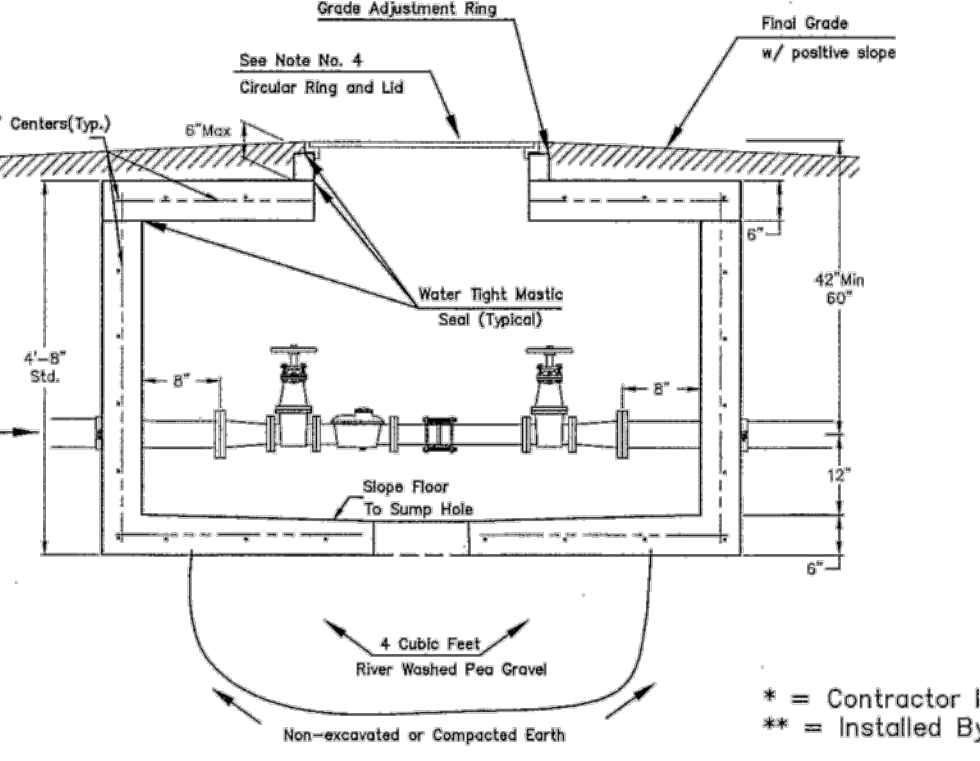
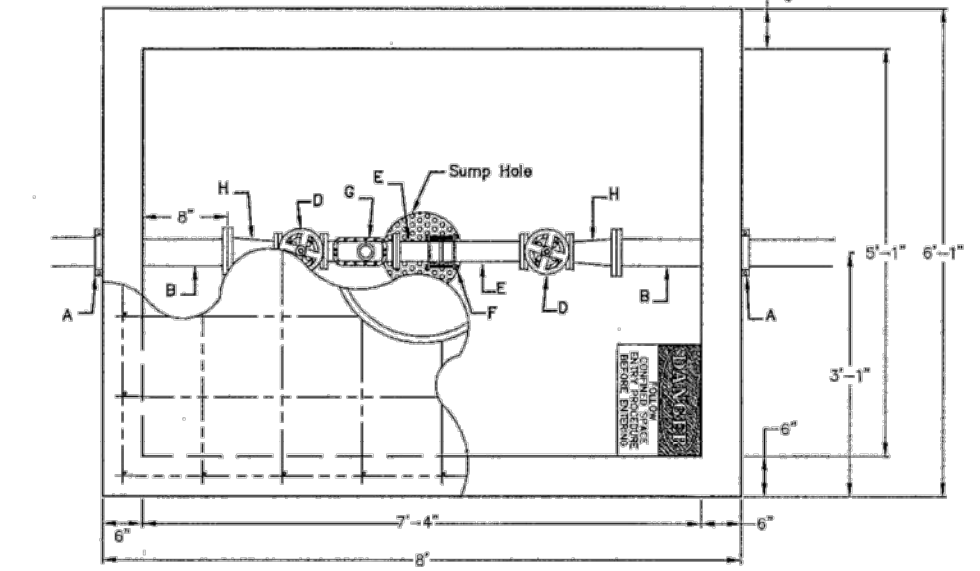
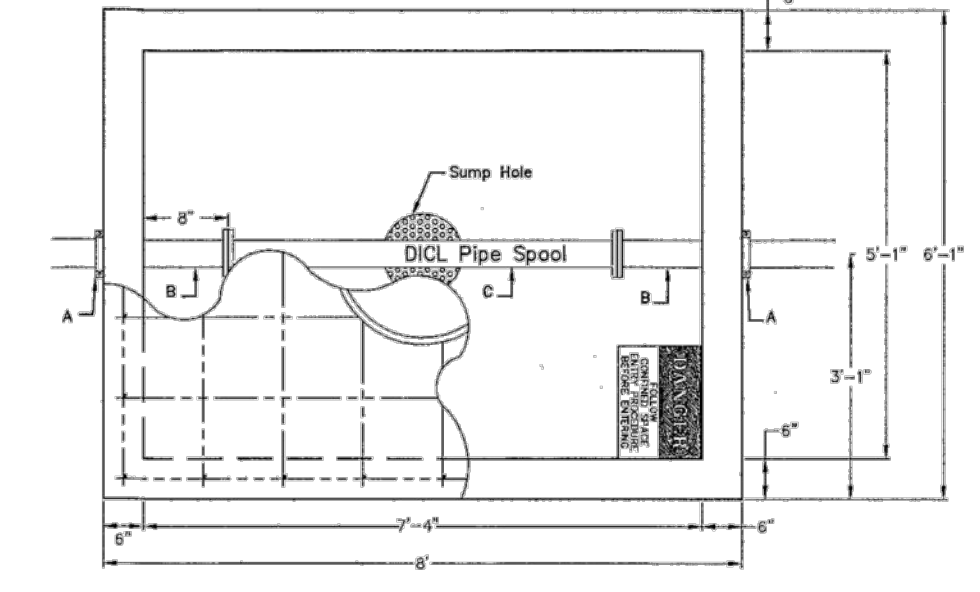
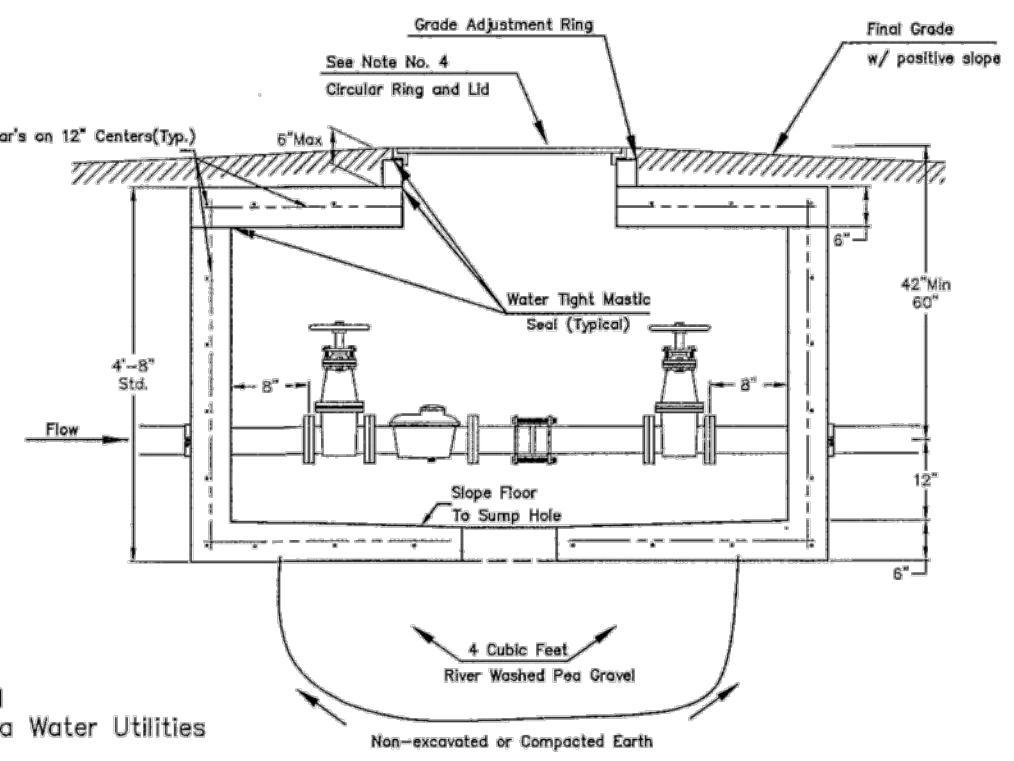
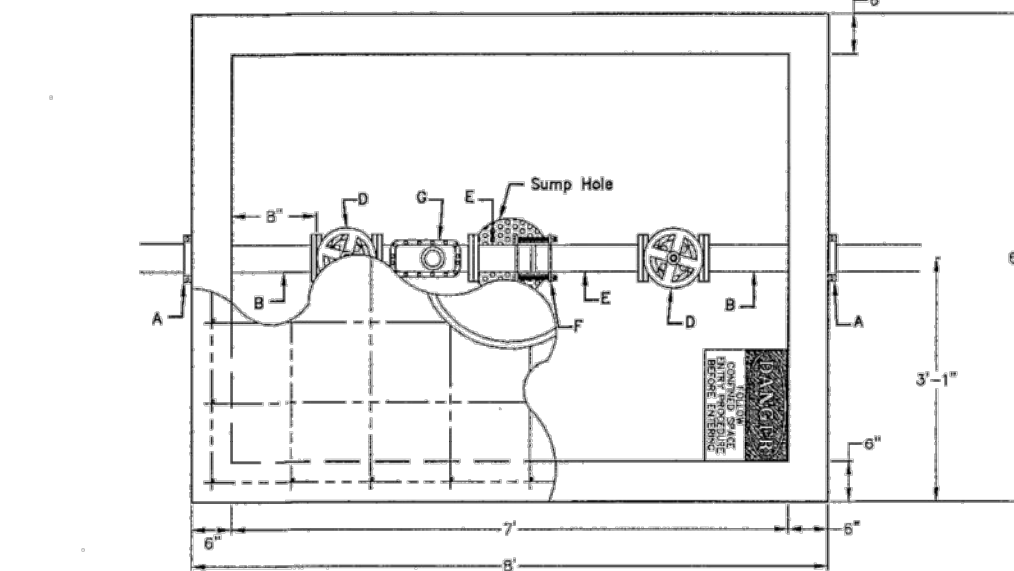
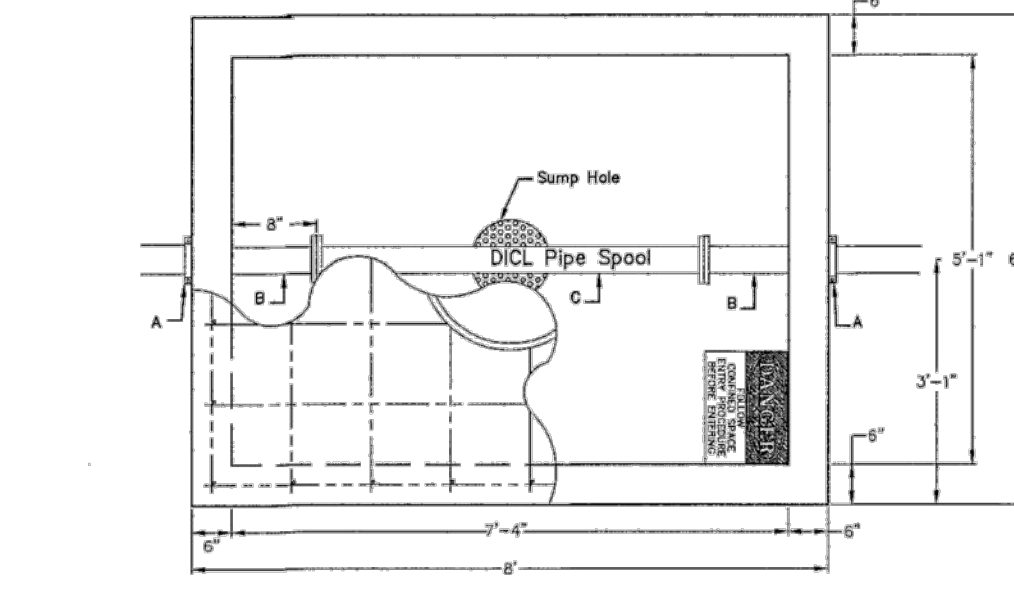


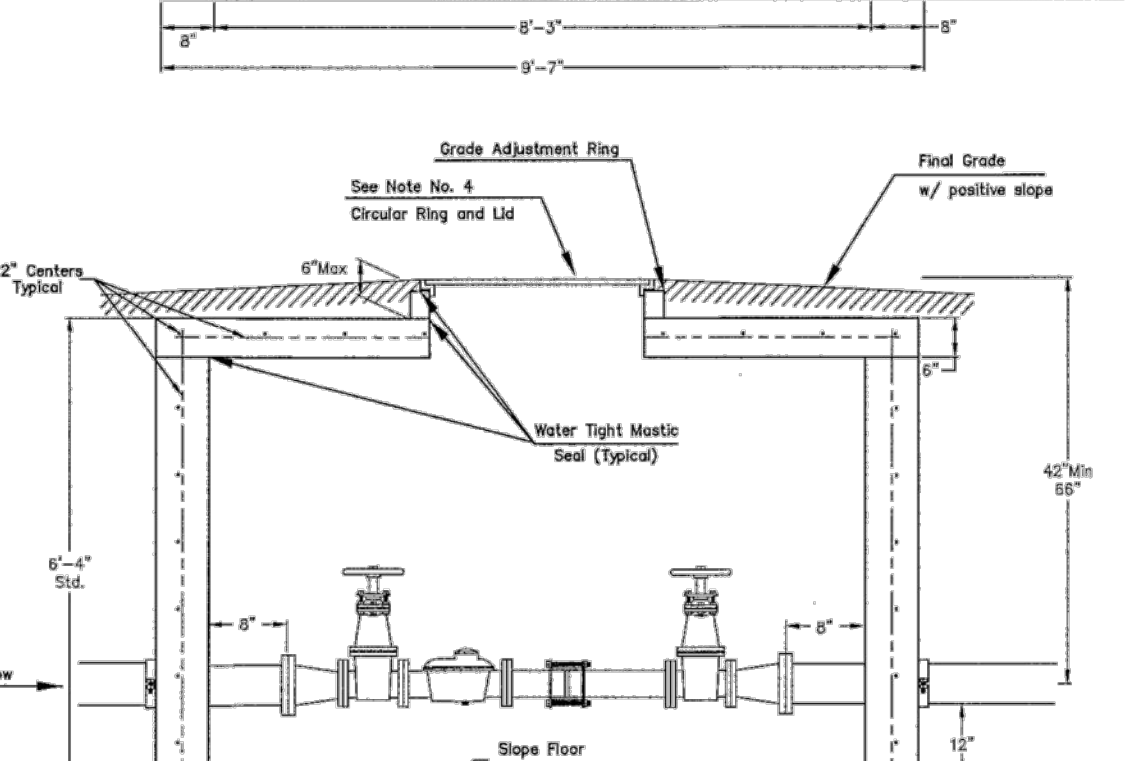
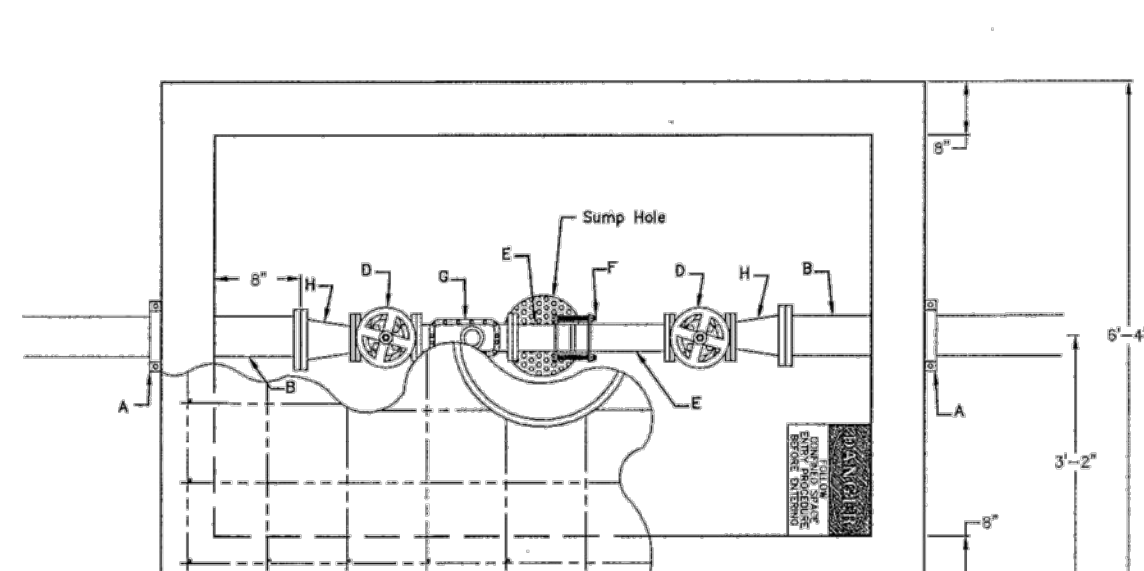
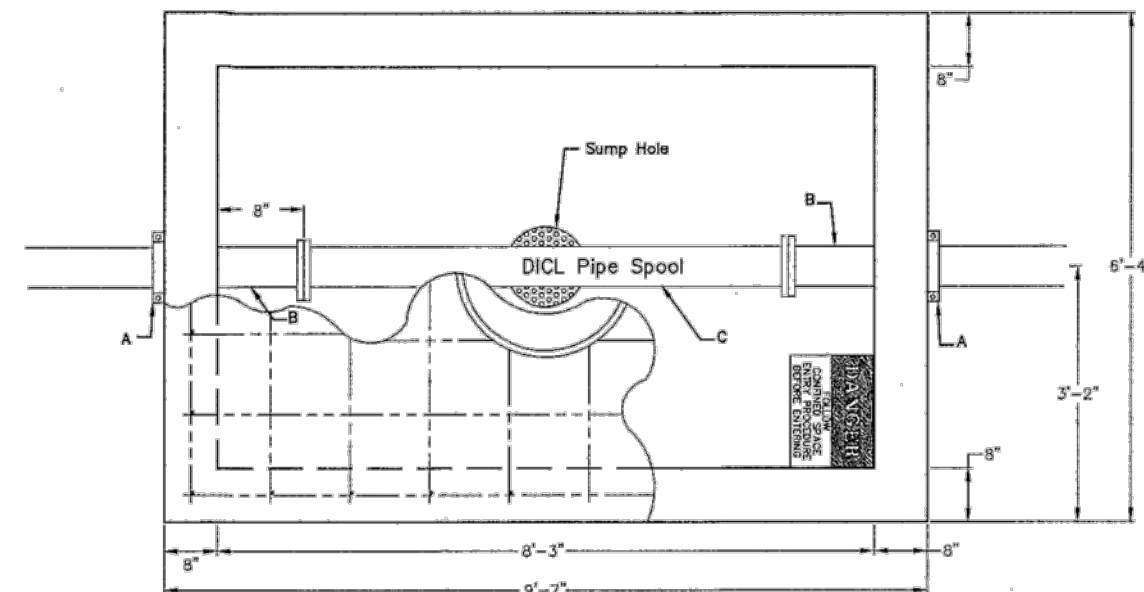
4" thru 8" Fire Service



3" Domestic Service



4" Domestic Service



6" Domestic Service with 4" meter

- A - Mega Lug (See Note 7)*
- B - Min. 3'-8" Piece of FL x PE DIOL Pipe*
- C - Flange Gate Valve, Wheel Operated*
- D - Ames Model 3001SS or approved equal with metered (cubic foot) by-pass assembly*

- A - 4" Vault Clamp*
- B - Min. 3' Piece of 4" FL x PE DIOL Pipe*
- C - 4" DIOL Flanged Pipe Spool*
- D - 3" Flange Non-rising Stem Gate Wheel Valve**
- E - 3" FL x PE Pipe**
- F - 3" Flex Coupling**
- G - 3" Badger Recordall II Turbo Cubic Foot Meter with AMR Register.**
- H - 3" x 4" FL Reducer**

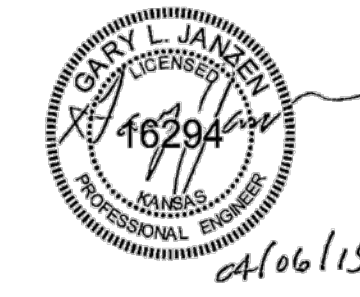
- A - 4" Vault Clamp*
- B - Min. 3' Piece of 4" FL x PE DIOL Pipe*
- C - 4" DIOL Pipe Spool*
- D - 4" Flange Non-rising Stem Gate Wheel Valve**
- E - 4" FL x PE Pipe**
- F - 4" Flex Coupling**
- G - 4" Badger Recordall II Turbo Cubic Foot Meter with AMR Register.**
- H - 4" x 4" Flange Reducer**

- A - 6" Mega Lug (See Note 7)*
- B - Min. 3' Piece of 6" FL x PE DIOL Pipe*
- C - 6" DIOL Pipe Spool*
- D - 4" Flange Non-rising Stem Gate Wheel Valve**
- E - 4" FL x PE Pipe**
- F - 4" Flex Coupling**
- G - 4" Badger Recordall II Turbo Cubic Foot Meter with AMR Register.**
- H - 6" x 4" Flange Reducer**

Notes For All Services - 3" thru 12":

1. When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc. the consultant design engineering shall design a vault with the required dimensions for Public Works and Utilities approval.
2. The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structures. The intent of these details shall not be limited by drawings or standards of precast structures.
3. Vault location to be determined by Public Works and Utilities prior to construction and approved by Departments'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 unless vault is H20 traffic rated, not to be located in any right-of-way or utility easement, and must be located on the property being served.
4. The manhole ring and lid shall be Neenah R-6034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry APS-30x30 (Aluminum). Where applicable the standard 10" Public Works and Utilities pattern meter reading lid and ring shall be located directly above water meter register. 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.
5. Any fittings or appurtenances required to achieve proper elevation of pipe through the vault shall be provided by the contractor and appropriately noted on the as-builts submitted by the inspecting engineer. Such fittings shall be a minimum of 2' from the exterior wall of vault.
6. For all domestic services larger than 3" the contractor shall provide an outlet flange connection as shown 8" 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 and joint no less than 2' from the exterior wall of vault. Flanges of inlet and outlet pipe 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.
7. 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 ASTM A 536-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of at least 250 P.S.I. For a services smaller than 4" the contractor shall install an approved vault clamp on the exterior walls of the vault.
8. All valves, meters, assemblies and fitting shall be provided with sufficient concrete or other approved supports to the vault floor.
9. The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for landscaping or site consideration, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73415HH, Plastic 73439HH or S.A. Vinyl 73463HH.
10. All meters shall have an electronic read register compatible with the current City of Wichita meter reading system. All detector meters shall be on 5/8 cubic foot Badger meter with ADE register and 25' long iron cord and plug or approved equal. Gallon meters shall not be accepted.

NOTE:
Domestic Services larger than 6" shall be custom designed by Consultant Engineer.



STANDARD VAULT DETAILS AND METER ASSEMBLIES

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: OCA NUMBER: DATE:

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET

Burns & McDonnell
SINCE 1898

9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
LICENSEE NO. 000165

date	AUGUST 25, 2014	detailed	M. CHARRETTE
designed	J. MCNIFF	checked	S. WILSON



ETHEL NEIGHBORHOOD WATER MAIN REPLACEMENT
DETAIL SHEET 3

project	77025	contract	448-90612
drawing	C090 - 0		
sheet	97	of	101 sheets
file	WL-103_DETAILSHEET3.dwg		

Scale For Microfitting
Millimeters
Inches

J:\WICHT\77025 - Ethel WMR\CAD\06_Civil\WL-103_DETAILSHEET3.dwg Jul 16, 2015 - 9:49am mchanette
COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING COMPANY, INC.

WL-103

Name
Discipline
License No.