



ADRIAN M. FENTY
MAYOR

March 19, 2009

Nancy Ward
Acting Administrator
Federal Emergency Management Agency
500 C Street, SW
Washington, DC 20472

Dear Administrator Ward,

I am writing to request Federal funding for the renovation of seven fire stations in the District of Columbia, the replacement of 48 apparatus bay doors at 10 stations, and the replacement of 12 traditional station roofs with “green” roofs. We are requesting this much-needed funding in the form of four grant applications for submission under Title VI of the **American Recovery and Reinvestment Act of 2009 (ARRA)**.

The District of Columbia Fire and Emergency Medical Services Department’s (DC Fire & EMS) fire stations are a critical component of the city’s emergency management infrastructure. Our stations operate 24 hours per day, seven days per week, and 365 days per year. They are, on average, 56 years old, and some were built over a century ago. Despite recent efforts to make up for several decades of deferred maintenance, a majority of the District’s fire stations are in need of total renovation.

In order to provide the highest possible quality service to the community, maintain a safe environment for Fire & EMS personnel, and run an efficient operation that provides the best fire, rescue, and EMS services to citizens, visitors, and workers in the nation’s capital, the District is requesting four grants totaling \$32,763,735. These funds would support five “shovel-ready” neighborhood station renovations in locations around the city (two grants totaling \$19,811,735); the installation of energy-efficient apparatus bay doors at 10 stations, as well as new green roofs at 12 stations (one grant totaling \$6,002,000); and the renovation and consolidation of the Special Operations and Fire Prevention and Investigations station houses (one grant totaling \$6,950,000). We believe that all of these projects could be completed within 24 months of the receipt of funds, with some projects likely to be finished significantly earlier. In accordance with both the objectives of the ARRA and the commitment of my administration to make “green” construction the standard for District government buildings, all project designs will meet the Leadership in Energy and Environmental Design (LEED) Silver level of certification.

DC Fire & EMS is a career department that is comprised of over 2,000 employees who staff over 40 work stations across the District. It operates a total of 33 engines, 16 ladder trucks, three heavy rescue squads, three fire boats, 25 basic life support units, 14 advanced life support units, a collapse/trench rescue unit, a technical high angle unit, a hazardous materials unit, the foam and twinned agent units (White House Service and Naval Observatory Circle Compound), a community services unit, and numerous other support components.

DC Fire & EMS provides a multi-layered response to 600,000 District residents and the more than one million visitors and workers who visit the city on an average workday. Department personnel answer over 165,000 emergency calls per year. The vast majority of these calls are answered in less than five minutes. In a recent customer satisfaction survey, 94% of patients transported by DC Fire & EMS who responded to the survey reported receiving service that was satisfactory or above.

The Department was a first responder to the disaster at the Pentagon on September 11, 2001 and two recent fires at the Eisenhower Executive Office Building. Along with the duties required of any metropolitan fire rescue service, DC Fire & EMS also is charged with safeguarding the President of the United States and his family, the Vice-President and his family and most members of the Cabinet. Additionally, the Department is responsible for the protection of all federally owned and leased buildings within the borders of the District of Columbia. Over 900 DC Fire & EMS personnel provided fire rescue coverage and EMS protection for over two million visitors during the recent Inauguration festivities.

This letter and the attached materials are intended to provide you with a better understanding of the District's tremendous need for Federal support for the planned renovations, energy efficiency enhancements, and environmental improvements as well as a sense of the positive impact these projects will have on District residents, visitors, workers and Department personnel. I greatly appreciate your consideration of this proposal. Please contact Fire Chief Dennis L. Rubin at (202) 637-3127 if you have any questions about either the proposal or the Department's operations generally.

Sincerely,

A handwritten signature in black ink, appearing to read "Adrian M. Fenty". The signature is stylized and cursive, with a large initial "A" and "F".

Adrian M. Fenty

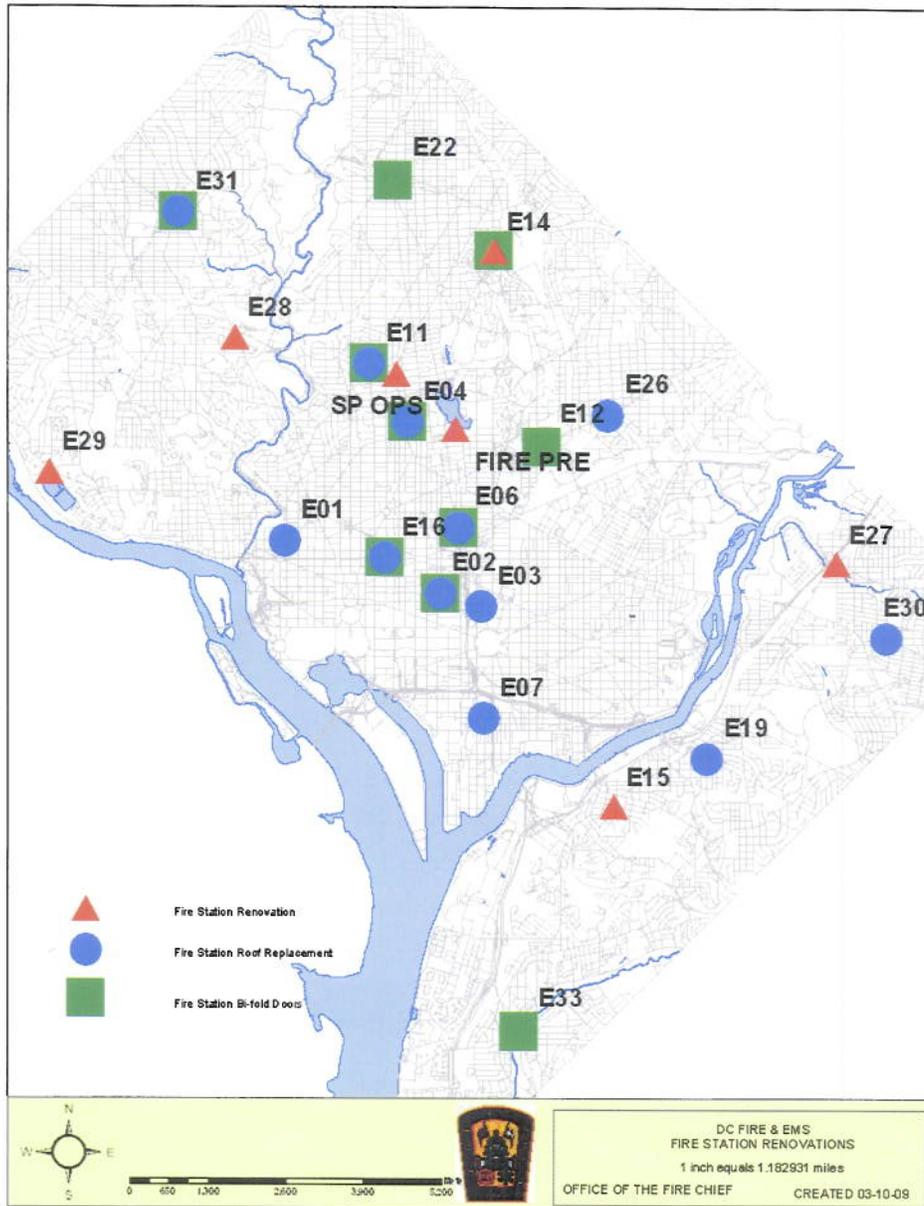
Attachments

**PROPOSAL OF THE DISTRICT OF COLUMBIA
FIRE & EMERGENCY MEDICAL SERVICES DEPARTMENT
FOR FIRE STATION RENOVATIONS AND
ENERGY EFFICIENCY IMPROVEMENTS**



**Dennis L. Rubin, Chief
March 17, 2009**

The District of Columbia Fire & Emergency Medical Services (DC Fire & EMS) department is seeking four grants under the American Recovery and Reinvestment Act of 2009 to renovate seven fire stations, install energy-efficient apparatus bay doors at 10 locations, and install 12 green station roofs. These funds would be used in stations around the nation's capital, as reflected in the map below.



We believe this proposal merits special consideration because of the unique relationship that exists between DC Fire & EMS and the Federal government, the extreme need for the proposed improvements, and the tremendous opportunity this well-developed project provides FEMA to showcase “green” renovation techniques that could be replicated by other departments nationwide.

PROJECT OVERVIEW

Major renovations are needed in 30 of the 40 DC Fire & EMS work stations. These stations are, on average, 56 years old. They require new plumbing and electrical systems, up-to-date, energy-efficient heating, ventilating, and air conditioning (HVAC) systems, and substantial restroom modifications to achieve compliance with the Americans with Disabilities Act (ADA). As a result of water and pipe leaks, some of the stations have mold contamination, biohazard issues, dilapidated walls, and decrepit ceilings. Renovation and installation of modern HVAC systems will greatly improve the air quality in these stations, making the environment healthier for our employees and visitors. In addition, the proposed renovations include energy efficient windows that will significantly decrease the amount of energy used at each station.

The District already has invested almost \$13 million in local funds to renovate four stations since 2001 and has developed a plan to modernize the remaining stations using energy efficient materials and systems. However, the cost of these renovations presents a significant challenge to the District government, especially in the current economic environment. **Accordingly, DC Fire & EMS is requesting \$32,763,735 to support the cost of renovating seven more fire stations, replacing 12 fire station roofs, and installing 50 apparatus doors over the next 24 months. These funds would support five “shovel-ready” neighborhood station renovations in locations around the city (two grants totaling \$19,811,735); the installation of energy-efficient apparatus bay doors at 10 stations, as well as new green roofs at 12 stations (one grant totaling \$6,002,000); and the renovation and consolidation of the Special Operations and Fire Prevention and Investigations station houses (one grant totaling \$6,950,000).**

The District's fire stations were built for Fire & EMS personnel of 50 years ago. In the decades since these facilities were designed, building codes have been updated, technological advancement have been made, and our society has changed. Our facilities must be adapted to our evolving mission and workforce. The proposed renovations are designed to accomplish this goal, ensuring that these facilities enhance, rather than stand in the way of, our efforts to provide high quality work environments to our staff and the high level of services to our community that they expect.

A Changing Workforce

The vast majority of the District's stations were constructed when the department was entirely male. In the last 30 years, the Department has made great strides in hiring and promoting women firefighters. Out of a 2,052 person workforce, women now hold 259 positions. However, most fire stations lack separate shower facilities and locker rooms for women. While temporary accommodations have been made, there should be single-sex locker rooms at each fire station to foster equality and safety in the workplace.

Fire & EMS' stations were built to accommodate either two or three shifts of firefighters working 12 hours shifts. Since 1987, our workforce consists of 4 shifts of firefighters working 24 hour platoons. As a result of the current work schedule, there are additional demands for parking, storage, work space, enhanced dormitory/bathing facilities, and on-site physical fitness facilities.

Updated Building Regulations

The majority of Fire & EMS' facilities were constructed when the building code focused primarily on fire and construction safety. At present, the building code also regulates safe working environments and accessibility. In addition, the District's Green Building Act,¹ which was enacted in 2006, requires all new public buildings and substantial renovations of such buildings to meet the Leadership in Energy and Environmental Design (LEED) Silver standard. The stations discussed in this proposal currently fall far short of the applicable standards in all of these areas. However, upon completion of the renovations, we believe that the stations will be models for renovations of buildings of similar age and size in other jurisdictions.

Specifically, all of the renovated fire stations will meet the relevant National Fire Protection Association's (NFPA) standards.² The renovations will fulfill NFPA 1500: *Standard on Fire Fighter Occupational Safety and Health*, and while these stations currently lack commercial fire detection, protection and suppression systems, each renovation will ensure compliance with NFPA 101: *Life Safety Code* ® and NFPA 5000: *Building Construction and Safety Code* ®.

¹ DC Official Code § 6-1451.02

² NFPA 13 Standard for the Installation of Sprinkler Systems
NFPA 37 Standard for the Installation and Use of Stationary Combustion Engines
And Gas Turbines
NFPA 70 National Electric Code
NFPA 72 National Fire Alarm Code ®
NFPA 80 Standard for Fire Door and Other Opening Protections
NFPA 90A Standard for the Installation of Air-conditioning and Ventilating Systems
NFPA 90B Standard for the Installation of Warm Heating and Air-conditioning
Systems
NFPA 91 Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists
And Noncombustible Solids
NFPA 101 Life Safety Code ®
NFPA 110 Standard for Emergency and Standby Power Systems
NFPA 720 Standard for the Installation of Carbon Monoxide (CO) Detection and
Warning Equipment
NFPA 900 Building Energy Code
NFPA 901 Uniform Coding for Fire Protection
NFPA 1500 Standard on Fire Fighter Occupational Safety and Health
NFPA 1581 Standard on Fire Department Infection Control Programs
NFPA 1851 Standard for Selection, Care and Maintenance of Protective Ensembles for
Structural Fire Fighting and Proximity Fire Fighting
NFPA 1710 Standard for the Organization and Deployment of Fire Suppression
Operations, Emergency Medical Operations, and Special Operations to the
Public by Career Fire Departments
NFPA 1901 Standard for Automotive Fire Apparatus
NFPA 1951 Standard on Protective Ensembles for Technical Rescue Incidents
NFPA 1962 Standard for the Inspection, Care and Use of Fire Hose Couplings and
Nozzles and the Service Testing of Hose
NFPA 5000 Building Construction and Safety Code ®

Furthermore, all of the fire stations will be brought into ADA compliance as part of the renovation process. This is especially important because each station to be renovated is an integral part of the community in which it is located. Residents come to our stations for information and assistance, and many citizens groups hold meetings in community rooms at fire stations. In addition to making them accessible to all, we will build community rooms at those stations that don't have them, where the footprint allows.

Equipment-driven Space Requirements

The fire service has transitioned over time to become a fire, rescue, and emergency medical service. In addition, Fire & EMS now maintains an all-hazards mitigation force. The all-hazards function requires a cache of specialized equipment and larger vehicles. As a result, on average, a typical fire engine has gone from weighing approximately 20,000 pounds to weighing nearly 40,000 pounds. Some specialized fire engines weigh 75,000 pounds. Trucks have also become longer in order to achieve the proper distribution of weight. The all-hazards equipment and vehicles have caused numerous problems in fire stations. Fire station apparatus bay floors have cracked due to the weight of the trucks. Fire station bay doors have very close clearances and the bays are limited in size. In some cases, fire truck operators must retract the trucks' mirrors in order to clear the fire station doors. The insufficient length of some fire stations also prevents fire trucks from parking in specific stations. Because of this, equipment cannot be deployed where it would prove most beneficial from a service matrix standpoint.

In addition, the protective equipment that is issued to firefighters and companies has radically changed since these fire stations were constructed. Fire & EMS is now responsible for hazardous materials calls. With the possibility of a weapon of mass destruction (WMD) incident, all firefighters currently maintain two complete sets of personal protective equipment. This equipment is not allowed in any of the fire stations' living areas. The equipment must be stored and maintained according to specific manufacturer's specifications to assure that it will function as designed. The storage methods call for capabilities that do not currently exist at the stations. Therefore, ample storage for each firefighter's gear is an integral part of the renovations.

Technology-Driven Requirements

Finally, the Department has transitioned to electronic reporting, documentation, payroll, and dispatch over the past decade. We rely heavily on these information technology systems to ensure that the emergency vehicles are dispatched in the most expeditious manner possible and to meet reporting requirements under the National Fire Incident Reporting System. This reporting format is consistent with the NFPA 901: *Standard for Uniform Coding for Fire Protection*, and it now expands the collection of data beyond fires to include the full range of department activity on a national scale. It is a true all-incident reporting system that promotes efficient communication throughout Fire & EMS. However, our stations were not designed to support the use of such equipment. To support modern information technology systems, significant improvements, such as electrical upgrades and the installation of new fiber-optic connections, are needed.

The project descriptions below provide a snapshot of the current conditions in each of the neighborhood fire stations to be renovated. Each section also includes an overview of the

proposed renovations, a summary of the benefits to the community, and a synopsis of the completed project.

Grant 1: \$11,932,055 to Renovate Three Neighborhood Stations.

Fort Totten Station (Engine Company 14) 4801 North Capitol Street, NE



The Fort Totten Station was built in 1945 and serves the far north-northeast section of the District. It houses an engine, an advanced life support unit, an ambulance, and a ready-reserve engine. Once the renovations are complete, this station will be able to house additional ambulances, resulting in lower response times in this quadrant of the city. A department-wide station survey conducted in 2000 highlighted the fact that the station's HVAC system has been serviced infrequently since its installation in the 1980's. The HVAC runs constantly in order to maintain an adequate air temperature due to significant draft leaks in the station. Due to age and deterioration, the HVAC system must be replaced, a new electrical system must be installed, the plumbing system must be replaced, and the telecommunications systems must be upgraded. Currently, a first-floor public restroom is used as the women's locker room. With the proposed renovations, a new women's locker room will be constructed and the restroom will be returned to public use. The public restrooms on the first floor also will be upgraded to be ADA compliant.

This project is "shovel ready," meaning that work can begin as soon as funding is available. In addition to the repairs and system replacements described above, significant weatherization improvements are included in the renovation plan. New insulation will be installed in the ceilings, windows will be replaced, and new doors will be installed. Finally, a fire-suppression system that complies with the building code will be installed. The total project cost is approximately **\$3,105,000**, including infrastructure improvements at LEED Silver certified level. **With temporary housing, the total amount of this fire station grant request is \$3,655,000.**

Anacostia Station (Engine Company 15) 2101 14th Street, SE



The Anacostia Station was built in 1969. This station houses an engine company, a rescue squad, a battalion fire chief, an ambulance, a cave-in unit, and a cave-in support unit. It was built into a hill and has a long history of both foundation and drainage problems. It is severely overcrowded and currently houses eight pieces of fire apparatus in a space designed for three pieces. Often, one piece of apparatus has to be moved before another can respond to a call. In addition to providing adequate space for the apparatus housed at this station, the renovation will greatly benefit the community because the bays will be redesigned so that fire trucks do not have to be relocated during a response. Thus, response times will improve. A second floor will be added to provide additional living space and locker rooms. The first floor will be renovated in order to provide an ADA accessible community room. Also as part of the renovation, the HVAC system will be upgraded, the electrical system will be replaced, a new plumbing system will be installed, and the telecommunications system will be supplanted. A code compliant fire-suppression system will be installed and the restrooms on the first floor will be upgraded to meet ADA requirements.

The Anacostia Station renovation also is a “shovel ready” project. In addition to the structural improvements and systems replacements discussed above, weatherization will be global and will include new insulation in the ceilings, new windows, and new doors. The cost for the renovation to the LEED Silver certified level will be approximately **\$4,177,055**. During the renovation, Fire & EMS will house the engine company and the ambulance in a temporary structure. This will cost approximately \$550,000. **Thus, the total cost for this fire station grant request is \$4,727,055.**

Cleveland Park (Engine Company 28) 3522 Connecticut Avenue, NW



The Cleveland Park Station was built in 1916. The station houses an engine company, a truck company, and an ambulance. Living space is scarce in this station and firefighters are forced to share dining space with the fire trucks. The station survey recommended that renovations to the Cleveland Park Station include installing a code compliant fire-suppression system, demolishing and redesigning the interior of the station, replacing the HVAC system, wiring a new electrical system, installing a new plumbing system, upgrading all telecommunications systems, and making the restrooms on the first floor ADA compliant. Additionally, the station's current insufficient staff parking capabilities will be expanded by adding another parking deck at the rear of the station.

The renovations at the Cleveland Park Station are “shovel ready.” Steps to improve weatherization of the station will include: installing new insulation in the ceilings and replacing all windows and doors. These renovations will cost approximately **\$2,800,000** if made to the LEED Silver certified level. The cost of a temporary structure to house the engine company and the ambulance will be approximately \$750,000. **Funding requested for this fire station amounts to \$3,550,000.**

Grant 2: \$7,879,680 to Renovate Two Neighborhood Stations.

Deanwood Station (Engine Company 27) 4201 Minnesota Avenue, NE



The Deanwood Station was built in 1908. This station houses an engine company, advanced life support transport unit, and an ambulance. The Deanwood Station will undergo complete demolition and redesign of its interior spaces, replacement of the HVAC system, installation of a new electrical system, installation of a new plumbing system, installation of a code compliant fire-suppression system, and the upgrading of telecommunications systems to current standards. In order to be made ADA compliant, the restrooms on the first floor will be overhauled. In addition, the Deanwood Station has a separate garage/maintenance facility, which also will be upgraded. The garage's renovations include demolishing the interior and installing a new roof.

This project also is "shovel ready." Furthermore, weatherization issues will be addressed to include all new insulation in the ceilings, new windows, and the replacement of all doors. Renovating this station to the LEED Silver certified level will cost approximately **\$2,875,000**. Temporary quarters for the engine company and the ambulance will cost approximately \$550,000. **With LEED Silver Certification and the temporary quarters, the total request amount for this fire station is \$3,425,000.**

Palisades Station (Engine Company 29) 4811 MacArthur Boulevard, NW



The Palisades Station was constructed in 1925 to serve the far western portion of the District, adjacent to the Potomac River and the Maryland State line. Since 1925, this community has grown significantly. The Palisades Station also has the responsibility of protecting many sovereign lands within its response area, including embassies and chanceries. This station was built for an engine and a single crew; however, it currently houses an engine company, a truck company, and an ambulance. Three companies operate out of one fire station. As a result, the number of firefighters overwhelms the dining room, and it is not possible to assemble for a meeting or a meal. As part of this project, a new apparatus bay will be added for the ambulance, providing much-needed protected storage. Other substantial renovation will include: interior demolition and redesign; renovation of the dormitory, dining room, and kitchen; a new HVAC system; a new electrical system; a new plumbing system; a state-of-the-art telecommunications system; ADA compliant male and female restrooms on the ground floor; and a code-compliant fire-suppression system.

The Palisades Station renovation/expansion project is a “shovel ready” project that includes weatherization improvements, up-to-date windows, and new doors. To renovate this station to the LEED Silver certification level, it will cost approximately **\$3,704,680**. The temporary station will house the engine company, the truck company and the ambulance currently assigned there by the U.S. Army Corps of Engineers. Due to the size of the structure needed for the apparatus and the number of personnel, the temporary station will cost approximately \$750,000. **The total grant request for the Palisades project is \$4,454,680.**

Grant 3: \$6,002,000 to Install Roofs and Bay Doors with Green Replacements.

Fire Station Roof Replacements

DC Fire & EMS currently has 12 stations that are in serious need of roof replacements. At each location, health and wellness are at risk because the roof is leaking into various living areas of the facility. Additionally, 10 other fire stations have roofs that are at the end of or past their life expectancies. The energy costs at the stations with poorly insulated roofs are very significant. The structures have gone for decades without any significant attention. The approximate cost to replace each roof ranges from \$250,000 to \$542,000, depending on size and space requirements. We intend to replace the 12 aforementioned roofs with "green" roofs. The roofs that need to be replaced are identified and have been reviewed by our Facilities Maintenance Division. The stations affected are: West End (Engine 1), Chinatown (Engine 2), Capitol Hill (Engine 3), Pleasant Plains (Engine 4), Shaw (Engine 6), Waterfront (Engine 7), Columbia Heights (Engine 11), Franklin Square (Engine 16), Penn Branch (engine 19), Brentwood (Engine 26), The Heights (Engine 30) and Chevy Chase (Engine 31). Due to pre-planning and advanced surveying of all roofs within the Department, this work can begin upon receipt of the funding. **Total funding requested for roof replacement and "green" upgrading is \$4,252,000.**

Bi-Fold Apparatus Bay Door Replacement

At present, DC Fire & EMS has 48 bi-fold apparatus bay doors that are beyond their life expectancies and need to be replaced in the immediate future. Bi-fold apparatus bay doors have been used in our fire stations for over 35 years. Following testing at our stations, the bi-fold apparatus doors proved to be the most reliable doors for fire service applications. They are cost-efficient doors, in that the model that we will use can produce significant reductions in energy use. The new doors also will allow more natural light to enter the station, again allowing for a reduction in energy use. Finally, the new bi-fold apparatus bay doors that will be installed are made with low emissivity (Low E) glass that stops heat from escaping through the glass during cold weather and keeps heat from entering through the glass during the spring and summer months. The result will be greater energy efficiency in both winter and summer at DC Fire & EMS' stations. Finally, these new bi-fold apparatus bay doors will provide extra security for the fire stations because they can be closed swiftly when the apparatus has cleared the opening. The cost will be approximately \$35,000 to replace each apparatus bay door, including the required remote features. **The total request for replacement doors is \$1,750,000.**

Grant 4: \$6,950,000 to Renovate Special Operations and Fire Prevention and Investigation Stations.

Park Road Special Operations Station - 1338 Park Road, NW



The Park Road Special Operations Station was built in 1901. No part of this facility is currently habitable; the firehouse is essentially a shell, in which two office trailers have been placed. The Special Operations and Homeland Security Division Command Staff works in the trailers, which are situated in two former apparatus bays. Renovation of the Special Operations Station will allow Fire & EMS to relocate one rescue squad, the on-duty special operations battalion fire chief, and one ambulance, which will respond to calls from this location. This will significantly enhance the District's Special Operations capabilities. Moreover, once complete, these renovations will greatly enhance the Department's mission by drastically reducing ambulance response time in the densely populated Columbia Heights/Adams Morgan community.

To bring the facility up to current operational fire station standards, the plan provides for the construction of four offices, a bunk room that accommodates 10 personnel, and two officers' dormitories. The renovation also will include a new roof, a new HVAC system, a new electrical system, a new plumbing system, code-compliant fire detection and suppression systems, and a new telecommunications system. The restrooms on the first floor will be outfitted to meet ADA requirements. Thus, a complete demolition of the station's interior is required. Additionally, the relocation of the rescue squad will allow for a more geographically balanced distribution of technical rescue resources throughout the District.

Plans for the Park Road Special Operations Station renovation are seventy-percent complete. In addition to the renovations, the project includes weatherization of the windows and doors. **Renovating this station to the LEED Silver certified level, will cost approximately \$3,450,000.**

**Joint Command and Fire Prevention and Investigations Division's
Administrative/Operations Fire Station - 300 McMillan Drive, NW**



The “Old Headquarters” building once housed Department Headquarters and the Communications Division. The facility has not been used since 2001 and is in severe disrepair. We plan to renovate this building and co-locate the Fire Prevention Division and Fire Investigations Unit (FIU) there. Staff from both groups are currently housed at stations across the District. The lack of centralization and cohesion has made it extremely difficult for the Fire Prevention staff to accomplish some of its goals; in addition, Fire Prevention Inspectors should work closely with the FIU staff, but geographic barriers have limited that interaction. Co-location of the two will greatly improve the functionality of the FIU, enhance coordination among the staff of the Fire Prevention Division, and, we believe, increase the success rate of our arson prosecution program.

This is the only facility within the Fire & EMS inventory that can house the fire investigators and serve as a 24 hour operational fire station facility. The FIU and the Arson Detection Canine Unit require 24-hour housing and response capabilities. Major renovations are needed: the building’s interior must be demolished, but the external brick and block foundation and walls will be

preserved. When renovated, this structure will be converted into a multi-use Administrative/Operations Fire Station for the Joint Command of the Fire Prevention and Investigations Division. The station will house the on-duty fire investigators for each of the four platoons, as well as the on-duty canine investigator. Such a layout will require dormitories, restrooms, locker rooms, shower facilities, canine care facilities, and an apparatus bay. The most pressing system needs at this location include: roof repairs; upgrading the HVAC system; replacing the electrical and plumbing systems; overhauling the telecommunications system; modifying all restrooms in the station to make them ADA compliant; installing a code compliant fire-suppression system; modifying and enhancing the lower level apparatus bay; and resurfacing the parking lot.

The "Old Headquarters" project also will address weatherization issues through the installation of a new roof and insulation in the ceiling, replacement of the windows, and replacement of the doors. To complete this project and achieve LEED Silver certification will cost approximately **\$3,500,000**. A temporary station would not be needed for this project as it is currently not in use. **The total request for renovation/construction of the Joint Command and Fire Prevention and Investigations Division's Administrative/Operations Fire Station is \$3,500,000.**