

Environmental Assessment Joplin FD Proposed Fire Station No. 2 Joplin, MO FEMA-1980-DR-MO January 2013



FEMA Region VII 9221 Ward Parkway, Suite 300 Kansas City, MO 64114



ENVIRONMENTAL ASSESSMENT

PROPOSED FIRE STATION NO. 2 FEMA-1980-DR-MO 2825 WEST JUNGE BOULEVARD JOPLIN, MISSOURI

For Submittal to:

FEDERAL EMERGENCY MANAGEMENT AGENCY U.S. DEPARTMENT OF HOMELAND SECURITY 9221 WARD PARKWAY, SUITE 300 KANSAS CITY, MISSOURI 64114

Prepared for:

CHIEF MITCHELL D. RANDLES JOPLIN FIRE DEPARTMENT 303 EAST THIRD STREET JOPLIN, MISSOURI 64801

Prepared by:

NPN Environmental Engineers, Inc. 1631 Headland Drive St. Louis, Missouri 63026

> January 2013 Contract C-12236

QUALITY ASSURANCE/QUALITY CONTROL

Project: **Environmental Assessment Proposed Fire Station No. 2** FEMA-1980-DR-MO **2825 West Junge Boulevard** Joplin, Missouri

Project No.: Contract C-12236

This report has been prepared on behalf of and for the exclusive use of Joplin Fire Department solely for the purpose of documenting the above-titled project. This report and all documents contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without written consent of NPN Environmental Engineers, Inc. and Joplin Fire Department. However, NPN Environmental acknowledges and agrees that the report being submitted to Federal Emergency Management Agency may be conveyed as public information.

As part of NPN Environmental's QA/QC practices and procedures, this report has been reviewed and approved by the following:

Project Manager:

Ruth Mamebach Ruth C. Mannebach

QA/QC Manager:

Kimbuly A. Polacek Kimberly A. Polacek

It is the professional opinion of David B. Rowe, P.E., a Registered Professional Engineer licensed to practice in the State of Missouri, that good environmental engineering practices were employed on this project.

Name: David B. Rowe, P.E. Principal Title:

Ville

Signature:

Date: January 11, 2013

> Missouri Registration Number E-24039

TABLE OF CONTENTS

Page <u>No.</u>

QUALITY ASSURANCE/QUALITY CONTROL
LIST OF ACRONYMS AND ABBREVIATIONS
INTRODUCTION
PURPOSE AND NEED
ALTERNATIVES
No Action Alternative
Proposed Action
Alternatives Considered and Dismissed
AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS
Physical Resources
Water Resources
Biological Resources
Cultural Resources
Socioeconomic Resources
Cumulative Impacts
SUMMARY OF IMPACTS
PUBLIC INVOLVEMENT
MITIGATION MEASURES AND PERMITS
AGENCY COORDINATION AND REFERENCES
LIST OF PREPARERS
TABLE
Table 1 – Summary of Affected Environments and Impacts
APPENDIXES
Appendix A Figures
Figure 1 – Vicinity Map
Figure 2 – Site Location

Appendix B	Draft Facility Layout
Appendix C	Site Photographs
Appendix D	Agency Consultation Correspondence
Appendix E	Additional Documentation

LIST OF ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
MDNR	Missouri Department of Natural Resources
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
SHPO	State Historic Preservation Office
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service

INTRODUCTION

The Joplin Fire Department (Joplin FD) serves the corporate limits of the City of Joplin in the southwest corner of Jasper County and northwest corner of Newton County, as well as providing mutual response/automatic aid to the Carl Junction Fire Protection District. The department previously had seven existing fire stations within their geographic service area until two stations were destroyed during the May 2011 EF-5 tornado.

The two stations impacted by the tornado are currently operating out of portable office trailers and temporary shelters. The proposed new Fire Station No. 2 would replace the existing station located at 2216 Maiden Lane that was destroyed by the tornado. The project site acquired by the City of Joplin for the proposed new Fire Station No. 2 is consistent with fire department program priorities and long-term regional planning objectives and will reduce overlaps in firehouse service areas and significantly increase response capabilities to the community.

NEPA requires that Federal agencies consider the environmental consequences of Proposed Actions before deciding to fund an action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed decision making. The Council on Environmental Quality was established under NEPA to implement and oversee Federal policy in this process and implemented the procedural provisions of NEPA codified at 40 CFR 1500-1508. An Environmental Assessment (EA) related to a FEMA program must be prepared according to the requirements of the Stafford Act and 44 CFR Part 10. This EA has been prepared to evaluate the potential effects to the natural and human environment from relocation and construction of a new fire station.

PURPOSE AND NEED

This EA provides information to support FEMA Region VII's public assistance grant program. The purpose of the Proposed Action is to provide funding for construction of a new fire station under a disaster recovery public assistance grant.

The proposed Fire Station No. 2 is needed to provide effective and timely fire protection and emergency services to the northwestern portion of the City of Joplin and surrounding municipalities. The original Fire Station No. 2 was destroyed by a tornado and replaced in the same location with a temporary facility which does not provide adequate quarters for assigned fire station personnel and weatherized shelter for the fire apparatus. The apparatus shelter (essentially a tent) cannot be adequately heated during the winter months and the fire department has struggled with maintaining the equipment in a constant state of readiness due to equipment freezing. Although the original fire station building was adequate for the mission, the property is constrained by size for future expansion and modernization of facilities. Additionally, the property at 2216 Maiden Lane is located in fairly close proximity to two other Joplin fire stations and significantly overlaps their service areas.

The proposed new fire station will replace an existing temporary facility (portable trailer and tent) that is inadequate for housing personnel and apparatus. Critical flaws of the original Fire Station No. 2 property at 2216 Maiden Lane cannot feasibly be corrected due to lot size and location constraints. The proposed new Fire Station No. 2 location at 2825 West Junge Boulevard will significantly improve coverage to underserved areas of the community, reduce significant overlaps with service areas of other fire stations, reduce overall response time to the northwest portion of the City of Joplin, and also enhance the Joplin FD's ability to respond to crises involving critical infrastructure including major roadways and truck routes and a heavy industrial development by providing a more optimally located modern facility able to house modern fire apparatus.

ALTERNATIVES

NEPA requires the investigation and evaluation of reasonable project alternatives, including impacts to the natural and human environment as part of the planning process. This EA addresses two alternatives, the No Action alternative and the Proposed Action. Prior to selecting and acquiring the property for the Proposed Action, the Joplin FD informally considered five other alternative locations which were ultimately dismissed due to site access limitations, environmental and geotechnical concerns relating to former mining operations, infrastructure development costs, or failure to align with emergency response goals.

No Action Alternative

The No Action alternative would result in continued operation of the temporary fire station at the 2216 Maiden Lane location. This action would leave emergency response times to this area of the community and surrounding areas unchanged and likely to increase with future population growth and development.

As the temporary facility does not provide adequate quarters for assigned fire station personnel or weatherized shelter for the fire apparatus, fire department readiness to respond to emergency situations is hampered. The No Action alternative would result in lower level of overall public safety than the proposed alternative.

Proposed Action

The Proposed Action would result in construction of a new fire station on property currently owned by the City of Joplin at 2825 West Junge Boulevard, within the city limits of Joplin, Missouri, as shown on Figure 1 – Vicinity Map in Appendix A – Figures. The preliminary design calls for an approximately 6750 square foot, 1-story fire station with 2 vehicle bays (Appendix B - Draft Facility Layout). An equipment and gear storage room and decontamination area will be located in the bay area and vehicle exhaust will be vented to the outdoors with an NFPA 1500 compliant exhaust extraction system. The living quarters will include a kitchen, day room, restrooms, bedrooms, and mechanical and utility areas. A fitness center and office will also be provided. A final design has not been completed; however, the building will incorporate "green design" features to the LEED silver accreditation level, although at this time there are no plans to obtain LEED certification. All utilities are currently available to the site and the building will be tied into existing municipal water and sewer and the local electric utility. A backup generator system will be installed to support building functions during power outages. The property is located in an area that has been zoned for heavy industrial use and allows for construction of a fire station with no changes to zoning designation.

Construction of a new Fire Station No. 2 at the 2825 West Junge Boulevard location will significantly improve coverage to underserved areas of the community, reduce significant overlaps with service areas of two fire stations, reduce overall response time to the northwest portion of the City of Joplin, and provide a modern facility able to house modern fire apparatus.

Photographs of the project site and adjacent properties taken on November 7, 2012 are included in *Appendix C* – *Site Photographs*.

Alternatives Considered and Dismissed

Joplin FD considered the possibility of reconstructing a permanent fire station at the original location (Maiden Lane). Due to the small size of the parcel, a new fire station would be limited to the same construction footprint as the station destroyed by the tornado, which would not allow for housing of modern apparatus, future expansion of the building, or acquisition of additional apparatus in response to community development trends. Additionally, utilizing the original location would continue the current situation of overlap in coverage area with two nearby stations and lack of coverage to other areas of Joplin that have experienced growth and development since installation of the original fire station network. Limitations associated with property constraints and emergency response coverage are considered by the Joplin FD to be critical flaws of the original location and this option has been dismissed.

Five other parcels available for construction of the proposed fire station were considered by the Joplin FD and dismissed.

- The large, vacant field located northeast of the property at 2825 West Junge Boulevard was considered and rejected due to lack of access right-of-way.
- A parcel at West 17th Street and South Schifferdecker Avenue was considered and rejected due to access issues as well as environmental and geotechnical concerns relating to the historical use of the parcel for subsurface mining.
- A parcel at West 20th Street and South Roosevelt Avenue was considered and rejected due to historical subsurface mining concerns and failure to adequately provide the desired fire response coverage area.
- A parcel at West Junge Boulevard and South Roosevelt Avenue was considered and rejected due to significant upfront infrastructure costs and failure to adequately provide the desired fire response coverage area.
- A parcel at West 20th Street and South Schifferdecker Avenue was considered and rejected due to failure to adequately provide the desired fire response coverage area.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

Joplin is a city located in Jasper and Newton Counties in southwest Missouri. The city has a total land area of 31.5 square miles. The 2010 United States Census Bureau population included 50,150 people, with a population density of 1,448 people per square mile. The surrounding Metropolitan Statistical Area included 175,518 people in 2010. Recent shifts in the metropolitan demographic indicate an increase in population growth and development to the western and southern portions of Joplin.

The proposed Joplin FD Fire Station No. 2 will be located on a 2.59-acre parcel of vacant ground within the city limits, as shown on *Figure 2 – Site Location*. Historically, the project site has not been developed with any structures. The parcel is currently zoned as M-2, Heavy Industrial District. A man-made drainage ditch traverses the parcel from the southwest corner to the north side, continuing off-site.

Adjacent properties are developed as follows:

- Kingdom Hall of Jehovah's Witnesses Salon Del Reino (N, zoned M-2)
- Vacant, grassy field (NE, zoned M-2)
- Alternative Opportunities Inc. (E, zoned M-2)
- Single-family residences (S/SE, zoned Residential)
- American Tool & Engineering (S, zoned M-2)
- Road Star gas station and convenience store (SW, zoned C-3 Commercial)
- Mercy Hospital warehouse (W, zoned M-2)
- White Industrial Seismology Inc. (W, zoned M-2)

This section discusses the existing environmental conditions at the project site including descriptions of the physical, biological, and socioeconomic resources throughout the general area and the project site. The characterization of existing conditions provides a baseline for assessing the potential environmental impacts from activities associated with the Proposed Action.

Physical Resources

The elevation of the project site is approximately 490 feet above mean sea level, as depicted on the 2011 Joplin West, MO-KS USGS 7.5 minute Quadrangle Maps. The project site and surrounding properties slope gently to the southwest. Storm water flow is routed over land by sheet flow to local storm drains. A copy of this map (Figure 1) is included in Appendix A.

Geology and Soils

The general stratigraphy of the project site is characterized by the Cherokee Group of the Desmoinesian Series of the Pennsylvanian System in the Paleozoic Era comprised of the Krebs subgroup.

The Krebs subgroup is composed of sandstone, siltstone, shale, clay, limestone, and coal beds. Clastics are predominant as lithologic constituents. In many areas where the Krebs subgroup is located, sandstone composes the greater part of the succession. This subgroup is comprised of the Hartshorne formation (beds of sandstone and shale), Warner formation (conglomerate with coarse-to-fine sandstone), Rowe formation (sandstone, siltstone, underclay, and Rowe coal bed), Drywood formation (fossiliferous limestone, dark gray-to-black shale, fine-grained sandstone, underclay, and Drywood coal bed), Bluejacket formation (dark gray-to-black shale, siltstone, medium- to fine-grained sandstone, underclay, and Bluejacket coal bed), and Seville formation (pinkish-gray to dark gray or black fine crystalline limestone).

The project site is a very deep, gently sloping, moderately well drained soil on the summit of hills on plains. The surface layer of Barden soils is silt loam to 10 inches, over silty clay loam to 47 inches, over silty clay loam to 80 inches. The parent material of Barden soils is loess over residuum derived from clayey shale. Depth to the seasonal high water table is 24 to 36 inches with no surface flooding.

Barden silt loam is included on the USDA list of prime farmland in Jasper County. USDA defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crosp and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas.

In accordance with Section 1541 of the Farmland Protection Policy Act, the project site was reviewed for impacts to prime farmland. Mr. Allan Johnston (Soil Scientist, USDA, Natural Resources Conservation Service) completed a Farmland Conversion Impact Rating (Form AD-1006) to determine the current value of the project site as farm ground (*Appendix D – Agency Consultation Correspondence*). Mr. Johnston responded that although the soil type is prime farmland, the project site is exempt from the requirements of the Farmland Protection Policy Act because it is located entirely within the city limits of Joplin. Based on this determination, the proposed alternative will not impact prime farmland.

The Proposed Action will not significantly impact geology or soils at the site. All construction activity will incorporate practices to minimize soil erosion during the construction phase, including the use of best management practices such as installation of silt fencing and straw bales and proper staging of construction equipment. Following completion of the construction phase, the project site will be landscaped with decorative and cover vegetation, reducing the potential for soil erosion.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to geology and soils, as this location has previously been impacted by construction and development.

Air Quality

The USEPA is required under the Clean Air Act to set National Ambient Air Quality Standards for pollutants harmful to public health and the environment. Primary standards protective of human health and secondary standards protective of public welfare have been established for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), particulate matter with a diameter of 10 microns or less (PM₁₀), and particulate matter with a diameter of 2.5 microns or less (PM_{2.5}).

MDNR operates two air quality monitoring stations for primary air pollutants (ozone and particulate matter) in Jasper County. Currently, Jasper County, Missouri is considered an attainment/unclassifiable area for ozone and particulate matter (PM₁₀).

The Proposed Action will require short-term construction activities including soil excavation and grading, cutting and filling, and soil placement. Heavy equipment including bulldozers, graders, and backhoes will be used during construction. These activities are likely to create fugitive dust; however, best management practices would be used to minimize dust and construction would be completed within a year. Once construction is complete and the facility is operational, the only anticipated source of air emissions would be from vehicle exhaust. As the Proposed Action is for construction of a replacement fire station and does not include acquisition of new vehicles or apparatus, no net increase of emissions over current local levels would occur.

Under the No Action alternative, continuing use of the temporary facility in use at 2216 Maiden Lane would result in continuation of current, existing impacts to air quality.

Water Resources

The USACE is responsible for administration of functions regarding navigable waters and wetlands of the United States under the Rivers and Harbors Act of 1899 and Section 404 of the CWA.

A site reconnaissance conducted on November 7, 2012 did not observe any natural surface water bodies (rivers, creeks, ponds, or wetlands) on or adjacent to the project site. The Barden silt loam present at the property is characterized as a moderately well drained soil and is not classified by the USDA as a hydric soil, one of the three criteria required for determining the presence of wetlands. Therefore, the project site does not contain waters of the United States.

Storm water at the project site drains by surface flow to street level inlet structures along major roads and through a man-made drainage ditch running along the south side of the property and from the southwest corner of the parcel in a northeasterly direction and continuing off-site to the north. Minor amounts of ponded water were noted in the drainage ditch near the southwest corner of the parcel. No evidence of inadequate drainage was observed during the site reconnaissance.

Water Quality

Disturbance of soils at the project site during construction activity could result in erosion and runoff, which in turn could impact local surface water quality.

To minimize erosion and storm water runoff during construction, a General NPDES Permit for construction activities (or waiver of the permit) will be required by MDNR. The General NPDES Permit is obtained by submitting a Notice of Intent for coverage to MDNR and developing a Storm Water Pollution Prevention Plan implementing best management practices to reduce or eliminate runoff impacts during construction. The Joplin FD will complete these activities during the engineering and design phase of the construction project.

Best management practices such as silt fencing and mulching will be utilized during construction of the Proposed Action to minimize water quality impacts from site activities. Following construction, the project site will be landscaped and vegetated to reduce the potential for soil erosion. The Proposed Action will have no significant impacts on water quality of waters of the United States and no Section 404 permitting will be required.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to water quality as no land disturbance would occur.

Wetlands

Lands subject to regulation as wetlands under Section 404 of the CWA (jurisdictional wetlands) are defined as: "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Typically, lands that exhibit characteristics of hydrology, support predominantly hydrophytic vegetation, and have a substrate that is predominantly undrained hydric soil are classified as jurisdictional wetlands. The USACE is responsible for administration of Section 404 and the issuance of permits for disturbance of wetlands, including discharge of dredged and fill material. Under Executive Order 11990, Protection of Wetlands, Federal agencies are required to take action to minimize the destruction or modification of wetlands.

The project site is located on Barden silt loam, which is characterized as a moderately well drained, non-hydric soil. A wetlands map for the project site prepared by the USFWS on-line map service was reviewed (*Appendix E – Additional Documentation*). No designated wetlands were identified on or adjacent to the project site. In addition, no areas containing wetland characteristics were observed on or adjacent to the project site during the site investigation; therefore, the Proposed Action would have no impacts to wetlands.

Wetlands will not be impacted by the No Action alternative as the existing Fire Station No. 2 site does not contain designated wetlands.

Floodplains

Floodplains provide numerous beneficial environmental functions including flood abatement, stream flow mediation, filtering, and water quality enhancement. Federal agencies are required to minimize the occupancy and modification of floodplains under Executive Order 11988, Floodplain Management. Under this order, construction within the 100-year floodplain (500-year floodplain for critical facilities) is prohibited from receiving Federal funding unless there are no practical alternatives.

According to FEMA Flood Insurance Rate Map Community Panel 29097C0258D, the project site is located in an area classified as Zone X, outside defined floodplains (*Appendix E*). As such, the Proposed Action would not have an impact on floodplains.

Floodplains will not be impacted by the No Action alternative as the existing Fire Station No. 2 site is not located in a designated floodplain.

Biological Resources

Under the Endangered Species Act of 1973, Federal agencies must review Proposed Actions to ensure they are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat.

Threatened/Endangered Species and Critical Habitat

The USFWS lists the following species in Jasper County, Missouri:

- Gray bat (endangered) caves
- Indiana bat (endangered) caves/mines, small stream corridors with well developed riparian woods, upland forests
- Arkansas darter (candidate) rivers
- Neosho madtom (threatened) rivers
- Ozark cavefish (threatened) caves in the Boone and Burlington limestone formations of the Ozark Mountains
- Neosho mucket (proposed as endangered) rivers
- Rabbitsfoot (proposed as threatened) rivers
- Geocarpon (threatened) moist soils in exposed sandstone glades
- Running buffalo clover (endangered) disturbed bottomland meadow
- Western prairie fringed orchid (threatened) wet prairies and sedge meadows

A Heritage Review Report of Federal and State listed species and critical habitats was requested from the Missouri Department of Conservation Policy Coordination Unit. The Heritage Review Report indicated no wildlife preserves, no designated wilderness areas or critical habitats, no Federal or State endangered list species, and no State-ranked species or natural communities are located within one mile of the project site.

The USFWS reviewed the Proposed Action and determined that no Federally listed species, candidate species, or designated critical habitat occurs within the project site. Furthermore, the USFWS determined the Proposed Action will have negligible impacts on wetlands, migratory birds, and other priority fish and wildlife resources. Agency correspondence is included in *Appendix D*.

Based on agency correspondence and characteristics of the project site, construction of the Proposed Action will have no adverse affect on Federal or State-listed threatened or endangered species or critical habitat.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to biological resources, as this location has previously been impacted by construction and development.

Wildlife and Fish

The project site is a 2.59-acre upland lot located at the northeast intersection of West Junge Boulevard and South Schifferdecker Avenue in an area historically and currently developed with industrial, commercial, and residential buildings. The vacant site is vegetated with maintained ground cover (lawn) and has been historically disturbed by construction of drainage ditches and utility installations. No habitats conducive to wildlife are present at the site and any wildlife using or crossing the property would be transitory in nature. Although storm water runoff is sometimes present as standing water in the drainage ditches, there are no natural or permanent surface water bodies present so no fish are located on the site. Thus, the Proposed Action will have no adverse affect on wildlife or fish.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to wildlife or fish, as this location has previously been impacted by construction and development.

Cultural Resources

Under Section 106 of the National Historic Preservation Act, Federal agencies must consider the potential effects of their actions on historical properties and cultural resources and consult with the MDNR SHPO to resolve any effects.

Historic Properties

A Section 106 Project Information Form was submitted to the MDNR SHPO to initiate review of the Proposed Action. In a Cultural Resource Assessment dated November 14, 2012, Mr. Mark Miles (Deputy State Historic Preservation Officer) determined that

adequate documentation has been provided and there will be "no historic properties affected by the current project". Agency correspondence is included in *Appendix D*.

Based on the MDNR SHPO review, the Proposed Action will have no adverse effect on cultural or historic resources. Should any evidence of cultural resources (artifacts or human remains) be discovered during construction activities, work would cease and the MDNR SHPO would be notified.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to historic properties, as this location has previously been impacted by construction and development.

American Indian Cultural/Religious Sites

The State of Missouri does not have a separate Tribal Historic Preservation Officer authorized by the National Park Service. Review of American Indian cultural and religious sites in Missouri is under the purview of the MDNR SHPO.

Based on the MDNR SHPO review, the Proposed Action will have no adverse effect on cultural or historic resources. Should any evidence of cultural resources (artifacts or human remains) be discovered during construction activities, work would cease and the MDNR SHPO would be notified.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in new or significant impacts to cultural or religious sites, as this location has previously been impacted by construction and development.

Socioeconomic Resources

The 2010 census indicates the population of Joplin consisted of 87.6% white, 0.03% African American, 0.02% Native American, 0.01% Asian, and 0.04% from two or more races. Hispanic or Latino of any race was 0.04% of the population. The median income for a household was \$30,555 and for a family was \$38,888. About 10.5% of families and 14.8% of the population were below the poverty line, including 18.8% of those under age 18 and 9.4% of those aged 65 or over.

Environmental Justice

Executive Order 12898 requires that Federal agencies focus on achieving environmental justice by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.

Based on discussions with the Joplin FD, the Proposed Action will result in significant upgrades to and enhancement of the department's ability to respond quickly and effectively to all residents and establishments of the City of Joplin, as well as providing mutual aid to a neighboring fire protection district. As such, the Proposed Action will have no adverse effect on environmental justice.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would have no adverse effect on environmental justice, as this location has previously been impacted by construction and development.

Noise

The Noise Control Act (NCA) of 1972 provides federal regulation of noise, which is defined as undesirable sound. The NCA gives the USEPA authority to establish guidelines for acceptable ambient noise levels. Under USEPA guidelines, outdoor sound levels in excess of 55 decibels (dB) are considered "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals.

The project site is located in the South Schifferdecker Avenue corridor and is zoned as a heavy industrial district. The project site is bordered by commercial businesses to the north, east, southwest, and west and by single-family residences to the south. Temporary short-term impacts due to noise are anticipated during the construction period. To reduce noise levels during this period, construction activities will take place during normal daylight business hours.

The Proposed Action will introduce long-term operational impacts to adjacent residences. Fire equipment and station alarms during an emergency can range from approximately 95 to 120 dB. This intermittent elevated noise would be above acceptable levels but would only be sustained for extremely short durations. This impact cannot be mitigated due to NFPA 1901 and State Fire Marshal requirements for minimum sound-warning requirements for fire equipment when responding to an emergency. The City of Joplin Zoning Regulations contain specific standards for noise limitations and sirens, whistles, bells, etc., maintained and used solely to serve a public purpose (such as fire, ambulance, police and air raid warning sirens) are excluded from these regulations (Section 29A-1816).

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would also result in short-term impacts from construction activities and continued long-term use of alarms.

Traffic

The project site is located along the South Schifferdecker Avenue corridor and is zoned for heavy industrial development. Development of the project site with the new fire station would be compatible with this zoning classification. The Missouri Department of Transportation's (MDOT) 2009 Joplin Urban Area average annual daily traffic volume on South Schifferdecker Avenue near West Junge Boulevard is 9,844 vehicles.

The project site will be located at 2825 West Junge Boulevard on the northeast corner of the intersection of Junge and South Schifferdecker Avenue and would not adversely affect average daily traffic volume on adjacent roads or general area traffic and circulation. The Proposed Action would result in short-term, intermittent effects to traffic on West Junge Boulevard and South Schifferdecker Avenue during fire response actions; however, current design plans call for emergency vehicles to egress the fire station onto West Junge Boulevard, then enter South Schifferdecker Avenue at a traffic signal. An Opticom emergency signal pre-emption system will be used to provide right-of-way to emergency signals at that intersection. Both streets are under the jurisdiction of the City of Joplin. Chief Randles indicated the City of Joplin would consider installation of emergency vehicle warning signs on West Junge Boulevard and South Schifferdecker Avenue; however, a final decision has not been made.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would result in continuation of existing impacts to traffic flow during emergency response events.

Public Service and Utilities

The project site is located within an area zoned as a heavy industrial district and is surrounded by industrial, commercial, and residential parcels. All utilities (electric, telephone, water, and sewer) run along South Schifferdecker Avenue and/or West Junge Boulevard and are available to the site. A limited amount of trenching and installation of underground lines and connections to the utilities will be required. The Proposed Action will place an additional, limited demand on utilities in the area; however, the utility infrastructure has been designed to accommodate the planned commercial and industrial development of the area.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would result in continuation of existing demand on local utilities.

Cumulative Impacts

Cumulative impacts represent the impact on either the natural or human environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The proposed alternative would occur on a project site zoned for industrial development, which is compatible with construction of the fire station. Other development in this area includes industrial, commercial, and single-family residential. Construction of the new fire station represents the replacement of an existing, temporary fire station and would not introduce an additional facility to the community that would potentially result in an increase in cumulative impacts. The new fire station design will incorporate "green building" features that meet stringent environmental standards and energy efficiencies that will lower the overall impact of the new building on the environment.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would not result in net increases in cumulative impacts to the community, as this location has previously been impacted by construction and development.

SUMMARY OF IMPACTS

Table 1 – Summary of Affected Environments and Impacts summarizes the potential impacts of the proposed project and, where appropriate, mitigation measures to minimize the impacts. Further discussion of the affected environment is provided in sections following the table.

Affected		
Environment	Impacts from Proposed Action	Mitigation
Geology and Soils	Disturbance of shallow soils during construction activities	Implement storm water best management practices during construction to minimize erosion; landscape after construction to prevent erosion
Air Quality	Minor and temporary impacts from construction vehicle exhaust and fugitive dust during construction activities	Air pollution will be minimized through proper equipment maintenance and dust suppression techniques during construction
Water Quality	Minor and temporary impacts from soil disturbance (erosion and runoff) during construction activities	Obtain general permit from MDNR for land disturbing activities, implement storm water best management practices during construction to minimize erosion, and landscape after construction to prevent erosion
Wetlands	The Proposed Action would not impact waters of the United States or wetlands	Not applicable
Floodplains	The Proposed Action is not located in a floodplain	Not applicable
Threatened/ Endangered Species	No threatened or endangered species or critical habitats are located near the Proposed Action	Not applicable
Wildlife and Fish	No critical habitats or surface water bodies are located near the Proposed Action	Not applicable
Cultural Resources	Coordination with SHPO concluded there will be no historic properties affected by the Proposed Action	Not applicable

 Table 1 – Summary of Affected Environments and Impacts

Affected		
Environment	Impacts from Proposed Action	Mitigation
Environmental	The Proposed Action would	Not applicable
Justice	benefit all citizens equally	
Noise	Short-term construction noise	Construction activities will be
	impacts and intermittent	restricted to normal daylight hours
	long-term impact from	and equipment properly
	emergency equipment sirens	maintained. Mitigation not
		possible for emergency equipment
		sirens
Traffic	Intermittent increase of	Emergency vehicle warning signs
	emergency equipment on South	will be considered by the City of
	Schifferdecker Avenue and West	Joplin
	Junge Boulevard	
Public Service	The Proposed Action will not	Not applicable
and Utilities	place significant demands on in	
	place utility infrastructure	
Cumulative	The new fire station will be	Not applicable
Impacts	constructed on industrially	
	zoned property and will	
	incorporate energy efficient	
	design	

Table 1 – Summary of Affected Environments and Impacts (cont.)

PUBLIC INVOLVEMENT

The availability of this EA will be advertised by public notice in The Joplin Globe newspaper and on the City of Joplin website. Copies of the EA will be placed at the following locations in Joplin:

- Joplin Fire Department 303 East 3rd Street
- Joplin Public Library 300 South Main Street
- Joplin City Clerk 602 South Main Street
- Public Works Office 602 South Main Street (Fourth Floor)

The public comment period will extend for a period of 30 days. The EA can be viewed locally at the locations listed above. The EA can also be downloaded from FEMA's website. If no substantive comments are received, the EA will become final and will be archived on FEMA's website.

MITIGATION MEASURES AND PERMITS

Construction of the Proposed Action will be completed in general accordance with the following mitigation measures to lessen impacts to the local community.

During construction, the applicant will water down construction areas as necessary to prevent fugitive dust emissions that would impact local air quality. Additionally, construction equipment will be operated with factory-equipped vehicle emissions controls.

Best management practices to reduce or eliminate runoff impacts during construction will be implemented and following construction, the project site will be landscaped and vegetated to reduce the potential for soil erosion.

Prior to construction, a General NPDES Permit for construction activities (or waiver of the permit) will be required by MDNR. Submittal of a Notice of Intent for coverage under the general permit and development of a Storm Water Pollution Prevention Plan implementing best management practices to reduce or eliminate runoff impacts during construction will be completed during the engineering and design phase of the construction project. Following construction, the project site will be landscaped and vegetated to reduce the potential for soil erosion.

Construction noise will be temporary and will be mitigated by limiting construction to normal daylight hours. Construction equipment will be operated with factory-equipped vehicle emissions controls including mufflers.

Permits required for the project site will include a building permit issued by the City of Joplin, Missouri.

AGENCY COORDINATION AND REFERENCES

Federal Emergency Management Agency Flood Insurance Rate Map Online Mapping Service http://msc.fema.gov/

Mr. Allan Johnston <u>allan.johnston@mo.usda.gov</u> United States Department of Agriculture Springfield Regional Office Form AD-1006, Farmland Conversion Impact Rating

Policy Coordination Section Missouri Department of Conservation PO Box 180 Jefferson City, MO 65102-0180 *Heritage Review Report*

Missouri Department of Natural Resources State Historic Preservation Office Section 106 Review PO Box 176 Jefferson City, MO 65102-0176 *Cultural Resource Assessment, Section 106 Review*

Missouri Department of Transportation Joplin Area Average Daily Traffic 2009

Missouri Geological Survey Geologic Map of Missouri 2003

Mr. Mitchell D. Randles, Fire Chief Joplin Fire Department 303 East 3rd Street Joplin, MO 64801

Mr. Jack Schaller, Assistant Public Works Director City of Joplin 602 South Main Street Joplin, MO 64801 United States Census Bureau <u>http://www.census.gov</u>

United States Department of Agriculture Farm Services Agency 2012 Aerial Photograph

United States Department of Agriculture Soil Conservation Service Soil Survey of Jasper County, Missouri 2002

United States Department of the Interior Geological Survey Topographic Maps *Joplin West, MO-KS USGS 7.5 minute Quadrangle* 2011

Mr. Charles Scott and Ms. Amy Salveter United States Department of the Interior Fish and Wildlife Service Columbia Ecological Services Office 101 Park DeVille Drive, Suite A Columbia, MO 65203

United States Department of the Interior Fish and Wildlife Service National Wetlands Inventory Online Mapper http://wetlandsfws.er.usgs.gov/wtlnds/launch.html

United States Department of the Interior Fish and Wildlife Service State and County Distribution Lists http://www.fws.gov/midwest/endangered/lists/cty_indx.html#missouri

LIST OF PREPARERS

Those responsible for preparation of this document include:

Ruth C. Mannebach, Senior Environmental Scientist NPN Environmental Engineers, Inc.

Mitchell D. Randles, Fire Chief Joplin Fire Department

Jack Schaller, Assistant Public Works Director City of Joplin

Ruth C. Mannebach was the principal preparer of this document, in consultation with Mr. Mitchell D. Randles and Mr. Jack Schaller as well as the other individuals and agencies identified in this document.

APPENDIX A

Figures





APPENDIX B

Draft Facility Layout



TITOT TIC TICT TICTURE TO TAKE THE TICTURE TO TAKE TO TAKE THE TICTURE TO TAKE TO TAKE TO TAKE TO TAKE TAKE TO TAKE TAKE TO TAKE TO TAKE TAKE TAKE TAKE TAKE TAKE TAKE TAKE	SITE PLAN JOPLIN FIRE STATION #2	CITY OF JOPLIN DEPARTMENT OF PUBLIC WORKS JOPLIN, JASPER COUNTY, MISSOURI
	Δõ	THIS DOCUMENT IS PRELIMINARY IN NATURE PRELIMINARY IN NATURE AND IS NOT A FINAL, AND IS NOT A FINAL, SIGNED AND SEALED SIGNED AND SEALED DOCUMENT.
Professional Endineers & Land Surveyors	<u> </u>	P.O. Box 1867 - Joplin, Missouri 64802 Phone (417) 781-0643 - FAX (417) 781-4714 TOLL FREE 1-866-781-0643 www.tristate-engineering.com TRI-STATE ENGINEERING Copyright, 2012, Tri-State Engineering, Inc.





OCTOBER 25, 2012





412012









OCTOBER 9, 2012









412012

APPENDIX C

Site Photographs

Photo No:	Date:	
1	11-07-12	
Viewing Angle:		
North		
Description		
Project site (undeveloped grassy lot)		









Photo No:	Date:	
3	11-07-12	
Viewing Angle:		
South		
Description:		
Project site (grassy lot)	undeveloped	












				
Photo No:	Date:			
6	11-07-12			
Viewing Angle:				
East				
Description:				
Alternative Opportunitie east	s adjacent to			





Photo No:	Date:			
7	11-07-12			
Viewing Angle:				
South				
Description:				
West Junge l single-family and America Engineering south	y residences, in Tool &			









APPENDIX D

Agency Consultation Correspondence



United States Department of Agriculture Natural Resources Conservation Service

Email:allan.johnston@mo.usda.gov

Subject: Farmland Conversion Impact Rating (AD – 1006) Jasper, County, Missouri Joplin Fire Department New Fire Station #2

To: Mr. Ruth Mannebach Senior Environmental Scientist NPN Environmental Engineers Inc. 1631 Headline Dr. St. Louis, Mo. 63026 688 State Hwy. B, Suite 100 Springfield, MO 65802 PHONE: 417-831-5246, ext. 138 FAX NUMBER: 417-862-0438

Date: December 17, 2012

File Code: 310-11-12-5

Dear Ms. Mannebach:

Enclosed for the above referenced project is the completed AD - 1006 form. Since the entire project area is located within the city limits of Joplin, Missouri, no prime farmland or farmland of statewide importance will be converted, FPPA does not apply. Do not complete additional parts of the AD-1006 Form.

No hydric soils or known wetlands will impacted by the proposed project site.

Soil descriptions of the soil series located in the project area can be obtained at the following Internet address:

http://soils.usda.gov

Please call if I can be of any more assistance.

Sincerely,

Allan R. Johnston Area Resource Soil Scientist

cc/watt, Robert Paul, District Conservationist, NRCS Field Office, Carthage, MO Montie Hawks, Area Conservationist, NRCS Area Office, Springfield, MO

AN EQUAL OPPORTUNITY EMPLOYER

Johnston, Allan - NRCS, Springfield, MO

From:	Ruth Mannebach [ruth.mannebach@npnenv.com]
Sent:	Tuesday, November 20, 2012 9:24 AM
To:	Johnston, Allan - NRCS, Springfield, MO
Subject:	FW: Agency Review - Prime Farmland Evaluation
Attachments:	Fire Station 2 Site Plan 10-22-12.pdf; Farmland Conversion Impact Rating-signed.pdf

Categories: Red Category

Mr. Johnston,

Just wanted to confirm that you received this request for an evaluation.

Thank you,

Ruth C. Mannebach Senior Environmental Scientist NPN Environmental Engineers, Inc.

From: Ruth Mannebach [<u>mailto:ruth.mannebach@npnenv.com</u>] Sent: Friday, November 09, 2012 1:09 PM To: 'allan.johnston@mo.usda.gov' Subject: Agency Review - Prime Farmland Evaluation

Mr. Johnston,

On behalf of the City of Joplin and the Joplin Fire Department, we are preparing NEPA Environmental Assessments to FEMA for construction of two new fire stations to replace those lost during the May 2011 tornado. One of the fire stations, proposed to be located at 2825 West Junge Boulevard (NE corner of Junge and Schifferdecker Ave), is on Barden Silt Loam 1-3% Slopes, which is identified as Prime Farmland in the 2002 Jasper County Soil Survey.

In accordance with Section 1541 of the Farmland Protection Policy Act, I am requesting USDA review to determine the current value of the proposed project site as farm ground. I have attached a copy of Form AD-1006 for your review, as well as a site plan of the proposed fire station development. Additionally, here is a link to an aerial photograph of the project site and surrounding areas: <u>http://binged.it/WLPMVb</u>

Currently, the proposed location is an undeveloped, grassy lot with a man-made drainage channel traversing it, and a small area of scrub/saplings on the east side. The parcel and much of the surrounding area is zoned for Heavy Industrial Development. Based on information provided by the City of Joplin, the property has not been previously developed.

Thank you for your assistance and prompt consideration of this request. If you have any questions, if changes need to be made to the Site Assessment Criteria, or if additional information is required, please do not hesitate to contact me.

Ruth C. Mannebach Senior Environmental Scientist NPN Environmental Engineers, Inc. 1631 Headland Drive St. Louis, MO 63026

636-343-1300 phone 636-343-8192 fax ruth.mannebach@npnenv.com

PART I (To be completed by Federal Agence	(V)	Date Of I	and Evaluation	Request 1	1/9/12		
Name of Design A		Agency Involved FEMA					
		nd State Jasper County, MO					
PART II (To be completed by NRCS)		Date Rec		By	PersonC	ompleting Fo	Dan
Does the site contain Prime, Unique, Statew (If no, the FPPA does not apply - do not con		? Y	ES NO		Irrigated	Average	
Major Crop(s)	Farmable Land In Govt. J	Farmable Land In Govt. Jurisdiction		Amount of	Farmland As	Defined in Fl	PPA
	Acres: %		Acres: %				
Name of Land Evaluation System Used	Name of State or Local Site Assessment System			Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agen				<u></u>	Alternative	Site Rating	· · · · · · · · · · · · · · · · · · ·
A. Total Acres To Be Converted Directly				Site A	Site B	Site C	Site
B. Total Acres To Be Converted Directly				1.3			
C. Total Acres In Site				1.3	<u> </u>	<u> </u>	
				2.6		<u> </u>	
PART IV (To be completed by NRCS) Land	Evaluation Information						
A. Total Acres Prime And Unique Farmland							
B. Total Acres Statewide Important or Local Important Farmland							
C. Percentage Of Farmland in County Or Lo					-		-
D. Percentage Of Farmland in Govt. Jurisdic		ve Value					
PART V (To be completed by NRCS) Land Relative Value of Farmland To Be Co PART VI (To be completed by Federal Agen	nverted (Scale of 0 to 100 Points)	1 av				
(Criteria are explained in 7 CFR 658.5 b. For C	cy) Sile Assessment Chteria	CPA-106)	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use			(15)	5		1	
2. Perimeter In Non-urban Use			(10)	0			
3. Percent Of Site Being Farmed		· · · · ·	(20)	0		1	
4. Protection Provided By State and Local G	overnment		(20)	0			
5. Distance From Urban Built-up Area			(15)	0			
6. Distance To Urban Support Services			(15)	0			
7. Size Of Present Farm Unit Compared To	Average		(10)	0			1
8. Creation Of Non-farmable Farmland			(10)	10			1
9. Availability Of Farm Support Services			(5)	2			1
10. On-Farm Investments			(20)	0			1
11. Effects Of Conversion On Farm Support	Services		(10)	0			
12. Compatibility With Existing Agricultural Use			(10)	0			
TOTAL SITE ASSESSMENT POINTS			160	17	0	0	C
PART VII (To be completed by Federal Agency)						†	
Relative Value Of Farmland (From Part V)			100	0	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	17	0	0		
TOTAL POINTS (Total of above 2 lines)			260	17	0	0	
1	Date Of Selection	<i>a</i> .		Was A Loca	I Site Assess	NO,	\
Reason For Selection: XHIA D Nation 20 loca	ted in the f	topler	2, cét	y lim	its-a	nd to	<u>}</u>

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <u>http://fppa.nrcs.usda.gov/lesa/</u>.
- Step 2 Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at <u>http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map</u>, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM (For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

- 1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
- 2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.
- Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).
- 1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
- 2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.



ł



November 9, 2012 Contract C-12236

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

FILE COPY

Policy Coordination Section Missouri Department of Conservation P.O. Box 180 Jefferson City, MO 65102-0180

RE: Request for Information 2825 West Junge Boulevard Joplin, MO 64801 Latitude 37.0778, Longitude -94.5486

The City of Joplin and Joplin Fire Department have retained NPN Environmental to prepare an Environmental Assessment in accordance with the Federal Emergency Management Agency (FEMA) regulations at 44 CFR Part 10 and Council on Environmental Quality Regulations at 40 CFR Part 1500-1508. As part of the Environmental Assessment for the above-referenced site, the following information is requested:

- Rare, threatened, or endangered species on or within one-half mile radius of site
- Commercially or recreationally important flora or fauna on or within one-half mile radius of site
- Wilderness, natural areas, critical habitat, preserves and forests, wildlife refuges, terrestrial breeding areas, and wildlife or game management areas on or within one-half mile radius of the site

The approximately 2.6-acre project site is currently an undeveloped parcel zoned as a Heavy Industrial District as shown on *Figure 1 – Vicinity Map* and *Figure 2 – 2012 Aerial Photograph*. A culvert will be placed in the man-made drainage ditch bisecting the property and a small area of invasive scrub/sapling brush on the east side will be cleared. The Joplin Fire Department proposes to construct a new fire station and associated paved parking and driveways on the project site-to replace a location destroyed by the 2011 EF-5 tornado.

Missouri Department of Conservation November 9, 2012 Page 2 of 2

Thank you for your prompt consideration of our request. If you have any questions or require additional information, please contact me at 636-343-1300.

Sincerely,

Ruth CMannebuck

Ruth C. Mannebach Senior Environmental Scientist

Enclosures Figure 1 – Vicinity Map Figure 2 – 2012 Aerial Photograph



UTS	ssouri Depar	Missouri Department of Conservation	Resource Science Division P. O. Box 180 Jefferson City. MO 65102
Contraction and and and and and and and and and an	November 1	Natural Heritage Keview Keport November 14, 2012 - Page 1 of 2	Prepared by: Emily Clancy Emily.Clancy@mdc.mo.gov (573) 522 - 4115 ext. 3182
NPN ENVIRONMENTAL	Project type: Location/Scope:	Land Development Section 9 of T27N R33W	
ATTN: RUTH C. MANNEBACH 1631 HEADLAND DRIVE ST. LOUIS, MISSOURI 63026	County: Query reference:	Jasper Environmental Assessment – Joplin Fire D Blvd.	Department 2825 West Junge
This NATTIDAL HEDITACE DEVIEW is not a site clearance	Query received:	Query received: November 13, 2012 This NATIDAL HEDITACE BEVIEW is not a site classing letter Bether it identifies nublic lands and sensitive resources known to have been located close to and/or potentially	n located close to and/or notentially
affected by the proposed project . On-site verification is the r not necessarily at the project site. Animals move and, over tim does not mean a protected species will not be encountered. Th considered. Look for additional information about the biologica http://mdc.mo.gov/discover-nature/places-gov/natural-areas and	ecter. Retrief, it de esponsibility of the p e, so do plant commu- nese records only pro needs o and habitat needs o <u>mdc4.mdc.mo.gov/a</u>	affected by the proposed project. On-site verification is the responsibility of the project. Natural Heritage records were identified at some date and location. This report considers records near but not necessarily at the project site. Animals move and, over time, so do plant communities. To say "there is a record" does not mean the species/habitat is still there. To say that "there is no record" does not mean a protected species will not be encountered. These records only provide one reference and other information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Look for additional information about the biological and habitat needs of records listed in order to avoid or minimize impacts. More information may be found at hits//mdc.mo.gov/discover-nature/places-go/natural-areas and mdc4.mdc.mo.gov/applications/mofwis. Search1.aspx. Contact information for the department's Natural History Biologist is	tion. This report considers records near but is still there. To say that "there is no record" s, on-site inspections or surveys) should be ion may be found at ie department's Natural History Biologist is
Level 3 issues: Records of <u>federal-listed</u> (these Natural Heritage records identify <u>no</u> wildlife preserves records within one mile of the site, or in the public lan	these are public land su	Level 3 issues: Records of federal-listed (these are also state-listed) species or critical habitats near the project site: Natural Heritage records identify <u>no</u> wildlife preserves, <u>no</u> designated wilderness areas or critical habitats, <u>no</u> federal-listed species records within one mile of the site, or in the public land survey section listed above or sections adjacent.	. near the project site: s, <u>no</u> federal-listed species
The project should be managed to minimize any "Clean Water Permit" conditions. Pollu and/or vegetative filter strips to buffer strea is reestablished. Revegetate areas in whic with the local landscape and wildlife needs.	e erosion and s itants, includin ms and draina h the natural c	The project should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions. Pollutants, including sediment, can have significant impacts far downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor those after rain events and until a well-rooted ground cover is reestablished. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species compatible with the local landscape and wildlife needs. <i>FEDERAL LIST species/habitats are protected under the Federal Endanges dd.</i> Consult with U.S. Fish and Wildlife Service, 101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132	 kes, including adherence to wnstream. Use silt fences ntil a well-rooted ground cover ive plant species compatible A. Columbia, Missouri 65203-0007; 573-234-2132
 Level 2 issues: Records of <u>state-listed</u> (not federal-listed) endangere endangered) species and natural communities of conservation concern communities due to population declines and/or apparent vulnerability. Natural Heritage records identify <u>no</u> state-listed endangered species volumentation. Natural Heritage records identify <u>no</u> state-ranked species and/or natural endangered. 	<u>a</u> (not federal- unities of con and/or appar state-listed en state-ranked s	 Level 2 issues: Records of <u>state-listed</u> (not federal-listed) endangered species AND / OR <u>state-ranked</u> (not state-listed endangered) species and natural species and natural communities of conservation concern. The Department tracks these species and natural communities due to population declines and/or apparent vulnerability. Natural Heritage records identify <u>no</u> state-listed endangered species within 1 mile of the site. Natural Heritage records identify <u>no</u> state-ranked species and/or natural communities within 1 mile of the site. 	-ranked (not state-listed these species and natural e of the site.
See <u>http://mdc.mo.gov/sites/default/files/res</u> and communities of conservation concern.	sources/2010/(See <u>http://mdc.mo.gov/sites/default/files/resources/2010/04/2012 species of concern 11-29-2011.pdf</u> for a complete list of species and communities of conservation concern.	for a complete list of species
STATE ENDAN	GERED species are list	STATE ENDANGERED species are listed in and protected under the Wildlife Code of Missouri (3CSR10-4.111).	

Prepared November 14, 2012: Mannebach_Jasper_LandDevelopment, Page 1 of 2

downstream. Use silt fences and/or vegetative filter strips to buffer streams and drainages, and monitor those after rain events and These recommendations are ones project managers might prudently consider based on a general understanding of species needs and landscape conditions. Natural Heritage records largely reflect only sites visited by project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes should be managed to minimize erosion and sedimentation/runoff to nearby streams and lakes, including adherence to any "Clean Water Permit" conditions. Revegetate areas in which the natural cover is disturbed to minimize erosion using native plant species Invasive exotic species are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment, so inspect and clean equipment thoroughly before moving between project sites. present, it is important to conserve as much as possible any grasslands dominated by native plant cover in the project area. See to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. habitats. Best management recommendations relating to streams and rivers may be found at http://mdc.mo.gov/79. The project Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic possible retain forest vegetation along the stream and from the gray bat cave opening to the stream. See http://mdc.mo.gov/104 Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, habitats to other uses. Other prairie dependent species are also in serious decline for the same reason. Prairie chickens range over a broad territory perhaps nesting, breeding and foraging in grasslands several miles apart. Even if prairie chickens are not streams, rivers, and reservoirs in this part of Missouri. Avoid entry or disturbance of any cave inhabited by gray bats and when General recommendations related to this project or site, or based on information about the historic range of species The proposed project occurs in the historic range of greater prairie chickens (Tympanuchus cupido), a bird on the state's list of movement). Few karst features are recorded in natural heritage records, and ones not noted here may be encountered at the Jasper County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water endangered species. Populations have been in serious decline for decades, and have reached a point where greater prairie When possible, wash and rinse equipment thoroughly with hard spray or HOT water (≧104° F, typically available at do-it-Gray bats (Myotis grisescens, federal and state-listed endangered) are likely to occur in the project area, as they forage over chickens could be gone from Missouri within a few years. The dominant factor in their decline is conversion of native prairie compatible with the local landscape and wildlife needs. Pollutants, including sediment, can have significant impacts far Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area. specialists in the last 30 years. This means that many privately owned tracts could host unknown remnants of species once but no longer common. See http://mdc.mo.gov/nathis/caves/manag construc.htm for best management information. yourself carwash sites), and dry in the hot sun before using again. http://mdc.mo.gov/130 for best management recommendations. tracks, buckets, and any other water reservoirs. until a well-rooted ground cover is reestablished. (unrelated to any specific heritage records) for best management recommendations. A A A A



November 9, 2012 Contract C-12236

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Charles Scott U.S. Fish and Wildlife Service Columbia Ecological Services Office 101 Park DeVille Drive, Suite A Columbia, MO 65203

RE: Request for Information 2825 West Junge Boulevard Joplin, MO 64801 Latitude 37.0778, Longitude -94.5486



Mr. Scott:

The City of Joplin and Joplin Fire Department have retained NPN Environmental to prepare an Environmental Assessment in accordance with the Federal Emergency Management Agency (FEMA) regulations at 44 CFR Part 10 and Council on Environmental Quality Regulations at 40 CFR Part 1500-1508. As part of the Environmental Assessment for the above-referenced site, the following information is requested:

- Rare, threatened, or endangered species on or within one-half mile radius of site
- Commercially or recreationally important flora or fauna on or within one-half mile radius of site
- Wilderness, natural areas, critical habitat, preserves and forests, wildlife refuges, terrestrial breeding areas, and wildlife or game management areas on or within one-half mile radius of the site

The approximately 2.6-acre project site is currently an undeveloped parcel zoned as a Heavy Industrial District as shown on *Figure 1 – Vicinity Map* and *Figure 2 – 2012 Aerial Photograph.* A culvert will be placed in the man-made drainage ditch bisecting the property and a small area of invasive scrub/sapling brush on the east side will be cleared. The Joplin Fire Department proposes to construct a new fire station and associated paved parking and driveways on the project site to replace a location destroyed by the 2011 EF-5 tornado.

Mr. Charles Scott November 9, 2012 Page 2 of 2

ŝ

Thank you for your prompt consideration of our request. If you have any questions or require additional information, please contact me at 636-343-1300.

Sincerely,

Ruth CMamebach

Ruth C. Mannebach Senior Environmental Scientist

Figure 1 – Vicinity Map Enclosures Figure 2 – 2012 Aerial Photograph

> "The U.S. Fish and Wildlife Service (Service) has reviewed the proposed action and determined that no federally listed species, candidate species, or designated critical habitat occurs within the project area. Furthermore, the Service has determined that this action will have negligible impacts on wetlands, migratory birds, and other priority fish and wildlife resources."

Log Ashoth 12-20-12 Date

Field Supervisor





MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE HISTORIC PRESERVATION OFFICE SECTION 106 PROJECT INFORMATION FORM

Submission of a completed Project Information Form with adequate information and attachments constitutes a request for a review pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended). We reserve the right to request more information. Please refer to the CHECKLIST on Page 2 to ensure that all basic information relevant to the project has been included. For further information, refer to our website at: http://dnr.mo.gov/shpo and follow the links to Section 106 Review.

FILE GOPY

NOTE: Section 106 regulations provide for a 30-day response time by the Missouri State Historic Preservation Office from the date of receipt.

PROJECT NAME					
New Fire Station #2 Construction					
FEDERAL AGENCY PROVIDING FUNDS	5, LICENSE, OR PERMIT				
FEMA Public Assistance Grant		·			
APPLICANT			TELEPHONE		
NPN Environmental Engineers on behalf of City of Joplin			(636) 343-1300		
CONTACT PERSON			TELEPHONE		
Ruth Mannebach, Senior Enviro	nmental Scientist, NPN Environr	mental Engineers	(636) 343-1300		
ADDRESS FOR RESPONSE					
Ruth Mannebach NPN Environmental Engineers, 1631 Headland Drive St. Louis, MO 63026	Inc.				
LOCATION OF DDO IFOT					
LOCATION OF PROJECT	관계에 2017년 10월 11월 21일 - 2017년 11월 11월 11월 11월 11월 11월 11월 11월 11월 11				
Jasper					
			ТҮ		
STREET ADDRESS CITY					
2825 West Junge Boulevard Joplin					
LEGAL DESCRIPTION OF PROJECT AREA (TOWNSHIP, RANGE, SECTION, % SECTION) USGS TOPOGRAPHIC MAP QUADRANGLE NAME (SEE MAP REQUIREMENTS ON PAGE 2)					
Joplin West, MO-KS					
YEAR	TOWNSHIP	RANGE	SECTION		
2011	27N	33W	NW1/4SEC9		
PROJECT DESCRIPTION]	L			
DESCRIBE THE OVERALL PROJECT IN DEMOLITION OF EXISTING BUILDINGS USE ADDITIONAL PAGES IF NECESSA), MAKE THAT CLEAR. IF THE PROJEC RY.	T INVOLVES REHABILITATION, DE	SURIBE THE PROPOSED WORK IN DETAIL.		
The Joplin Fire Department (JFD a 2.6-acre undeveloped parcel a currently owns the parcel. Cons	t the northeast corner of West J	unge Boulevard and Schifferd	ot fire station with two vehicle bays on lecker Avenue. The City of Joplin ly 2011 EF-5 tornado.		
Historically, the City of Joplin rep purchased the parcel from a real west are zoned for Heavy Indust property to the southwest is zone and Salon del Reine to the north residences to the southeast, Am warehouse to the west, and Whi	ports the parcel has not been de l estate developer in 2012. The trial Use. Adjacent property to the ed for Commercial. Current adja a, an undeveloped field to the no erican Tool & Engineering to the te Industrial Seismology Inc. to the	veloped and no structures ha property and adjacent proper ne southeast is zoned for Sing acent development includes k rtheast, Alternative Opportuni e south, Road Star gas station the northwest.	ve been present. The City of Joplin ties to the north, east, south, and gle-Family Residential. Adjacent (ingdom Hall of Jehovah's Witnesses ties to the east, single-family in to the southwest, Mercy Hospital		
Excavation at the project site wil fire station will not have a basem	I be limited to utilities, shallow b nent. A culvert will be placed in	uilding foundations and footin the existing man-made draina	gs, driveways, and parking areas. The ge ditch traversing the property.		
A topographic map, aerial photo	graph, proposed preliminary site	e plan, and site photographs a	re attached.		

ARCHAEOLOGY (EARTHMOVING						
HAS THE GROUND INVOLVED BEEN GRADED, BUILT ON, BORROWED, OR OTHERWISE DISTURBED? PLEASE DESCRIBE IN DETAIL (USE ADDITIONAL PAGES, IF NECESSARY) PHOTOGRAPHS ARE HELPFUL:						
The City of Joplin reports the site has not been previously developed. Some grading has occurred in the past during construction of the man-made drainage ditch which traverses the property and excavation has occurred for installation of public utilities along the west and south borders.						
WILL THE PROJECT REQUIRE FILL MATERIAL? YES INO IF YES, INDICATE PROPOSED BORROW AREAS (SOURCE OF FILL MATERIAL) ON TOPOGRAPHIC MAP ARE YOU AWARE OF ARCHAEOLOGICAL SITES ON OR ADJACENT TO PROJECT AREA? YES INO IF YES, IDENTIFY THEM ON THE TOPOGRAPHIC MAP						
			TION NEAR EXISTING STRUCTURES)			
TO THE BEST OF YOUR KNOWLEDGE, IS AN AREA PREVIOUSLY SURVEYE FOR HISTORIC PROPERTIES.	_		A LOCAL HISTORIC DISTRICT			
IF YES, PLEASE PROVIDE THE NAME THE SURVEY OR DISTRICT:	OF IF YES, PLEASE PRO THE SURVEY OR DIS		IF YES, PLEASE PROVIDE THE NAME OF THE SURVEY OR DISTRICT:			
 PLEASE PROVIDE PHOTOGRAPHS OF ALL STRUCTURES, SEE PHOTOGRAPHY REQUIREMENTS NOTE: ALL PHOTOGRAPHS SHOULD BE LABELED AND KEYED TO ONE MAP OF THE PROJECT AREA PLEASE PROVIDE A BRIEF HISTORY OF THE BUILDING(S), INCLUDING CONSTRUCTION DATES AND BUILDING USES. (USE ADDITONAL PAGES, IF NECESSARY.) 						
ADDITIONAL REQUIREMENTS						
Map Requirements: Attach a copy of the relevant portion (8 ½ x 11) of the current USGS 7.5 min. topographic map and, if necessary, a large scale project map. Please do not send an individual map with each structure or site. While an original map is preferable, a good copy is acceptable. For a list of sites from which to order, download or print the required USGS 7.5 min. topographic maps at little or no cost, consult http://dnr.mo.gov/shpo/sectionrev.htm . Photography Requirements: Clear black and white or color photographs (minimum 3" x 5") are acceptable. Polariods, photocopies, emailed or faxed photographs are not acceptable. Good quality photographs are important for expeditious project review. Photographs of neighboring or nearby buildings are also helpful.						
CHECKLIST-DID YOU PROVIDE T	HE FOLLOWING INFORMA	TION?				
Topographic map 7.5 min. (per proje			cuments (If necessary to explain the project)			
Thorough description (all projects)		For new construction plans, drawings, etc.	n, rehabilitations, etc., attach work write-ups,			
Photographs (all structures)		✓ Is topographic map i	identified by quadrangle and year?			
Return this Form and Attachments to:						
MISSOUR DEPARTMENT OF NATURAL RESOURCES STATE HISTORIC PRESERVATION OFFICE Attn: Section 106 Review P.O. BOX 176 JEFFERSON CITY, MISSOURI 65102-0176						
780-1027(08-09)						

•

CULTURAL RESOURCE ASSESSMENT Section 106 Review

CONTACT PERSON/ADDRESS

Ruth Mannebach NPN Environmental Engineers, Inc. 1631 Headland Drive St. Louis, Missouri 63026 C:

Kenneth Sessa, FEMA Chelsea Klein, FEMA Jo Ann Dent, DED/CDBG

PROJECT:

Fire Station No. 2, 2825 West Junge Blvd, Joplin

FEDERAL AGENCY

FEMA

COUNTY:

JASPER

The State Historic Preservation Office has reviewed the information submitted on the above referenced project. Based on this review, we have made the following determination:

After review of initial submission, the project area has a low potential for the occurrence of cultural resources. A cultural resource survey, therefore, is not warranted.



Adequate documentation has been provided (36 CFR Section 800.11). There will be "no historic properties affected" by the current project.



An adequate cultural resource survey of the project area has been previously conducted. It has been determined that for the proposed undertaking there will be "no historic properties affected".

For the above checked reason, the State Historic Preservation Office has no objection to the initiation of project activities. PLEASE BE ADVISED THAT, IF THE CURRENT PROJECT AREA OR SCOPE OF WORK ARE CHANGED, A BORROW AREA IS INCLUDED IN THE PROJECT, OR CULTURAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, APPROPRIATE INFORMATION MUST BE PROVIDED TO THIS OFFICE FOR FURTHER REVIEW AND COMMENT. Please retain this documentation as evidence of compliance with Section 106 of the National Historic Preservation Act, as amended.

By:

ash a Male_ Mark A. Miles, Deputy State Historic Preservation Officer

November 14, 2012 Date

MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE HISTORIC PRESERVATION OFFICE P.O. Box 176, Jefferson City, Missouri 65102 For additional information, please contact Judith Deel, (573) 751-7862. Please be sure to refer to the project number: 013-JP-13

APPENDIX E

Additional Documentation





User Remarks:

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.