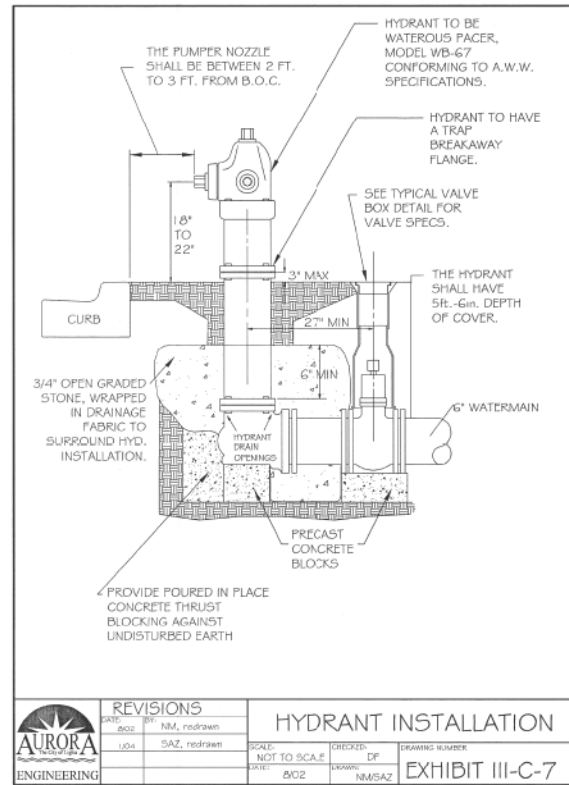


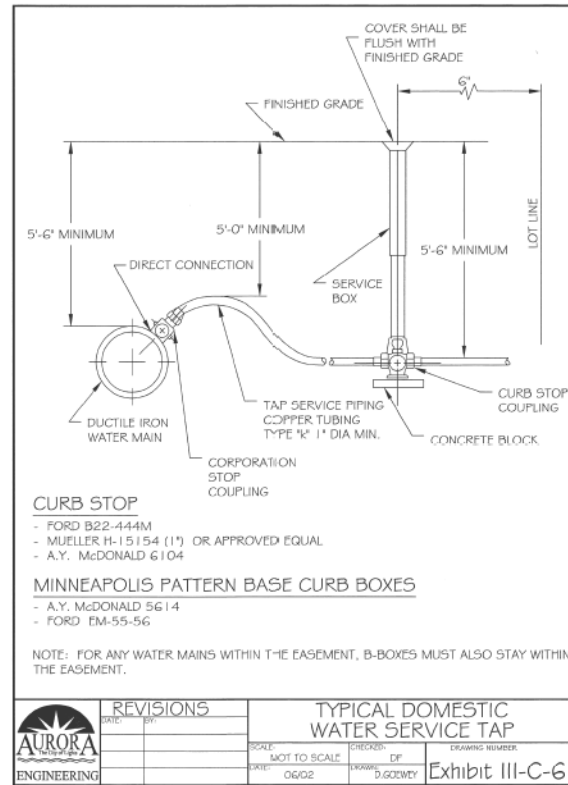
WATER MAIN



REVISIONS		HYDRANT INSTALLATION	
NO.	DATE	BY	DESCRIPTION
001	02/28/14	NM	redrawn
004		SAZ	redrawn

SCALE: NOT TO SCALE
DATE: 02/28/14
DRAWN: DF
CHECKED: NMSAZ

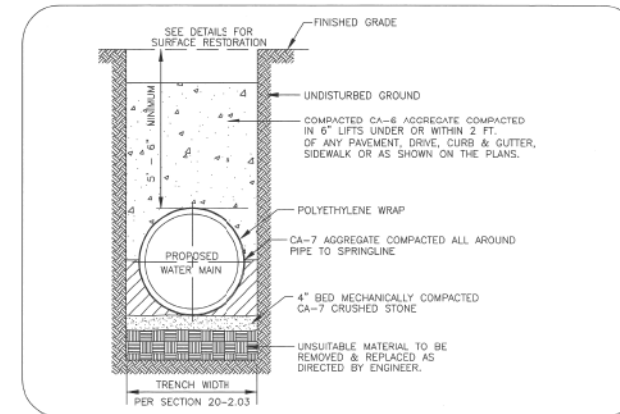
DRAWING NUMBER: EXHIBIT III-C-7



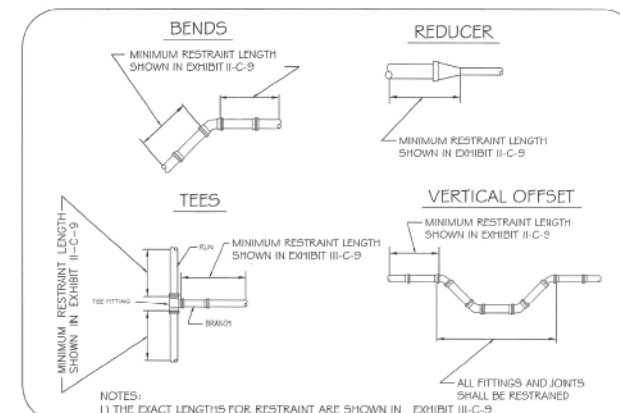
REVISIONS		TYPICAL DOMESTIC WATER SERVICE TAP	
NO.	DATE	BY	DESCRIPTION
001	06/02	DF	DESIGNED
002		DIG	DRAWN

SCALE: NOT TO SCALE
DATE: 06/02
DRAWN: DIG
CHECKED: D.GODWY

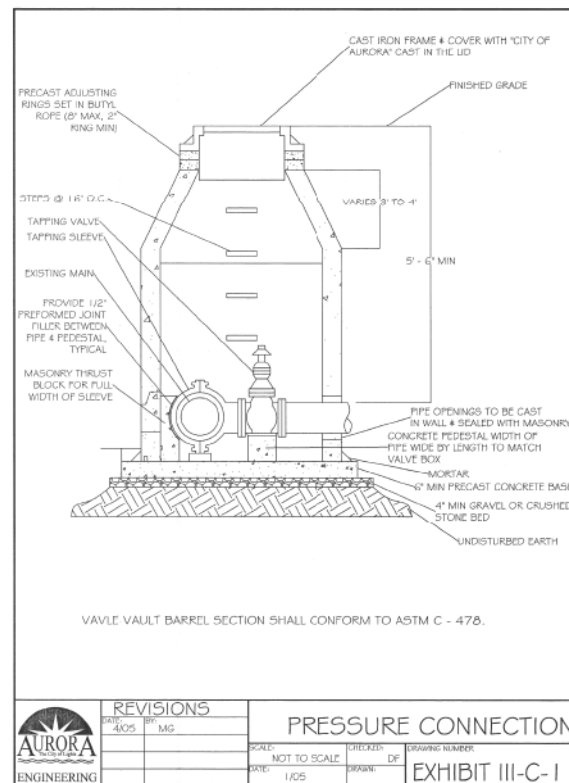
DRAWING NUMBER: EXHIBIT III-C-6



TRENCH DETAIL
(FOR WATERMAIN UNDER PAVEMENT, DRIVES, CURBS, OR SIDEWALKS)



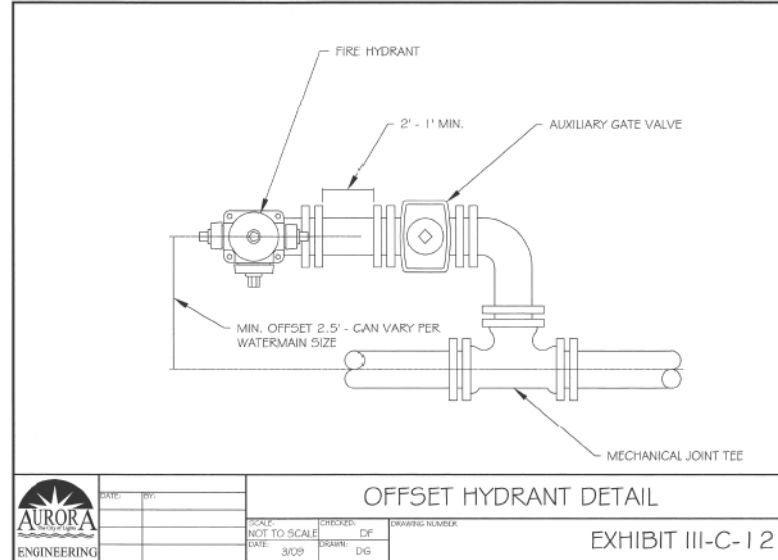
WATER MAIN RESTRAINT DETAIL
(EXHIBIT III-C-10)



REVISIONS		PRESSURE CONNECTION	
NO.	DATE	BY	DESCRIPTION
001	1/05	MG	

SCALE: NOT TO SCALE
DATE: 1/05
DRAWN: DF
CHECKED: NMSAZ

DRAWING NUMBER: EXHIBIT III-C-11



REVISIONS		OFFSET HYDRANT DETAIL	
NO.	DATE	BY	DESCRIPTION
001	3/08	DIG	DRAWN

SCALE: NOT TO SCALE
DATE: 3/08
DRAWN: DIG
CHECKED: D.GODWY

DRAWING NUMBER: EXHIBIT III-C-12

Minimum Restraint Length (ft) on both sides of the Fitting				
Fitting Type/Nominal Size	6"	8"	12"	16"
11 1/2" Bend	2	3	4	6
22 1/2" Bend	5	6	9	11
15" Bend	10	13	18	23
90° Bend	23	30	43	56
Dead End	31	40	57	74
Top Side of a Vertical Offset ¹	19	25	35	46
Tee Run x Branch ²				
Tee Run x Branch ²	6" BY	24		
Tee Run x Branch ²	8" BY	22	34	
Tee Run x Branch ²	12" BY	18	31	51
Tee Run x Branch ²	16" BY	14	28	48
Reducer ³	8" BY	17		
Reducer ³	12" BY	42	30	
Reducer ³	16" BY	62	54	31

¹ All joints within the lowered section of the watermain shall be restrained or shall be solid pipe. The above distances reflect the required restraint distance on the normally elevated watermain either side of the 45° fitting of the vertical offset (or lowering).
² Minimum of 2 ft of solid pipe is required on both sides of the fitting on the run side. Distance indicates the length of restraint on the branch side or the side perpendicular to the tee run watermain.
³ Indicates the distance from the larger end of the reducer.

Notes: 1) All runs and bells shall be shrouded steel.
2) The entire restraint extends from the fitting to the minimum restraint distance must be supported by the City of Aurora prior to backfilling.

Watermain Restraint Length Table
EXHIBIT III-C-9

WATERMAIN RESTRAINT LENGTH TABLE
(EXHIBIT III-C-9)

FILE NAME = Q:\Aurora\351278\US 34 Water Main Relocation\Roadway Drawings\Plan&Profile\Aurora-WaterMain-shd-Details-1.dgn



USER NAME = URS	DESIGNED - MB	REVISED -
PLOT SCALE = 48.0000' / in.	DRAWN - JMA	REVISED -
PLOT DATE = 02/28/2014	CHECKED - SPF	REVISED -
	DATE - 02/28/2014	REVISED -

CITY OF AURORA

WATER MAIN PLAN DETAILS - 1

SCALE: 20 SHEET NO. 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311		DUPAGE	383	114
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				