

MEMORANDUM

January 27, 2009

TO: Public Safety Committee
Transportation, Infrastructure, Energy and Environment Committee

FROM: Minna K. Davidson ^{MKD}, Legislative Analyst

SUBJECT: Executive Regulation 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*

The following individuals are expected to attend:

Richard Bowers, Interim Fire Chief, Montgomery County Fire and Rescue Service (MCFRS)
Michael Love, Chief, Division of Community Risk Reduction Services, MCFRS
Assistant Chief Michael Donahue, Deputy Fire Marshal, MCFRS
Lawrence Cole, Master Planner, Highway Coordinator, M-NCPPC
Catherine Conlon, Master Planner/Supervisor, Development Review, M-NCPPC

Background

The proposed regulation was developed in coordination with the update of the Road Code. As this regulation refers specifically to fire and rescue requirements, it was issued separately from the Road Code regulations. This regulation would establish public and private roadway and water supply requirements that ensure efficient and timely delivery of emergency assistance and fire suppression services in urban, suburban, and rural settings. It would adopt into the Montgomery County Fire Safety Code the current National Fire Protection Association (NFPA) standards for fire protection in planned building groups, and water supplies for suburban and rural firefighting.

In particular, Regulation 29-08 would permit the use of performance-based design, consistent with the most recent update of the Fire Safety Code regulations which the Council approved in October 2006. This would provide the development community the latitude to find the most cost-effective means of achieving adequate fire department access while enabling the fire service to respond expeditiously to emergency calls. Background on the regulation, in the form of MCFRS responses to Council staff questions, is on © 12-15.

Notice of the proposed regulation and a public hearing announcement were published in the Montgomery County Register on September 1, 2008. The public hearing was held on October 3, 2008 (no speakers). The proposed regulation was reviewed by the Road Code Stakeholders Work Group, and MCFRS received comments from representatives of the Departments of Transportation and Permitting services, and the Montgomery County Planning Board. (Only the Planning Board submitted written comments which are attached on © 16-17.) The comments and MCFRS' responses are summarized in the Executive's transmittal on © 1-2. MCFRS staff believes that they addressed all of the issues that were raised regarding roads.

MCFRS did not receive any comments on the water supply requirements. MCFRS staff said that WSSC staff have reviewed the proposed regulation and concur with the water supply standards.

According to the Fiscal Impact Statement (© 10-11), there will be no fiscal impact on County Government or the private sector because new developments and roadway reconstruction are currently reviewed for adequate fire department apparatus access, and resources are already in place for those reviews. If anything, the proposed regulation may have a positive effect on new development because performance-based design may allow for narrower streets.

Fire Department Apparatus Access

(See proposed regulation, Sections 1-9, on © 4-8, and MCFRS responses on © 12-13.)

The proposed regulation would require that, in general, fire department apparatus access for emergency vehicles must be at least 20 feet wide. On-street parking would be allowed on one side only if the load-bearing fire department apparatus access is at least 28 feet wide, or on two sides if the access is at least 36 feet wide. The minimum interior turning radius for apparatus access is 25 feet and the minimum exterior turning radius is 50 feet. These requirements could be modified, with the Fire Marshal's approval, through performance-based design.

Issue: Compatibility with current development design standards: Current development design standards call for narrower streets to create more walkable neighborhoods and slower traffic. The proposed fire department access requirements call for wider streets than would be desirable to meet these goals. Question #4 on © 12-13 addresses this issue. The response notes that aerial ladder trucks require 16 to 18 feet of clearance to set their ground jacks, but also says that alternative options to the requirements in the regulation could be considered based on a risk assessment of the community and other factors. **The Committee may want to ask Executive and M-NCPPC staff to discuss this issue in more detail.**

Water Supply

(See proposed regulation, Section 10, on © 8-9, and MCFRS responses on © 13-15.)

In areas with municipal (including WSSC) water supplies, the regulation would require hydrants to be spaced no more than 500 feet apart and within 400 feet from any dead-ends in apparatus travel. The previous requirement for single family residential areas was no more than

800 feet apart, but the spacing of existing hydrants will not have to be modified. The regulation will only apply to new hydrants.

For non-hydranted areas the regulation would establish the framework for a Countywide strategic effort to address water supply issues.

For residential development of more than one dwelling unit, the developer would have to dedicate an easement along the fire department apparatus access route for the grading and installation of an underground cistern. MCFRS anticipates that the County will purchase and install the cisterns through a future CIP project.

For non-residential development, the developer must install a new, or upgrade an existing water supply which must be approved the Fire Marshal. The cost for this requirement would vary depending upon the existing conditions and level of proposed development. To date, one code compliant tank has been installed following the County's adoption of NFPA 1 in 2003.

Issue: Hydrant spacing requirements for Rockville and Poolesville. MCFRS did not receive responses from Rockville or Poolesville on the new hydrant spacing requirements. **The Committees may want to request that MCFRS contact each municipality's water authority to find out whether they are prepared to comply with the new spacing requirements.**

Issue: Coordination of underground cisterns and "water on wheels". The MCFRS responses to questions about non-hydranted areas include comments that tank wagon units are an option to be considered, especially when hydranted infrastructure is down. **The Committee may want to ask MCFRS staff to explain in more detail how the underground water tanks and the tank wagon units would be coordinated within the overall Countywide strategic effort to address water supply issues.**

Council staff recommendation: Council staff recommends that the Committees request that MCFRS seek input from Rockville and Poolesville on the new hydrant spacing requirements before the Council takes action on this regulation.

Unless any issues arise in conjunction with this request, Council staff recommends approval of Regulation 29-08.

This packet contains:

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MONTGOMERY COUNTY
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OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

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Isiah Leggett
County Executive

MEMORANDUM

December 10, 2008

TO: Phil Andrews, President
Montgomery County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: MCER NO. 29-08, proposed Fire and Rescue Service Regulation – Fire Safety Code – Fire Department Apparatus Access and Water Supply

I am recommending approval of Montgomery County Executive Regulation Number 29-08, Proposed Fire and Rescue Service Regulation – Fire Safety Code – Fire Department Apparatus Access and Water Supply. Notice of the proposed regulation was published in the Montgomery County Register on September 1, 2008, Volume 25, Issue 9. Notice of a Public Hearing for the proposed regulation was also published in the Montgomery County Register on September 1, 2008. The Hearing was held on October 3, 2008.

The proposed regulation clarifies several requirements that already exist in the Maryland State Fire Prevention Code; specifically permits the use of performance-based design to meet the intent of the code as originally identified before the Montgomery County Council in October, 2006; and adopts into the Montgomery County Fire Safety Code the National Fire Protection Association (NFPA) 1141, *Standard for Fire Protection in Planned Building Groups, 2006 Edition* and NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition*.

Prior to publication in the Montgomery County Register, the proposed regulation was distributed to the entire Road Code Stakeholders Work Group. Pre- and post-publication comments were received from the Department of Transportation (DOT), the Department of Permitting Services (DPS) and the Maryland National Capital Park and Planning Commission (MNCPPC), Montgomery County Planning Board. DOT and

Phil Andrews, President
December 10, 2008
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DPS comments were mostly procedural and coordination of requirements. The Planning Board requested that the County Executive convene a multi-agency work group to study and make recommendations on the regulation's impacts, add specific language regarding exceptions and Fire Marshal discretion, clarify driveway requirements, consider parking on 26-foot wide roadways, application to in-fill development, define all-weather surfaces, define easement sizes for water supply cisterns and require MNCPPC notification when purchasing larger vehicles. No comments were received regarding the water supply requirements.

MCFRS staff met DOT, DPS and MNCPPC staff on several occasions during September and October and reached mutually acceptable and enforceable language. As a result of these meetings, definitions were added for One and Two-Family Dwellings and Operating Bays. Fire department apparatus access plans will be required as part of the development submittal process, a performance-based option was included to allow for narrower streets in certain circumstances, an allowance was made for street trees, and a section was added that provides for administrative interpretation for recurrent problems that are not specifically addressed in the regulation language.

The proposed regulation, MCER No. 29-08, Fire Safety Code – Fire Department Apparatus Access and Water Supply, will provide a flexible framework that can be applied to ensure adequate fire department apparatus access and water supply while considering other Montgomery County priorities, such as community design, historic preservation, environmental impact and preserving rural character.

I appreciate your prompt consideration of this action.

Attachments



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08
Originating Department Montgomery County Fire & Rescue Service	Effective Date January 1, 2009

MONTGOMERY COUNTY EXECUTIVE REGULATION

FIRE SAFETY CODE – FIRE DEPARTMENT APPARATUS ACCESS AND WATER SUPPLY

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Issued by: County Executive
 Executive Regulation No: 29-08
 COMCOR: Division 06

Authority: Montgomery County Code Section 22-13
 Council Review: Method (2) under Code Section 2A-15
 Register: Vol. 25, No. 9
 Effective Date: January 1, 2009

SUMMARY: Expedient fire department apparatus access and adequate water supply are essential to the efficient and timely delivery of emergency assistance and fire suppression services. This proposed Regulation establishes the requirements for effective fire department apparatus access and water supply in urban, suburban and rural settings in Montgomery County.

ADDRESS: Division Chief Michael Love, Fire Marshal, Montgomery County Fire and Rescue Service, Executive Office Building, 101 Monroe Street, 12th Floor, Rockville, Maryland 20850

STAFF: For additional information, contact Assistant Chief Michael Donahue, Office of the Fire Marshal, Montgomery County Fire and Rescue Service, 255 Rockville Pike, 2nd Floor, Rockville, MD 20850. (240) 777-2457. e-mail: Mike.Donahue@montgomerycountymd.gov



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number	29-08
Originating Department	Montgomery County Fire & Rescue Service	Effective Date	January 1, 2009

Section 1. Applicability. In accordance with the procedures authorized in Chapter 22, "Fire Safety Code," of the Montgomery County Code (1994), as amended, this Executive Regulation applies to safeguarding life, property and the public welfare from the risks of fire and explosion arising from the improper storage, handling, or use of materials or devices, and from conditions hazardous to life, property and the public welfare in the use or occupancy of structures or lots and adopts, except as amended in this Regulation, the National Fire Protection Association (NFPA) 1141, Standard for Fire Protection in Planned Building Groups, 2006 Edition, and NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition.

Section 2. Definitions.

- a. **Fire Department Apparatus Access.** Any approved load-bearing, all-weather surfaces, including public, private, or access roads, driveways, parking lots, shoulders, and buffers, whose use is required to access more than one residential dwelling unit or any non-residential occupied building. Not all roadways are required for fire department apparatus access. In addition to these access surfaces, the Fire Marshal may require, and must approve, all suitable gates, access boxes, and fire lanes to ensure adequate fire department apparatus access.
- b. **Fire Lane.** A road or path developed or reserved to allow fire apparatus to pass through congested areas. The Fire Marshal must require and approve all fire lanes on new or existing roads to be clearly marked to prohibit vehicles or obstructions from impeding fire department apparatus access.
- c. **Fire Marshal.** For purposes of this Regulation, the Fire Marshal of the Montgomery County Fire and Rescue Service (MCFRS) includes the Fire Marshal's designees.
- d. **One- and Two- Family Dwellings.** Detached one- and two-family dwellings and attached single-family dwellings (townhomes) not more than three stories in height with a separate means of egress.



MONTGOMERY COUNTY EXECUTIVE REGULATION

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Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08
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- e. **Operating Bay.** Clear and unobstructed fire department apparatus load bearing surface along **fire department apparatus access** that increases operating width to a minimum of 26 feet wide. It may be defined by bollards and accessed via 3 inch mountable curb. The minimum length of an operating bay is 50 feet.

Section 3. Fire Department Apparatus Access.

The **Fire Marshal** must review and approve **fire department apparatus access** for all new development, and any changes made to **fire department apparatus access**. A **fire department apparatus access** plan is required as part of any development plan. Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment. The **Fire Marshal** may require at least two **fire department apparatus access** roads into new developments when, in the **Fire Marshal's** opinion, there is substantial risk that a single fire department access road into a community may become impassable.

Section 4. Width of Fire Department Apparatus Access.

Fire department apparatus access must be at least 20 feet wide, unless specifically excepted in this Regulation, or as approved by the **Fire Marshal**. Clear width may include, but is not limited, to multiple features of the cross-section, such as travel lanes, bike lanes, and load-bearing shoulders. Clear width excludes obstructive features such as, but not limited, to parking lanes and non-mountable curbs.

- a. On-street parking is allowed on one side only if the load-bearing **fire department apparatus access** is at least 28-feet wide.
- b. On-street parking is allowed on both sides if the load-bearing **fire department apparatus access** is at least 36-feet wide. The required width may increase with additional roadway features, such as pedestrian refuges.
- c. **Fire department apparatus access** serving one- and two-family dwellings of three stories or less, with no superimposed dwelling units or portions of dwelling units, and having no window sill greater than 27 feet from grade on



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Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08
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the same side of the structure as **fire department apparatus access**, may be 26-feet wide and allow parking on one side, if there are 50-foot long **operating bays** at 300-foot intervals. See Figure 1.

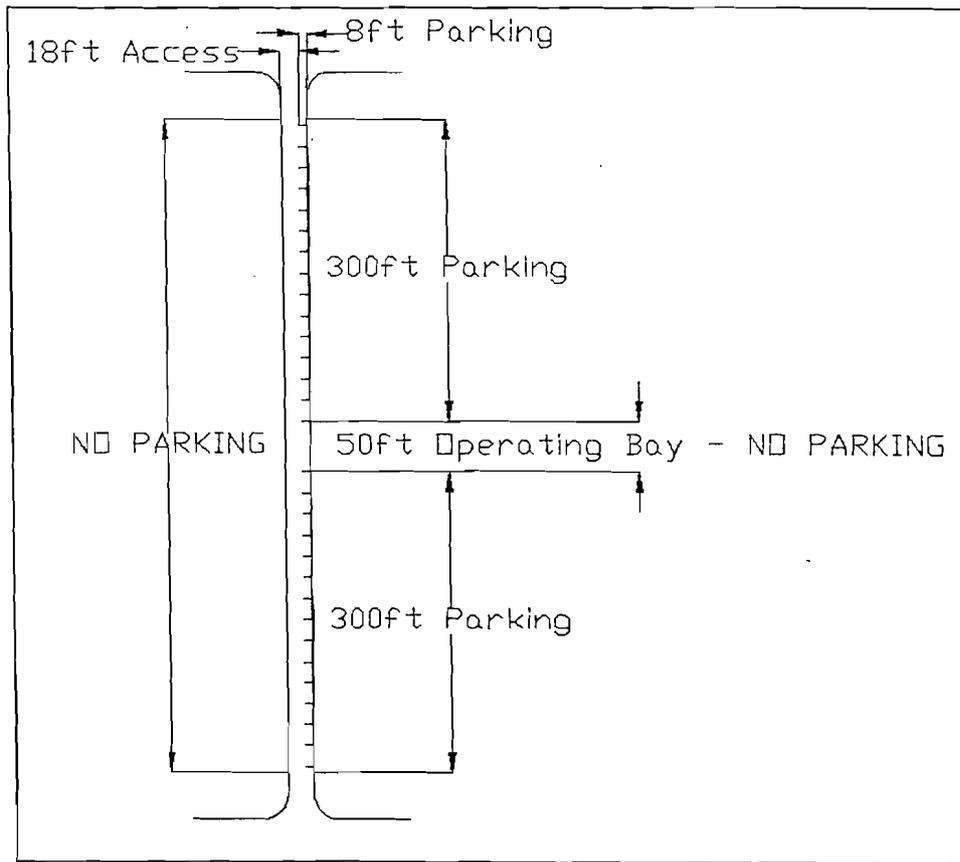


Figure 1. Operating bay application sketch

Section 5. Minimum and Maximum Turning Radii. The minimum interior turning radius for **fire department apparatus access** is 25 feet. The minimum exterior turning radius for **fire department apparatus access** is 50 feet. Performance-based approval of alternative turning radii may be allowed if apparatus movement into opposing lanes of traffic is minimized and unrestricted **fire department apparatus access** is maintained.



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Section 6. Provision of Dead-End Apparatus Turn-Around. Dead-end fire department apparatus access greater than 150-feet long must provide an approved apparatus turnaround. Approved designs include a cul-de-sac at the closed end at least 90-feet in diameter, or a T-turnaround, with each leg of the tee at least 60-feet long and 20-feet wide.

Section 7. When a Building Requires an Automatic Sprinkler System.

- a. A building must be protected throughout by an approved automatic sprinkler system if any portion of its footprint is more than 150 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.
- b. No portion of a building footprint in a building protected throughout by an approved automatic sprinkler system can be more than 450 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.

Section 8. Access Requirements for Occupied Structures.

- a. One- and two-family dwellings of three stories or less, with no superimposed dwelling unit or portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 150 feet of **fire department apparatus access**.
- b. One- and two-family dwellings more than three stories, or dwellings with superimposed dwelling units or a portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.
- c. A non-residential occupied structure must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.



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- d. When **fire department apparatus access** to a new building cannot be provided, the **Fire Marshal** may require compensatory actions in the form of additional fire protection features. Compensatory action may include, but is not limited, to upgraded sprinkler protection, onsite water supply, and early notification fire alarm systems.

Section 9. Fire Department Apparatus Access Requirements: Surface, Load-Bearing, Clearance.

- a. At-grade **fire department apparatus access** must have all-weather surface, and must be capable of bearing the heaviest piece of apparatus in the MCFRS fleet at the time of **Fire Marshal** review and approval.
- b. Elevated decks designated as “**fire department apparatus access**” must have all-weather surface, and be load-bearing up to 75 pounds per square inch, or as specified in Chapter 20 of NFPA Standard 1901, Automotive Fire Apparatus, whichever is greater, or as approved by the **Fire Marshal**.
- c. All buildings, parts of buildings, or other obstructions extending over apparatus access must have a minimum of 13.5 feet vertical clearance from the finished driveway surface. Vertical clearance for any overhead obstruction over arterial roadways must be at least 16 feet from the finished surface. This requirement does not preclude the planting of street trees if maintained appropriately for **fire department apparatus access**.

Section 10. Water Supply Requirements along Fire Department Apparatus Access Routes.

- a. In municipally-supplied areas, hydrants must be spaced not more than 500 feet apart, and within 400 feet from any dead- ends in apparatus travel.
- b. In non-municipally supplied areas, static water sources compliant with NFPA 1142, Water Supplies for Suburban and Rural Firefighting, must be



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sited not more than one mile travel distance along **fire department apparatus access** routes. If an acceptable water supply is not available at the time of development:

1. residential development of more than one dwelling unit must dedicate an easement along the **fire department apparatus access** route to MCFRS that is appropriate in size for the grading and installation of an underground cistern.
2. Non-residential development must install a new, or upgrade an existing water supply, that is acceptable to the **Fire Marshal**.

Section 11. Alternative Application. The alternative application of performance-based design, as specified in Chapter 5 of NFPA 1, Uniform Fire Code, applies to any **fire department apparatus access** requirement identified in this Regulation.

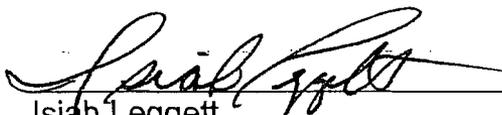
Section 12. Administrative Interpretations. The Fire Marshal will issue administrative interpretations as needed to clarify **fire department apparatus access** requirements for recurrent design issues that are not specifically addressed in this regulation.

Recommended:


 Richard Bowers, Acting Fire Chief
 Montgomery County Fire and Rescue Service

12/1/08
 Date

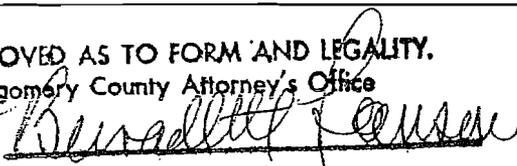
Approved:


 Isiah Leggett,
 County Executive

Dec 10/2008
 Date

APPROVED AS TO FORM AND LEGALITY.
Montgomery County Attorney's Office

By:





MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Isiah Leggett
County Executive

Thomas W. Carr, Jr.
Fire Chief

MEMORANDUM

August 21, 2008

TO: Isiah Leggett, County Executive

VIA: Joseph Beach, Director *B. Feenbergh, for*
Office of Management and Budget

FROM: Thomas W. Carr, Jr., Fire Chief *TWC*

SUBJECT: Request Approval of Executive Regulation No. 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*

Attached for your signature and publication in the Montgomery County Register is Executive Regulation No. 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*.

This new regulation amends the Fire Safety Code by establishing public and private roadway and water supply requirements that ensure efficient and timely delivery of emergency assistance and fire suppression services in urban, suburban and rural settings. Critically important to the regulation and development community is the allowance for performance-based design. This provides the development community with the latitude to find the most cost-effective means of achieving adequate fire department access while meeting the fire service need to arrive as expeditiously as possible.

The regulation does not require any additional resources from the Montgomery County Government. Resources are in place and already perform the associated review function. The same applies to the private sector. In fact, this regulation will ease the burden on the private sector by clarifying the expectations for fire department apparatus access and water supply, at the same time permitting flexibility.

If additional information is needed, please call Assistant Chief Mike Donahue
Ext. 7-2470.

TWC:md

Attachments

Office of the Fire Chief

Issuing Department Fire and Rescue

Contact Person Michael Donahue, 7-2470

Executive Regulation No. 29-08

FISCAL IMPACT STATEMENT
Fire Safety Code – Fire Department Apparatus Access and Water Supply
Title of Regulation

FISCAL SUMMARY: No fiscal impact is anticipated on county personnel or operating costs. Functions associated with regulation are already performed and no additional resources are required.

	<u>Current Fiscal</u> <u>Year FY 09</u>	<u>Next Fiscal</u> <u>Year FY 10</u>
<i>1. Revenues: General Fund</i>	\$ 0	\$ 0
<i>Technology Fund</i>	\$ 0	\$ 0
<i>Total Revenues</i>	\$ 0	\$ 0
<i>2. Personnel Costs: All uniformed positions</i>		
Salaries and Wages (including OT):	\$ 0	\$ 0
Fringe Benefits:	\$ 0	\$ 0
Total Personnel Costs:	\$ 0	\$ 0
<i>3. Operating Expenses:</i>		
List Items:		
Total Operating Expenses:	\$ 0	\$ 0
Capital Outlay:	\$ 0	\$ 0
<i>Technology Fund</i>	\$ 0	\$ 0
Total Expenses (2 + 3):	\$ 0	\$ 0
<i>4. Positions Affected:</i>		
Positions:		
Full-time:	0	0
Part-Time:	0	0
Workyears:		
Full-time:	0	0
Part-Time:	0	0

5. Assumptions and Explanations: See attached memo.

6. Economic Effect on Private Sector: New developments are currently reviewed for adequate fire department apparatus access against the standard adopted in NFPA 1, *Uniform Fire Code*. The proposed regulation is not anticipated to have negative economic effect on the private sector in new development. The proposed regulation may have a positive economic effect through the allowance for performance-based design which may provide for narrower streets. The proposed regulation applies standards for fire department apparatus access to existing roadways at the time of redevelopment or reconstruction. Review in such cases already occurs and will not add to existing work-load.

If additional space is needed, please attach.

OMB REVIEW

Fiscal Impact Statement approved Beryl L. Feunberg for Joseph F. Beach
OMB Director

Fiscal Impact Statement not approved, OMB will contact department to remedy.

Questions

Regulation 29-08, Fire Safety Code – Fire Department Apparatus Access and Water Supply

Fire Department Apparatus Access

1. Section 3, Fire Department Apparatus Access, requires that the Fire Marshal review and approve fire department apparatus access for all new development and any changes made to fire department apparatus access. It says further that “Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment.”

Please explain in more detail when fire department apparatus access reviews would be triggered for existing roads or development.

Fire department apparatus access reviews are triggered by the Montgomery County’s MNCPPC Development Review Committee process. Alterations to existing roads are implemented on a case by case basis depending on extent of redevelopment.

2. When would the Fire Marshal have discretion to use performance-based alternatives to meet fire department apparatus access requirements?

All designs originate with a design professional. At the request of design professionals and in response to context sensitive community needs the Fire Marshal has the discretion to review performance-based options to meet fire department apparatus access requirements based on 2003 NFPA 1 (adopted by Montgomery County in November 2006) Chapter 5 Performance-Based Option.

3. What standards or guidelines serve as the basis for the Fire Marshal to adopt performance-based alternatives for clear width or turning radii?

Performance-based alternatives for clear width or turning radii are adopted by Montgomery County through Chapters 5 of NFPA 1 and NFPA 101. The Office of the Fire Marshal is staffed and conducts performance-based modeling to evaluate turning radii, widths and other access variables.

4. If the fire department access standards of 20 feet clear width conflict with development goals of narrower streets to promote more walkable neighborhoods or slower local traffic, could performance-based alternatives be used to address these design issues? If so, what alternative options might be available?

The issue that presents itself is aerial ladders require 16’ – 18’ clearance to set the grounds jack’s on operations.

Yes. Alternative options are based on a risk assessment of the community, opportunities to create clear non-conflicting width, and roadway networking, among other design inputs. According to the Congress for New Urbanism (CNU), traditional neighborhood designs or interconnected neighborhood design is a performance-based design. The Montgomery County Fire Marshal sits on the CNU committee tasked with reconciling the needs of various stakeholders at the national level.

Water Supply

Hydranted

The regulation would require that in municipally-supplied areas, hydrants must be spaced no more than 500 feet apart, and within 400 feet from any dead-ends in apparatus travel.

1. What are the current standards for spacing fire hydrants in areas with municipal (including WSSC) water supplies?

Coordination with WSSC in April 2007 lead to hydrant spacing revisions published in the 2008 WSSC Pipe Design Manual. Maximum hydrant spacing is now 500ft. It was previously 800ft in single family residential areas.

2. Under the regulation, would the spacing of existing hydrants have to be modified if they do not meet the new standards?

Spacing of existing hydrants does not need to be modified. Development beyond 500ft from the nearest existing hydrant and adding some length of a private or public water main would be required to add a hydrant at the beginning of the development and every 500ft along the length of the new main.

3. Are the municipal water authorities (including WSSC) in agreement with the new standards?

Yes.

We do not have a response from the City of Rockville, and the town of Poolesville in regards to their position on the new standards.

WSSC 2008 Pipe Design Manual Section 24.d

- 1) *Single family residential areas. Provide five hundred (500) feet maximum spacing between fire hydrants, as measured along an improved roadway, and a maximum*

fire hydrant coverage of four hundred (400) feet from the nearest fire hydrant to any dwelling as measured along an improved roadway (as a fire engine would drive).

- 2) *Townhouses and garden apartments. Provide two hundred fifty (250) to three hundred (300) feet maximum spacing between fire hydrants, as measured along an improved roadway, and a maximum fire hydrant coverage of three hundred (300) feet from the nearest fire hydrant to any dwelling as measured along an improved roadway (as a fire engine would drive).*
- 3) *All other areas. (commercial, industrial, high-rise, elevator type apartments, etc.). Provide two hundred fifty (250) to three hundred (300) feet maximum spacing between fire hydrants, as measured along an improved roadway. Conform to any additional requirements of the Fire Marshall for fire hydrant spacing.*

Non-hydranted

In non-hydranted areas, the regulation would require that residential development of more than one dwelling unit must dedicate an easement along the fire department apparatus access route that is appropriate in size for the grading and installation of an underground cistern.

4. How much land would be required for an easement in a residential development? Please provide a range if the size of the easement would vary with the size or scope of the development.

One important issue is to determine ownership.

Easement size varies based on topographical conditions. Developers are asked to design a location for a 30,000gal underground storage tank and access pulloff for apparatus, approximately 40ft x 75ft. The easement must include sufficient area necessary for installation and final grading.

5. Who would pay for and install the cisterns?

It is currently anticipated that a future Montgomery County Capital Improvements Project will fund the underground storage tank installations. These cisterns will serve pre-existing communities as well as new development. We are exploring alternative funding to include grants.

Water on wheels is a much better option particularly when hydranted infrastructure is down.

6. How have water supply issues in non-hydranted residential areas been handled to date? Were easements and/or cisterns required previously? If so, which existing developments currently have them? If not, how is water provided for firefighting?

Water supply was handled by the LFRDs and operational policies. There was no coordinated county-wide strategic effort. In the non-hydranted areas (ISO class 9) of the county manual firefighting water supply is provided by shuttling water in tankers.

Tank wagon units are an option that also needs to be considered particularly when hydranted infrastructure is down.

7. The regulation would require non-residential development in non-hydranted areas to install a new or upgrade an existing water supply. Presumably, the developer would have to undertake and pay for these improvements. What would be involved in making the improvements, and approximately how much would they cost?

It is incumbent upon developers to provide a code compliant patent all-season water supply of sufficient quantity for fire protection systems and manual firefighting. Cost varies depending on existing conditions and level of proposed development.

8. How have water supply issues in non-hydranted, non-residential areas been handled to date? Have water supply upgrades been required previously? If so, which existing non-residential developments have them? If not, how is water provided for firefighting?

Water supply was handled by the LFRDs and operational policies. There was no coordinated county-wide strategic effort. There were no pre-existing code compliant cisterns on record. As a result of this initiative due to adoption of NFPA 1 in 2003 there is now one code compliant tank in service.



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

September 29, 2008

Isiah Leggett
Montgomery County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

RE: MCER NO. 29-08: PROPOSED DEPARTMENT OF FIRE AND
RESCUE SERVICE REGULATION, Fire Safety Code – Fire Department
Apparatus Access and Water Supply

Dear Mr. Leggett:

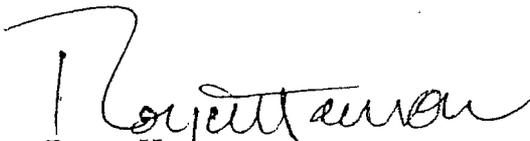
At our regularly scheduled meeting on September 25, 2008, the Planning Board reviewed the proposed Department of Fire and Rescue Service Regulation MCER No. 29-08 with your staff and made the following recommendations:

1. The Executive should convene an interagency working group to develop appropriate provisions to address issues associated with private development and environmental impacts before submitting these regulations to the County Council.
2. Add language that describes the exceptions or discretion that the Fire Marshall has so that applicants and reviewers can understand what non-standard items may be allowed. The waiver criteria should include consideration of other County goals such as preserving/protecting sensitive areas (e.g. historic settings, environmental areas, specimen/champion trees) and preserving rural character.
3. Clarify which driveways need to meet the 20-foot unobstructed width requirement.
4. Consider allowing parking on both sides of 26-foot-wide roads if the street pattern in the area would otherwise allow adequate fire access.
5. Clarify how the fire department access road requirements, including parking prohibitions on existing streets, would be applied to infill development.
6. A definition of an all-weather surface is needed. Grasscrete and other forms of more pervious pavement surfaces should be included.
7. The size of the easement needed for fire department-required cisterns needs to be specified.

8. All Executive departments should be required to identify when they are proposing to purchase larger vehicles than their current fleet and what road changes would be needed to accommodate them.

Thank you for your attention to this matter. We appreciate your staff's help in finding mutually satisfactory solutions and look forward to continuing to work with them. If you have any questions or comments concerning our review, please call Larry Cole at 301-495-4528.

Sincerely,



Royce Hanson
Chairman

cc: Mike Donahue