE VALVE SHOULD BE NON-RISING STEM (NRS)

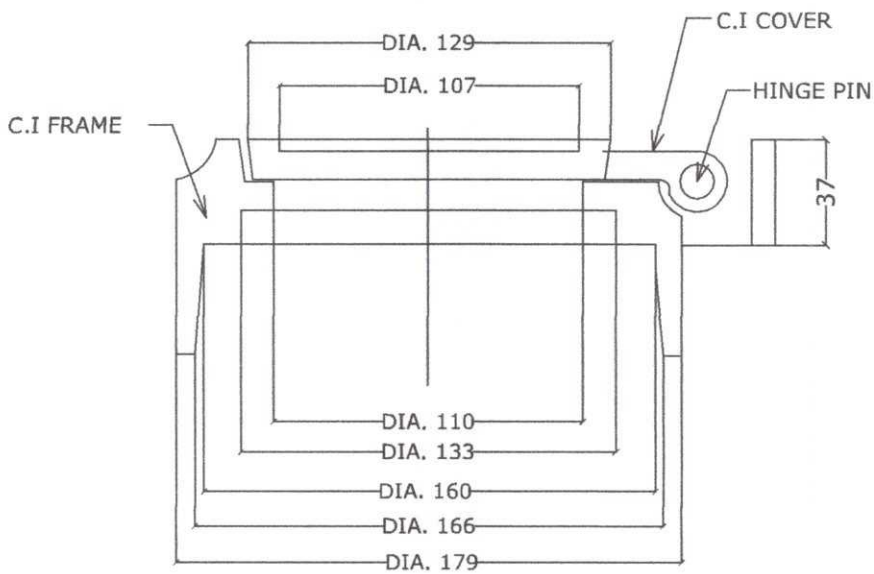
**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	C.I GATE VALVE MECHANICAL TYPE		REVISIONS BY    DATE
		SCALE:    N.T.S    BY:    DESIGN UNIT	DATE: FEBRUARY 2021	DWG. NO.: 01



TOP VIEW

C.I VALVE BOX COVER 150mm



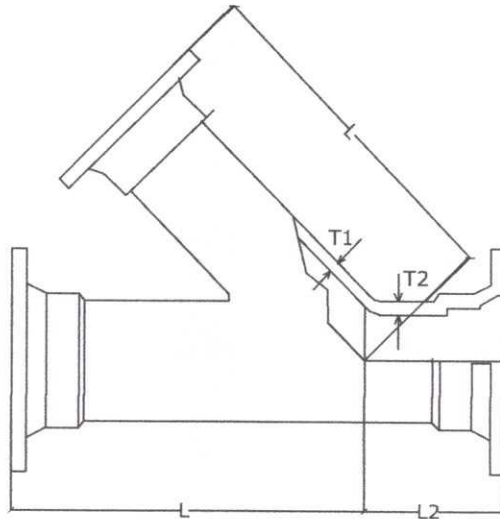
Section  
Frame & Cover

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER UNITS
2. MATERIAL IS CAST IRON CONFORMING TO ASTM A-126 CLASS B
3. COATING FINISH: BITUMINOUS COALTAR ENAMEL

**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT	C.I VALVE BOX COVER 150mm		REVISIONS	
		SCALE: N.T.S	BY: DESIGN UNIT	DATE: FEBRUARY 2021	DWG. NO.: 01



**C.I WYE MECHANICAL TYPE**

**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETER UNITS
2. MATERIAL IS CAST IRON CONFORMING TO ASTM A-126 CLASS B
3. MATERIAL OF BOLTS & NUTS IS STEEL CONFORM TO ASTM A-307 GRADE B. AND HOT DIP GALVANIZED AS PER ASTM A-153.
4. COATING IS BITUMINOUS COALTAR ENAMEL 50 MICRONS THICK. FITTING SHALL BE LINED WITH CEMENT MORTAL CONFORMING TO AWWA C-104.
5. GASKET MATERIAL SHALL BE SBR, NBR, OR EPDM CONFORMING TO ISO 4633 CLASS 70, AND SUITABLE FOR DRINKING WATER.
6. THIS DESIGN IS POLYGON TYPE

NOMINAL SIZE		BODY LENGTH		BODY THICKNESS	
RUN	BRANCH	(L)	L2	T1	T2
50	50	230	95	7	7
75	75	254	76.2	7	7
100	50	265	140	7.2	7
100	75	370	140	7.2	7
100	100	370	140	7.2	7.2
150	75	406	153.4	7.8	7
150	100	406	152.4	7.8	7.2
150	150	406	152.4	7.8	7.8
200	75	445	163.5	8.4	7
200	100	445	163.5	8.4	7.2
200	150	445	163.5	8.4	7.8
200	200	518.5	187.5	8.4	8.4
250	75	518.5	187.5	9	7
250	100	518.5	187.5	9	7.2
250	150	518.5	187.5	9	7.8
250	200	585	187.5	9	8.4
250	250	585	187.5	9	9
300	75	585	187.5	9.6	7
300	100	585	187.5	9.6	7.2
300	150	585	187.5	9.6	7.8
300	200	585	187.5	9.6	8.4
300	250	635	203.2	9.6	9
300	300	635	203.2	9.6	9.6

**TECHNICAL STANDARD DETAILS**

	PLANNING AND DESIGN DIVISION OF METRO KIDAPAWAN WATER DISTRICT TYPE		C.I WYE MECHANICAL		REVISIONS	
	SCALE: N.T.S		BY: DESIGN UNIT		DATE: FEBRUARY 2021	
				DWG. NO.: 01		BY: DATE: