

Chapter amendments approved unless noted:	OMPC	Owensboro	Daviess Co.	Whitesville
Water supply & fire protection requirements established (6)	11-Sep-82	09-Nov-82	19-Oct-82	?
Water supply requirements amended	20-Apr-89	06-Jun-89	31-May-89	18-Sep-91
New water supply & fire protection requirements	15-Jan-98	No action required by legislative bodies		
2002 Revised Public Improvement Specifications	08-Aug-02	No action required by legislative bodies		

**6.0 PURPOSE.** The purpose of this chapter is to give the minimum standards that shall be required for subdivision water supply systems in order to meet fire protection requirements as determined by adequate design.

**6.1 NEW RESIDENTIAL SUBDIVISIONS (INCLUDES MANUFACTURED HOUSING PARK COMPLEXES AND SUBDIVISIONS)**

**6.1.1 Water Supply**

**6.1.1.1.** Water mains shall not be less than six inches (152mm) in diameter, including fire hydrant branch connections, installed in conformity with the minimum requirements of the local water authorities. Where size and physical characteristics indicate, the developer may be required to install mains of a larger diameter. Water mains shall be used to supply water to all fire hydrants and similar fire protection devices that shall comply with the minimum flow requirements.

**6.1.1.1.1.** Water mains shall be used to supply water to all lots and shall extend throughout the entire frontage of all lots within the subdivision.

**6.1.1.1.2.** For new stub streets (streets designed for future extension), water mains shall extend to the end of the street.

**6.1.1.1.3.** On cul-de-sac streets, water mains shall be connected to all fire hydrants and similar fire protection devices. Service lines that are less than six inches (152mm) in diameter may be used to provide domestic water to those lots that are beyond water mains but are within the minimum required distance from a fire hydrant.

**6.1.1.1.4.** Six-inch (152mm) diameter mains may be extended from existing four inch (102mm) or larger diameter mains, provided the minimum flow requirements can be met for all fire hydrants or similar fire protection devices. Where mains of

diameters less than four inches (102mm) exist, such mains shall not be extended or used to provide flow to a fire hydrant or similar fire protection device.

**6.1.1.2.** Water mains shall be so arranged that the distance between intersecting mains does not exceed 800 feet (244m). (Exception may be made if intersecting streets are over 800 feet apart.) All circulating gridironing must meet the approval of the respective Fire Chief and Water District Superintendent.

**6.1.1.3.** Eight-inch (203mm) mains shall be used where dead-end and poorly circulating gridironing is likely to exist for a considerable period of time, or where the layout of the streets and topographical characteristics are not well adapted to location of valves and a circulating system.

**6.1.1.4.** Valve type and valve location shall meet water district approval. Wherever meters are installed in conjunction with fire hydrants, said meters shall be of the fire-protection type and match the size of the water main.

**6.1.2 Fire Hydrant Installation.** In major subdivisions that involve new streets, fire hydrants shall be spaced no further than 600 feet (183m) apart and each lot shall be within 300 feet (91.5m) of a fire hydrant capable of meeting the minimum flow requirements. In major subdivisions on existing county roads, fire hydrants may be placed up to 1,000 feet (305m) apart and each lot shall be within 500 feet (152.5m) of a fire hydrant capable of meeting the minimum flow requirements. All distances are to be measured over all-weather roads. Fire hydrants shall be installed no further than 10 feet (305cm) from a permanent all-weather road.

**6.1.3 Fire Hydrant Type**

**6.1.3.1.** Fire hydrants shall meet the minimum specifications and be installed in conformity with the requirements of the local water authorities.

**6.1.3.2.** Fire hydrants shall deliver a minimum of 250 gallons per minute (946 L/min).

**6.1.3.3.** Fire hydrants shall be equipped with not less than two 2-1/2 inch (64mm) outlets and one 4-1/2 inch (114mm) pumper outlet if served by county water districts. A 4-inch (102mm) pumper outlet is required if service is provided by OMU.

**6.1.3.4.** A gate valve shall be installed in the hydrant connection to the street main.

## **6.2 COMMERCIAL AND HIGH DENSITY RESIDENTIAL DEVELOPMENT**

### **6.2.1 Water Supply**

**6.2.1.1.** Water mains shall not be less than six inches (152mm) in diameter, including fire hydrant branch connections. Water supply and water main sizes will be subject to reasonable, additional requirements relative to the degree of density of development and use. Exceptions may be allowed per special conditions outlined in Section 6.111.

**6.2.1.2.** Approval of the Fire Chief or the Fire Prevention Bureau of the Daviess County Fire Department shall be obtained prior to the issuance of an occupancy permit.

**6.2.1.3.** Development requiring sprinkler systems must obtain approval from the Kentucky Housing, Building and Construction Office regarding the required water flows prior to the issuance of a building permit.

### **6.2.2 Fire Hydrant Installation**

**6.2.2.1.** Fire hydrant spacing shall not be less than that required for residential areas referred to in Section 6.12.

**6.2.2.2.** No part of the exterior of the buildings, other than dwellings, shall be further than 600 feet (183m) from a hydrant. Distances are to be measured along the shortest feasible exterior route (never measured through buildings) for laying hose.

**6.2.2.3.** Fire hydrants shall be located at least 15 feet (4.6m) from the exterior wall of any masonry building, and at least 25 feet (7.6m) from any exterior wall of frame or equivalent construction, including brick and

stone veneer. A variance should be granted from this section to accommodate the redevelopment of existing commercial areas that already have fire protection facilities.

### **6.2.3 Fire Hydrant Type**

**6.2.3.1.** Fire hydrants shall meet the minimum specifications and be installed in conformity with the requirements of the local water authorities.

**6.2.3.2.** Fire hydrants shall deliver a minimum of 500 gallons per minute (1893 L/min) where 6-inch (152mm) and 8-inch (203mm) mains are required.

**6.2.3.3.** Fire hydrants shall be equipped with not less than two 2-1/2 inch (64mm) outlets and a large pumper outlet.

**6.2.3.4.** A gate valve shall be installed in the hydrant connection to the street main.

## **6.3 ADMINISTRATIVE ENFORCEMENT PROCEDURE.**

It is essential that the foregoing minimum requirements be completed prior to the issuance of occupancy permits. The Building Department should not issue building permits for developments referred to in Section 6.2 until such time as a certification of completion of fire hydrant installation is received. The Building Department may issue foundation permits providing no combustible materials to be used above the foundation are brought or used on the construction site. For developments referred to in Section 6.1, surety may be posted in lieu of completion of improvements (see Section 6.31).

A close working relationship should be maintained between the Owensboro Metropolitan Planning Commission, Water Districts, Building Department and Fire Department, particularly in determining the fire protection requirements for high value commercial and high density residential developments.

**6.3.1 Surety.** To insure proper and timely installation of water mains and fire hydrants, surety may be required in accordance with Section 3.3, and subsections therein, of the Subdivision Regulations.