

LEGEND

	PROPERTY LINE		EXISTING / PROPOSED MANHOLE
	EXISTING OVERHEAD LINES		EXISTING / PROPOSED HYDRANT
	STORM SEWER		EXISTING / PROPOSED VALVE OR STOP BOX
	EXISTING SANITARY SEWER		EXISTING / PROPOSED LIGHT POLE
	EXISTING WATER		EXISTING / PROPOSED CATCH BASIN
	PROPOSED SANITARY SEWER		PROPOSED CLEANOUT
	PROPOSED WATER		EXISTING UTILITY POLE
	UNDERGROUND ELECTRIC		UTILITY CROSSING
	GAS		
	UNDERGROUND TELEPHONE/DATA		
	PROPOSED SAND BACKFILL		

NOTES

- FOR ADDITIONAL INFORMATION REFERENCE THE STANDARD NOTES SHEET, STANDARD DETAILS SHEET(S), AND ANY MUNICIPALITY AND/OR JURISDICTIONAL NOTES/DETAILS INCLUDED WITH THIS PLAN SET.
- ALL 6" DIAMETER SANITARY SEWER SHALL BE PVC SDR 23.5.
- ALL SANITARY SEWER 8" DIAMETER AND LARGER SHALL BE PVC TRUSS PIPE.
- NO FOOTING DRAINS SHALL BE CONNECTED TO THE BUILDING SEWER.
- SEE MASTER UTILITY PLAN FOR ALL UTILITY ROUTING AND CROSSING INFORMATION.
- NO CONNECTION RECEIVING STORM SEWER, SURFACE WATER OR GROUND WATER SHALL BE MADE TO THE SANITARY SEWER.
- INFILTRATION FOR ANY SECTION OF SEWER BETWEEN MANHOLES SHLL NOT EXCEED 100 GALLONS/INCH DIAMETER/MILE/24 HOURS.
- NO FOOTING DRAINS SHALL BE CONNECTED TO THE BUILDING SEWER.
- DIFFERENTIAL EXCAVATION AROUND THE EXISTING MANHOLES SHALL NOT EXCEED SIX FEET.
- CONTRACTOR SHALL NOTIFY THE CITY OF LIVONIA 48 HOURS PRIOR TO THE START OF CONSTRUCTION IF THE CONSTRUCTION IS WITHIN THE CITY'S RIGHT-OF-WAY OR EASEMENT.
- ALL GREASE TRAPS MUST COMPLY WITH THE FOG ORDINANCE.
- EXTERNAL DROP CONNECTION IS REQUIRED IF OUTLET PIPE INVERT IS 18-INCHES OR GREATER BELOW INVERT OF INLET PIPE. INTERNAL DROP CONNECTIONS WILL NOT BE ALLOWED.

SANITARY STRUCTURE SCHEDULE

NUMBER	TYPE	DIA. (INCH)	RIM/FG	INVERT
S100	EX MH	48	701.89	PR 8" INV. W 685.70
S101	WYE			PR 8" INV. W 686.07 PR 8" INV. E 686.07 PR 6" INV. N 686.12
S102	MH	48	700.77	PR 8" INV. NW 686.94 PR 8" INV. E 686.84
S103	MH	48	699.36	PR 8" INV. N 688.56 PR 8" INV. SE 688.46
S104	EX MH	48	699.70	PR 8" INV. S 688.95
S105	GREASE			PR 6" INV. S 686.25

CROSSING CHART

CROSSING	UPPER UTILITY		LOWER UTILITY		CLEARANCE	NOTES
	TYPE	B/P ELEV	TYPE	T/P ELEV		
X1	24" ST	693.67	10" EX SAN	688.40	5.27'	FIELD VERIFY EX. SANITARY
X2	18" ST	696.66	12" EX WM	TBD	TBD	VERIFY WM DEPTH, DIP IF NEC
X3	15" ST	697.70	12" EX WM	TBD	TBD	VERIFY WM DEPTH, DIP IF NEC
X4	12" ST	695.39	6" SAN	TBD	TBD	VERIFY WITH MEP PLANS
X5	ELEC	699.79	### SAN	###N/A	###N/A	
X6	ELEC	699.46	36" ST	696.58	2.87'	
X7	ELEC	699.42	10" SAN	TBD	TBD	FIELD VERIFY SAN DEPTH

ALL PRIVATE UTILITY
MANHOLE COVERS
SHALL NOT CONTAIN
CITY OF LIVONIA LOGO

BENCHMARKS

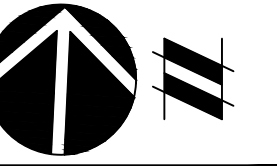
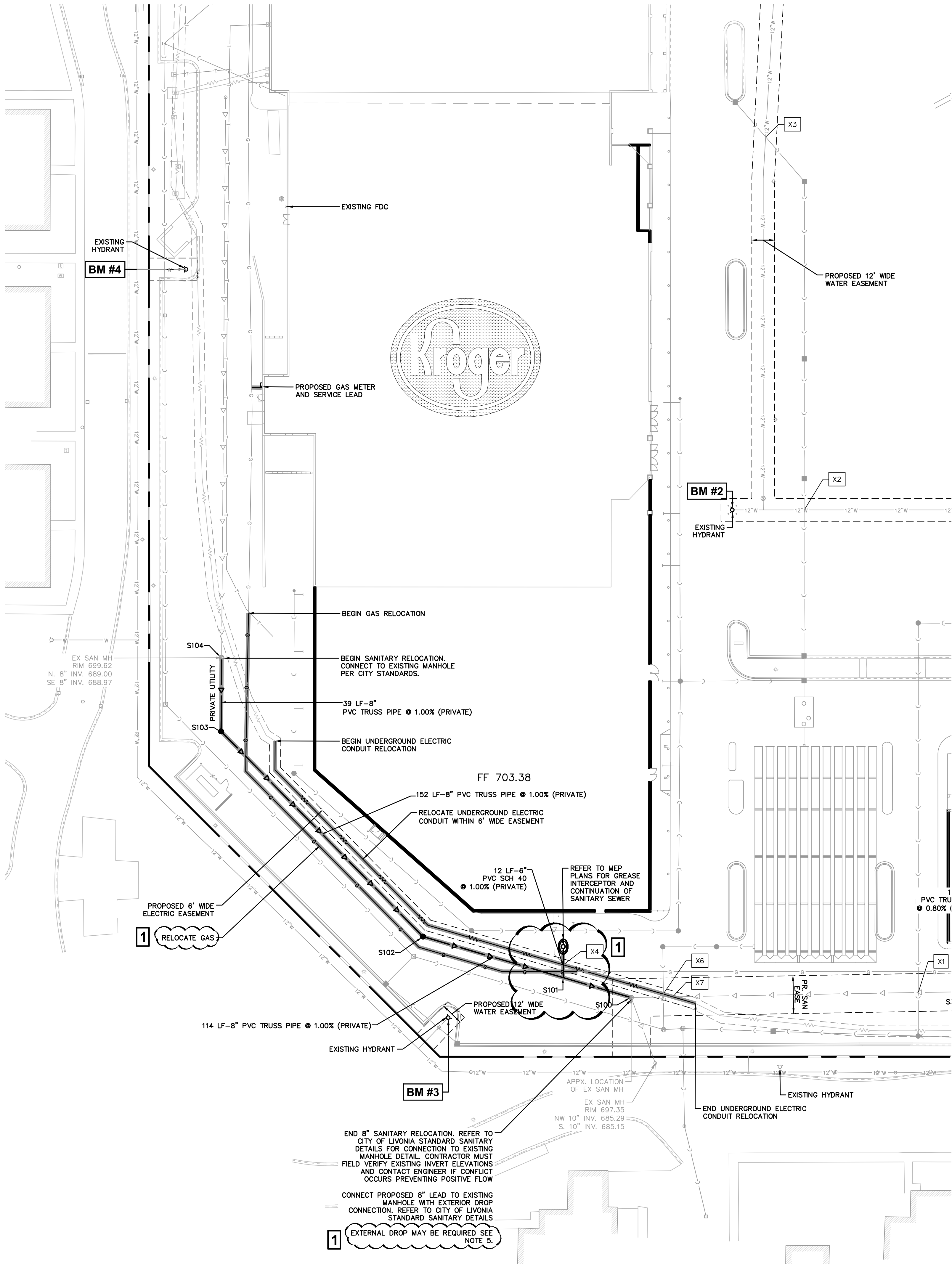
SOURCE BENCHMARK:
NGS PID: DI6221
ELEVATION: 705.42 (NAVD88)

SITE BM #1:
ARROW ON FIRE HYDRANT IN CURB ISLAND
NORTH OF SOUTHERLY BUILDING
ELEVATION: 704.36 (NAVD88)

SITE BM #2:
ARROW ON FIRE HYDRANT IN CURB ISLAND
EAST OF KROGER BUILDING
ELEVATION: 704.88 (NAVD88)

SITE BM #3:
ARROW ON FIRE HYDRANT IN CURB ISLAND
AT SOUTHWEST PROPERTY CORNER
ELEVATION: 701.22 (NAVD88)

SITE BM #4:
ARROW ON FIRE HYDRANT IN CURB ISLAND
WEST OF KROGER BUILDING
ELEVATION: 704.25 (NAVD88)



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Know what's below.

Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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CITY OF LIVONIA
WAYNE COUNTY, MICHIGAN

THE KROGER COMPANY
STORE D-615 EXPANSION
SITE PLANS

UTILITY PLAN

DATE: JULY 13, 2021
REVISIONS/SUBMITTALS:
07-13-2021 SUBMIT TO CITY
10-27-2021 OTB
02-01-2022 REV PER CITY
03-25-2022 REV PER CITY
05-10-2022 BULLETIN 1

0 15 30
SCALE: 1"=30'
DRAWN BY: EM
CHECKED BY: EM
PROJECT MANAGER: MMC
JOB #: 18003949
SHEET NO.

C16.1

CAD FILE: \\18003949\DWG\PLAN SETS\CONSTRUCTION PLANS\18003949-16-1