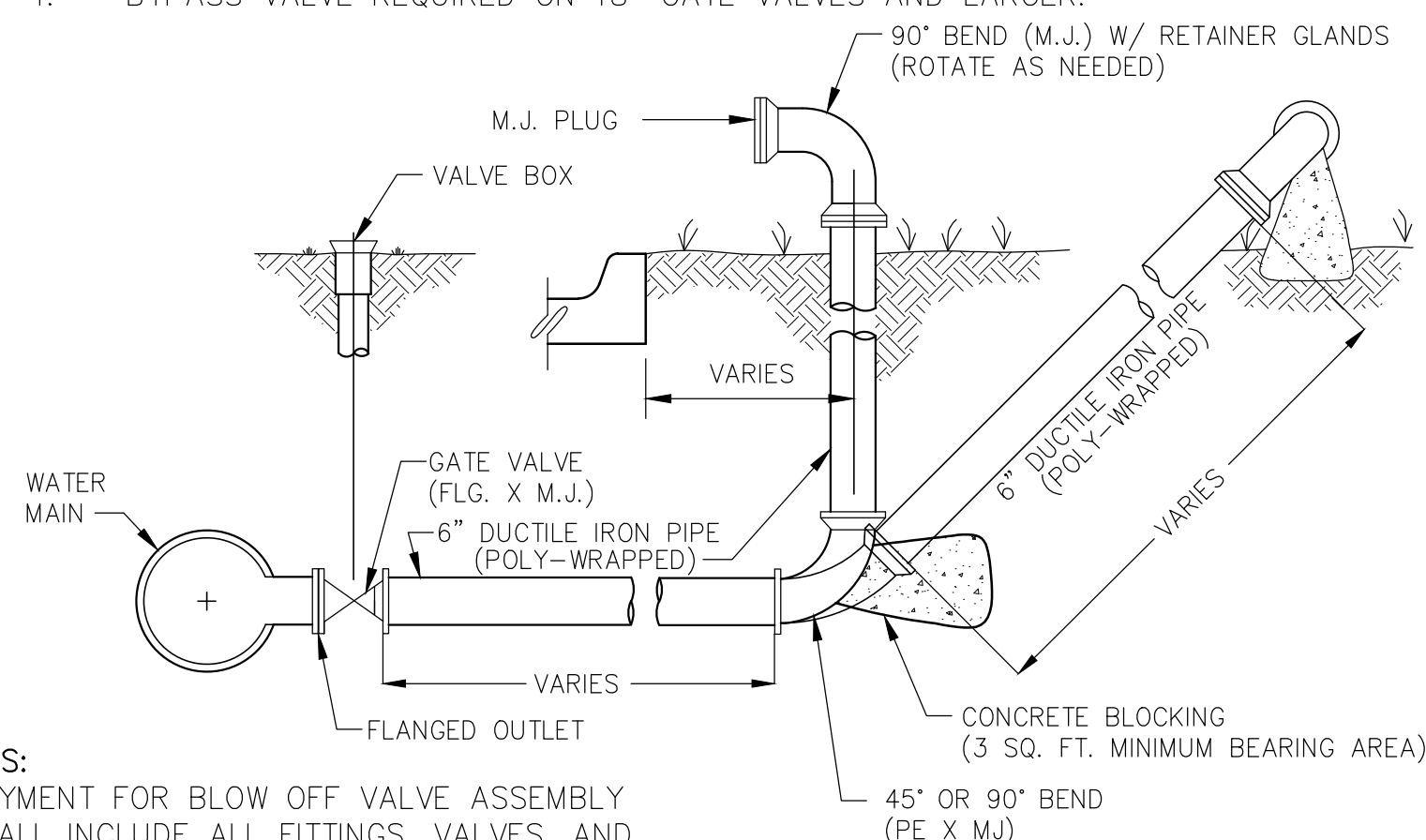


- NOTES:**
1. ALL PIPING, FITTINGS, AND VALVES SHOWN ARE FOR 2" COMBINATION AIR VALVE. FOR COMBINATION AIR VALVE INSTALLATION LARGER OR SMALLER THAN 2", ALL PIPING, FITTINGS, AND VALVES SHALL BE SAME SIZE AS AIR VALVE.
  2. ALL ABOVE GROUND PIPING, FITTINGS, SIGNS, ETC., SHALL BE BRUSH PAINTED WITH TWO COATS OF ALUMINUM PAINT. (NO SPRAYING).

1 COMBINATION AIR VALVE INSTALLATION

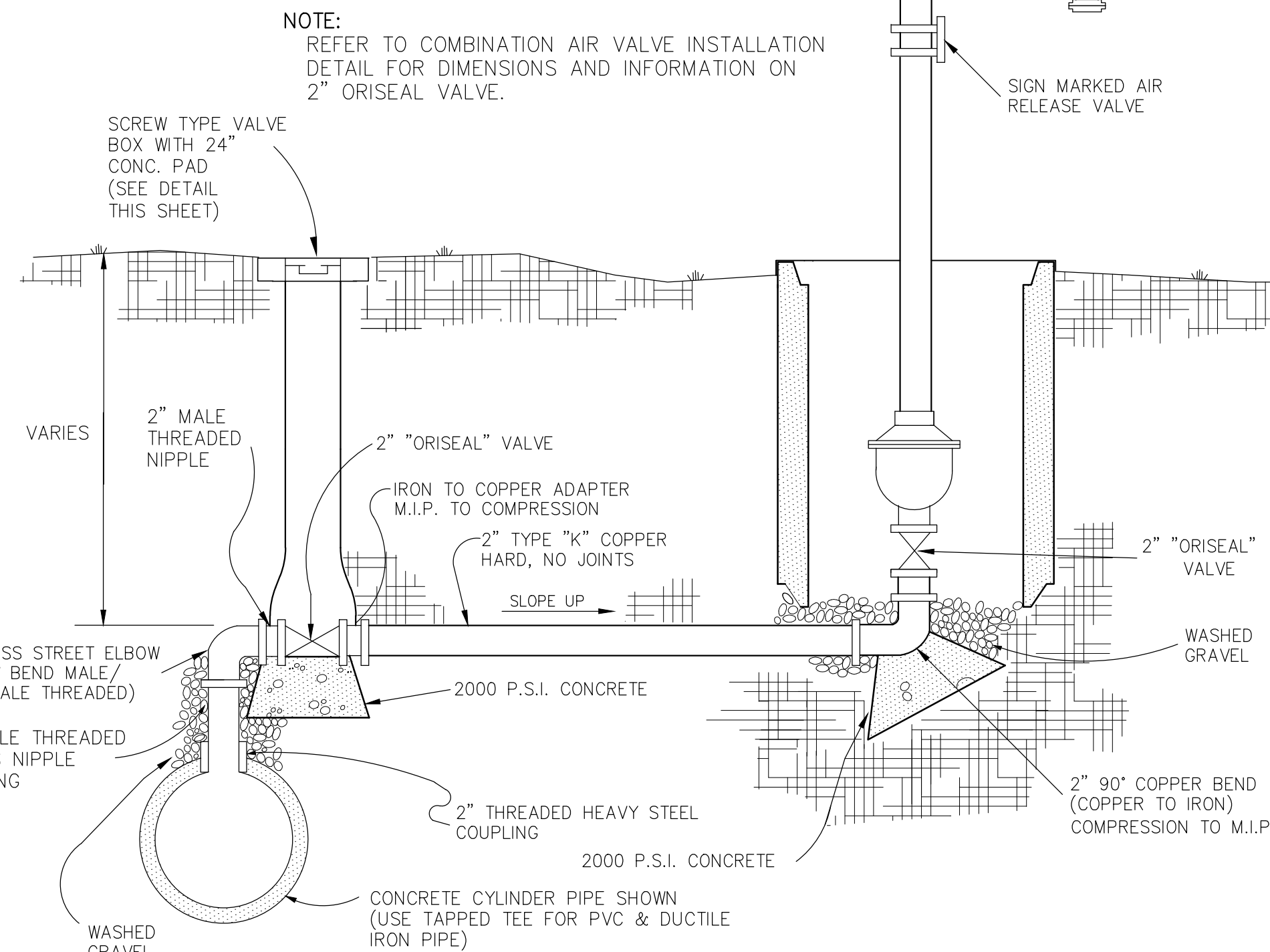
4 GENERAL NOTES

1. BUTTERFLY VALVES ARE ALLOWED FOR ALL WATER MAINS 24" DIAMETER AND LARGER.
2. RESILIENT SEATED GATE VALVES ARE REQUIRED FOR ALL MAINS SMALLER THAN 24" DIAMETER.
3. GATE VALVES FOR MAINS 16" DIAMETER OR LESS SHALL HAVE HAND OPERATED GATE VALVES. GATE VALVES FOR MAINS 18" DIAMETER OR GREATER SHALL HAVE GEAR ACTUATED GATE VALVES.
4. BYPASS VALVE REQUIRED ON 18" GATE VALVES AND LARGER.



- NOTES:**
1. PAYMENT FOR BLOW OFF VALVE ASSEMBLY SHALL INCLUDE ALL FITTINGS, VALVES, AND CONCRETE NECESSARY FOR COMPLETE OPERATION.
  2. BLOW-OFF SHALL BE PIPED TO A DRAINAGE SYSTEM APPROVED BY THE CITY ENGINEER.

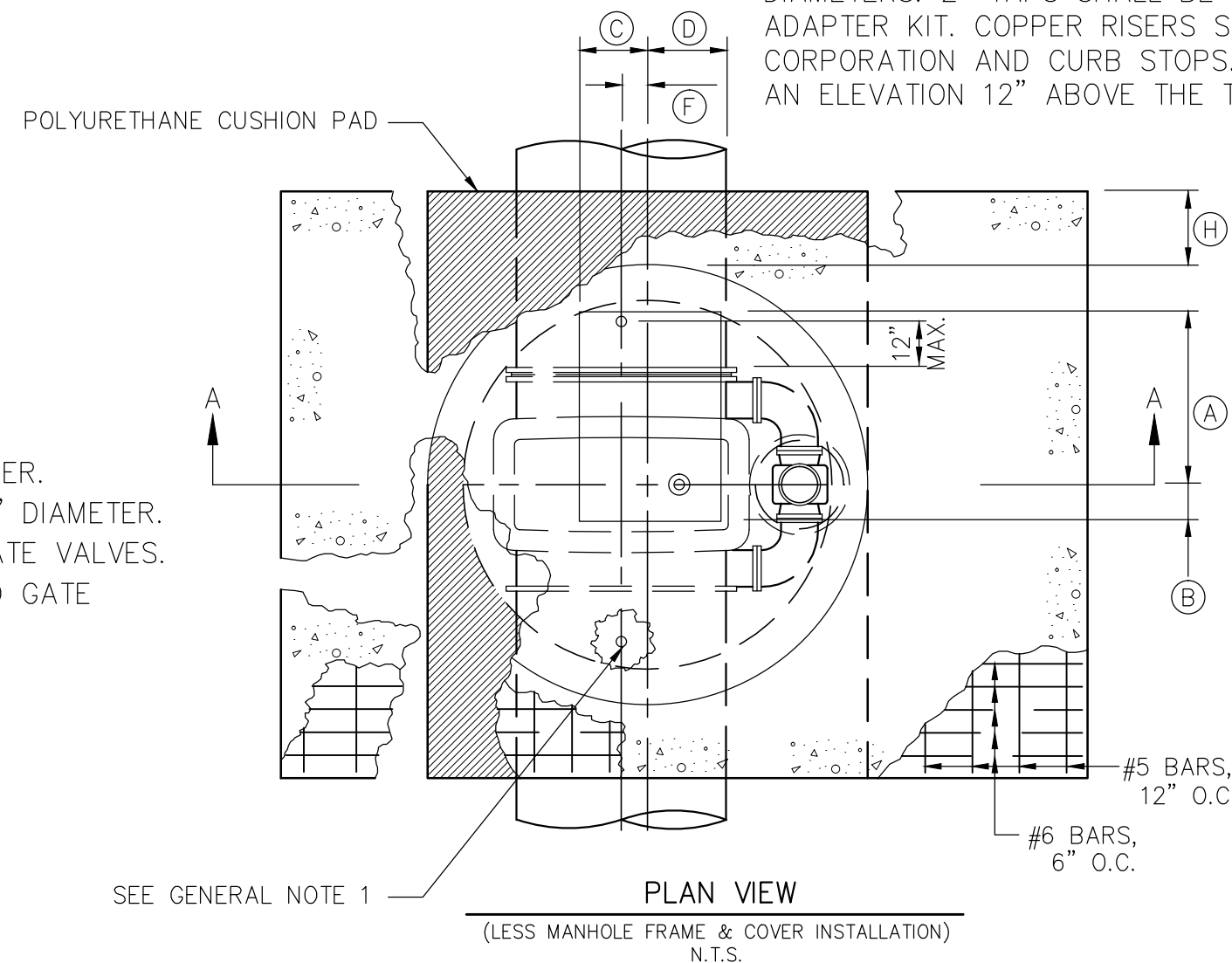
5 BLOW-OFF VALVE ASSEMBLY



**NOTE:** REFER TO COMBINATION AIR VALVE INSTALLATION DETAIL FOR DIMENSIONS AND INFORMATION ON 2" ORISEAL VALVE.

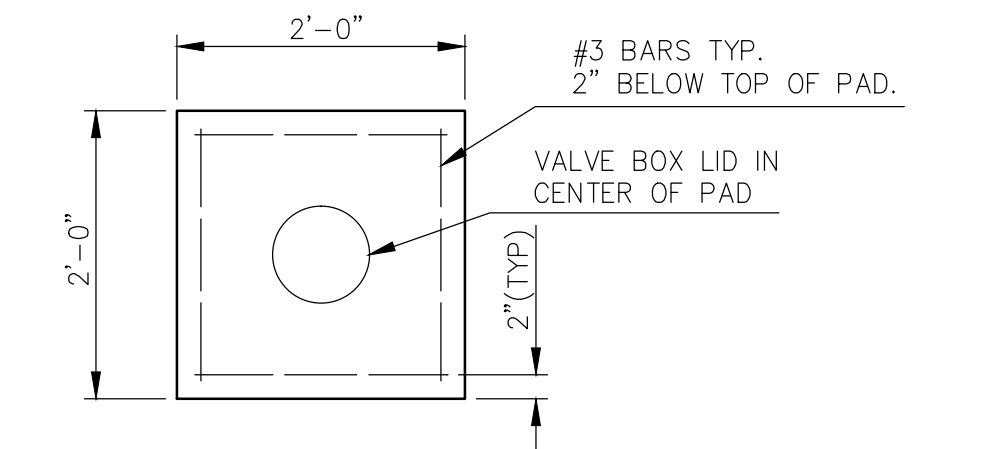
2 OFFSET COMBINATION AIR VALVE INSTALLATION

- NOTES:**
- PROVIDE CORPORATION AND CURB STOPS A MAXIMUM OF 12" FROM EACH END OF GATE VALVE, AS SHOWN. CORPORATION AND CURB STOP SIZES SHALL BE 1" FOR 16", 20", AND 24" NOMINAL PIPE DIAMETERS; 2" FOR 30" AND LARGER DIAMETERS. 2" TAPS SHALL BE MADE AS A 2" FLANGED OUTLET WITH INSULATED ADAPTER KIT. COPPER RISERS SHALL BE PROVIDED BETWEEN THE CORPORATION AND CURB STOPS. CURB STOPS SHALL BE INSTALLED AT AN ELEVATION 12" ABOVE THE TOP SURFACE OF VAULT BOTTOM SLAB.

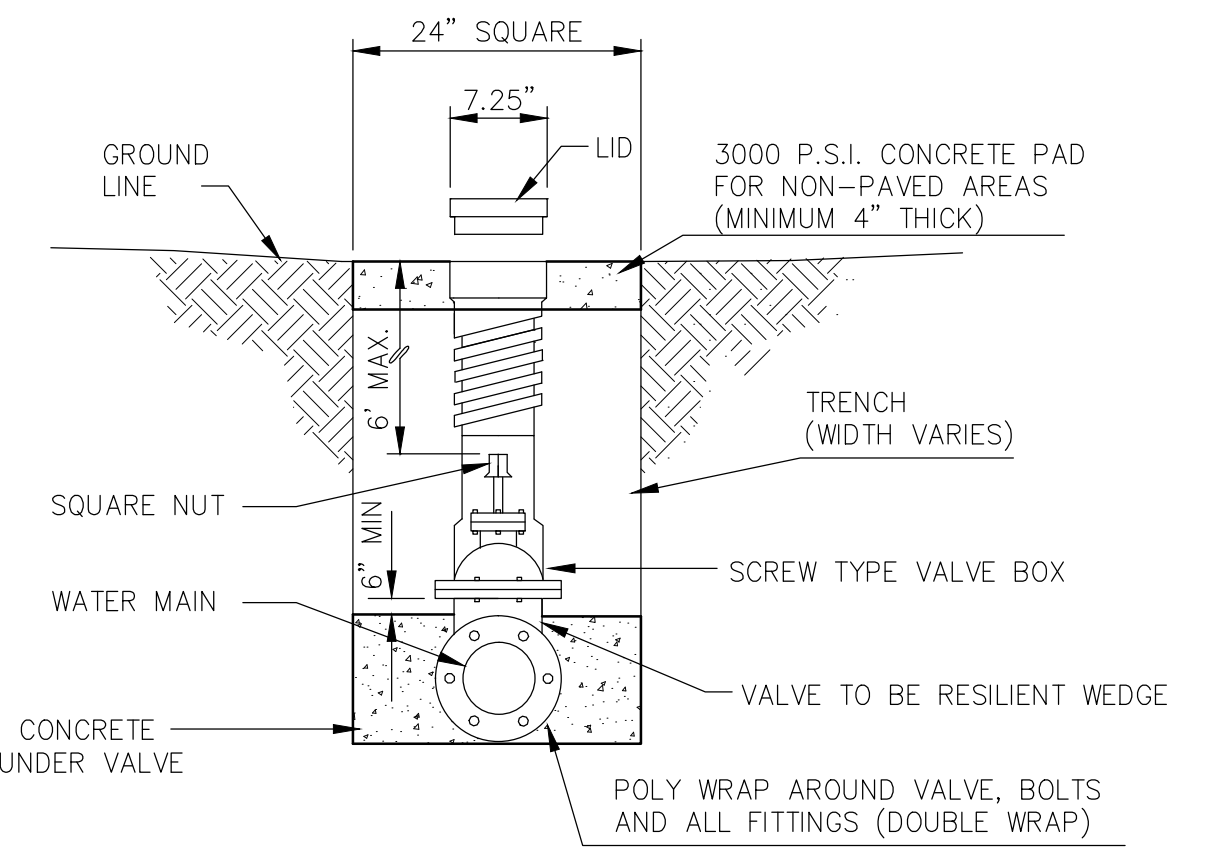


GATE VALVE SIZE	DIMENSION TABLE											
	A	B	C	D	E	F	G	H	J	K	L	M
18"	20"	20"	12"	12"	51 3/8"	2"	48"	12"	12"	24"	12"	18"
20"	22"	18"	12"	12"	56 5/8"	1"	54"	12"	12"	24"	16"	20"
24"	26"	14"	12"	12"	64 3/8"	1"	60"	18"	14"	30"	18"	24"
30"	28"	12"	12"	12"	80 5/8"	3"	66"	18"	18"	30"	20"	30"
36"	32"	8"	12"	12"	90 1/16"	4"	72"	18"	18"	36"	24"	36"
42"	34"	6"	15"	9"	107 3/4"	5"	78"	24"	20"	36"	30"	42"
48"	36"	4"	14"	10"	121 5/8"	4"	90"	24"	26"	42"	36"	48"
54"	36"	4"	9"	15"	142 1/2"	3"	102"	24"	32"	46"	40"	54"

6 VAULT CONSTRUCTION VERTICAL GATE VALVE (18" AND LARGER)

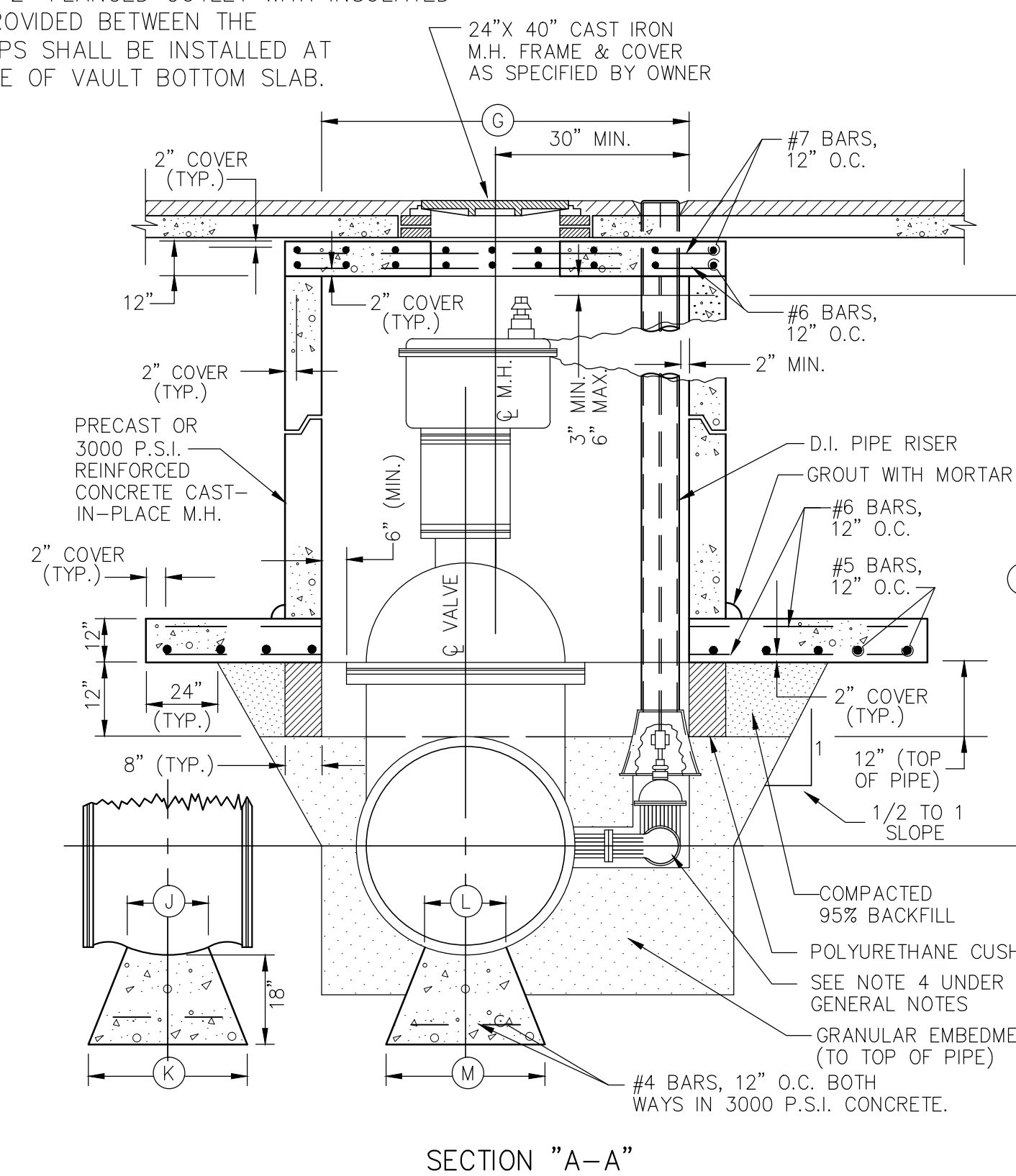


TOP VIEW - CONCRETE PAD



- NOTES:**
1. VALVES WITH OPERATING NUTS GREATER THAN 6' BELOW GROUND SHALL INCLUDE 1-1/4" SOLID STEM EXTENSION WITH ROCK GUARD TO 12" BELOW TOP OF BOX. EXTENSION OPERATING NUT SHALL BE SAME SIZE AS VALVE OPERATING NUT.
  2. VALVES WITH OPERATING NUTS GREATER THAN 6' BELOW GROUND SHALL BE INSTALLED WITH DUCTILE IRON PIPE BELL OVER VALVE AND 24"x36" SCREW TYPE VALVE BOX FOR TOP SECTION. ONLY ONE VALVE BOX SHALL BE USED PER INSTALLATION.
  3. TYLER VALVE BOX MODEL NO. 6850 AND LID OR APPROVED EQUAL SHALL BE USED.
  4. UNLESS OTHERWISE NOTED ON PLANS, SET VALVE AND BOX AT CURB RETURN.
  5. VALVE BOXES AND PADS SHALL BE INSTALLED AT FINISHED GRADE. SLOPE CONCRETE PAD SURFACE SLIGHTLY AWAY FROM LID.
  6. PADS ARE REQUIRED FOR ALL NON-PAVED AREAS. BROOM FINISH ALL PADS.

3 TYP. VALVE DETAIL WITH BOX AND CONCRETE PAD



- NOTES:**
1. VALVES 18" AND LARGER SHALL BE PLACED IN A 5' MIN. DIA. MANHOLE.
  2. ALL VALVE LIDS SHALL BE LABELED AS A CITY OF MIDLOTHIAN WATER VALVE AND MANUFACTURED BY EAST JORDAN IRON WORKS, INC. (OR APPROVED EQUAL).

**NOTE:** THIS IS SHT. SD-20 OF THE STANDARD CONSTRUCTION DETAILS, ORDINANCE NO. 2013-51 EFFECTIVE DATE: JANUARY 1, 2014

*CITY OF MIDLOTHIAN, TEXAS*  
DEPARTMENT OF ENGINEERING,  
UTILITIES, AND PUBLIC WORKS

**STANDARD CONSTRUCTION DETAILS**  
WATER UTILITIES

**AIR VALVE & GATE VALVE**  
DETAILS

NO.	REVISION	DATE	SHEET
			SD-20

