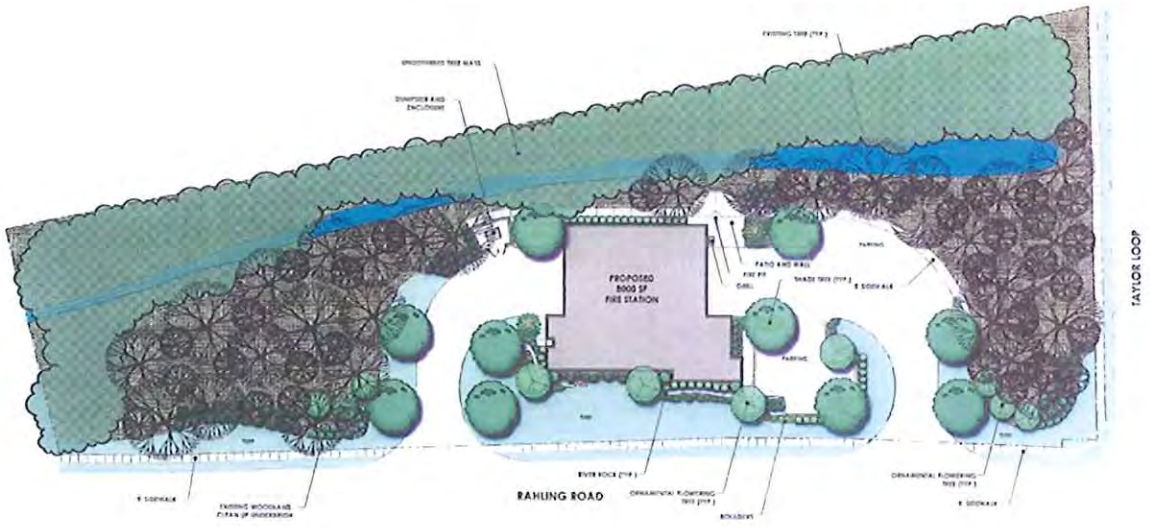
ENVIRONMENTAL ASSESSMENT

LITTLE ROCK FIRE STATION 8 CONSTRUCTION
CITY OF LITTLE ROCK
PULASKI COUNTY, ARKANSAS
GRANT AWARD #EMW-2009-FC-0139OR

Project Number: 35107088
Report Date: June 4, 2010



WEST LITTLE ROCK
FIRE SUB-STATION
LITTLE ROCK, ARKANSAS

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JUNE 24, 2009

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Fire Department

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EXECUTIVE SUMMARY

ENVIRONMENTAL ASSESSMENT FOR LITTLE ROCK FIRE STATION 8 CONSTRUCTION CITY OF LITTLE ROCK PULASKI COUNTY, ARKANSAS GRANT AWARD #EMW-2009-FC-0139OR

In accordance with Federal Emergency Management Agency (FEMA) regulations, an Environmental Assessment (EA) was prepared for the proposed construction of a new fire station in Little Rock, Arkansas. The EA addresses site-specific impacts associated with the construction of the new facility. The results of this EA will be used to decide whether to initiate preparation of an Environmental Impact Statement (EIS) or to prepare a Finding of No Significant Impact (FONSI).

The need for the new fire station is due to the dramatic increased growth in the western part of the city coupled with the Little Rock Fire Department's desire to meet the evaluation criteria of the Insurance Services Office (ISO) requirements for a rating of 2 or better for the City of Little Rock. The Little Rock Fire Department (LRFD) proposes to build a new Leadership in Energy and Environmental Design (LEED)-certified fire station to enhance the surrounding neighborhood.

Three alternatives were considered to address the need for a new fire station. These included: the No Action Alternative, the Expansion of Existing Fire Stations, and the Proposed Action Alternative. The Proposed Action Alternative – the preferred action - is to construct a new fire station (Fire Station #8) on a vacant tract of land located on the southwest corner of the intersection of Rahling Road and Taylor Loop Road in Little Rock, Arkansas. The station will be built within .5 miles of a major east/west corridor in Little Rock (State Highway 10). It will be located on a major north/south thoroughfare that will enable the engine company to quickly reach the target area. The city purchased the site in 1998 and a conditional-use zoning permit was acquired. As a result, the project was "shovel ready" for construction of a fire station in the City's crucial area of need.

No impacts to geology, groundwater, floodplains, wetlands, environmental justice, threatened and endangered species, cultural resources, hazardous materials, or socioeconomic resources are anticipated with the preferred action. During the construction period, short-term impacts to soil, downstream surface water, traffic, air quality, and noise are anticipated. All short-term impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

The findings of this EA conclude that the proposed construction of a fire station in the City of Little Rock would result in no significant environmental impacts to the human or natural environment; therefore, the proposed action meets the requirements of a Finding of No Significant Impact (FONSI) under the NEPA and the preparation of an Environmental Impact Statement (EIS) will not be required.

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ENVIRONMENTAL ASSESSMENT FOR
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CITY OF LITTLE ROCK
PULASKI COUNTY, ARKANSAS
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1.0 INTRODUCTION

1.1 Project Authority

In accordance with 44 Code of Federal Regulation (CFR) for the Federal Emergency Management Agency (FEMA), Subpart B – Agency Implementing Procedures, Section 10.9, an Environmental Assessment (EA) was prepared pursuant to Section 102 of the National Environmental Policy Act of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (40 CFR Parts 1500-1508). The EA addresses site-specific impacts associated with the construction of the City of Little Rock Fire Station 8 in Pulaski County, Arkansas. The results of this EA will be used to decide whether to initiate preparation of an Environmental Impact Statement (EIS) or to prepare a Finding of No Significant Impact (FONSI).

1.2 Project Location

Figure 1.0 – Pulaski County

Pulaski County is located at the geographic center of the state of Arkansas and is approximately 771 total square miles (**Figure 1.0**). The county is crossed by the Arkansas River, which enters the county from the northwest portion and exits in the southwest portion of the county. Pulaski County is served by Interstate (I)-30, I-430, I-530, I-630, I-40, and I-440; by U.S. Highways 65, 67, 70, 165, and 167; and by State Highways 5, 10, 100, 161, 300, 338, 365, and 367. It was created on December 15, 1818 and was one of the state's five original counties. The county was named for Count Casmir Pulaski, a Polish nobleman who fought and died in the American Revolutionary War. Pulaski County has a diverse population, economy, natural setting and social structure. Its population mirrors the State's racial, ethnic, age and gender makeup. Its balanced economy derives from state and local government, business and industry, finance and nonprofit sectors. Three of Arkansas's natural divisions converge in Pulaski County presenting a cross section of the state's flora, fauna and geological diversity. It derives its urban/suburban character from a widespread network of community organizations, neighborhood associations, civic clubs, recreational and sports groups, cultural centers and churches.

The city of Little Rock is located in the central portion of the county along the Arkansas River. In 1673, the first European explorers to travel through the Arkansas River wilderness encountered the friendly Quapaw Indians. Nine years later the famed La Salle Expedition landed at "La Petite

Roche," the little rock that rested along the wild banks of the Arkansas. Both French and Spanish expeditions followed, but even as late as 1819, when the Arkansas territory was created, the Little Rock area was still little more than a wilderness. The graceful bluffs of "La Petite Roche," did not go unnoticed for long. Little Rock became the seat of the new territorial government in 1821 and in 1831 was incorporated as a city. In 1836, Little Rock became the capital of the state of Arkansas.

The proposed location of the new fire station is to be built on a wooded site located in the western portion of the City. Please reference Figures 1.1 and 1.2, below, for approximate site location.

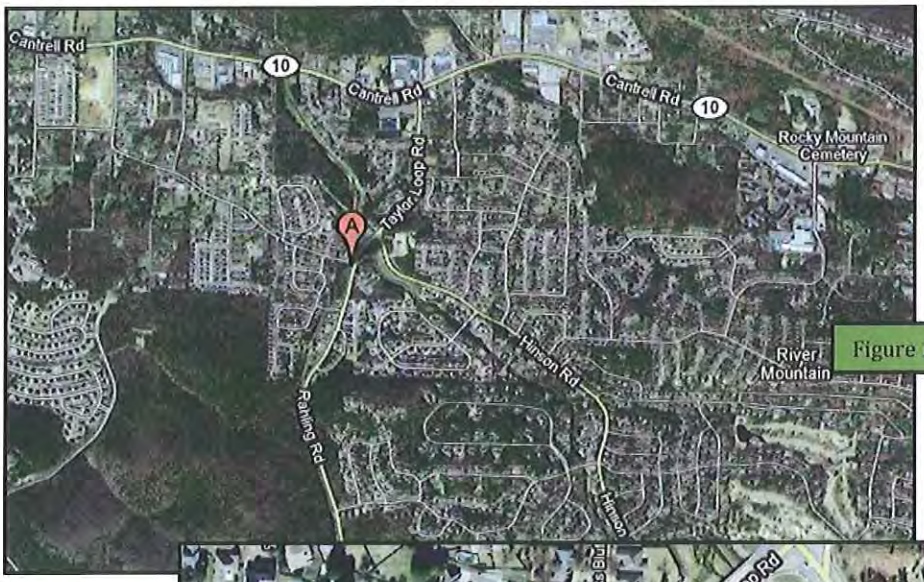

Figure 1.1

Figure 1.2

1.3 Purpose and Need for the Proposed Action

The Little Rock Fire Department (LRFD) currently has 20 fire stations to protect 123 square miles. The western quadrant of the City has experienced incredible growth as evidenced by the issuance of more than 2,200 single-family residential building permits for the area since 2004. From 2001 to 2008, single-family residential construction exceeded 57 billion dollars. Business development has also grown at a similar pace in the area. The city annexed portions of land to this area, thereby extending the distance firefighters must travel. All of these developments have resulted in increased traffic and changing traffic patterns which are major factors adversely affecting the LRFD's response time.

In an effort to deal with concerns addressed by the Insurance Services Office (ISO), the Little Rock Fire Department (LRFD) proposes to build a new Leadership in Energy and Environmental Design (LEED)-certified fire station in the western area of Little Rock, Arkansas (Figure 1.2). The primary reason a new station is needed in the area is the tremendous residential and commercial growth the area has experienced over the last decade. The current response time to the area served by the proposed site is 12 – 15 minutes. The LRFD is seeking a response time of 4 minutes. The City of Little Rock currently has an ISO rating of 2; however the department has been told by ISO representatives that the City needs an additional four stations. We are attempting to maintain the rating of 2 and improve to an ISO rating of 1 in the future.

2.0 ALTERNATIVES CONSIDERED

Three alternatives were considered to address the purpose and need stated in Section 1.3 above. These included: the No Action Alternative, the Expansion of Existing Fire Stations, and the Proposed Action Alternative. The Proposed Action Alternative is to construct a new fire station (Fire Station #8) on a vacant tract of land located on the southwest corner of the intersection of Rahling Road and Taylor Loop Road in Little Rock, Arkansas. The City of Little Rock has owned the approximately 2.65-acre property since 1998. The proposed location was selected based upon several selection criteria.

2.1 No Action

Implementation of No Action Alternative would entail no construction of a new facility to meet the needs of the greatly expanded western area of the City. As a consequence, the City of Little Rock would be unable to address the ISO's determination for the need of a fire station in this western quadrant of the City. At present, it takes the LRFD approximately 12-15 minutes to assemble a full alarm assignment to areas in the western quadrant and approximately eight minutes to respond to EMS calls. In the event of an extreme emergency the distance of the existing fire stations could pose a greater risk to life and/or property.

2.2 Expansion of Existing Fire Stations

This alternative would be to expand an existing fire station(s). Expanding one or more existing fire stations would not improve the standard of coverage in the area. Adding apparatus and personnel to current stations would not reduce the distance that must be traveled in order to serve the far west area of the city nor would it reduce the travel time. Additionally, the expansion of current sites would not help in meeting the ISO standard of a 1.5-mile radius for

service. This alternative does not meet ISO and it is readily apparent that the only way to improve response time is to build a fire station closer to the impacted area; therefore, this alternative is dismissed from further consideration in this E.A.

2.3 Construction of a New Fire Station at 4500 Rahling Road – Proposed Action Alternative

The proposed action is construction of a new fire station at a site located in the western quadrant of the city. The station will be built within .5 miles of a major east/west corridor in Little Rock (State Highway 10). It will be located on a major north/south thoroughfare that will enable the engine company to quickly reach the target area. The city purchased the site in 1998 and a conditional use zoning permit was acquired. As a result, the project was "shovel ready" for construction of a fire station in the City's crucial area of need.

The LRFD would construct a new fire sub-station for the Little Rock Fire Department. The program will include individual bunkrooms, toilets, a classroom, kitchen and dining room, a day room, office and secure public entry (reference Figure 2.1). Additionally, the support spaces will include a two-bay apparatus room with thru access, an air room, equipment storage, shop, washer/ extractor and washer dryer, and a weight room. This program composes a facility of approximately 7,928 square feet. There will be 10 dedicated staff parking spaces, 4 visitor/staff spaces, and one handicap-accessible space totaling 15 parking spaces. These parking areas and the apparatus room will be accessed from two drive aprons located on Rahling Road. The total surface area of the parking and drives to the property line is 12,845 square feet and the total area of the site is 115,604 square feet or about 2.65 acres. The exact routing of the utilities is to be determined during the final design phase. City water and sewer will service the site. There will not be any on-site sewer treatment and the intention is to bring these utilities to the building underground.

Figure 2.1

An existing unnamed tributary to Taylor Creek exists on the property. Construction plans include creating a defined channel for the tributary on the site. The existing culverts running under Taylor Loop Road will remain. Channel improvements include widening the channel to allow it to contain a 100-year storm event and relocating one section of it to the west edge of the site to create additional land to construct the fire station on. USI Consulting Engineers conducted hydraulic modeling to confirm the size of the ditch. Since construction activities will include the placement of dredged and fill material in waters of the United States, a permit application and mitigation plan were submitted to the United States Army Corps of Engineers

(USACE) in order to obtain coverage under a Section 404 Nationwide Permit. The permit is provided in the report appendices.

The proposed channel improvements include modification of an 8- to 10-foot wide existing stream channel and new construction to create a 24-foot wide stream channel. Approximately 200 linear feet of the existing stream channel will be filled and relocated to provide a uniform alignment across the entire property. The remaining 580 linear feet that is being improved will be excavated to achieve the proposed stream width. An approximately 150-foot portion of the channel consists of bedrock and may not require excavation or modification. The new channel and stream banks will be lined with open space geogrid reinforced turf, which will create a more nature stable channel.

As a result of locating the new fire station at the proposed location, citizens and firefighters will be at a lower risk for death or injury. Property damage can be significantly reduced. In addition, the construction of the new fire station will enhance LRFD's ability to respond not only to structural fires and other fire-related hazards, but also to potential Chemical Biological Radiological Nuclear Explosive (CBRNE) incidents, building collapse(s), and other catastrophic incidents. The new fire station will also help LRFD meet the objectives listed in the National Preparedness Goal documentation and the objectives set forth in the NFPA Standard 1710.

3.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section describes the potential impact of the Proposed Action Alternative and the No-Action Alternative. Where potential impact exists, conditions or mitigation measures to offset the impact are detailed.

3.1 Land Use and Zoning

In Pulaski County, Arkansas, the majority of the land uses and economic base of the county is widely diverse consisting of light and heavy manufacturing, retail, commercial, forest product production, timber management, large and small scale agricultural operations and tourism. According to the City of Little Rock Future Land Use map (2010), the proposed project site is zoned RL (Residential Low Density). The city purchased the site in 1998 and a conditional-use zoning permit was acquired.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to the local zoning or land use plan.

Proposed Action Alternative - Under the Proposed Action Alternative, plans for the construction of the new fire station has been approved under a conditional-use zoning permit.

3.2 Geology, Seismicity and Soils

Because the proposed project involves the construction of a new building, Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, applies to the project. According to the Executive Order, the construction of the proposed project must use appropriate seismic design and construction standards and practices. The 1997 Uniform Building Code and American Society of Civil Engineers Standard

7-95 are model codes that are substantially equivalent to Federal recommendations for new building seismic design and construction. According to the U.S. Geological Survey (USGS) National Seismic Hazard Mapping Project (USGS 2008) and the recently published USGS Fact Sheet entitled, "Earthquake Hazard in the New Madrid Seismic Zone Remains a Concern" (2009) the New Madrid region is identified as a "high earthquake hazard." Although the proposed construction site is located a considerable distance from the New Madrid seismic zone epicenter, it is still located within the New Madrid region; therefore, the USGS predicts that damage will occur within the Little Rock area (USGS 2009).

According to the National Resource Conservation Service (NRCS) Web Soil Survey (WSS) for Pulaski County, the proposed site soils consist of Sallisaw gravelly silt loam soils with a 1 to 3 percent slope. The Sallisaw series consists of deep, well-drained, moderately permeable soil that formed in loamy and gravelly alluvium or valley fill. Sallisaw gravelly silt loam is not classified as a hydric soil on the NRCS 2010 List of Hydric Soils in Pulaski County.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to geology or site soils.

Proposed Action Alternative – Under the Proposed Action Alternative, construction activities will be relatively shallow and restricted to those activities associated with site grading and installation of relatively shallow underground utilities. The grading activities will not be deep enough to impact underlying geologic resources. Soils on the proposed fire station site will be disturbed during construction to develop the property. Excavated soil and waste materials will be managed and disposed in accordance with applicable local, State and Federal regulations. If contaminated materials are discovered during the construction activities, the work will cease until appropriate procedures and permits can be implemented.

3.3 Farmland Conversion Impact Rating

The Farmland Protection Policy Act (FPPA) (P.L. 97-98, Sec. 1539-1549; U.S. Code 4201, et seq.) was enacted to minimize the unnecessary conversion of farmland to non-agricultural uses as a result of federal actions. The Act requires federal agencies to evaluate the adverse effects of their activities on prime and unique farmland as well as farmland of statewide and local importance. The National Resource Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of an essential food or environmental resource. Prime farmland is characterized as land with the best physical and chemical characteristics for the production of food, feed, forage, fiber and oilseed crops.

Ecologic, Inc. submitted a request to the National Resource Conservation Service (NRCS) on June 23, 2010 for the Farmland Conversion Rating for the site. The NRCS completed a Farmland Conversion Impact Rating Form for the site using the Land Evaluation Information and Site Assessment Criteria. The stated rating for soils that are not Prime Farmland or Farmland of Statewide Importance are rated at 0 for Pulaski County. The NRCS provided this form along with a letter dated June 23, 2010 stating that the site's "location has been urbanized and no longer meets the criteria for Prime Farmland or Farmland of Statewide Importance". The City of Little Rock has also zoned the area a Residential Low Density (RL). A copy of the

Farmland Conversion Impact Rating From and the NRCS letter are provided in the report appendices.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to areas of the proposed fire station site that contain prime farmland.

Proposed Action Alternative - Under the Proposed Action Alternative, construction activities will not disturb prime farmland soils on the proposed fire station site. The site is not currently being used as farmland. Conversion of the site from vacant land to the proposed fire station will not result in the loss of an essential food or environmental resource.

3.4 Water Resources and Water Quality

3.4.1 Surface and Groundwater

An unnamed tributary of Taylor Creek transects the site from the south to the north. The tributary connects to Taylor Creek approximately 525 feet north of the site. Taylor Loop Creek is currently not identified in the Arkansas Department of Environmental Quality (ADEQ) 2010 List of Impaired Waterbodies which was prepared pursuant to Section 305 (b) and 303 (d) of the Federal Water Pollution Control Act. The nearest major surface water feature is the Arkansas River, located approximately 2.5 miles north of the proposed project site.

The proposed project site is not located in the vicinity of a protected Wild and Scenic River. The nearest Wild and Scenic River is Big Piney Creek, which is located approximately fifty (50) miles northwest of the proposed site.

The proposed project site is not located in the vicinity of a Sole Source Aquifer. According to the EPA Region 6 Sole Source Aquifer map, the nearest Sole Source Aquifer is located in central Louisiana.

The City of Little Rock receives its drinking water from two publicly owned water sources—Lake Winona and Lake Maumelle. The City provides wastewater services.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to surface water or groundwater.

Proposed Action Alternative – Under the Proposed Action Alternative, temporary short-term impacts to downstream surface waters may occur during the construction period due to soil erosion. Prior to project implementation, any necessary local, state, or federal permits, including but not limited to a City of Little Rock Grading & Land Alteration Permit and coverage under the Arkansas Department of Environmental Quality General Permit No. ARR150000, will be obtained.

The LRFD will be required to prepare a Storm Water Pollution Prevention Program (SWPPP) and obtain a National Pollutant Discharge Elimination System (NPDES) permit. Implementation of appropriate Best Management Practices (BMPs) will be required at the construction location. BMPs will be implemented in accordance with the permits.

All general and special conditions of US Army Corps of Engineers (USACE) Nationwide Permit No. 2009-00373 obtained for the proposed construction and modification of the tributary channel shall be met. A copy of the approved permit will be kept at the work site for reference. If changes in the proposed design or location of the facilities are required, revised plans will be resubmitted for review by the Department of the Army before construction of the changes begins.

During construction, appropriate erosion control methods will be implemented to prevent erosion and sediment deposits into the unnamed tributary and with Taylor Loop Creek. Following construction, all areas which were disturbed will be seeded, replanted, or receive an equivalent erosion control protection. Within the new channel and on the stream banks, open space geogrid reinforced turf will be installed to create a more nature stable channel. Along both sides of the stream channel, a 25-foot width of the existing forest area will remain in an undisturbed natural state in order to create a riparian buffer area. This buffer will provide adequate separation between developed areas of the site and the Unnamed Tributary. Existing mature trees and vegetation within the buffer will create shade and habitat for aquatic and woodland species. If the forested area must be disturbed, tree and shrub species as identified in the Appendix B of the Mitigation Plan will be replanted. Immediately downstream of the proposed channel improvements, an existing scour hole that has developed where the Unnamed Tributary enters Taylor Loop Creek will be repaired with concrete paving as identified in the Mitigation Plan.

3.4.2 Wetlands and Waters of the U.S.

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. Wetlands are identified as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. In addition, Executive Order 11990, Protection of Wetlands, directs federal agencies to take actions to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the values of wetlands on federal property.

A review of the National Wetlands Inventory (NWI) indicates there are no wetlands located within the immediate vicinity of the Proposed Project site (reference Figure 3.1 in Appendix A). During site reconnaissance, the unnamed intermittent tributary of Taylor Loop Creek was observed within the proposed project site. The City of Little Rock's proposed construction and modifications of the tributary channel were approved by the U.S. Army Corps of Engineers (USACE) issuance of the Nationwide 404 Permit No. 2009-00373, dated December 22, 2009 to the City (reference Appendix C).

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to the waters of the U.S., including wetlands.

Proposed Action Alternative – Under the Proposed Action Alternative, temporary short-term impacts to downstream surface waters may occur during the construction period due to soil

erosion. Prior to project implementation, any necessary local, state, or federal permits, including but not limited to a City of Little Rock Grading & Land Alteration Permit and coverage under the Arkansas Department of Environmental Quality General Permit No. ARR150000, will be obtained. All general and special conditions of US Army Corps of Engineers (USACE) Nationwide Permit No. 2009-00373 obtained for the proposed construction and modification of the tributary channel shall be met. A copy of the approved permit will be kept at the work site for reference. If changes in the proposed design or location of the facilities are required, revised plans will be resubmitted for review by the Department of the Army before construction of the changes begins.

The LRFD will be required to prepare a Storm Water Pollution Prevention Program (SWPPP) and obtain a National Pollutant Discharge Elimination System (NPDES) permit. Implementation of appropriate Best Management Practices (BMPs) will be required at the construction location. BMPs will be implemented in accordance with the permits.

The USACE permit was issued under the condition that certain Special Conditions were met. These Special Conditions are summarized as follows. During construction, appropriate erosion control methods will be implemented to prevent erosion and sediment deposits into the unnamed tributary and with Taylor Loop Creek. Following construction, all areas which were disturbed will be seeded, replanted, or receive an equivalent erosion control protection. Within the new channel and on the stream banks, open space geogrid reinforced turf will be installed to create a more nature stable channel. Along both sides of the stream channel, a 25-foot width of the existing forest area will remain in an undisturbed natural state in order to create a riparian buffer area. This buffer will provide adequate separation between developed areas of the site and the Unnamed Tributary. Existing mature trees and vegetation within the buffer will create shade and habitat for aquatic and woodland species. If the forested area must be disturbed, tree and shrub species as identified in the Appendix B of the Mitigation Plan will be replanted. Immediately downstream of the proposed channel improvements, an existing scour hole that has developed where the Unnamed Tributary enters Taylor Loop Creek will be repaired with concrete paving as identified in the Mitigation Plan.

3.4.3 Floodplains

In compliance with FEMA policy implementing Executive Order 11988, Floodplain Management, the proposed project site was reviewed for possible impacts associated with occupancy or modification to a floodplain. According to the National Flood Insurance Program's Flood Insurance Rate Map (FIRM) 0501810037 F panel 37, dated October 19, 2001, the proposed project site is located outside the special flood hazard areas (reference Figure 3.2 in Appendix A).

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to the floodplain.

Proposed Action Alternative – Under the Proposed Action Alternative, the construction plans include channel improvements to the on-site tributary to Taylor Creek including widening the channel to allow it to contain a 100-year storm event.

3.5 Air Quality

The Environmental Protection Agency (EPA) uses six "criteria pollutants" as indicator of air quality, and has established for each of them a maximum concentration above which adverse effects to human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS).

The EPA has designated specific areas as NAAQS attainment or non-attainment areas. Non-attainment areas are any areas that do not meet the quality standards for a pollutant. These areas are subject to corrective actions specified by EPA, including restrictions on certain types of activities. Attainment areas are any areas the meet ambient air quality standards. Per phone conversation with Mr. Bill Swafford of the Arkansas Department of Environmental Quality on May 18, 2010, Pulaski County is in attainment for all six criteria pollutants and has no restrictions. Boundary Designation for the 1997 8-Hour Zone Standard for EPA Region VI as of the current date show that Crittenden is the only county in Arkansas that is in non-attainment, which is on the eastern border of the state along the Mississippi River.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to air quality.

Proposed Action Alternative - Construction of the proposed fire station would involve pollutant emissions from construction equipment that could result in minor effects to air quality in the area immediately surrounding the construction activity. Fugitive dust would escape into the atmosphere during these activities. However, the effects would be localized and of short duration and would not jeopardize the attainment status of Pulaski County. The contractor would be required to keep all equipment in good working order to minimize air pollution.

3.6 Noise

Noise is generally described as unwanted sound. Existing ambient noise levels in the area are consistent with a major three-lane city thoroughfare and the surrounding residential neighborhood.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to noise levels.

Proposed Action Alternative - Noise levels within and adjacent to the project area would increase during the proposed construction activities as a result of construction equipment. The noise levels generated would be limited to workday daylight hours for the duration of the work and not cause long-term negative impacts. Although the fire station by nature has noise associated, the new station will not increase noise levels beyond previous conditions.

3.7 Biological Resources – Vegetation, Threatened and Endangered Species and Critical Habitat

The area in the vicinity of the proposed project site is currently developed as a residential area. The site may be generally characterized as a bottomland hardwood forest area consisting of *Carya tomentosa*, *Liquidambar styraciflua*, *Quercus stellata*, *Quercus velutina*, *Quercus rubra*,

Pinus taeda, *Juniperus virginiana*, *Circus Canadensis*, *Aesculus pavia*, *Ulmus alata*, *Morus rubra*, *Celtis laevigata*, *Prunus serotina*, *Ostrya virginiana*, *Hamamelis vernalis*, *Vaccinium arborium*, *Salix nigra*, *Ligustrum vugare*, Smilax *rotundifolia*, *Lonicera japonica*, *Vitus rotundifolia*, and *Silene virginica*.

Faunal species observed on-site included several common species of migratory birds, such as *Turdus migratorius, Cyanocitta cristata*, *Cardinalis cardinalis*, *Spizella passerine*, *Mimus polyglottos*, *Sialia sialis*, and *Melanerpes carolinus*. In addition, the site may support small rodents, mammals, reptiles, fishes, and insects common to both a bottomland hardwood forest and urbanized area. It is reasonable to ascertain squirrels, opossum, raccoons, and field mice may inhabit the proposed site.

According to The Endangered Species Act (Act), it is unlawful for any person or entity to take any plant or animal species identified on the Secretary of Interior's list of threatened and endangered species (Section 9(a)(1)(B) and it is the responsibility of each federal agency to insure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence or result in the destruction or adverse modification of habitat determined to be critical to the conservation of any such species (Section 7(a)(2)).

A search of the U.S. Fish and Wildlife Service website of threatened and endangered species resulted in the identification of four (4) endangered species in Pulaski County. They are the Bald Eagle (*Haliaeetus leucocephalus*), Red-cockaded Woodpecker (*Picoides borealis*), Interior Least Tern (*Sterna antillarum athalassos*), and Running Buffalo Clover (*Trifolium stoloniferum*).

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to biological resources, including federally protected species.

Proposed Action Alternative – Based on the individual species habitat requirements and observations made during field reconnaissance of the site, no federally listed species are considered likely to exist or have potential to inhabit the proposed project site. On February 5, 2010, the City of Little Rock provided the U.S. Fish and Wildlife Service a completed Endangered and Threatened Species Evaluation Form for the proposed project site. According to the Evaluation Form, there are no federally listed threatened or endangered species present in the area of the project site (reference Appendix D). Based upon the Evaluation Form and discussions with the USFWS, FEMA has determined that there will be no effect to threatened or endangered species due to the Proposed Alternative Action.

3.8 Cultural Resources

In addition to review under the National Environmental Policy Act (NEPA), consideration of impacts to cultural resources is mandated under Section 106 of the National Historic Preservation Act (NHPA), as amended, implemented by 36 CFR Part 800. Requirements include the identification of significant historic properties that may be impacted by the proposed action or alternatives within the project's area of potential effect. Historic properties are defined as archaeological sites, standing structures or other historic resources listed in or determined eligible for listing in the National Register of Historic Places. If adverse effects on historic,

archaeological or cultural properties are identified, agencies must consider effects of their activities and attempt to avoid, minimize, or mitigate the impacts to these resources.

No Action Alternative – Under the No Action Alternative, no construction will occur and no historical properties will be affected.

Proposed Action Alternative - On 24 August 2009, the LRFD requested concurrence from the Arkansas Historic Preservation Office that the proposed project would not have an adverse effect on Historic Properties. The State Historic Preservation Officer (SHPO) responded by stating that a cultural resources survey was not recommended at this time. "Records show that five archeological sites are located in close proximity to the subject property but should not be affected by the proposed construction. Most, or all, of these sites have been damaged or destroyed by development in the area and it is important to note that none is actually on the proposed development site."

In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO or Tribal Historic Preservation Officer (THPO) and Tribes and work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.

3.9 Environmental Justice

Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, "mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations.

According to the 2008 American Community Survey (ACS) data, Pulaski County has a total population of 376,797. The White population was 60.1% and the next highest race/ethnicity was Black at 33.5%. The median family income was $56,980 and the median household income was $44,967.

The total population in Little Rock was 186,584 people, 81,976 households and 46,232 families residing in the city. The racial makeup of the city was 50.3% White, 41.3% Black, 2.8% Asian, 2.4% Two + Races, and 3.2% Other. In the city, median family income was $53,898 and the median household income was $41,826. The per capita income for the town was $31,780. Share of families below the poverty line was 14.2% and share of the population below the poverty line was 18.6%, including 28.9% of those under the age of eighteen and 9.9% of those sixty-five and over. All data was received from Metroplan located in Little Rock, Arkansas. Metroplan is the designated Metropolitan Planning Organization responsible for the transportation planning process in central Arkansas under federal law.

No Action Alternative – Under the No Action Alternative, there will be no disproportionate impacts on minority or low-income populations.

Proposed Action Alternative – The Proposed Action Alternative will enhance firefighter and resident safety by decreasing response times in the City of Little Rock. There will be no disproportionately high or adverse impact on minority or low-income portions of the population. All populations will benefit from the emergency response provided by the facility.

3.10 Traffic and Safety

Traffic and Safety issues that were considered in this EA include the health and safety of area residents, the public at large and the protection of personnel involved in activities related to the implementation of the proposed project. The proposed fire station site is located at the southwest corner of the intersection of Rahling Road and Taylor Loop Road in Little Rock, Arkansas. Two drive aprons from Rahling Road will provide access to the proposed fire station on the eastern property boundary. Arkansas State Highway 10 is easily accessible to the north.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to transportation. The No Action Alternative could have a negative effect on the general safety of the residents of the City of Little Rock. The lack of this emergency response facility will continue to hinder response capability and the protection of the community it serves from fire and fire-related hazards.

Proposed Action Alternative – Under the Proposed Action Alternative, there will be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed fire station site. This temporary increase could potentially result in a slower traffic flow during the construction phase of the project. To mitigate potential delays, construction vehicles and equipment will be stored on site during the project construction and appropriate signage will be posted on affected roadways. Once the proposed fire station is in operation, the traffic increase is expected to be minor and associated with staff traveling to and from the facility, and emergency response vehicles leaving and arriving the fire station. The site will have a large parking area that is level, allowing for access in and out of the complex easily. In the summer of 2010, a new traffic signal will be constructed at the corner of Rahling Road and Taylor Loop Road. The fire station will be equipped with equipment that will change the traffic signal remotely during emergency response events.

Construction activities could also present safety risks to those performing the activities. To minimize risks to safety and human health, all construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner and in accordance with the standards specified in the Occupational Safety and Health Administration (OSHA) regulations. The appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.

In the long term, the Proposed Action Alternative is believed to be an overall enhancement to public safety.

3.11 Hazardous Materials and Waste

Hazardous wastes, as defined by the Resource Conservation and Recovery Act, are define as "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed."

A Phase I Environmental Site Assessment (Phase I ESA) conducted by Ecologic Environmental Services, Inc., in accordance with the ASTM e1527-05 Standard Practice, and dated February 18, 2010 did not identify recognized environmental conditions (RECs) associated with the site. At the time of site reconnaissance for the preparation of this EA no hazardous materials and/or wastes were identified on or near the proposed project site.

No Action Alternative – Under the No Action Alternative, no construction will occur and there will be no impact to hazardous materials or waste.

Proposed Action Alternative – Under the Proposed Action Alternative, no hazardous materials or waste impacts are anticipated. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, State, and Federal regulations.

4.0 CUMULATIVE IMPACTS

Cumulative impacts are those effects on the environment that result from the incremental effect of the action when added to past, present and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

The proposed fire station site is located in an area surrounded by single-family residences. There is one church located east across Rahling Road from the site. The City of Little Rock was contacted to determine if there were any known proposed projects occurring or proposed near the proposed project site. In the summer of 2010, the City will be constructing a new sidewalk along Taylor Loop Road from a new school to Rahling Road. Also this summer, a new traffic signal will be constructed at the corner of Rahling Road and Taylor Loop Road. There are no known proposed projects that, when added to the proposed action (the new fire station) has a cumulative impact on the human environment.

The construction of the proposed project may have temporary impacts on air quality, by increasing criteria pollutants during construction activities, and traffic. No other cumulative impacts are anticipated. The construction of the proposed fire station will have little or no negative cumulative impact on the surrounding community and environment.

5.0 PUBLIC PARTICIPATION

To increase citizen involvement and knowledge of the plans, LRFD has held numerous meetings with residents in the neighborhood where the new fire station would be located. A legal notice will be posted in the local newspaper, the Arkansas Democrat Gazette, and this Draft EA will be made available for review at the Little Rock Public Library, the Pulaski County Courthouse and the Little Rock City Hall for a 15-day period.

6.0 AGENCIES CONSULTED

▪ State Historic Preservation Office, Natural Heritage Commission	Little Rock, Arkansas
▪ U.S. Fish and Wildlife Service, Arkansas Field Office	Conway, Arkansas
▪ Arkansas Department of Environmental Quality	Little Rock, Arkansas
▪ City of Little Rock	Little Rock, Arkansas
▪ Metroplan	Little Rock, Arkansas
▪ National Resource Conservation Service	Little Rock, Arkansas
▪ U.S. Army Corps of Engineers	Little Rock, Arkansas

7.0 CONCLUSION

No impacts to geology, groundwater, floodplains, wetlands, environmental justice, threatened and endangered species, cultural resources, hazardous materials, or socioeconomic resources are anticipated with the preferred action. During the construction period, short-term impacts to soil, downstream surface water, traffic, air quality, and noise are anticipated. All short-term impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

The findings of this EA conclude that the proposed construction of a fire station in the City of Little Rock would result in no significant environmental impacts to the human or natural environment; therefore, the proposed action meets the requirements of a Finding of No Significant Impact (FONSI) under the NEPA and the preparation of an Environmental Impact Statement (EIS) will not be required.

The following table is a summary of those items discussed in detail in Section 3.0 Affected Environment and Potential Impacts of this report. The table provides a review of information regarding the potential impact and any required mitigation measures discussed in that section.

Summary and Comparison of Environmental Effects			
Resource Area	Alternatives		Mitigation
	Proposed Action	No Action	
Geology and Soils	No impacts to underlying geology are anticipated. Shallow soils and rock on the proposed fire station will be disturbed during construction.	No change	Excavated soil and waste materials will be managed and disposed of in accordance with applicable local, State and Federal regulations. If contaminated materials are discovered during the construction activities, the work will cease until appropriate procedures and permits can be implemented.
Farmland Conversion Impact Rating	Construction activities will not disturb prime farmland soils on the proposed fire station site.	No change	None
Air Quality	Minor long-term impacts due to exhaust emissions produced by the operation of emergency response vehicles. Short-term impacts may occur during construction.	No change	Construction contractors will be required to water down the construction areas when necessary to minimize dust and to keep fuel-burning equipment running times to a minimum and keep engines properly maintained.
Surface Water	Temporary short-term impact to downstream surface waters may occur during construction. A defined channel will be created for the unnamed tributary located on the site.	No change	A SWPPP and a NPDES permit must be obtained prior to construction. BMPs, such as installing silt fences and revegetating bare soils, will minimize runoff. All general and special conditions of US Army Corps of Engineers (USACE) Nationwide Permit No. 2009-00373 obtained for the proposed construction and modification of the tributary channel shall be met.
Groundwater	No impact to groundwater is anticipated.	No change	If the proposed action will require additional excavation to groundwater depths, the applicant will consult with EPA and ADEQ to identify the appropriate mitigation.
Floodplains	No impact to the floodplain is anticipated. Construction plans include channel improvements to the on-site tributary to Taylor Creek including widening the channel to allow it to contain a 100-year storm event.	No change	All general and special conditions of US Army Corps of Engineers (USACE) Nationwide Permit No. 2009-00373 obtained for the proposed construction and modification of the tributary channel shall be met.
Waters of the U.S. Including Wetlands	Short-term impacts to downstream surface waters could occur during construction. Construction plans include channel improvements to the on-site tributary to Taylor Creek including widening the channel.	No change	A SWPPP and a NPDES permit must be obtained prior to construction. BMPs, such as installing silt fences and revegetating bare soils, will minimize runoff. All general and special conditions of US Army Corps of Engineers (USACE) Nationwide Permit No. 2009-00373 obtained for the proposed construction and modification of the tributary channel shall be met.
Biological Resources	No impact to federally protected species is anticipated.	No change	None

Cultural Resources	No impacts to archeological or cultural resources are anticipated.	No change	In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered the project shall be halted. The applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO or THPO and Tribes and work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the NHPA.
Environmental Justice	No adverse impact on minority or low-income portions of the population is anticipated.	No change	None
Noise	Temporary short-term impacts in noise levels are anticipated during construction. Minor impacts in noise levels from sirens operated by emergency response vehicles are anticipated.	No change	To reduce noise levels during construction, construction activities will take place during working hours.
Traffic	Minor temporary increase in the volume of construction traffic on roads in the immediate vicinity is anticipated. After construction of the facility, a minor increase in traffic from staff and emergency response vehicles is anticipated.	No change	Construction vehicles and equipment will be stored on site during the project construction and appropriate signage will be posted on affected roadways.
Hazardous Material	No hazardous materials or waste impacts are anticipated.	No change	Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, State, and Federal regulations.
Safety	Construction activities could present safety risks to those performing the activities. No long-term negative safety impacts are anticipated.	The lack of this emergency response facility will continue to hinder response capability and the protection of the community it serves from fire and fire-related hazards.	Construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner and in accordance with the standards specified in the (OSHA) regulations. The appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.

8.0 REFERENCES

- Environmental Protection Agency, Air Quality Standards
- First Search Technology Corporation, Federal and State Agency Database Search
- Google Earth
- National Wetland Inventory, U.S. Fish and Wildlife Service
- U.S. Fish and Wildlife Service (website of threatened and endangered species)
- U.S. Geological Survey national Seismic Hazard Mapping Project
- National Resource Conservation Service Web Soil Survey for Pulaski County
- National Flood Insurance Program Floor Insurance Rate Map (FIRM) 0501810037 F panel 37, dated October 19, 2001

9.0 LIST OF PREPARERS

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