



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



FEMA

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
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Contract C-12236

**January 2013
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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 C. Mannebach*

QA/QC Manager:

_____ *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.
Title: Principal

Signature: _____

Date: _____

Missouri Registration Number
E-24039

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LIST OF ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
FEMA	Federal Emergency Management Agency
HVAC	Heating, Ventilation, and Air Conditioning System
LEED	Leadership in Energy and Environmental Design
MDNR	Missouri Department of Natural Resources
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
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)

Alternative Opportunities Inc. is a non-profit serving persons with disabilities, foster use, and providing substance abuse and behavioral health services. Joplin FD indicated this location of Alternative Opportunities Inc. serves as administrative offices. As such, development of the proposed fire station would not directly impact the client population served by Alternative Opportunities Inc.

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 crop 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. In accordance with MDNR air quality permitting requirements at 10 CSR 10-6.061(3)(A)(2)(C), the Proposed Action is exempt from construction permitting requirements.

Once construction is complete and the facility is operational, the only anticipated source of air emissions would be from vehicle exhaust. The Proposed Action does not include acquisition of new vehicles or apparatus, hence no net increase in emissions over current local levels would occur in the Joplin region. Vehicle exhaust levels will increase somewhat in the immediate proximity of the fire station but any additional impacts will not rise to a level of significance.

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 for ZIP Code 64801 indicates the population of this area of Joplin consisted of 88.3% white, 3.3% African American, 1.8% Native American, 1.2% Asian, and 3.3% from two or more races. Hispanic or Latino of any race was 4.3% of the population. The median income for a household was \$36,578 and for a family was

\$46,907. About 14.4% of families and 19.7% of the population were below the poverty line, including 26.3% of those under age 18 and 9.1% 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 minority or low-income populations.

Under the No Action alternative, continuing use of the temporary facility at 2216 Maiden Lane would have no adverse effect on minority or low-income populations, 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 at the source per NFPA 1500 requirements. This intermittent elevated noise would be within these acceptable levels and would only be sustained for extremely short durations. Noise levels attenuate significantly with distance from the source (siren or alarm) which will mitigate impacts to nearby structures. For pedestrians and other vehicular traffic, this impact is impractical for mitigation 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) and such noises 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, including local residents and local business employees and customers, 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. These features will include high-efficiency HVAC units, energy efficient windows, and construction methods that would comply with a LEED silver rating; however, formal LEED certification will not be pursued.

A long-term goal of the City of Joplin is to provide 90% or greater of the city within a 4-minute radius of a responding engine company. The South Shifferdecker Avenue corridor is an area of Joplin that is targeted for growth and expansion of businesses and services. Location of the Proposed Action at the intersection of South Shifferdecker Avenue and West Junge Boulevard will improve the response coverage goal immediately and for future development.

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.

Table 1 – Summary of Affected Environments and Impacts

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, long-term increase in vehicle exhaust levels in the immediate vicinity of the fire station	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

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

Affected Environment	Impacts from Proposed Action	Mitigation
Cultural Resources	Coordination with SHPO concluded there will be no historic properties affected by the Proposed Action	Construction work will cease and SHPO will be notified in the event cultural artifacts or human remains are found
Environmental Justice	The Proposed Action would have no adverse effect on minority or low-income populations	Not applicable
Noise	Short-term construction noise impacts and intermittent long-term impact from emergency equipment sirens	Construction activities will be restricted to normal daylight hours and equipment properly maintained. Mitigation not possible for emergency equipment sirens
Traffic	Intermittent increase of emergency equipment on South Schifferdecker Avenue and West Junge Boulevard	Emergency vehicle warning signs will be considered by the City of Joplin
Public Service and Utilities	The Proposed Action will not place significant demands on in place utility infrastructure	Not applicable
Cumulative Impacts	The new fire station will be constructed on industrially zoned property, will incorporate energy efficient design, and will provide enhanced response coverage to current and projected residential and commercial development of the local area	Not applicable

PUBLIC INVOLVEMENT

The availability of this EA was advertised by public notice in February 2013 in The Joplin Globe newspaper and on the City of Joplin website. Copies of the EA were 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 extended for a period of 30 days. The EA was available to be viewed locally at the locations listed above. The EA was also available to be downloaded from FEMA's website. As no substantive comments were 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.

The Joplin FD, through community education and public service, continually strives to minimize the need for emergency responses and thereby reduce noise impacts within the city. Fire department policies regarding use of lights and sirens and response action history are continually reviewed to assure proper response procedures are taken.

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

Construction of the Proposed Action will comply with all applicable Federal, State, and Local regulations.

AGENCY COORDINATION AND REFERENCES

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

Mr. Allan Johnston
allan.johnston@mo.usda.gov
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
<http://www.census.gov>

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.

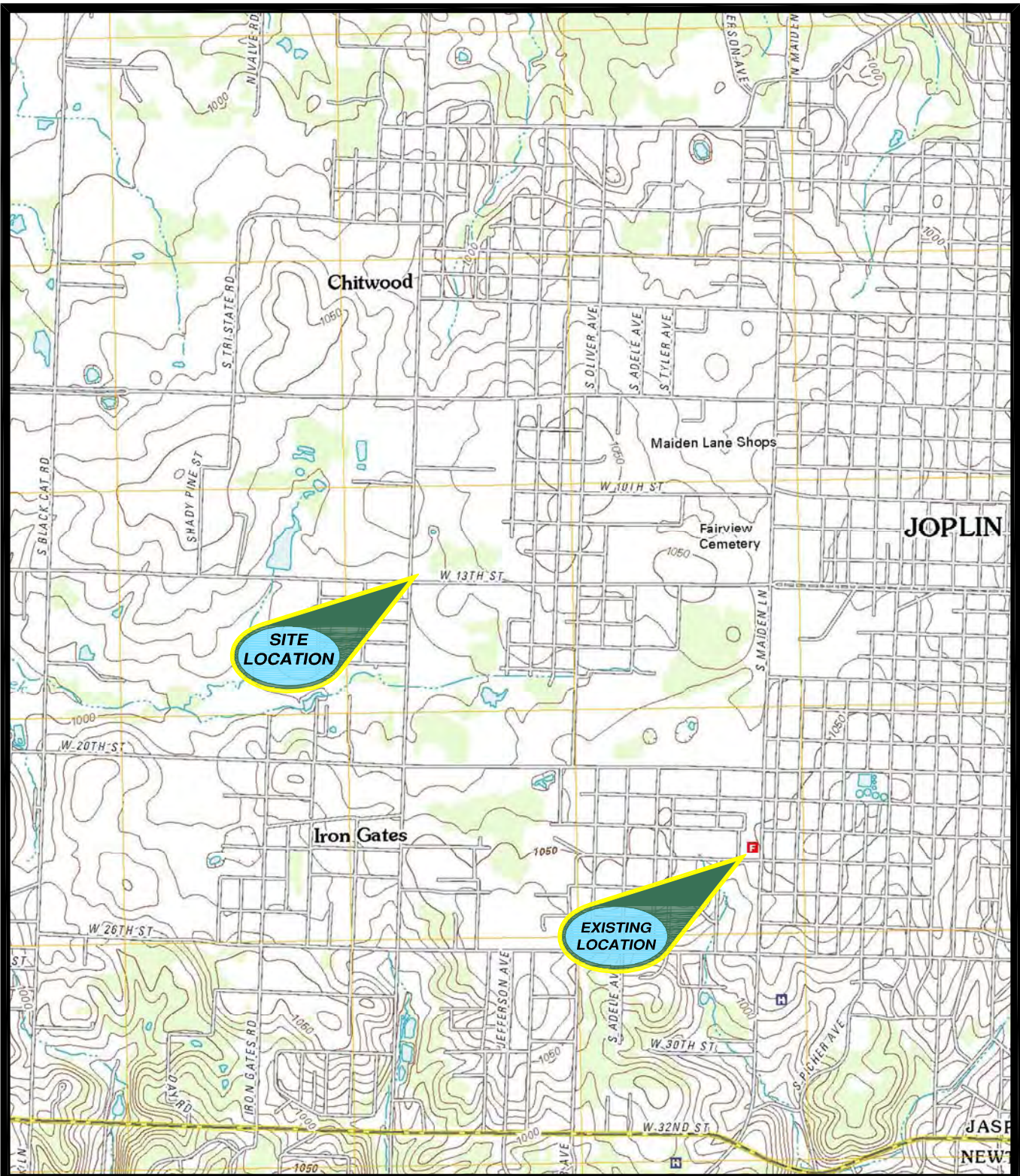
Mitchell D. Randles, Fire Chief
Joplin Fire Department

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



Adapted from Joplin West, MO-KS
 USGS 7.5 minute Quadrangle Map
 2011

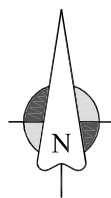
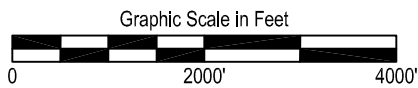


FIGURE 1
 Vicinity Map

2825 W Junge Boulevard - Joplin, MO

Project No.	Date	Scale	Drawn By:	Checked By:
C-12236	Jan. 2013	1" = 2000'	SRR	RCM



*Adapted from USDA Farm Service Agency
2012 Aerial Photograph*

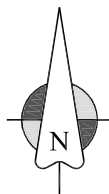


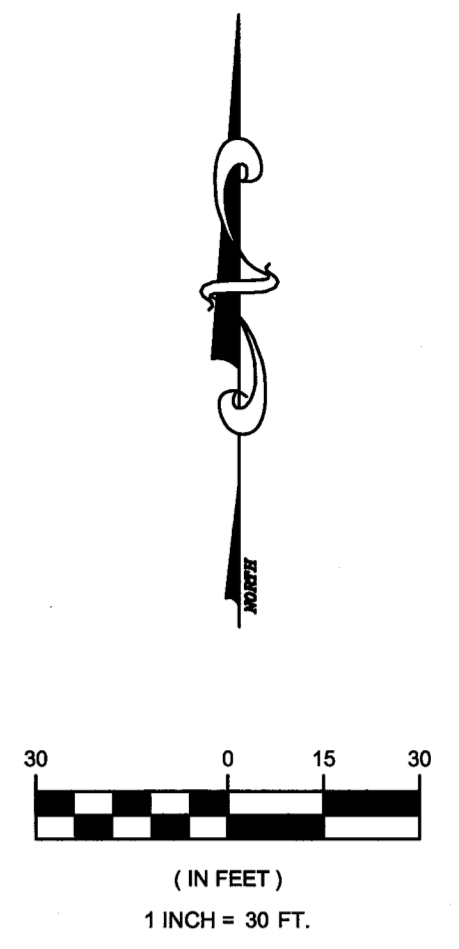
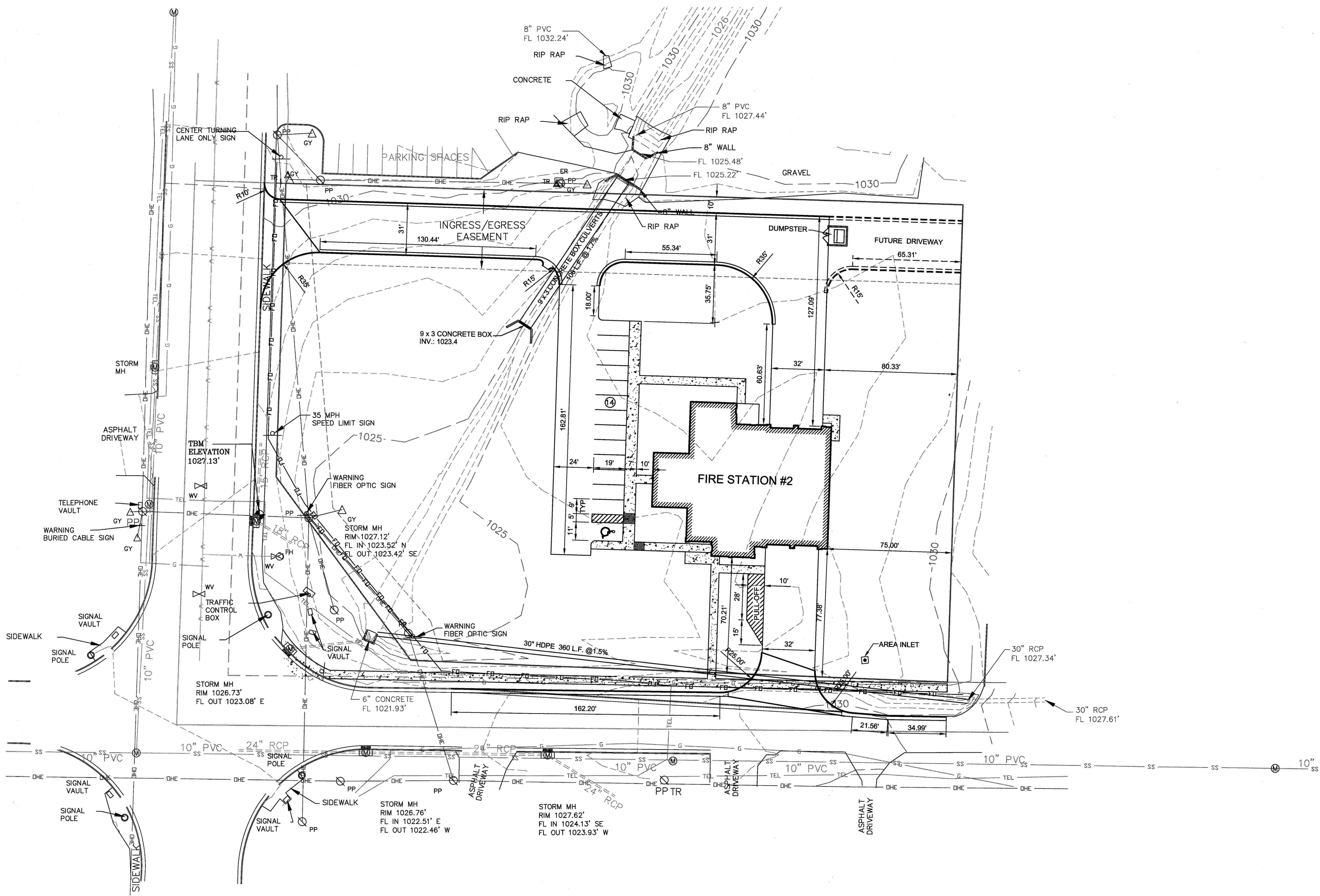
FIGURE 2
Site Location

2825 W Junge Boulevard - Joplin, MO

Project No.	Date	Scale	Drawn By:	Checked By:
C-12236	Jan. 2013	NONE	SRR	RCM

APPENDIX B

Draft Facility Layout



MISSOURI ENGINEERING CERTIFICATE OF AUTHORIZATION NUMBER 06650, EXPIRATION DATE DEC. 31, 2012

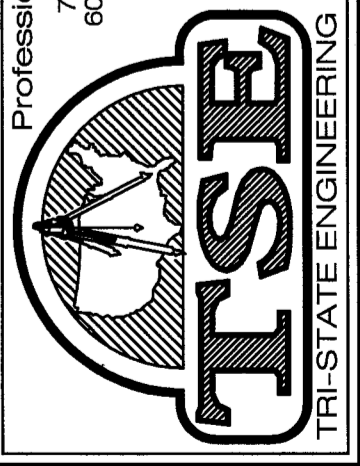
PROJECT: **SITE PLAN**
 CUSTOMER: **JOPLIN FIRE STATION #2**
CITY OF JOPLIN DEPARTMENT OF PUBLIC WORKS
JOPLIN, JASPER COUNTY, MISSOURI

NO.	DATE	INT.	REVISIONS

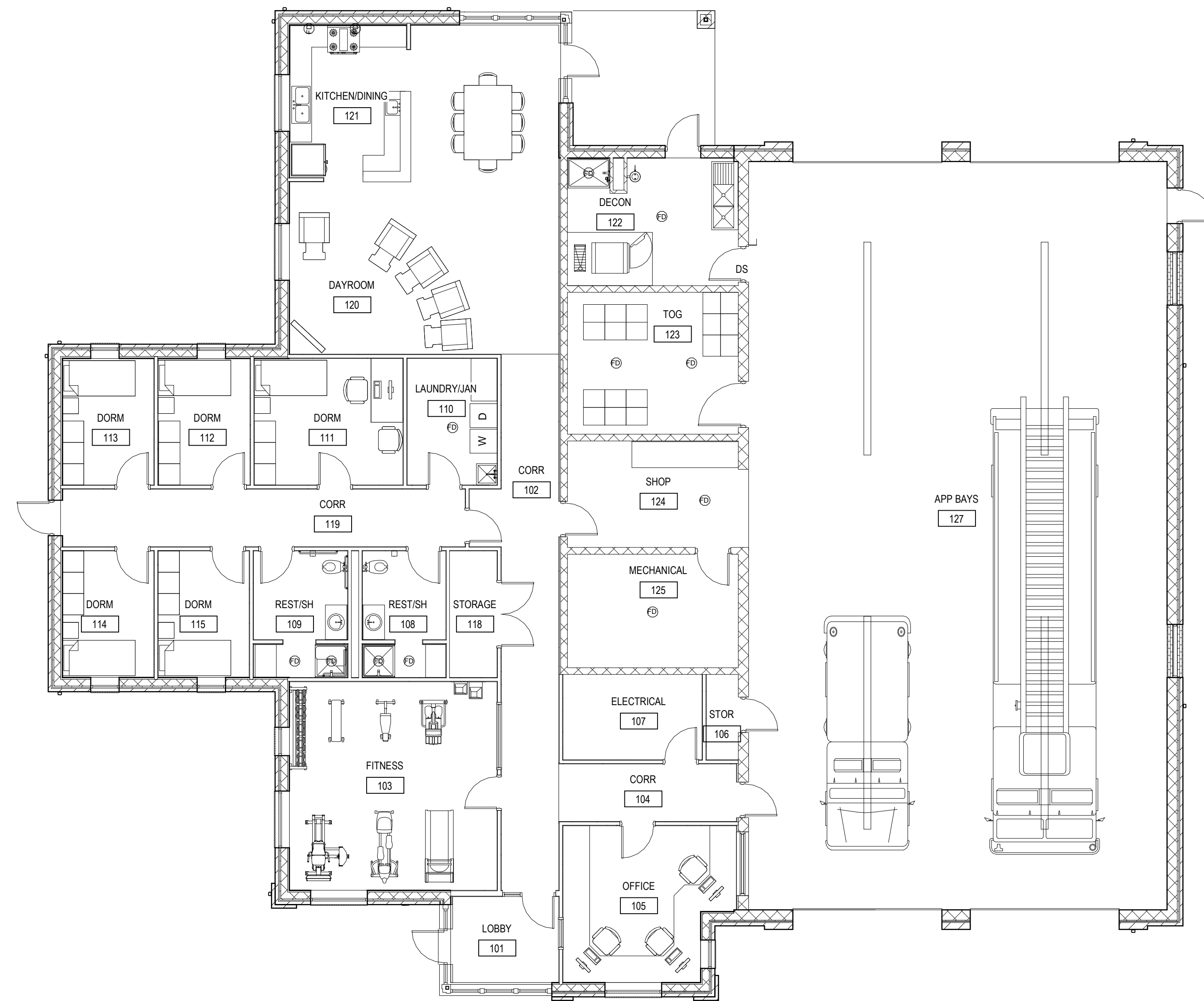
PRELIMINARY
NOT FOR CONSTRUCTION
10-22-2012
 THIS DOCUMENT IS
 PRELIMINARY IN NATURE
 AND IS NOT A FINAL
 SIGNED AND SEALED
 DOCUMENT.

JERALD F. NORTON JR.
 CIVIL ENG. E-25158

Professional Engineers & Land Surveyors
 702 South Main - Joplin, Missouri 64801
 608 W. Will Rogers Blvd. - Claremore, OK 74017
 Mailing Address
 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
 Copyright, 2012, Tri-State Engineering, Inc.



JOB NO.	12189
DATE	10-16-12
DRAWN BY	EWS
CHKD. BY	
SHEET NO.	1



JOPLIN FIRE STATION #2

OCTOBER 25, 2012

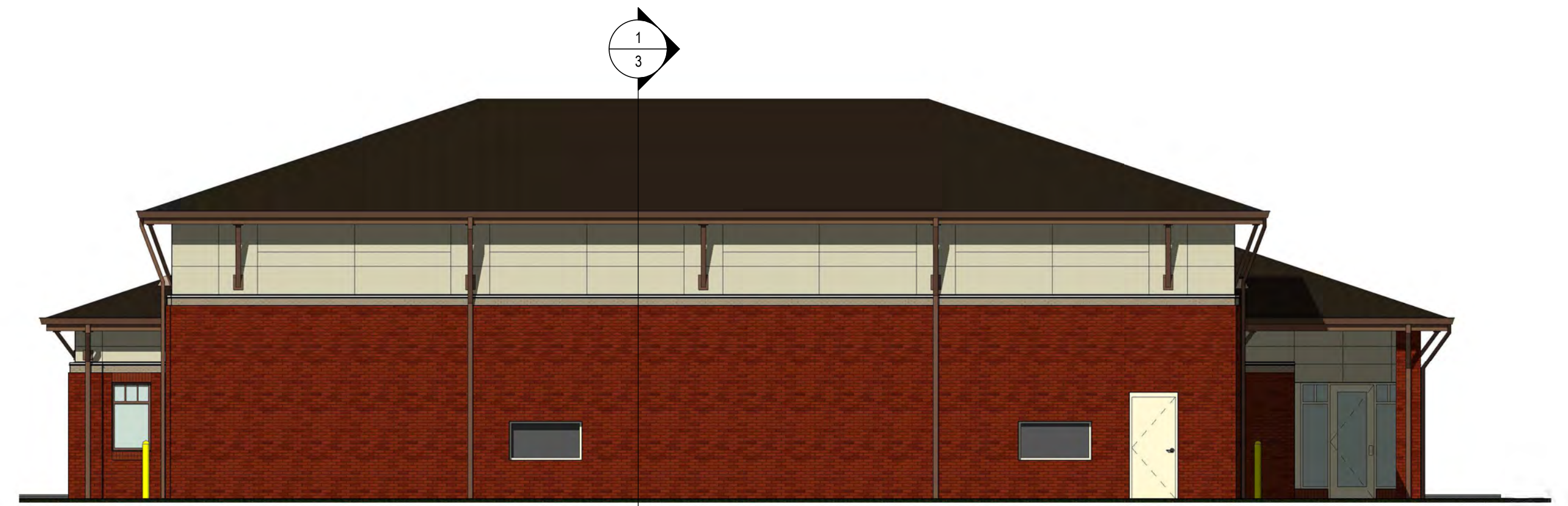


412012

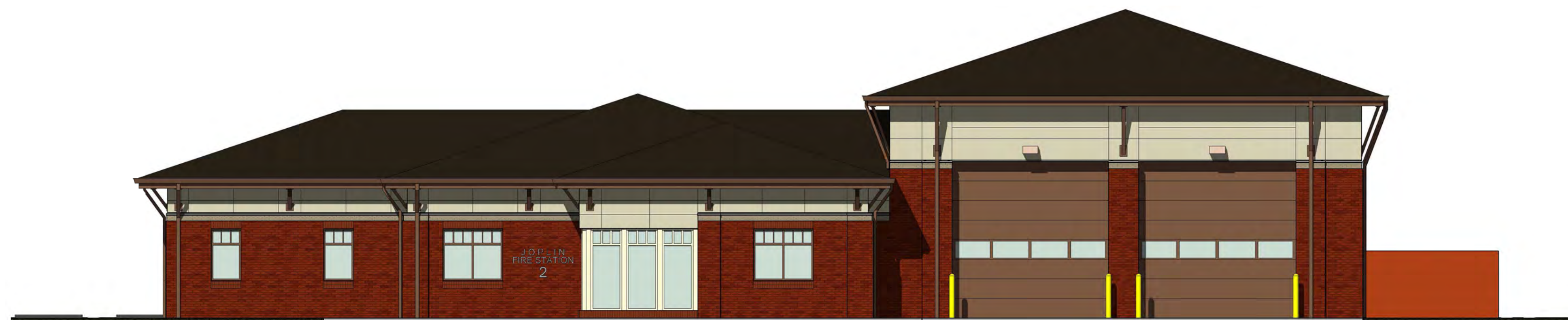




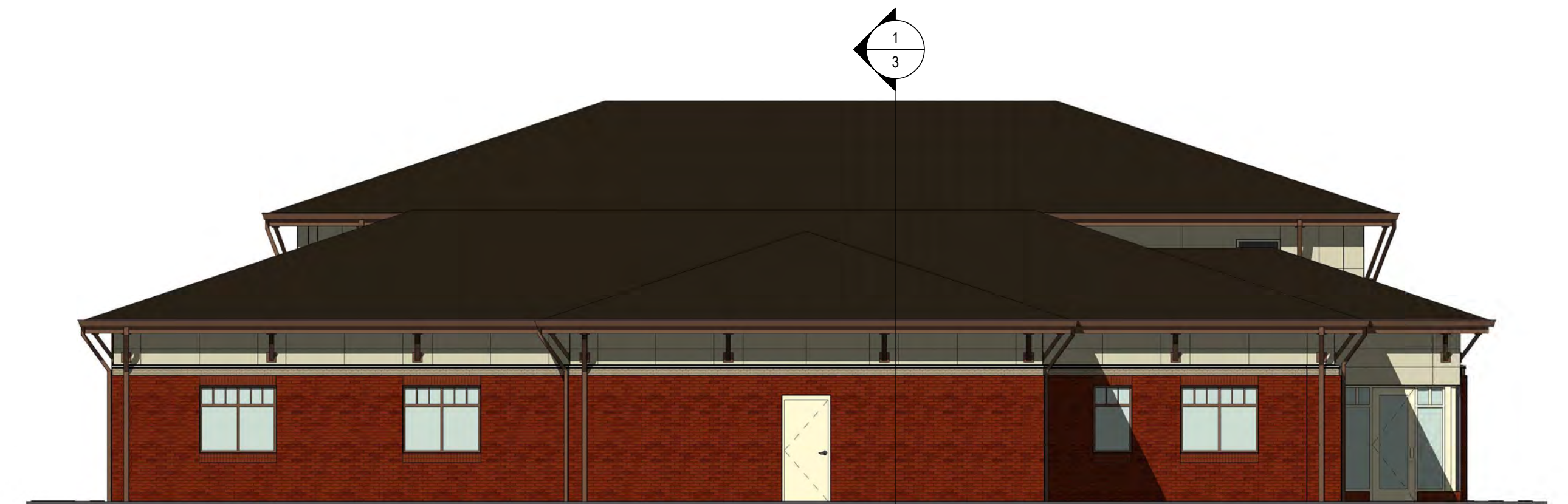
1 NORTH ELEVATION - RENDERED
2 SCALE: 1/8" = 1'-0"



2 EAST ELEVATION - RENDERED
2 SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION - RENDERED
2 SCALE: 1/8" = 1'-0"



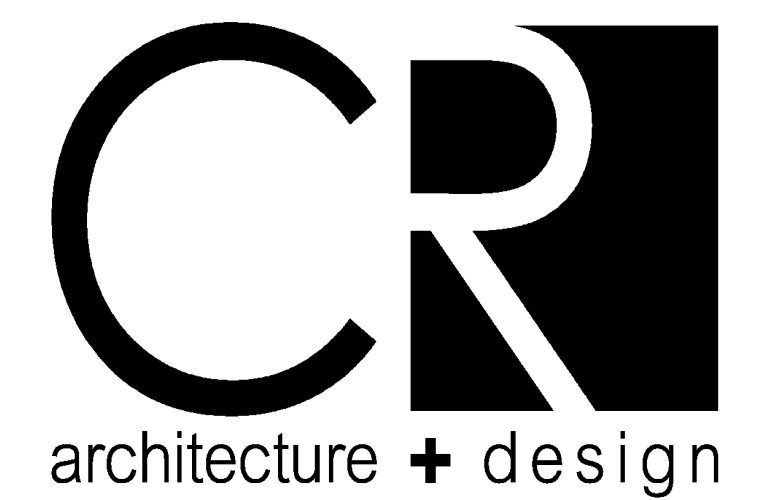
4 WEST ELEVATION - RENDERED
2 SCALE: 1/8" = 1'-0"



OCTOBER 9, 2012

JOPLIN FIRE STATION #2

412012



APPENDIX C

Site Photographs

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



Photo No: 2	Date: 11-07-12
Viewing Angle: East	
Description: Project site (undeveloped grassy lot)	



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



Photo No: 4	Date: 11-07-12
Viewing Angle: West	
Description: Project site (undeveloped grassy lot)	



Photo No: 5	Date: 11-07-12
Viewing Angle: North	
Description: Kingdom Hall of Jehovah's Witnesses and Salon del Reine adjacent to north	



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



Photo No: 7	Date: 11-07-12
Viewing Angle: South	
Description: West Junge Boulevard, single-family residences, and American Tool & Engineering adjacent to south	



Photo No: 8	Date: 11-07-12
Viewing Angle: West	
Description: Schifferdecker Avenue, Mercy Hospital (warehouse), and White Industrial Seismology Inc. adjacent to west	



APPENDIX D

Agency Consultation Correspondence



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

688 State Hwy. B, Suite 100
Springfield, MO 65802
PHONE: 417-831-5246, ext. 138
FAX NUMBER: 417-862-0438

Email: allan.johnston@mo.usda.gov

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

Date: December 17, 2012

To: Mr. Ruth Mannebach
Senior Environmental Scientist
NPN Environmental Engineers Inc.
1631 Headline Dr.
St. Louis, Mo. 63026

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

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 [mailto:ruth.mannebach@npnenv.com]
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: <http://binged.it/WLPMVb>

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

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 11/9/12	
Name of Project Joplin Fire Department		Federal Agency Involved FEMA	
Proposed Land Use New Fire Station #2		County and State Jasper County, MO	
PART II (To be completed by NRCS)		Date Request Received By NRCS 11/09/12	Person Completing Form <i>[Signature]</i>
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Acres Irrigated _____ Average Farm Size _____
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: _____ % _____	Amount of Farmland As Defined in FPPA 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 Agency)	Alternative Site Rating			
	Site A	Site B	Site C	Site D
	1.3			
	1.3			
C. Total Acres In Site		2.6		

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 Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				
--------------------------------------------------------------------------------------------------------------------------------------------	--	--	--	--

PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	5			
2. Perimeter In Non-urban Use	(10)	0			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(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			
8. Creation Of Non-farmable Farmland	(10)	10			
9. Availability Of Farm Support Services	(5)	2			
10. On-Farm Investments	(20)	0			
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	0

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	0
TOTAL POINTS (Total of above 2 lines)	260	17	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
----------------	-------------------	----------------------------------------------------------------------------------------------------------

Reason For Selection:
This project is located in the Joplin, city limits and is exempt from FPPA.

Name of Federal agency representative completing this form:	Date:
-------------------------------------------------------------	-------

(See Instructions on reverse side)

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, <http://fppa.nrcs.usda.gov/lesa/>.
- 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 http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, 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).

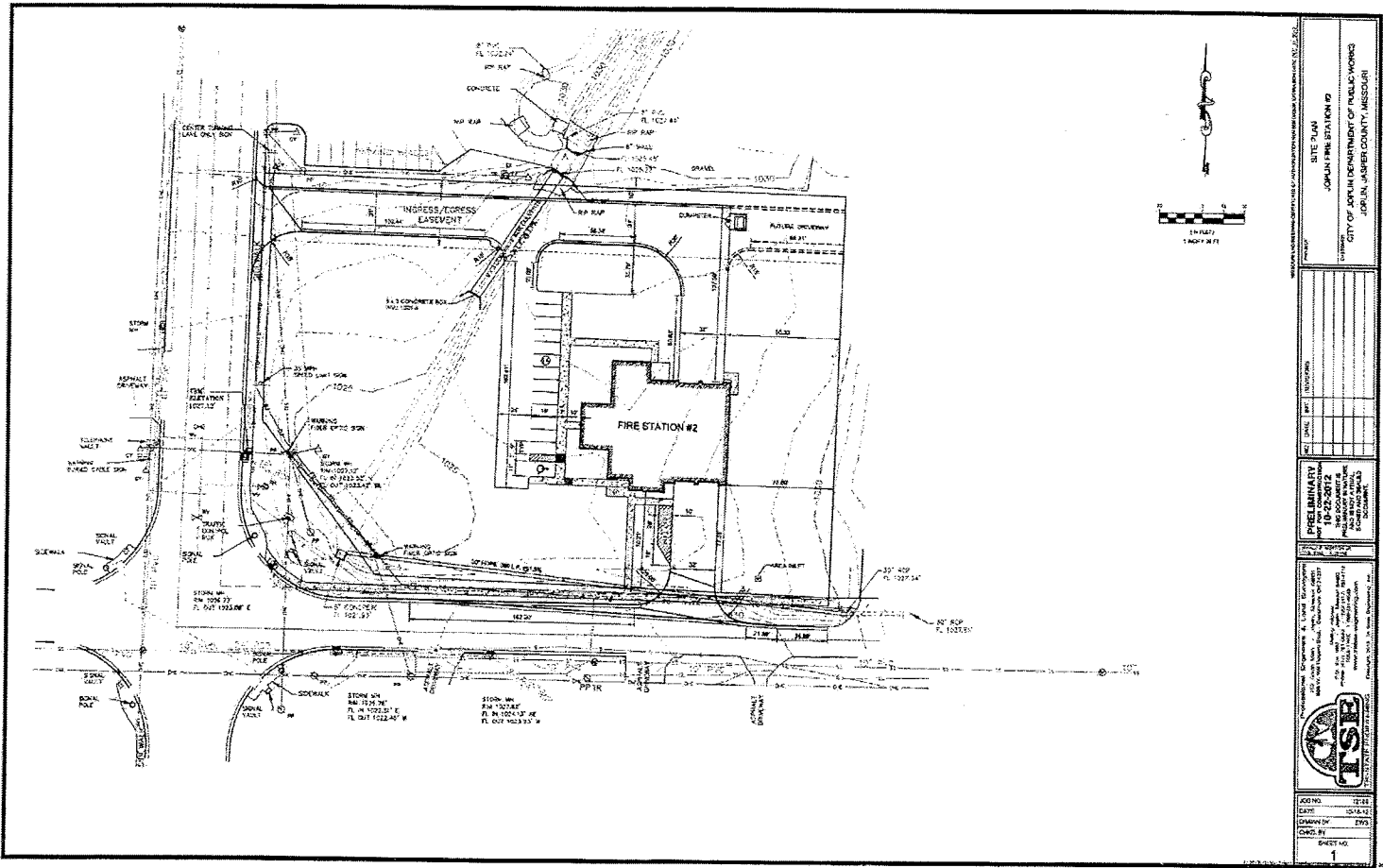
Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

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.



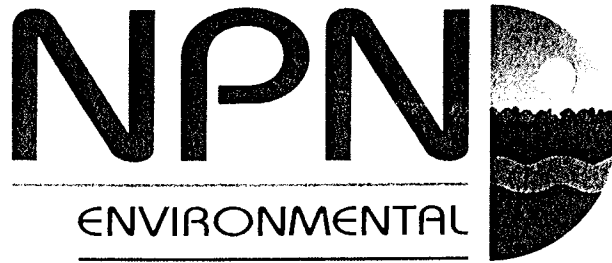
SITE PLAN
 JOPLIN FIRE STATION #2
 CITY OF JOPLIN DEPARTMENT OF PUBLIC WORKS
 JOPLIN, JASPER COUNTY, MISSOURI

NO.	DATE	DESCRIPTION

PRELIMINARY
 10-22-2012
 THE ACCURACY OF THIS DOCUMENT IS NOT GUARANTEED FOR ANY PURPOSES OTHER THAN AS SHOWN.

TSE
 TERRY S. ELLIOTT, INC.
 1000 N. 17th Street, Suite 100
 Joplin, MO 64603
 Phone: 417-785-1111
 Fax: 417-785-1112
 www.tseinc.com

DESIGNER	TSE
CHECKED	SWH
APPROVED	EWS
CHECKED BY	
SHEET NO.	1



FILE COPY

November 9, 2012
Contract C-12236

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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 C. Mannebach
Senior Environmental Scientist

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



Missouri Department of Conservation Natural Heritage Review Report

November 14, 2012 -- Page 1 of 2

Resource Science Division
P. O. Box 180
Jefferson City, MO 65102
Prepared by: Emily Clancy
Emily.Clancy@mdc.mo.gov
(573) 522 - 4115 ext. 3182

NPN ENVIRONMENTAL
ATTN: RUTH C. MANNEBACH
1631 HEADLAND DRIVE
ST. LOUIS, MISSOURI 63026

Project type: Land Development

Location/Scope: Section 9 of T27N R33W

County: Jasper

Query reference: Environmental Assessment – Joplin Fire Department 2825 West Junge Blvd.

Query received: November 13, 2012

This NATURAL HERITAGE REVIEW is not a site clearance letter. Rather, it identifies public lands and sensitive resources known to have been located close to and/or potentially 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 <http://mdc.mo.gov/discover-nature/places-go/natural-areas> and http://mdc4.mdc.mo.gov/applications/mofwis/mofwis_search1.aspx. Contact information for the department's Natural History Biologist is online at <http://mdc.mo.gov/contact-us>.

Level 3 issues: Records of federal-listed (these are also state-listed) species or critical habitats near the project site:

Natural Heritage records identify no wildlife preserves, no designated wilderness areas or critical habitats, no federal-listed species records within one mile of the site, or in the public land survey section listed above or sections adjacent.

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.

FEDERAL LIST species/habitats are protected under the Federal Endangered Species Act. Consult with U.S. Fish and Wildlife Service, 101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; 573-234-2132

Level 2 issues: Records of state-listed (not federal-listed) endangered species AND / OR state-ranked (not state-listed endangered) 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 no state-listed endangered species within 1 mile of the site.
- Natural Heritage records identify no state-ranked species and/or natural communities within 1 mile of the site.

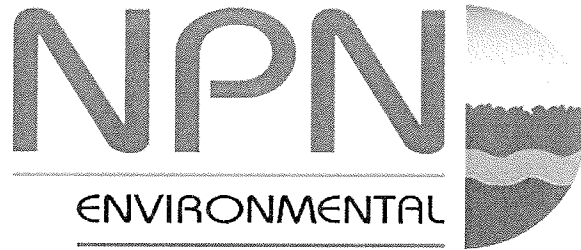
See http://mdc.mo.gov/sites/default/files/resources/2010/04/2012_species_of_concern_11-29-2011.pdf for a complete list of species and communities of conservation concern.

STATE ENDANGERED species are listed in and protected under the [Wildlife Code of Missouri \(3CSR10-4.111\)](#).

General recommendations related to this project or site, or based on information about the historic range of species (unrelated to any specific heritage records):

- Gray bats (*Myotis grisescens*, federal and state-listed endangered) are likely to occur in the project area, as they forage over streams, rivers, and reservoirs in this part of Missouri. Avoid entry or disturbance of any cave inhabited by gray bats and when possible retain forest vegetation along the stream and from the gray bat cave opening to the stream. See <http://mdc.mo.gov/104> for best management recommendations.
- The proposed project occurs in the historic range of greater prairie chickens (*Tympanuchus cupido*), a bird on the state's list of endangered species. Populations have been in serious decline for decades, and have reached a point where greater prairie chickens could be gone from Missouri within a few years. The dominant factor in their decline is conversion of native prairie 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 present, it is important to conserve as much as possible any grasslands dominated by native plant cover in the project area. See <http://mdc.mo.gov/130> for best management recommendations.
- Jasper County has known karst geologic features (e.g. caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in natural heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are species of conservation concern) are influenced by changes to water quality, so check your project site for any karst features and make every effort to protect groundwater in the project area. See http://mdc.mo.gov/nathis/caves/manag_construct.htm for best management information.
- Streams in the area should be protected from soil erosion, water pollution and in-stream activities that modify or diminish aquatic habitats. Best management recommendations relating to streams and rivers may be found at <http://mdc.mo.gov/79>. The project 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 compatible with the local landscape and wildlife needs. 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.
- 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.
 - ◆ Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
 - ◆ Drain water from boats and machinery that has operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
 - ◆ When possible, wash and rinse equipment thoroughly with hard spray or HOT water ($\geq 104^{\circ}$ F, typically available at do-it-yourself carwash sites), and dry in the hot sun before using again.

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 specialists in the last 30 years. This means that many privately owned tracts could host unknown remnants of species once but no longer common.



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

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 C. Mannebach

Ruth C. Mannebach
Senior Environmental Scientist

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

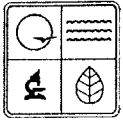
“The U.S. Fish and Wildlife Service (Service) has reviewed the proposed action and determined that no federally listed species, candidate species, or designated critical habitat occurs within the project area. Furthermore, the Service has determined that this action will have negligible impacts on wetlands,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

Ray Anderson

Field Supervisor

12-20-12

Date



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

FILE COPY

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.

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, LICENSE, OR PERMIT

FEMA Public Assistance Grant

APPLICANT

NPN Environmental Engineers on behalf of City of Joplin

TELEPHONE

(636) 343-1300

CONTACT PERSON

Ruth Mannebach, Senior Environmental Scientist, NPN Environmental Engineers

TELEPHONE

(636) 343-1300

ADDRESS FOR RESPONSE

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

LOCATION OF PROJECT

COUNTY

Jasper

STREET ADDRESS

2825 West Junge Boulevard

CITY

Joplin

LEGAL DESCRIPTION OF PROJECT AREA (TOWNSHIP, RANGE, SECTION, 1/4 SECTION)

USGS TOPOGRAPHIC MAP QUADRANGLE NAME (SEE MAP REQUIREMENTS ON PAGE 2)

Joplin West, MO-KS

YEAR

2011

TOWNSHIP

27N

RANGE

33W

SECTION

NW1/4SEC9

PROJECT DESCRIPTION

DESCRIBE THE OVERALL PROJECT IN DETAIL. IF IT INVOLVES EXCAVATION, INDICATE HOW WIDE, HOW DEEP, ETC. IF THE PROJECT INVOLVES DEMOLITION OF EXISTING BUILDINGS, MAKE THAT CLEAR. IF THE PROJECT INVOLVES REHABILITATION, DESCRIBE THE PROPOSED WORK IN DETAIL. USE ADDITIONAL PAGES IF NECESSARY.

The Joplin Fire Department (JFD) proposes to construct a new approximately 6750 square foot fire station with two vehicle bays on a 2.6-acre undeveloped parcel at the northeast corner of West Junge Boulevard and Schifferdecker Avenue. The City of Joplin currently owns the parcel. Construction will be to replace Fire Station #2 destroyed by the May 2011 EF-5 tornado.

Historically, the City of Joplin reports the parcel has not been developed and no structures have been present. The City of Joplin purchased the parcel from a real estate developer in 2012. The property and adjacent properties to the north, east, south, and west are zoned for Heavy Industrial Use. Adjacent property to the southeast is zoned for Single-Family Residential. Adjacent property to the southwest is zoned for Commercial. Current adjacent development includes Kingdom Hall of Jehovah's Witnesses and Salon del Reine to the north, an undeveloped field to the northeast, Alternative Opportunities to the east, single-family residences to the southeast, American Tool & Engineering to the south, Road Star gas station to the southwest, Mercy Hospital warehouse to the west, and White Industrial Seismology Inc. to the northwest.

Excavation at the project site will be limited to utilities, shallow building foundations and footings, driveways, and parking areas. The fire station will not have a basement. A culvert will be placed in the existing man-made drainage ditch traversing the property.

A topographic map, aerial photograph, proposed preliminary site plan, and site photographs are attached.

ARCHAEOLOGY (EARTHMOVING ACTIVITIES)

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 NO

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 NO

IF YES, IDENTIFY THEM ON THE TOPOGRAPHIC MAP

STRUCTURES (REHABILITATION, DEMOLITION, ADDITIONS TO, OR CONSTRUCTION NEAR EXISTING STRUCTURES)

TO THE BEST OF YOUR KNOWLEDGE, IS THE STRUCTURE LOCATED IN ANY OF THE FOLLOWING?

AN AREA PREVIOUSLY SURVEYED FOR HISTORIC PROPERTIES.

A NATIONAL REGISTER DISTRICT

A LOCAL HISTORIC DISTRICT

IF YES, PLEASE PROVIDE THE NAME OF THE SURVEY OR DISTRICT:

IF YES, PLEASE PROVIDE THE NAME OF THE SURVEY OR DISTRICT:

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 ADDITIONAL PAGES, IF NECESSARY.)

ADDITIONAL REQUIREMENTS

Map Requirements: Attach a copy of the relevant portion (8 1/2 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. Polaroids, 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. All photographs should be labeled and keyed to one map of the project area.

CHECKLIST-DID YOU PROVIDE THE FOLLOWING INFORMATION?

Topographic map 7.5 min. (per project, not structure)

Other supporting documents (If necessary to explain the project)

Thorough description (all projects)

For new construction, rehabilitations, etc., attach work write-ups, plans, drawings, etc.

Photographs (all structures)

Is topographic map identified by quadrangle and year?

Return this Form and Attachments to:

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
Attn: Section 106 Review
P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102-0176**

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:



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

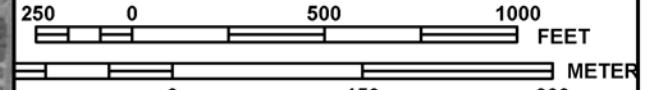
For additional information, please contact Judith Deel, (573) 751-7862. Please be sure to refer to the project number:
013-JP-13

APPENDIX E

Additional Documentation



MAP SCALE 1" = 500'



NFP

PANEL 0258D

FIRM

FLOOD INSURANCE RATE MAP
 JASPER COUNTY,
 MISSOURI
 AND INCORPORATED AREAS

PANEL 258 OF 375

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
JASPER COUNTY	290807	0258	D
JOPLIN, CITY OF	290183	0258	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
 29097C0258D
EFFECTIVE DATE
 MARCH 16, 2006

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



U.S. Fish and Wildlife Service National Wetlands Inventory

2825 West Junge
Boulevard



Oct 19, 2012



Wetlands

-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

Riparian

-  Herbaceous
-  Forested/Shrub

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.

User Remarks: