

WATER DISTRIBUTION SYSTEM IMPROVEMENTS TO SERVE YMCA SOUTH ADDITION PRIVATE PROJECT 1283PPW

THE CITY OF WICHITA, KANSAS
JAMES L. ARMOUR, CITY ENGINEER

OCA NO. 607853

SE COR., NE 1/4
SEC 12, T28S, R1W

MERIDIAN

BM #1

NOTE: CONTRACTOR TO VERIFY DEPTH & LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

1-8" X 4" TAPPING SLEEVE & VALVE TO BE FURNISHED & INSTALLED BY C.O.W. WATER DEPT. CONTRACTOR TO REIMBURSE C.O.W. \$1320 N2360.99, E2366.36

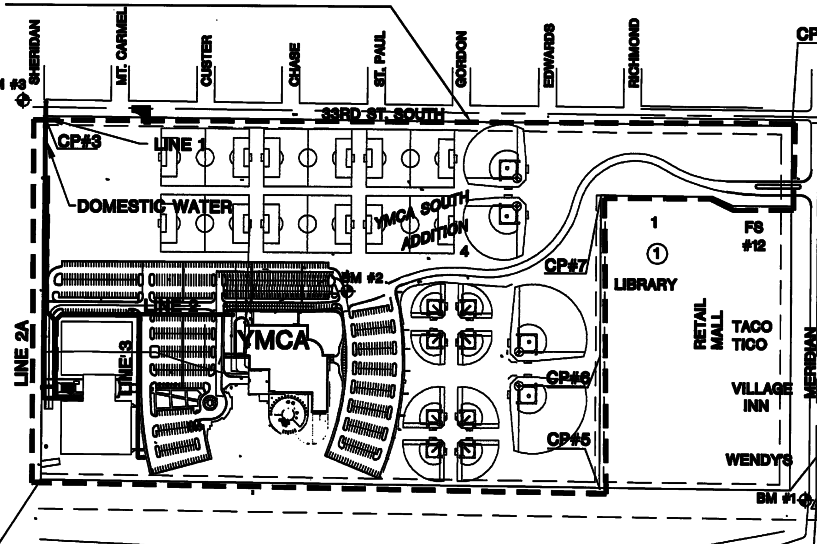
INSTALL 80.6 L.F. OF 4" PIPE

36± L.F. OF 4" PIPE. INSTALLED BY DIRECTIONAL DRILLING

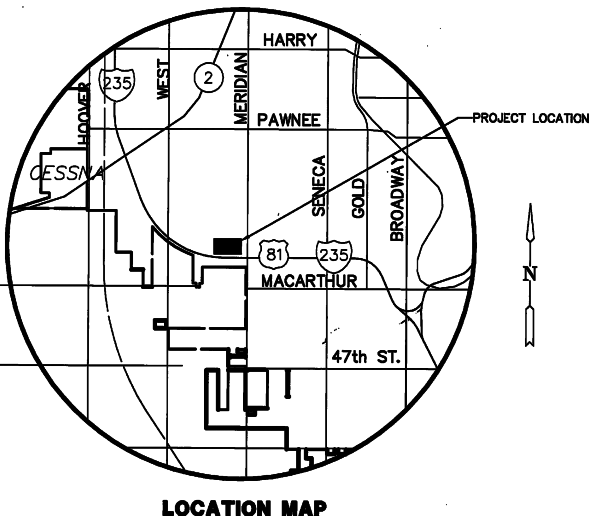
STA. 0+80.6, LINE 1
INSTALL VAULT
TOP=99.5
N2380.40, E2366.02

CITY MAINTENANCE ENDS

BENEFIT DISTRICT BOUNDARY



CONTROL POINTS			
CP1	N1050.35	E4910.01	
CP2	N2291.19	E4910.02	
CP3	N2311.01	E2360.15	
CP4	N1074.41	E2355.00	
CP5	N1056.48	E4260.03	
CP6	N1506.48	E4260.01	
CP7	N2051.27	E4260.01	



APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA,
BY WICHITA WATER & SEWER DEPARTMENT,
& BY WICHITA FIRE DEPARTMENT

Water Mains (Public Works) *1/26/07*

Water Mains (Water & Sewer Dept.) *1/25/07*

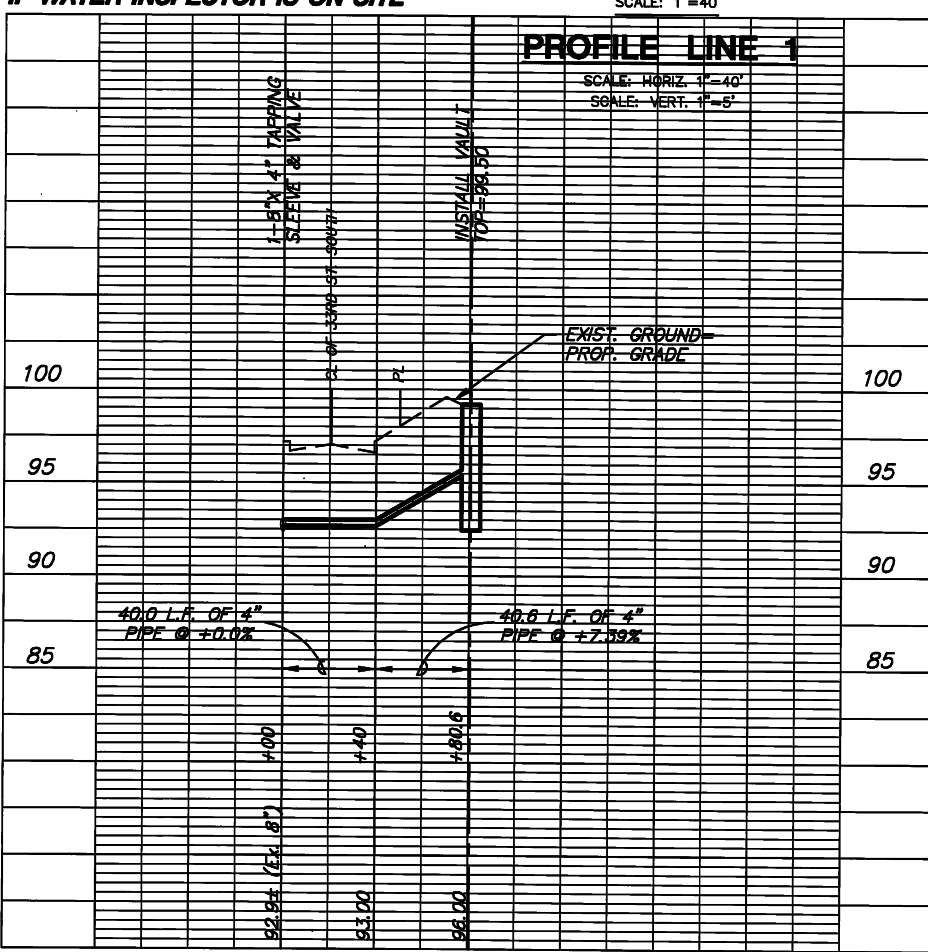
Fire Prot. Line (Fire Dept.) *1-26-07*

NOTE TO CONTRACTORS

Public Property:
Inspection and testing for the waterline is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita Standard Construction Engineering Practices and certified by a Professional Engineer licensed in the state of Kansas. No work shall be performed in dedicated easements or public rights-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer. All construction and materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

Private Property:
Installation and testing for the fire protection line is to be performed by a City of Wichita Licensed Fire Protection Contractor in accordance with the fire codes as adopted by the City of Wichita. All materials and construction practices for the fire protection line shall comply with the fire codes as adopted by the City of Wichita (available from the City of Wichita Fire Department). The Contractor shall not commence work without notification to and approval of the Wichita Fire Department. Inspection of the fire protection line is to be provided by a licensed engineering firm under contract with the Owner/Developer and the Fire Department. The contractor shall not start work until the project inspector is assigned to the project and present on the site. Any work done without inspection will be required to be uncovered for inspection.

WATER LINE VALVES TO BE OPERATED BY CONTRACTOR ONLY IF WATER INSPECTOR IS ON SITE



PLAN LINE 1
SCALE: 1" = 40'

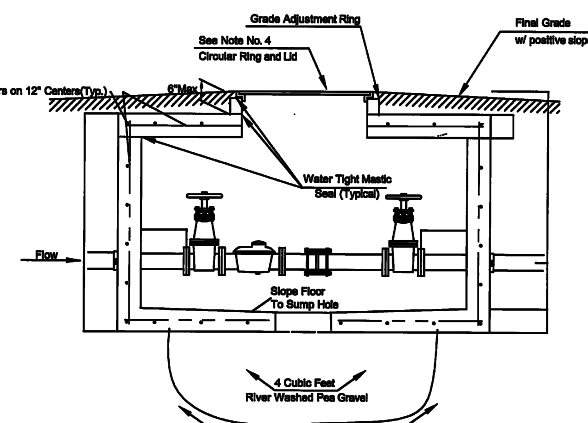
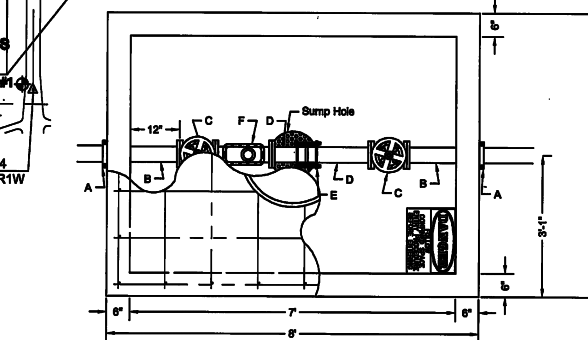
PROFILE LINE 1
SCALE: HORIZ 1" = 40'
SCALE: VERT. 1" = 5'

BENCHMARKS

- BM#1 = DATUM BENCHMARK
"□" BRASS DISC @ W HUBGUARD RCBC, NORTH OF 1-235 ON MERIDIAN
ELEV. = 100.15 (1287.55 USGS)
- BM#2 - "□" CUT WEST OF BASE LIGHT POLE E. OF CURB NE TO PARKING LOT
ELEV. = 100.19 (1287.59 USGS)
- BM#3 - "□" CUT NE COR. RCB @ 33RD ST. SOUTH & SHERIDAN
ELEV. = 99.31 (1286.71 USGS)

Notes For All Services - 2" thru 12"

- When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc. the design engineer shall design a vault with the required dimensions for Water & Sewer Dept. approval and Public Works approval.
- The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structure (such as Clutter Inc. vaults approved 8/1/2000). The intent of these details shall not be limited by drawings or standards of precast structures.
- Vault location to be determined by Wichita Water & Sewer prior to construction and approved by Department's field supervisor prior to installation. A final inspection will be required for acceptance. Vault location standards include but not limited to: not to be located where subjected to vehicular loads, not to be located in any right-of-way or utility easement, and must be located on the property being served.
- The manhole ring and lid shall be Neenah R-8034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry AFS-30x30 (Aluminum). Where applicable the standard 10" Wichita Water & Sewer pattern meter reading lid and ring shall be located directly above water meter register. All meter registers shall have an approved lid directly vertical above. All joints of concrete to concrete or metal to concrete in the construction of the vault shall have an approved water tight mastic joint seal.
- Any fittings or appurtenances required to achieve proper elevation of pipe through the vault shall be provided by the contractor and appropriately noted on as-builts submitted by the inspecting engineer. Such fittings shall be a minimum of 2' from the exterior wall of vault.
- For all services larger than 2" the contractor shall provide an outlet flange connection as shown 12-inches from the inside wall. Inlet and outlet wall sleeves shall be provided and installed by the contractor and shall be in alignment with one another. The inlet and outlet pipe shall be ductile iron pipe, cement lined, Class 150 per Standard Specifications and shall be continuous through vault wall and joint no less than two(2) feet from the exterior wall of vault. Flanges of inlet and outlet pipes shall be in proper alignment and bolt pattern shall be rotated in such a way that valves and other fittings shall be in their proper vertical alignment when installed.
- For all services 4" and larger the contractor shall install a mega lug, restrained joint, or approved equal on the exterior walls of the vault, which shall be manufactured of ductile iron conforming to ASTM A 538-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of at least 250 P.S.I. For all services smaller than 4" the contractor shall install an approved vault clamp on the exterior walls of the vault.
- All valves, meters, assemblies, and fittings shall be provided with sufficient concrete or other approved supports to the vault floor.
- The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for landscaping or site considerations, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73416HH, Plastic 73438HH, or S.A. Vinyl 73463HH.
- All meters shall have an electronic read register compatible with the current City of Wichita meter reading system. All detector meters shall be a 5/8 cubic foot Badger meter with ERT register or approved equal. Gallon meters shall not be accepted.
- Additional Notes For Fire Services:**
 - A post indicator valve (PIV) is an option for the outlet valve and may be requested by the architect or owner. The PIV is not required by City of Wichita ordinance.
 - When Slammee connections are required by the Wichita Fire Department, refer to the current City Code Section 15.
 - If due to any reason the completed vault retains ground or drainage water in excess of 4" in depth from the floor of the vault, the property owner shall be responsible for providing and installing an appropriate automatic sump pump or approved equal, as well as any other appurtenances required to make such system function as intended.
 - The property owner is responsible for completing an "Application for Private Fire Protection" prior to final acceptance of the project.



- A - 4" Vault Clamp
- B - Min. 3" Flange of 4" FL x PE DCL Pipe
- C - 4" Flange Non-rising Stem Gate Wheel Valve
- D - 4" FL x PE Pipe
- E - 4" Flex Coupling
- F - 4" Badger Recordall II Turbo Cubic Foot Meter with ERT Register or Servus W-1002DR Cubic Foot Meter with AMR Register.



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MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

**GREATER WICHITA YMCA
SOUTH BRANCH
INDOOR SPORTS COMPLEX**

PROJECT NAME

WATER LINE PLAN & PROFILE

SHEET TITLE

DESIGN BY: **MKEC**

DRAWN BY: **MKEC**

CHECKED BY: **MAB**

DATE: **JANUARY 2007**

JOB NO.: **06587**

SHEET/OF: **1 / 8**