

1 ACCESS MANWAY IN ACCESS MANHOLE
(FOR WATER LINES 36-INCH TO 90-INCH DIAMETER)

WATER MAIN DIAMETER	MANUFACTURER (1)	VACUUM (AI/VR)		AIR RELEASE		
		SERIES	ORIFICE SIZE	SERIES	INLET SIZE (NPT)	ORIFICE SIZE (2)
>=36" <=96"	APCO	1500C		200A	1"	
	CLAVAL	38VB		34AR-C	1"	
	PRATT	WAVVB		WAR 02	1"	

AIR VALVE & TYPE TABLE

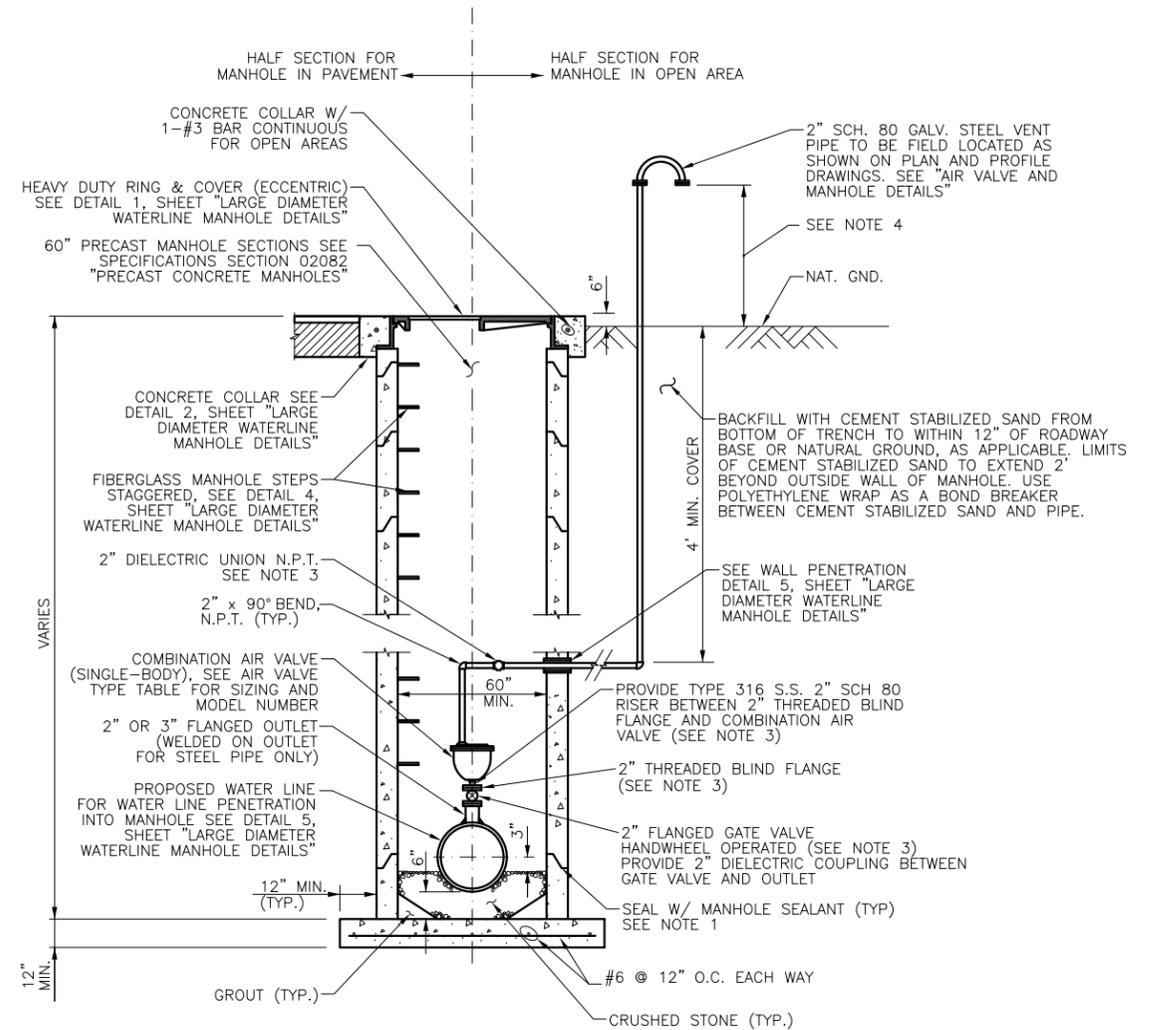
(FOR WATER LINES 36" TO 90" DIAMETER)

- (1) OR APPROVED EQUAL.
(2) MINIMUM ORIFICE SIZE REQUIRED. TO BE UPDATED FOR EACH PROJECT BASED ON TRANSIENT ANALYSIS.

WATER MAIN DIAMETER	MANUFACTURER (1)	VACUUM (AI/VR)	
		SERIES	ORIFICE SIZE
<=36"	APCO	140C	
	CLAVAL	36	
	PRATT	WCV 01	

AIR VALVE & TYPE TABLE

(FOR WATER LINES SMALLER THAN 36" DIAMETER)



2 COMBINATION AIR VALVE ASSEMBLY IN SERVICE MANHOLE
(FOR WATER LINES SMALLER THAN 36-INCHES DIAMETER)

NOTES:

- PROVIDE RAM-NEK OR APPROVED EQUAL BETWEEN PRECAST SEGMENTS OF THE MANHOLE.
- FOR MANHOLES DEEPER THAN 20 FEET, SAFETY CLIMBING RAIL MUST BE PROVIDED (SAF-T-CLIMB OR APPROVED EQUAL).
- PIPING AND APPURTENANCES OF THE SAME DIAMETER AND CONSTRUCTED OF THE SAME MATERIAL AND CLASS.
- VERIFY THAT LOCATION OF VENT PIPE SCREEN IS 1 FOOT ABOVE 100-YEAR FLOOD PLAIN ELEVATION OR 4 FEET ABOVE NATURAL GROUND WHICHEVER IS HIGHER.
- REFER TO PLAN AND PROFILE SHEETS FOR LOCATIONS OF AIR VALVES.
- FOR PAVEMENT REPAIR, SEE SHEET "EXCAVATION, BEDDING, BACKFILL AND PAVEMENT REPAIR DETAILS".
- PROVIDE AN APPROVED PETROLATUM BASED TAPE ENCAPSULATING ALL BOLTS IN ACCESS MANHOLE.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STANDARD LDWL
AIR VALVE & MANHOLE DETAILS

SHEET 2 OF 2 (NOT TO SCALE)

APPROVED BY:	APPROVED BY:
CITY ENGINEER	DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: NOV-10-2016	DWG NO: