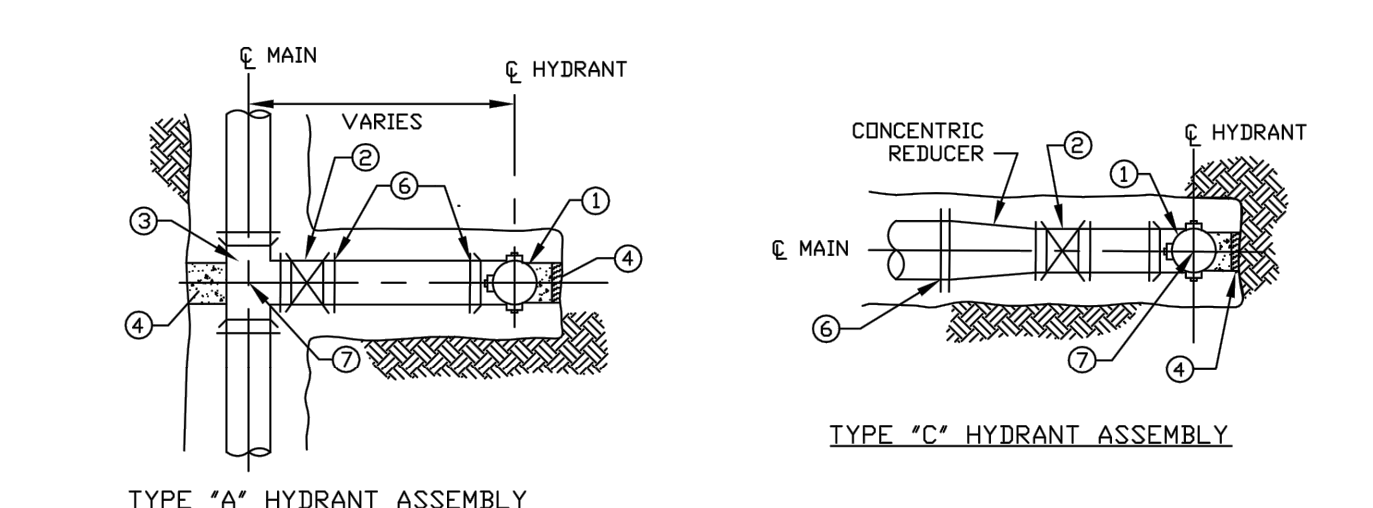


DATE	5/06/20
REVISION	ADDENDUM 2
NO	2
CD	4/10/20
ISSUED FOR:	AS NOTED
SCALE:	PJF / GMS
DESIGNED BY:	GMS
DRAWN BY:	PJF
CHECKED BY:	PJF

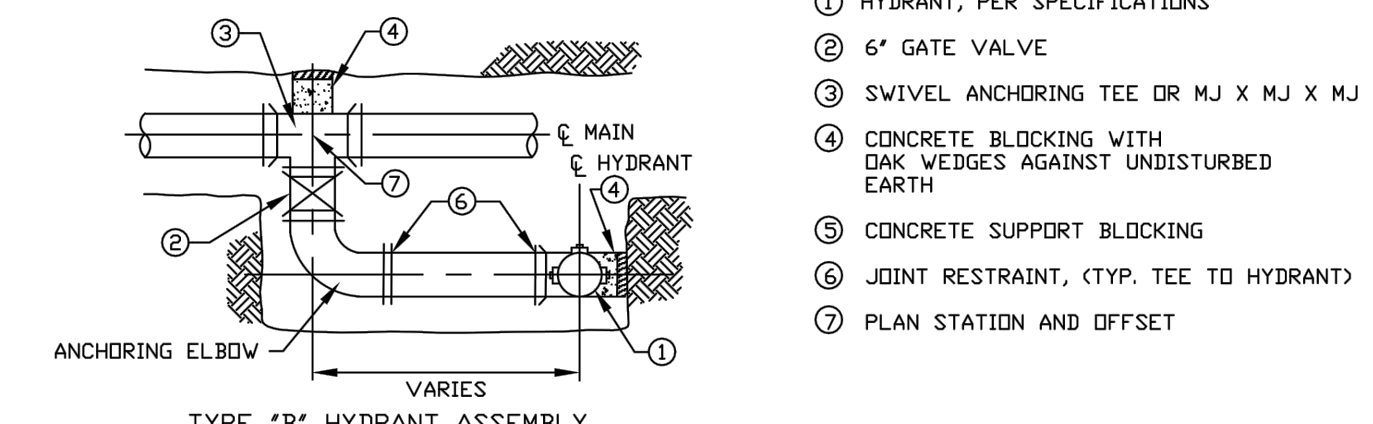
LAKETRAN WICKLIFFE PARK-N-RIDE LOT
 29610 LAKELAND BLVD., WICKLIFFE, OH 44092

CONSTRUCTION DETAILS 4

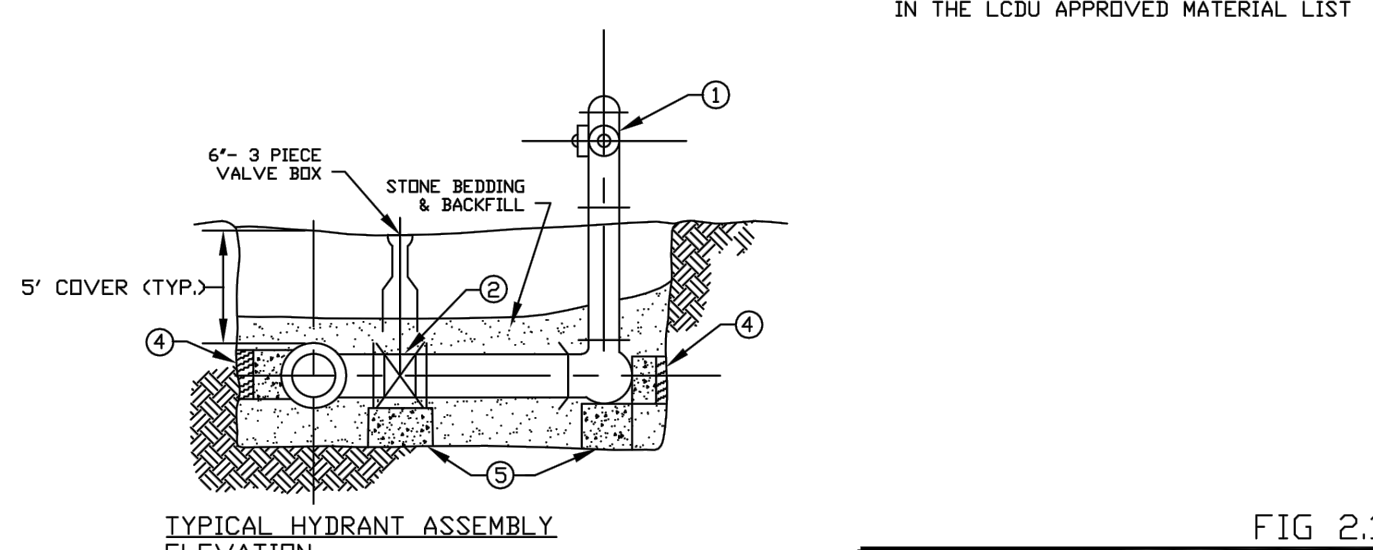
PROJECT NO.	190065
DISCIPLINE	CIVIL
SHEET NAME	DT-4
SHEET	OF
15	49



TYPE "A" HYDRANT ASSEMBLY



TYPE "B" HYDRANT ASSEMBLY

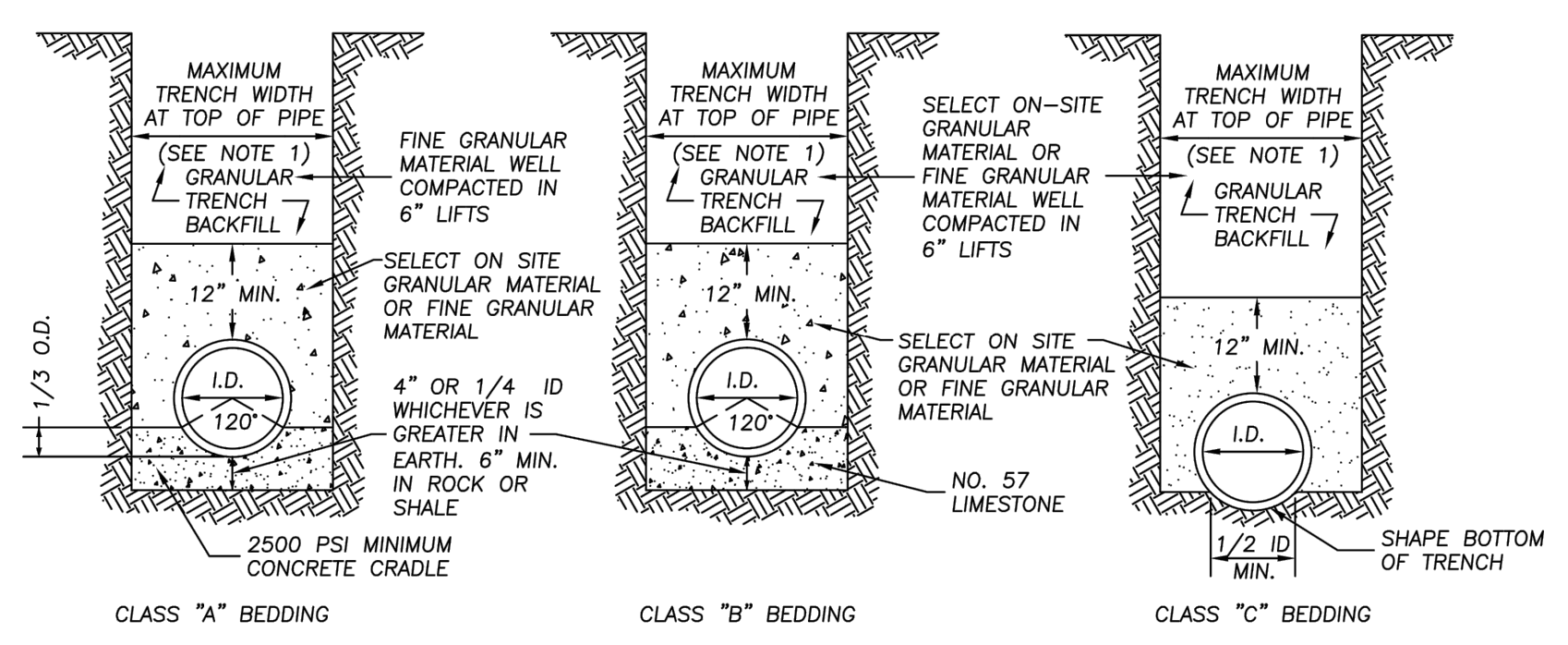


TYPICAL HYDRANT ASSEMBLY ELEVATION

- 1 HYDRANT, PER SPECIFICATIONS
- 2 6" GATE VALVE
- 3 SWIVEL ANCHORING TEE OR MJ X MJ X MJ TEE
- 4 CONCRETE BLOCKING WITH DAK WEDGES AGAINST UNDISTURBED EARTH
- 5 CONCRETE SUPPORT BLOCKING
- 6 JOINT RESTRAINT, (TYP. TEE TO HYDRANT)
- 7 PLAN STATION AND OFFSET

NOTE: ALL MATERIALS SHALL BE AS LISTED IN THE LCDU APPROVED MATERIAL LIST

FIG 2.12.1
 LAKE COUNTY DEPARTMENT OF UTILITIES
HYDRANT DETAILS
 DATE: 5-16 DRAWN BY: D.D.B. SCALE: NONE

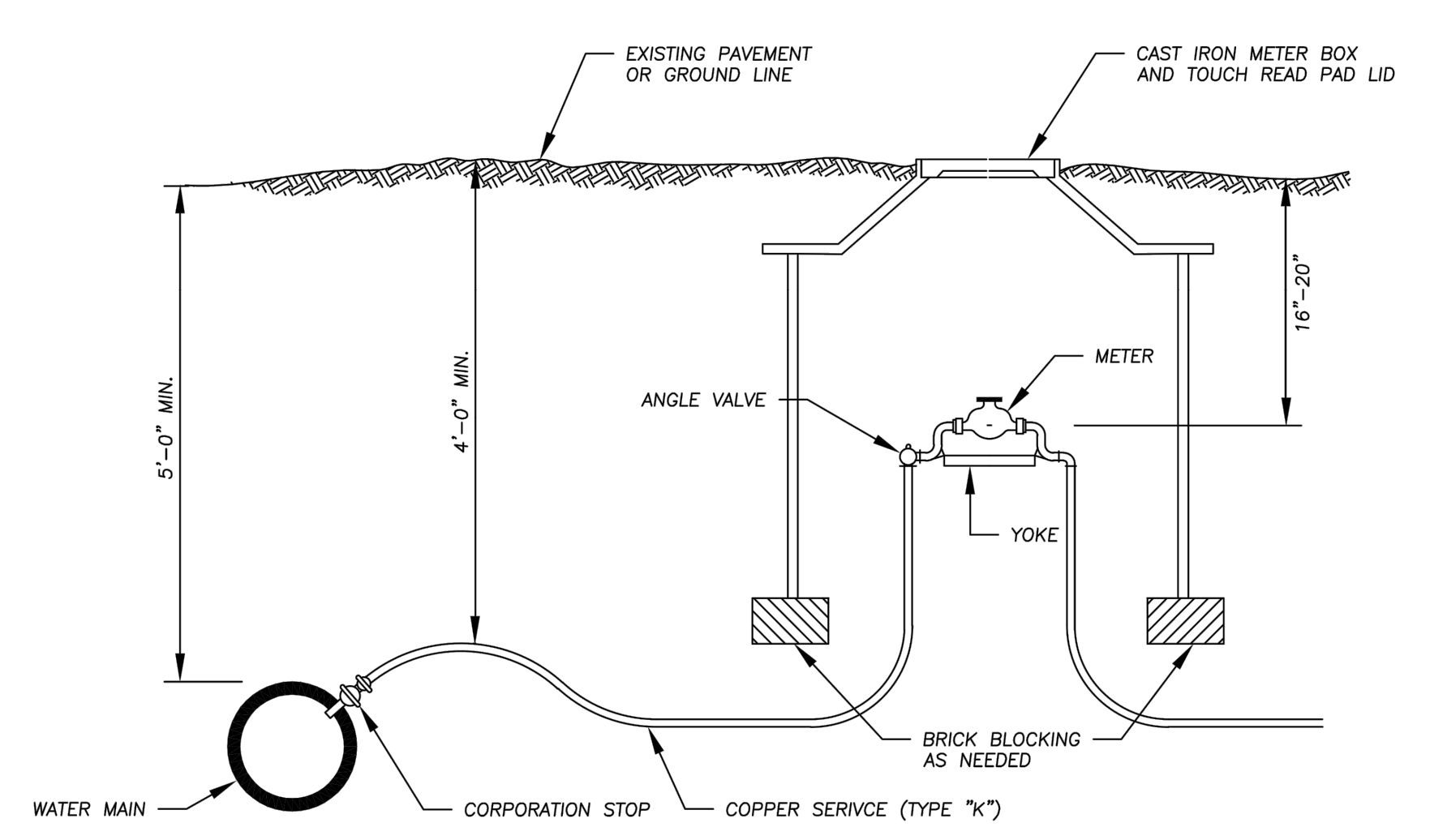


- NOTES:
- MAXIMUM TRENCH WIDTH AT TOP OF PIPE SHALL BE O.D. +24" FOR ALL PIPE SIZES UP TO AND INCLUDING 24" I.D., AND O.D. +30" FOR PIPE LARGER THAN 24" I.D.
 - GRANULAR TRENCH PIPE BACKFILL UNDER PAVEMENT AND STRUCTURES SHALL BE ODOT 304 LIMESTONE COMPACTED TO TOP OF TRENCH. SEE SECTION 1.24 FOR COMPACTION REQUIREMENTS. THE BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF 3- FEET BEYOND EACH EDGE OF PAVEMENT OR STRUCTURE. IN AREAS OUTSIDE OF PAVEMENT, SELECT ON-SITE GRANULAR MATERIAL APPROVED BY LAKE COUNTY SANITARY ENGINEER MAY BE USED IN LIFTS NOT TO EXCEED 6-INCHES FOR PIPE BACKFILL ABOVE BEDDING.
 - ALL BEDDING SHALL BE CLASS "C" UNLESS OTHERWISE NOTED ON THE PLANS OR REQUIRED BY THE SANITARY ENGINEER.
 - SLAG SHALL NOT BE USED FOR BEDDING OR BACKFILL.
 - RECYCLED CONCRETE SHALL NOT BE USED.
 - CLAY DAMS SHALL BE REQUIRED WHEN AND WHERE NECESSARY PER THE SOLE DISCRETION OF THE LCDU.
 - THESE SPECIFICATIONS ARE TO BE CONSIDERED MINIMUM REQUIREMENTS AND ARE SUPERSEDED BY THE REQUIREMENTS OF THE LOCAL AUTHORITY WITH JURISDICTION OVER THE ROADWAY, WHEN APPLICABLE.

FOR WATER ONLY
 SEE FIG 3.17.1 FOR SANITARY

LAKE COUNTY DEPARTMENT OF UTILITIES
TRENCH AND BEDDING DETAILS
 DATE: 6-16 DRAWN BY: DDB SCALE: NONE

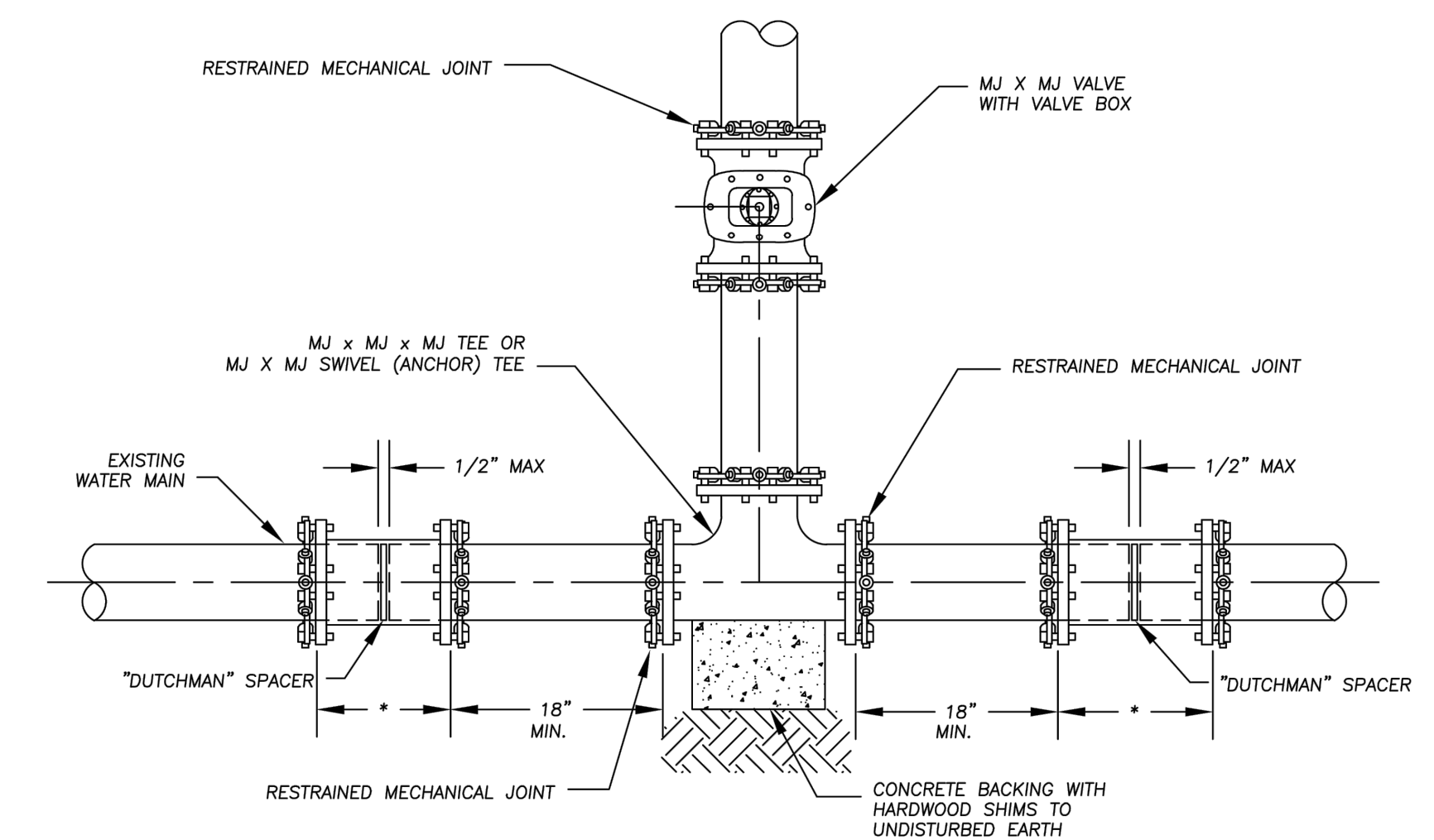
FIG 2.22.1



ALL MATERIALS SHALL BE AS LISTED IN THE LCDU APPROVED MATERIAL LIST.

LAKE COUNTY DEPARTMENT OF UTILITIES
SERVICE TIE IN FOR OUTSIDE METER LESS THAN 2" DIA.
 DATE: 9-17 DRAWN BY: DDB SCALE: NONE

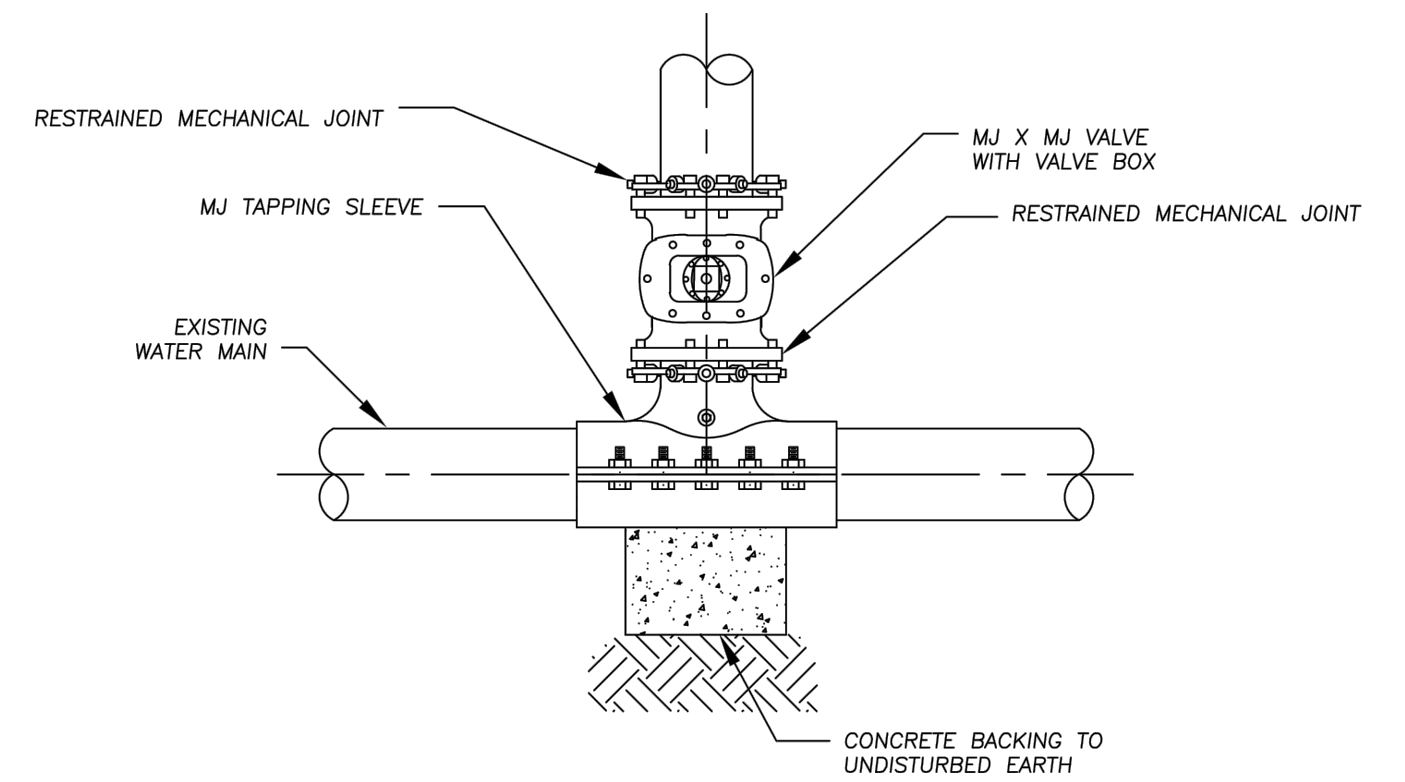
FIG 2.25.1



- NOTES:
- THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
 - NO CAST IRON FITTINGS SHALL BE PERMITTED.
 - * = CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.
 - ALL MATERIALS TO CONFORM TO THE LCDU APPROVED MATERIAL LIST.
 - FITTINGS TO BE SUPPORTED BY SOLID CONCRETE BLOCKING WITH HARD WOOD SHIMS AS NEEDED.
 - IF THE SPACE BETWEEN THE JOINT IS GREATER THAN 1/2-INCH, THEN A FULL CIRCLE SPACER OR "DUTCHMAN" MUST BE CUT AND PLACED IN THE GAP BEFORE THE SLEEVE IS USED TO CLOSE THE JOINT.
 - THE "DUTCHMAN" SPACER SHALL BE CUT TO A WIDTH NO LESS THAN 1/4-INCH LESS THAN THE NARROWEST WIDTH OF THE JOINT.
 - EACH PIPE SPIGOT SHALL BE MARKED TO INDICATE THE POINT WHERE THE SHEEVE WILL BE PROPERLY CENTERED OVER THE POINT.

LAKE COUNTY DEPARTMENT OF UTILITIES
CUT-IN DETAIL WITH VALVE
 DATE: 3-17 DRAWN BY: DDB SCALE: NONE

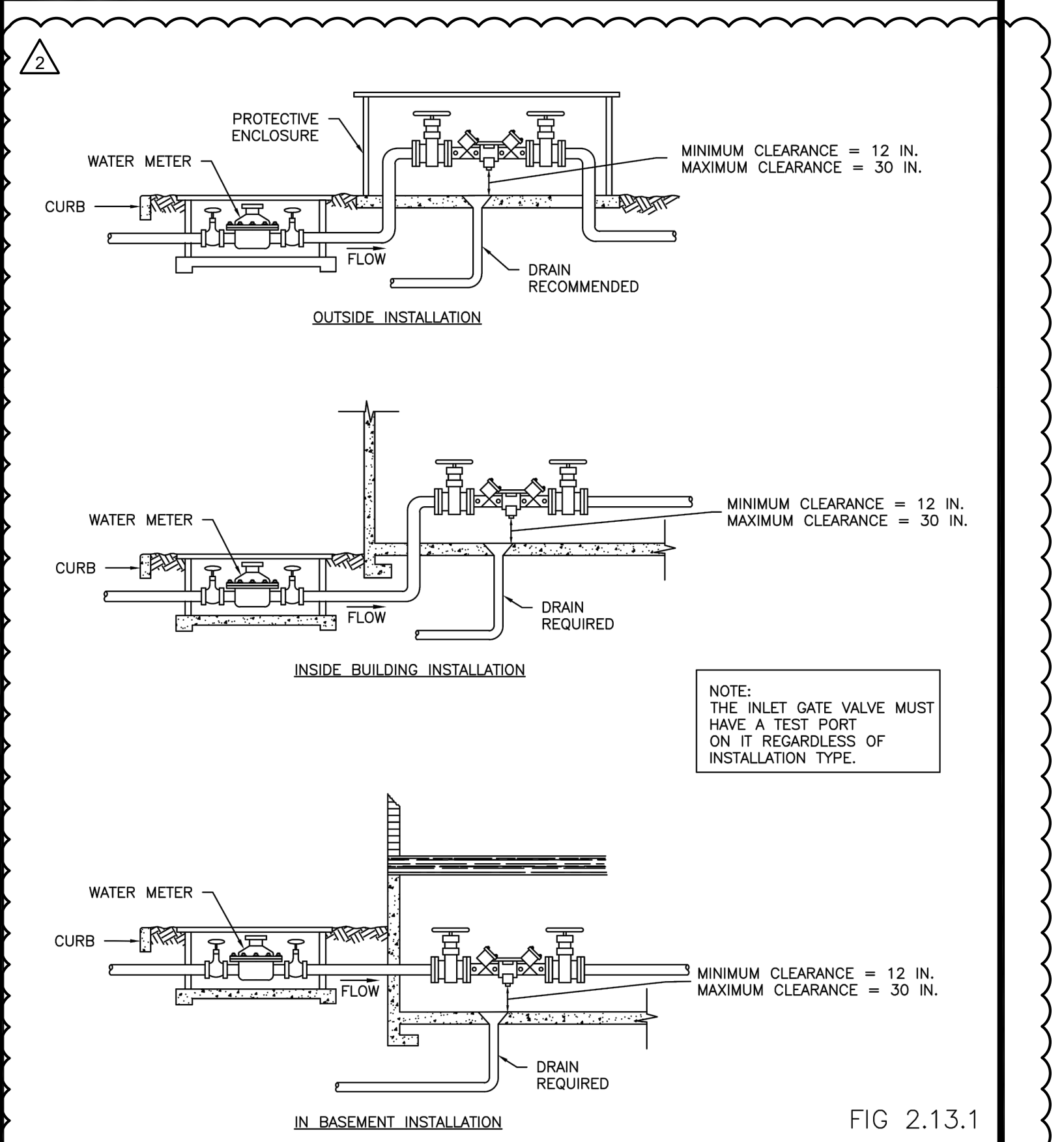
FIG 2.6.2



- NOTES:
- THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
 - NO CAST IRON FITTINGS SHALL BE PERMITTED.
 - * = CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.
 - ALL MATERIALS TO CONFORM TO THE LCDU APPROVED MATERIAL LIST.

LAKE COUNTY DEPARTMENT OF UTILITIES
M.J. TAPPING SLEEVE & VALVE
 DATE: 10-09 DRAWN BY: D.D.B. SCALE: NONE

FIG 2.6.3



NOTE: THE INLET GATE VALVE MUST HAVE A TEST PORT ON IT REGARDLESS OF INSTALLATION TYPE.

LAKE COUNTY DEPARTMENT OF UTILITIES
REDUCED PRESSURE BACKFLOW PREVENTER INSTALLATION
 DATE: 6-16 DRAWN BY: D.D.B. SCALE: NONE

FIG 2.13.1