

January 30, 2004

REQUIREMENTS FOR WATER MAINS AND PLACEMENT OF FIRE HYDRANTS

This guideline will cover the requirements for placement of water mains and/or fire hydrants within the bounds of service for Central Arkansas Water and areas bounding to these areas that may become part of the City of Little Rock.

The water mains under these guidelines must be at least 6-inch diameter or larger in order to meet the flow requirements. The fire hydrants in these areas may be public or private, but all fire hydrants must meet the requirements for fire flow demands.

No commercial, industrial or multiple apartment structure shall be greater than 150 feet from an approved fire hydrant installation, and no portion of said commercial, industrial or multiple apartment structure shall be farther than 400 feet from an approved fire hydrant installation (distances measured as fire hoses can be laid).

When streets or alleys are closed or if the location where the fire hydrants are needed will not allow public hydrants to be installed, then private hydrants shall be installed and maintained by the private developer/owner to provide the required fire hydrant coverage.

Dead end mains which are designed to provide fire flows shall not be less than 8-inches in diameter. (EXCEPTION 6-inch mains may be allowed if hydraulic conditions warrant).

The installation of mains 6-inches in diameter and smaller shall be generally limited to residential developments as follows:

- a. Last 300 feet or less cul-de-sacs where fire protection is to be available off mains 8-inches or larger in diameter.
- b. Looped mains which connect to larger mains may be 6-inches, if hydraulics allow. No more than two fire hydrants are allowed and the 6-inch main shall not exceed 2,000 feet. The maximum length for looped mains smaller than 6-inches shall be 1,000 feet.
- c. Fire sprinkler systems shall be designed and installed to meet the required sprinkler demand.

The design fire flow demand for new residential areas will not be less than 1,500 gallons of water per minute. The design fire flow demand for commercial areas will not be less than 2,000 gallons of water per minute.

The design fire flow requirements for large residential dwellings and commercial developments may require larger fire flows as determined by the Fire Department.

Water supply requirements will be established using the I.S.O. guide for determination of required fire flow.

The minimum standards will be as described in the AWWA standards, the State of Arkansas Fire Prevention Codes, the International Fire Code (Sec. 508), the National Fire Protection Association codes and as adopted by the City of Little Rock. If there are conflicts in the standards above, the most stringent standard set forth shall apply.

The Chief of the Little Rock Fire Department, or designated representative, having jurisdiction to approve the placement of fire hydrants, public or private, shall approve the placement of fire hydrants.

The Director of Engineering of Central Arkansas Water, or designated representative, shall ensure that plans and contracts for the installation of fire hydrants follow these guidelines.

If either the Little Rock Fire Department or Central Arkansas Water allows deviation or exception from this guideline for a specific project, the excepting organization shall provide a written conformation to the other organization. Written conformation shall be maintained in the file of the specific project in question.

This guideline is necessary to ensure the protection of citizens and property in the City of Little Rock. This guideline also will assist the Little Rock Fire Department in maintaining its Class 2 I.S.O. rating.

The Little Rock Fire Department and Central Arkansas Water shall review this guideline annually for any necessary revision.

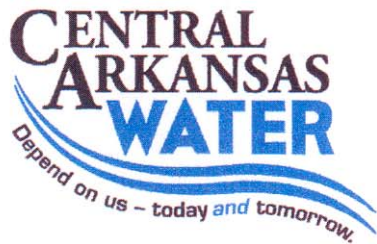
Signed this 18th day of March, 2004.

Central Arkansas Water


Jim Ferguson, Director of Engineering

City of Little Rock
Little Rock Fire Department


Rhoda Mae Kerr, Fire Chief



FIRE DEPARTMENT



January 30, 2004

REQUIREMENTS FOR WATER MAINS AND PLACEMENT OF FIRE HYDRANTS

This guideline will cover the requirements for placement of water mains and/or fire hydrants within the bounds of service for Central Arkansas Water and areas bounding to these areas that may become part of the City of North Little Rock.

The water mains under these guidelines must be at least 6-inch diameter or larger in order to meet the flow requirements. The fire hydrants in these areas may be public or private, but all must meet the requirements for fire flow demands.

No commercial, industrial or multiple apartment structure shall be greater than 150 feet from an approved fire hydrant installation, and no portion of said commercial, industrial or multiple apartment structure shall be farther than 400 feet from an approved fire hydrant installation (distances measured as fire hoses can be laid).

When streets or alleys are closed or if the location where the fire hydrants are needed will not allow public hydrants to be installed, then private hydrants shall be installed and maintained by the private developer/owner to provide the required fire hydrant coverage.

Dead end mains which are designed to provide fire flows shall not be less than 8-inches in diameter. (EXCEPTION 6-inch mains may be allowed if hydraulic conditions warrant).

The installation of mains 6-inches in diameter and smaller shall be generally limited to residential developments as follows:

- a. Last 300 feet or less cul-de-sacs where fire protection is to be available off mains 8-inches or larger in diameter.
- b. Looped mains which connect to larger mains may be 6-inches, if hydraulics allow. No more than two fire hydrants are allowed and the 6-inch main shall not exceed 2,000 feet. The maximum length for looped mains smaller than 6-inches shall be 1,000 feet.
- c. Fire sprinkler systems shall be designed and installed to meet the required sprinkler demand.

The design fire flow demand for new residential areas will not be less than 1,500 gallons of water per minute. The design fire flow demand for commercial areas will not be less than 2,000 gallons of water per minute.

The design fire flow requirements for large residential dwellings and commercial developments may require larger fire flows as determined by the Fire Department.

Water supply requirements will be established using the I.S.O. guide for determination of required fire flow.

The minimum standards will be as described in the AWWA standards, the State of Arkansas Fire Prevention Codes, the International Fire Code (Sec. 508), the National Fire Protection Association codes and/or as adopted by the City of North Little Rock. If there are conflicts in the standards above, the most stringent standard set forth shall apply.

The Chief of the North Little Rock Fire Department, or designated representative, having jurisdiction to approve the placement of fire hydrants, public or private, shall approve the placement of fire hydrants.

The Director of Engineering of Central Arkansas Water or designated representative shall ensure that plans and contracts for the installation of fire hydrants follow these guidelines.

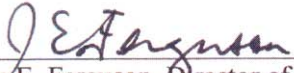
If either the North Little Rock Fire Department or Central Arkansas Water allows deviation or exception from this guideline for a specific project, the excepting organization shall provide a written conformation to the other organization. Written conformation shall be maintained in the file of the specific project in question.

This guideline is necessary to ensure the protection of citizens and property in the City of North Little Rock. This guideline also will assist the North Little Rock Fire Department in maintaining its Class 2 I.S.O. rating.

The North Little Rock Fire Department and Central Arkansas Water shall review this guideline annually for any necessary revision.

Signed this 18th day of March, 2004.

Central Arkansas Water

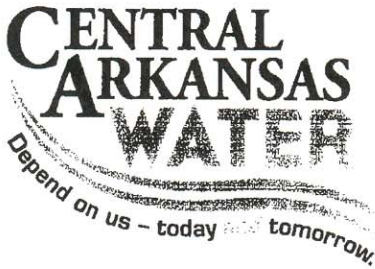


Jim E. Ferguson, Director of Engineering

North Little Rock Fire Department



Joe McCall, Fire Chief



DATE 4-22-04

REQUIREMENTS FOR WATER MAINS AND PLACEMENT OF FIRE HYDRANTS

This guideline will cover the requirements for placement of water mains and/or fire hydrants within the bounds of service for Central Arkansas Water and areas bounding to these areas that may become part of the City of Sherwood.

The water mains under these guidelines must be at least 6-inch diameter or larger in order to meet the flow requirements. The hydrants in these areas may be public or private, but all must meet the requirements for fire flow demands.

No commercial, industrial or multiple apartment structure shall be greater than 150 feet from an approved fire hydrant installation, and no portion of said commercial, industrial or multiple apartment structure shall be farther than 500 feet from an approved fire hydrant installation (distances measured as fire hosed can be laid).

If the location where the hydrants are needed will not allow public hydrants to be installed, then private hydrants shall be installed and maintained by the private developer/owner.

Dead end mains, which are designed to provide fire flows, shall not be less than 8 inches in diameter. (EXCEPTION 6-inch mains may be allowed if hydraulic conditions warrant).

The installation of mains 6 inches in diameter and smaller shall be generally limited to residential developments as follows:

- a. Last 300 feet or less cul-de-sacs where fire protection is to be available off mains 8 inches or larger in diameter.
- b. Looped mains which connect to larger mains may be 6-inch, if hydraulics allow. No more than two hydrants are allowed and the 6-inch main shall not exceed 2,000 feet. The maximum length for looped mains smaller than 6 inches shall be 1,000 feet.
- c. Fire sprinkler systems shall be designed and installed to meet the required sprinkler demand.

The design fire flow demand for new residential areas will be 1,500 gallons of water per minute. The design fire flow demand for commercial areas will be 2,000 gallons of water per minute and above.

The design fire flow requirements for large residential dwellings and commercial developments may require larger fire flows.

Water supply requirements will be established using the I.S.O. guide for determination of required fire flow.

The minimum standards will be described in the AWWA standards, the State of Arkansas Fire Prevention Codes, the National Fire Protection Association codes or as adopted by the City of Sherwood. If there are conflicts in the standards above, the most stringent standard set forth shall apply.

The Chief of the Sylvan Hills Fire Department, or their designated representative, having jurisdiction to approve the placement of fire hydrants, public or private, shall approve the placement of fire hydrants.


The Director of Engineering of Central Arkansas Water or their designated representatives shall be the person responsible for insuring that plans and contract for the installation of fire hydrants follow these guidelines.

It is felt that a firm policy is necessary to insure the protection of citizens and property in Sherwood. This also will allow us to maintain our Class 4 I.S.O. rating.

Signed this 22 day of APRIL, 2008.

Central Arkansas Water

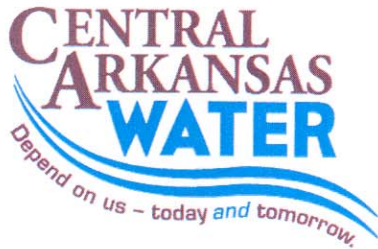
Sylvan Hills Fire Department



Jim Ferguson, Director of Engineering



Frank Hill, Fire Chief



REQUIREMENTS FOR WATER MAINS AND PLACEMENT OF FIRE HYDRANTS

This guideline will cover the requirements for placement of water mains and/or fire hydrants within the bounds of service for Central Arkansas Water and areas bounding to these areas that may become part of the City of Sherwood.

The water mains under these guidelines must be at least 6-inch diameter or larger in order to meet the flow requirements. The hydrants in these areas may be public or private, but all must meet the requirements for fire flow demands.

No commercial, industrial or multiple apartment structure shall be greater than 150 feet from an approved fire hydrant installation, and no portion of said commercial, industrial or multiple apartment structure shall be farther than 400 feet from an approved fire hydrant installation (distances measured as fire hosed can be laid).

If the location where the hydrants are needed will not allow public hydrants to be installed, then private hydrants shall be installed and maintained by the private developer/owner.

Dead end mains, which are designed to provide fire flows, shall not be less than 8 inches in diameter. (EXCEPTION 6-inch mains may be allowed if hydraulic conditions warrant).

The installation of mains 6 inches in diameter and smaller shall be generally limited to residential developments as follows:

- a. Last 300 feet or less cul-de-sacs where fire protection is to be available off mains 8 inches or larger in diameter.
- b. Looped mains which connect to larger mains may be 6-inch, if hydraulics allow. No more than two hydrants are allowed and the 6-inch main shall not exceed 2,000 feet. The maximum length for looped mains smaller than 6 inches shall be 1,000 feet.
- c. Fire sprinkler systems shall be designed and installed to meet the required sprinkler demand.

The design fire flow demand for new residential areas will be 1,500 gallons of water per minute. The design fire flow demand for commercial areas will be 2,000 gallons of water per minute and above.

The design fire flow requirements for large residential dwellings and commercial developments may require larger fire flows.

Water supply requirements will be established using the I.S.O. guide for determination of required fire flow.

The minimum standards will be described in the AWWA standards, the State of Arkansas Fire Prevention Codes, the National Fire Protection Association codes or as adopted by the City of Sherwood. If there are conflicts in the standards above, the most stringent standard set forth shall apply.

The Chief of the Sherwood Fire Department, or their designated representative, having jurisdiction to approve the placement of fire hydrants, public or private, shall approve the placement of fire hydrants.


The Director of Engineering of Central Arkansas Water or their designated representatives shall be the person responsible for insuring that plans and contract for the installation of fire hydrants follow these guidelines.

It is felt that a firm policy is necessary to insure the protection of citizens and property in Sherwood. This also will allow us to maintain our Class 4 I.S.O. rating.

Signed this 21ST day of June, 2004.

Central Arkansas Water

Sherwood Fire Department



Jim Ferguson, Director of Engineering



Lee Church, Fire Chief



**PULASKI COUNTY VOLUNTEER
FIRE ASSOCIATION**
28 EASY STREET
SCOTT, AR 72142

10 November 2004

REQUIREMENTS FOR WATER MAINS AND PLACEMENT OF FIRE HYDRANTS

This guideline will cover the requirements for placement of water mains and/or fire hydrants within the bounds of service for Central Arkansas Water outside the 'extra-territorial jurisdiction' of the Cities of Little Rock, North Little Rock and Sherwood and areas bounding to these areas that may be part of unincorporated areas of Pulaski County.

The water mains under these guidelines must be at least 6-inch diameter or larger in order to meet the flow requirements. The hydrants in these areas may be public or private, but all must meet the requirements for fire flow demands.

No commercial, industrial or multiple apartment structure shall be greater than 150 feet from an approved fire hydrant installation, and no portion of said commercial, industrial or multiple apartment structure shall be farther than 500 feet from an approved fire hydrant installation (distances measured as fire hosed can be laid). For undeveloped areas fire hydrant installation shall not be no more than 2000 feet spacing between fire hydrants and for developed areas and subdivisions fire hydrant installation shall be no more than 1000 feet spacing between hydrants.

If the location where the hydrants are needed will not allow public hydrants to be installed, then private hydrants shall be installed and maintained by the private developer/owner.

Dead end mains, which are designed to provide fire flows, shall not be less than 8 inches in diameter. (EXCEPTION 6-inch mains may be allowed if hydraulic conditions warrant).

The installation of mains 6 inches in diameter and smaller shall be generally limited to residential developments as follows:

- a. Last 300 feet or less cul-de-sacs where fire protection is to be available off mains 6 inches or larger in diameter.
- b. Looped mains which connect to larger mains may be 6-inch, if hydraulics allow. No more than two hydrants are allowed and the 6-inch main shall not exceed 2,000 feet. The maximum length for looped mains smaller than 6 inches shall be 1,000 feet.

- c. Fire sprinkler systems shall be designed and installed to meet the required sprinkler demand.

The design fire flow demand for new residential areas will be not less than 500 gallons of water per minute. The design fire flow demand for commercial areas will be not less than 500 gallons of water per minute.

The design fire flow requirements for large residential dwellings and commercial developments may require larger fire flows.

Water supply requirements will be established using the I.S.O. guide for determination of required fire flow.

The minimum standards will be described in the AWWA standards, the State of Arkansas Fire Prevention Codes, the National Fire Protection Association codes or as adopted by the Pulaski County Volunteer Fire Association. If there are conflicts in the standards above, the most stringent standard set forth shall apply.

The Chiefs of the fire departments having jurisdiction in that area, or their designated representative, having jurisdiction to approve the placement of fire hydrants, public or private, shall approve the placement of fire hydrants.

The Director of Engineering of Central Arkansas Water, or designated representative, shall be the person responsible for insuring that plans and contract for the installation of fire hydrants follow these guidelines.

It is felt that a firm policy is necessary to insure the protection of citizens and property in unincorporated areas in Pulaski County.

Signed this 10th day of November, 2004.

Central Arkansas Water


Jim Ferguson, Director of Engineering

Pulaski County Volunteer
Fire Association


Harvey Durham, President