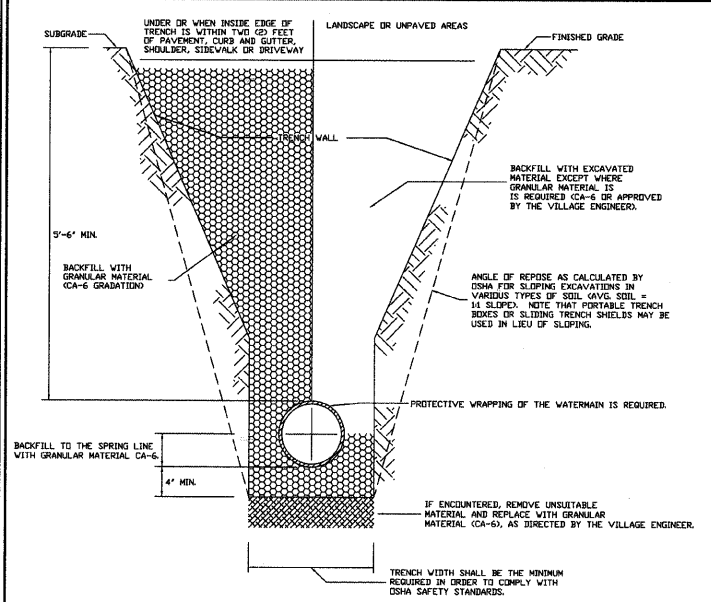


**GENERAL NOTES:**

- ALL VALVES 2-1/2" OR LARGER SHALL BE PLACED IN A VALVE VAULT, UNLESS APPROVED BY THE VILLAGE ENGINEER.
- APPROVED VALVE TYPES ARE MUELLER A-2360 RESILIENT SEAT GATE VALVES WITH STAINLESS STEEL TRIM BOLTS (ALL SIZES) OR CLOW 2810 BUTTERFLY VALVES (12" OR LARGER ONLY).
- VALVES THAT REQUIRE RESTRAINT JOINTS, MY USE FIELD TITE, FIELD-LOC OR MEGA LUG BRANDS.

REV.:	ERH	REV.:	3-20-99	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	2-16-98	WATER 3
DRAWN BY: VJGL DATE: 2-16-98				
BY: VILLAGE ENGINEER/DESIGNER/SEALER/DATE: WATER-3286				

**VALVE BOX INSTALLATION**

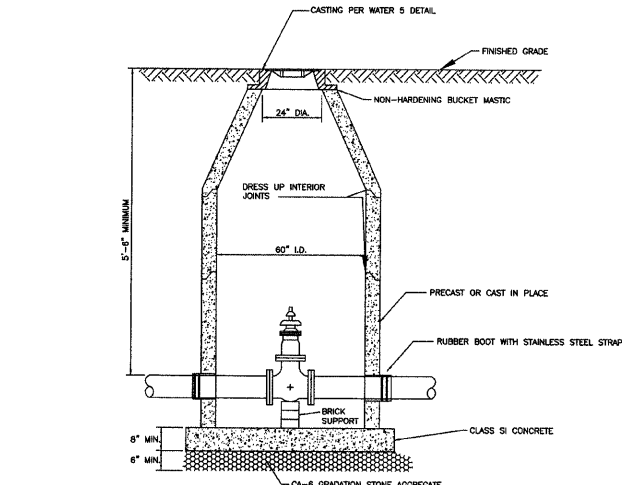


**GENERAL NOTES:**

- CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A SAFE MANNER AT ALL TIMES AND SHALL COMPLY WITH ALL APPLICABLE GOVERNING REGULATIONS, INCLUDING BUT NOT LIMITED TO OSHA SAFETY STANDARDS.
- ALL BACKFILL MATERIAL UP TO A HEIGHT OF 12 INCHES ABOVE THE PIPE SHALL BE CAREFULLY DEPOSITED IN UNIFORM LAYERS NOT EXCEEDING 8 INCHES THICK (CLOSE MEASURED). THE MATERIAL IN EACH LAYER SHALL BE FIRMLY COMPACTED BY RAMMING OR TAMPING WITH TOOLS APPROVED BY THE VILLAGE ENGINEER IN SUCH A MANNER AS NOT TO DISTURB OR INJURE THE PIPE. THE BACKFILLING ABOVE THIS HEIGHT SHALL BE DONE AS NOTED BELOW.
- GRANULAR BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN NOTE 2, ABOVE. THE USE OF JETTING SHALL NOT BE ALLOWED UNLESS AUTHORIZED IN WRITING BY THE VILLAGE ENGINEER. IT SHALL BE THE DESIGN ENGINEER OR CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE VILLAGE ENGINEER WITH THE REQUEST FOR APPROVAL OF JETTING.
- BACKFILL MATERIAL CONSISTING OF SUITABLE EXCAVATED MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING TWELVE (12) INCHES THICK (CLOSE MEASURED) AND EACH LAYER SHALL BE COMPACTED BY RAMMING OR TAMPING TO ACHIEVE THE REQUIRED COMPACTION. JETTING OF THIS MATERIAL MAY BE PERMITTED WHEN AUTHORIZED IN WRITING BY THE VILLAGE ENGINEER. IT SHALL BE THE DESIGN ENGINEER OR THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT APPROPRIATE JUSTIFICATION AND DOCUMENTATION (SOIL INVESTIGATION REPORTS, ETC.) TO THE VILLAGE ENGINEER WITH THE REQUEST FOR APPROVAL OF JETTING.

REV.:	ERH	REV.:	3-19-98	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	3-19-98	WATER 7
DRAWN BY: VJGL DATE: 2-16-98				
BY: VILLAGE ENGINEER/DESIGNER/SEALER/DATE: WATER-7286				

**WATERMAIN TRENCH SECTION**

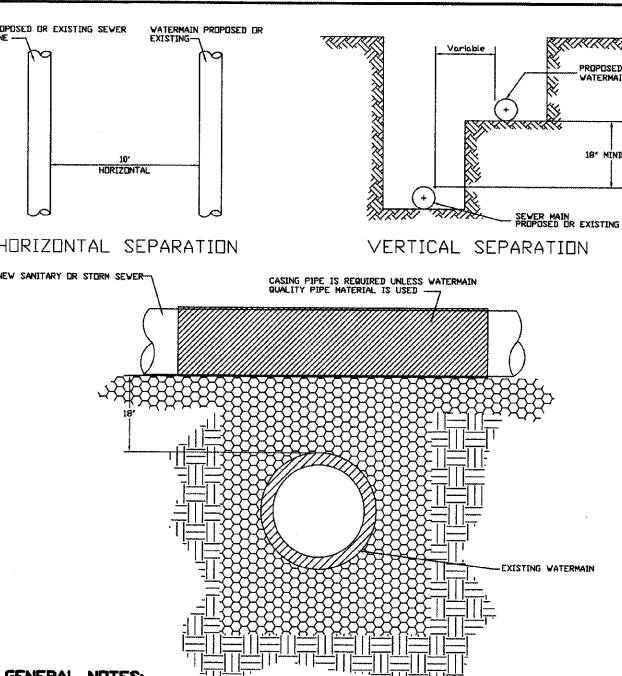


**GENERAL NOTES:**

- PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
- PROVIDE TRENCH BACKFILL, CA-6 GRADATION, AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS.
- APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEX OR E-Z STICK) TO EACH JOINT TO PREVENT INFLOW.
- WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
- PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT.
- WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
- PLASTIC POLYMER STEPS SHALL NOT BE INSTALLED, UNLESS APPROVED BY THE VILLAGE ENGINEER OR HIS/HER DESIGNEE.
- DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
- VALVE MUST ALIGN WITH CENTER OF VAULT OPENING.
- CONES MUST BE CONCENTRIC WITH VALVES 12" AND SMALLER.
- BUTTERFLY VALVES REQUIRE ECCENTRIC CONES.
- ALL VALVE VAULTS REQUIRE RUBBER BOOTS WITH STAINLESS STEEL STRAPS WITH THE EXCEPTION OF PRESSURE CONNECTION VALVE VAULTS. (SEE WATER DETAIL 10).
- CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE VALVE VAULT IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH VILLAGE DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

REV.:	ERH	REV.:	12-05-95	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	2-20-99	WATER 4
DRAWN BY: VJGL DATE: 2-16-98				

**WATER TIGHT VALVE VAULT**

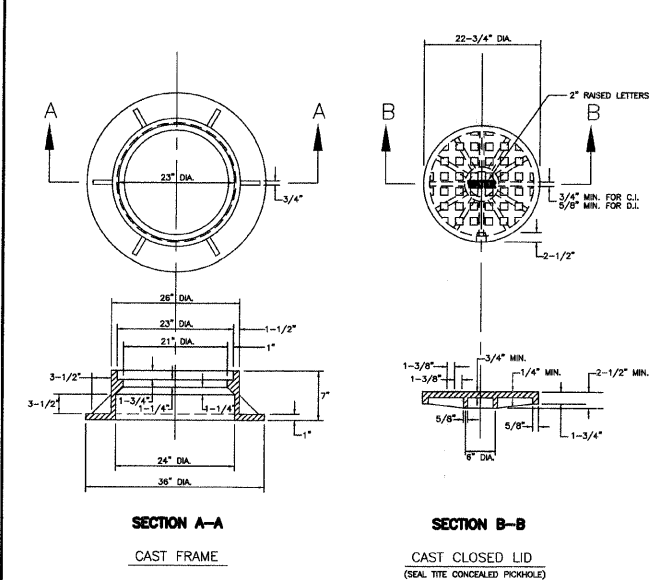


**GENERAL NOTES:**

- WHEN THE MINIMUM 10 FEET HORIZONTAL SEPARATION CANNOT BE ACHIEVED, AN 18 INCH VERTICAL SEPARATION MAY BE PERMITTED. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR ALL PORTIONS OF THE WATERMAIN THAT ARE WITHIN 10 HORIZONTAL FEET OF ANY SEWER OR DRAIN.
- WHEN THE WATERMAIN MUST PASS UNDER A SEWER OR DRAIN, BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT DUCTILE IRON PIPE, PRE-STRESSED CONCRETE PIPE, OR PVC PIPE MEETING WATERMAIN STANDARDS. (SEE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS).
- WHEN THE WATERMAIN CROSSES UNDER A SEWER GREATER THAN 24 INCH IN DIAMETER, THE SEWER SHALL BE SUPPORTED TO PREVENT SETTLING AND BREAKING OF THE WATER MAIN. REFER TO THE VILLAGE OF LOMBARD 'CONCRETE SADDLE SUPPORT' DETAIL.

REV.:	ERH	ADD:	3-19-98	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	3-19-98	WATER 8
DRAWN BY: VJGL DATE: 2-16-98				
BY: VILLAGE ENGINEER/DESIGNER/SEALER/DATE: WATER-3286				

**WATER AND SEWER SEPARATION**

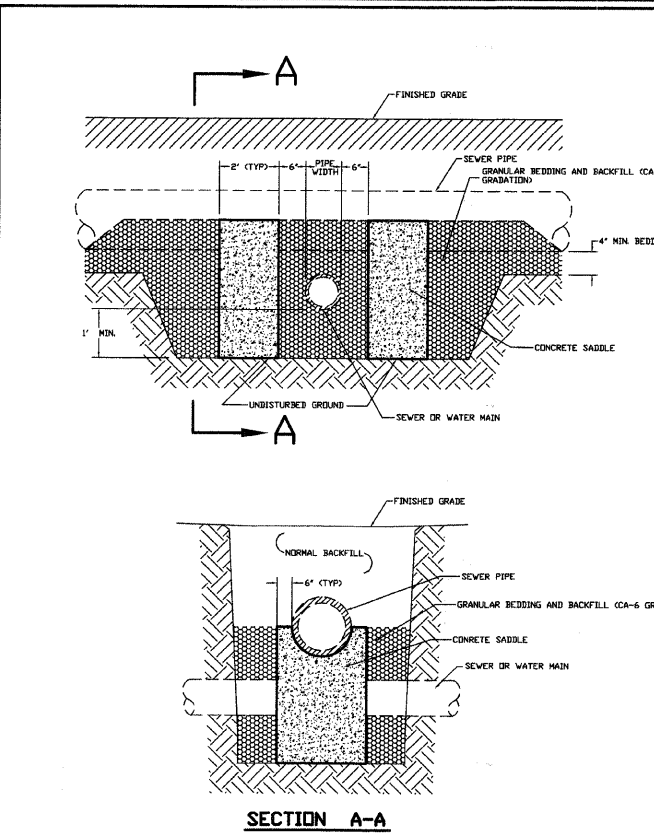


**GENERAL NOTES:**

- DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
- ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
- THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN.
- DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN 1022-3 OR NEENAH FOUNDRY 1772-C.
- WATERPROOF, BOLTDOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH R-1916-C, EAST JORDAN 1022-3 WT OR APPROVED EQUAL).
- LIDS SHALL BE "WATERITE" OR "SELF-SEALING" WITH A FACTORY INSTALLED GASKET.

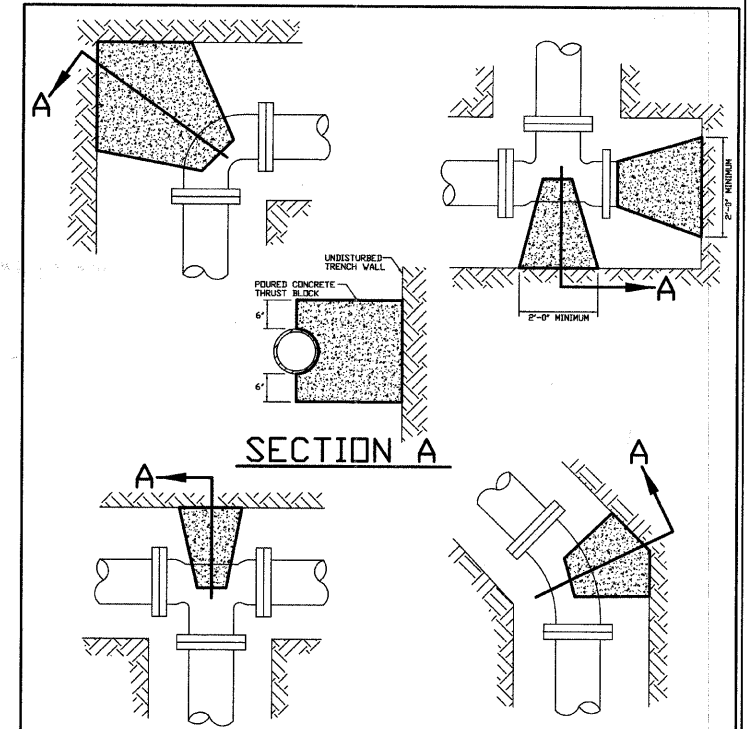
REV.:	ERH	REV.:	8-23-06	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	3-20-99	WATER 5
DRAWN BY: VJGL DATE: 2-16-98				

**VALVE VAULT FRAME AND COVER**



REV.:	ERH	REV.:	3-20-99	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	2-16-98	WATER 9
DRAWN BY: VJGL DATE: 2-16-98				
BY: VILLAGE ENGINEER/DESIGNER/SEALER/DATE: WATER-3286				

**CONCRETE SADDLE SUPPORT**



**GENERAL NOTES:**

- THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE VILLAGE ENGINEER SHALL BE CLASS ST1 CONCRETE A MINIMUM OF TWELVE (12) INCHES THICK PLUS THE SIZE OF THE WATERMAIN. IT SHALL BE PLACED BETWEEN SOLID GROUND AND FITTINGS WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS OF 11-1/4 DEGREES OR MORE. THE AREA OF BEARING SHALL BE SUFFICIENT TO RESIST THE APPLIED FORCES.
- USE OF WOOD MATERIAL FOR THRUST BLOCKING IS STRONGLY PROHIBITED.

REV.:	ERH	REV.:	3-20-99	VILLAGE OF LOMBARD
REV.:	ERH	REV.:	2-16-98	WATER 6
DRAWN BY: VJGL DATE: 2-16-98				
BY: VILLAGE ENGINEER/DESIGNER/SEALER/DATE: WATER-3286				

**THRUST BLOCK INSTALLATION**

**GENERAL NOTES:**

- CORPORATION IS TO BE FLARING TYPE (FORD F-600 OR MUELLER EQUAL).
- WHEN USING 1" CURB STOP, THE B-BOX IS ARCH PATTERN WITH INTERIOR ROD OF 1" IN THE UPPER SECTION ONLY.
- WHEN USING 1-1/2" TO 2" CURB STOP, THE B-BOX IS ARCH PATTERN WITHOUT AN INTERIOR UPPER SECTION ROD.
- 1" CURB STOP IS WITH COMPRESSION COUPLINGS (FORD B44-444).
- B-BOX IS MUELLER 10334 WITH 1/4 TURN PENTAGON NUT AND RISER ROD (OR EQUAL AS APPROVED BY THE VILLAGE ENGINEER).
- SERVICE TAPS GREATER THAN 1" IN DIAMETER MUST HAVE A STAINLESS STEEL BANDED DUCTILE IRON SADDLE (FORD 101S, 202S, OR MUELLER EQUAL).
- CORPORATION STOPS SHALL BE INSTALLED A MINIMUM OF 18" FROM PIPE ENDS. MULTIPLE INSTALLATIONS SHOULD BE STAGGERED AROUND THE MAIN BY 90% AND SEPARATED BY 18".

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DETAILS**

**MAIN STREET**

REVISIONS	
NAME	DATE

DATE: 11/26/07  
DESIGNED BY: SJG  
CHECKED BY: JRV