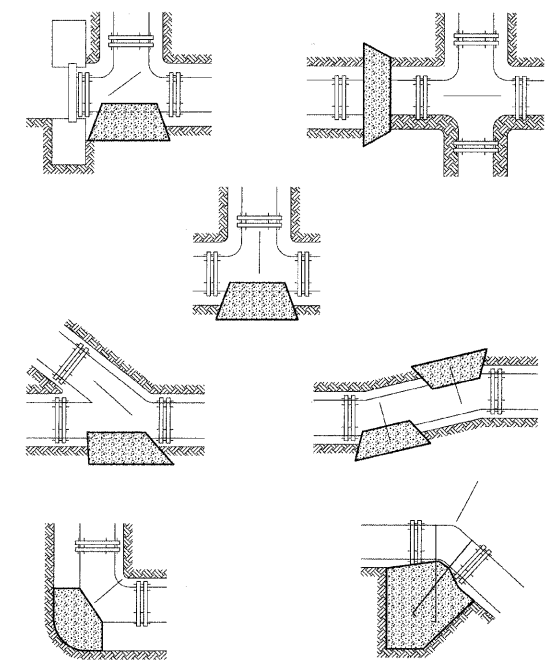


- NOTES:
1. NO CORPORATION STOPS OR CURB BOXES MAY BE LOCATED UNDER PAVED AREAS INCLUDING DRIVES AND SIDEWALKS
 2. ALL WATER MAIN HARDWARE SHALL BE MUELLER, A.Y. McDONALD, OR FORD.
 3. SERVICE TO BE CONTINUOUS WITHOUT JOINTS FROM CORPORATION STOP TO CURB STOP.
 4. MULTIPLE TAPS INTO MAIN SHALL BE NO CLOSER THAN 2' APART.
 5. TRENCH FROM MAIN TO BACK OF SIDEWALK TO BE COMPACTED TRENCH BACKFILL.
 6. NO FLARE FITTINGS WILL BE ACCEPTED.
 7. ALL CURB BOX ADJUSTMENTS TO BE MADE WITH GALVANIZED PIPE AND COUPLINGS (SCREWED ON)
 8. ALL COPPER TO BE REAMED BOTH INSIDE AND OUTSIDE AFTER CUTTING.
 9. B-BOXES (TWO OR MORE) FOR ALL MULTI-UNIT BUILDINGS MUST BE CLEARLY AND PERMANENTLY LABELED BY WELDING THE UNIT NUMBER/LETTER ONTO THE B-BOX TOP

PART DESCRIPTION	MUELLER CAT. NO.	FORD CAT. NO.	A.Y. McDONALD CAT. NO.	SERVICE SIZE
CORP. STOP	B-25008	FB1000-Q	4701BQ	
DOUBLE STRAP SERVICE SADDLE	BR 2 S 0684 CC	202BS-750-CC	3855 6	
	BR 2 S 0899 CC	202BS-962-CC	3855 8	
	BR 2 S 1104 CC	202BS-1212-CC	3855 10	
	BR 2 S 1314 CC	202BS-1438-CC	3855 12	
STOP CURB	B-25155	B44-M-Q	6104Q	
CURB BOX	H-10300	EM2-60-56	5614	1" & 1.25" A.Y. McD.
	H-10300-99002	EM2-60-57	5615	1.25" FORD, 1.5" & 2"
STATIONARY ROD	84247	ROD-36	5660	

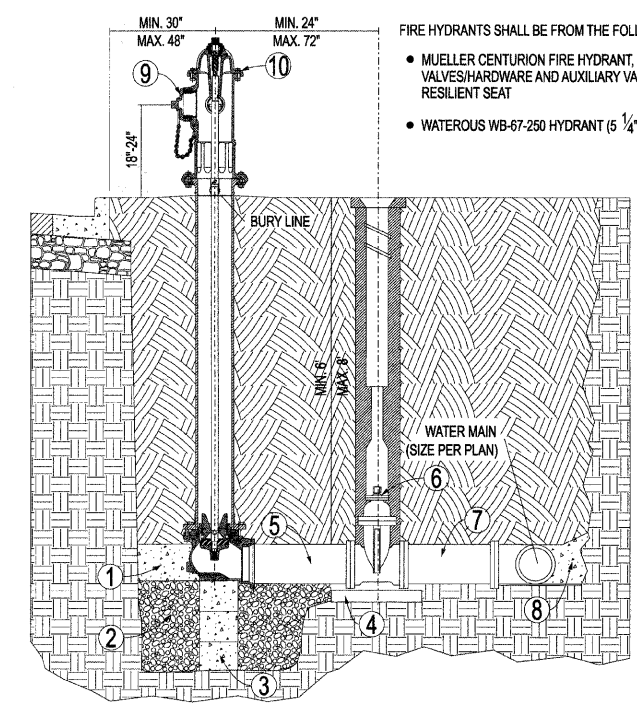
WATER SERVICE INSTALLATION DETAIL



BEARING AREA (SQ. FT.)					
PIPE SIZE	TEE/PLUG	90°	45°	21 1/2°	11 1/4°
6	4	2	1	1	1
8	6	4	3	1	1
10	7	5	3	2	1
12	8	6	4	3	2
14	12	9	6	4	3
16	15	12	7	5	3
18	18	15	9	5	4
24	40	30	15	10	5

- NOTES:
- ALL BLOCKING SHALL BE POURED CLASS SI CONCRETE AGAINST UNDISTURBED EARTH.
 - ALL BENDS OR ELBOWS GREATER THAN 11 1/4° SHALL HAVE THRUST BLOCKING. FORM AS TO NOT COVER BOLTS.
 - IN LEU OF THRUST BLOCKING "MEGA LUG" (EBAA) JOINT RESTRAINTS OR APPROVED EQUAL CAN BE USED AS APPROVED BY THE ENGINEER.

THRUST BLOCK DETAIL



- FIRE HYDRANTS SHALL BE FROM THE FOLLOWING LIST, AS APPROVED BY THE CITY:
- MUELLER CENTURION FIRE HYDRANT, OPT-094 (5 1/4" BARREL) WITH MUELLER VALVES/HARDWARE AND AUXILIARY VALVE 6" GATE VALVE NO. 2360-23-9020 MODIFIED WEDGE RESILIENT SEAT
 - WATEROUS WB-67-250 HYDRANT (5 1/4" PACER) WITH SERIES 2500-1 RESILIENT WEDGE GATE VALVE
1. PROVIDE CLASS SI CONCRETE BASE AND BLOCKING AGAINST UNDISTURBED EARTH
 2. DRAIN SUMP TO BE 3/4 CUBIC YARD OF 3/4" WASHED STONE
 3. CONCRETE SUPPORT
 4. CONCRETE BLOCK OR BRICK SUPPORT
 5. PIPE AS REQUIRED TO MAINTAIN 24" SEPARATION AS SHOWN (DIRECT MECHANICAL JOINT CONNECTION IF APPROVED BY CITY)
 6. RUBBER VALVE BOX STABILIZER
 7. USE "CORTEN" STEEL TIE RODS BETWEEN AUXILIARY VALVE AND WATER MAIN (STAINLESS STEEL MAY BE REQUIRED BY THE CITY ENGINEER). ANY DISTANCE GREATER THAN 30" SHALL BE RODDED TO MEGA-LUG FLANGE. NO COUPLINGS ARE PERMITTED IN RODS.
 8. CONCRETE BLOCKING CAST IN PLACE 3000 P.S.I.
 9. 4 1/2" PORT TO FACE PAVEMENT OR AS DIRECTED BY CITY ENGINEER
 10. ALL NEWLY INSTALLED HYDRANTS MUST BE TOP COATED WITH RUST-OLEUM FIRE HYDRANT ENAMEL (COLOR = FIRE HYDRANT RED)
 11. MIN. 48" BETWEEN HYDRANT AND ANY VERTICAL OBSTRUCTIONS.
 12. MIN. 72" BETWEEN HYDRANT AND ANY LANDSCAPING WITH A MATURE HEIGHT GREATER THAN 12".
 13. ALL VALVE AND HYDRANT HARDWARE MUST BE STAINLESS STEEL INCLUDING NUTS, BOLTS, AND WASHERS.

FIRE HYDRANT DETAIL

REVISIONS	
NAME	DATE

CITY OF CRYSTAL LAKE
 ERICK STREET (FAU 0125)
 DRAINAGE & UTILITIES
 DRAINAGE DETAILS

SCALE: NTS
 DATE: DECEMBER 15, 2008

DRAWN BY: JJS
 CHECKED BY: ADJ