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CC: Mike Castro-SL

FROM: Carole Hopkins *CAH*
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DATE: January 25, 2013

SUBJECT: Design, Environmental Unit
Route 364, St. Charles County
I-64 to Route 94 at Mid Rivers Mall Drive
Job. No. J6U1028
Environmental Reevaluation

*FHWA concurs that the
ROD issued January 6, 1993
is still valid.*

1/30/13

*Raegan Ball
Program Development
Team Lead*

This final 14.3-kilometer (8.9-mile) section of the Page Avenue extension (Route 364, formerly known as Route D) is a cost-share project with St. Charles County and East West Gateway Council of Governments (EWGCOG). Environmental impacts were originally evaluated in an Environmental Impact Statement (EIS) under MoDOT Job Nos. J6U0803B, J6U0803C and J6U0803D; the Final EIS was approved November 24, 1992, and the Record of Decision was issued January 6, 1993. The ROD describes the selected alternate as a four-lane limited access highway on new alignment with a 70-foot wide median to accommodate future lane additions. MoDOT has prepared this reevaluation for the final project phase for two reasons: 1) a review of impacts is warranted as 20 years or more have passed since the FEIS and ROD were issued and 2) design-build contracting is being used on this project, which may result in modifications to the configuration of the ROD selected alternate.

The principal purpose of the entire 21-mile Page Avenue extension project is to provide relief for chronic traffic congestion at Missouri River crossings between St. Louis and St. Charles Counties in Missouri. Earlier construction phases of the project extended Page Avenue from its 1992 terminus at Bennington Place, just west of I-270 in St. Louis County, across the Missouri River to Route 94/Mid Rivers Mall Drive in St. Charles County. These earlier project phases carry average daily traffic (ADT) of 75,000 vehicles per day across the Missouri River, providing an alternative to the I-70 and I-64 crossings. The final phase included herein will connect the extension to I-64.



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The project is scheduled to be awarded as a design-build project in February 2013. FHWA approved the Financial Plan on September 14 and the Request for Proposal (RFP) on September 19, 2012. Four potential design-build teams submitted Statements of Qualification (SOQ). MoDOT short-listed all four teams to proceed; teams' plans for the project's design and construction are based on the RFP issued in early October. The final technical proposals were submitted to MoDOT January 11, 2013. The winning contractor will be selected in February 2013 and construction could start as early as spring 2013.

The design-build teams are allowed to propose the design of the project within the defined footprint of the ROD selected alternate and governed by the parameters of the fixed-cost contract. MoDOT and St. Charles County will be very involved in the design and evaluation process, which is anticipated to result in less than the build out shown in the preliminary plans.

MoDOT is purchasing all necessary realty interests in compliance with the Uniform Relocation and Real Properties Acquisition Policies Act, as amended (Uniform Act), 49 CFR part 24. Any additional realty interests outside the approved project footprint are the design-build contractor's responsibility. If needed, the contractor will obtain all necessary NEPA approvals and permits prior to purchasing such additional realty interests and will acquire at their cost following the same guidelines with MoDOT oversight. MoDOT plans to sell any extra property as excess right of way at the conclusion of the project.

MoDOT has identified and located utilities along the corridor and discussed relocation with each utility company. Utility relocation will not begin until the design-build contractor has established design and identified the extent of the required relocations and adjustments. The cost obligations and relocation process will follow MoDOT policies.

Changes from the Selected Alternate

In many cases, the FEIS and ROD described selected alternate design details such as type of interchange, width of median, etc. These details are considered commitments and are listed below as described in the FEIS.

From Route N- Pitman Hill Road to Route 40/61, the Red Alignment *[of the Page Avenue Extension]* would be a **#1 four-lane fully limited access highway with a 70-foot wide depressed median that will accommodate expansion for two additional lanes, in each direction**, if necessary in the future.

#2 Total access is provided between the Route 94 - Route N- Page Avenue interchange by ramps or by direct lane continuity. Five bridges would be needed to direct the traffic between the various routes. After the Route 94 - Route N - Page Avenue interchange, the alignment curves northwest. The Red Alignment will intersect Motherhead Road. **#3 A grade separation is proposed over the new Page Avenue at Motherhead Road where the outer road accesses Gutermuth Road.** It will cross Dardenne Creek and head northwest to the Route K interchange. **#4 Route K will be a partial cloverleaf interchange.** The Red Alignment continues on Route N along the south side to Bates Road.

#5 Route N would become an outer road servicing the north side of the alignment from Bates Road to the Route K interchange. #6 McCluer Road will be serviced by a proposed south outer road. The Red Alignment then starts to curve due west at **Bates Road, serviced by the south outer road.** The Red Alignment continues to **#7 Bryan Road diamond interchange. #8 Hanley Road will be serviced by the north outer road. #9 Henke Road will be grade separated over Page Avenue Extension. #10 The semi-directional interchange between Route 40 and Page Avenue is proposed about 2,000 feet north of the existing Route N**

intersection with Route 40/61 (future Route 1-64). #11A connection will be needed west of Route 40 to tie Page Avenue into Route N, where four lanes will converge into two west of the interchange before it joins to the existing Route N. #12An outer road will be built north of the proposed alignment from the east outer road along Route 40 to Bates Road.

The anticipated changes from the FEIS/ROD described design are discussed next. The design-build best-value design lists what is proposed for each corresponding, numbered (1 through 12) design commitment described above. Unless stated otherwise, all changes occur within the FEIS/ROD identified footprint.

Best-Value Design

- #1** Route 364 will be a four-lane limited access highway with a 46' median from I-64 to east of Route 94. The design-build project will construct lanes 2 & 3 of the future 8-lane configuration. In future, the third through lane (lane 1), shoulder, and concrete median can be constructed within the 46' median section with minimal impacts to Route 364 traffic or interchange traffic. Four lanes of traffic can accommodate the projected 2040 Route 364 traffic volumes (traffic models forecast a range between level of service C and level of service D on mainline beyond 2040). If volumes exceed projections and a future fourth through lane is needed, it can easily be widened to the outside with minimal grading and reconstruction of the gores.
- #2** The Route 94 - Route N - Page Avenue interchange will include a new direct connection flyover ramp from WB Route 364 to WB Route 94; a new direct ramp connection from EB Route 364 to WB Route 94; a new direct ramp connection from Mid Rivers Mall Drive to WB Route 364; an existing direct ramp connection from WB Route 364 to Mid Rivers Mall Drive; an existing direct ramp connection from Mid Rivers Mall Drive to EB Route 364; a new direct ramp connection from EB Route 94 to EB Route 364; a new direct connection flyover ramp from Mid Rivers Mall Drive to WB Route 94; and a new ramp that crosses Route 94 at a signalized intersection, which saves cost by eliminating the need for two bridge structures and eliminates a very short weave section on the Route 364 to Mid Rivers Mall Drive off-ramp from the original design concept. The proposed two-phase traffic signalized crossing of Route 94 would extend the existing traffic signal system along Route 94 between Westwood Drive and I-64. The ramp "crossing phase" could be timed to have minimal impact on Route 94 traffic. Traffic forecasts show that by 2040 this ramp would carry less than 200 vehicles per hour during the morning peak period and less than 400 vehicles per hour during the evening peak period. Capacity analysis shows that the proposed signal would operate at LOS C or better through the 2040 design year. Although not anticipated to be required until beyond 2040, the design accommodates the construction of a grade-separated ramp connecting EB Route 364 to Mid Rivers Mall in the future, if construction of this ramp is ever warranted.
- #3** Route 364 at Motherhead is grade separated, with the Route 364 profile going over Motherhead.
- #4** Route K will be a single point urban interchange (SPUI). The proposed SPUI preserves capacity along Route K and maximizes the interchange capacity by combining all ramp movements into one traffic signal. This removes a traffic signal phase from the interchange and optimizes traffic signal spacing. It also provides better lane utilization along Route K than the partial cloverleaf design. This design includes improvements along Route K and in the immediate vicinity of the interchange that will maximize the capacity of the connection to Route 364 while enhancing the carrying

- capacity of Route K. This will provide high-quality service at the interchange (LOS D or better for all intersections) through 2040.
- #5 Route N will remain in place and become the outer road servicing the north side of Route 364. Route N will be extended to the west from Bates Road/Stump Road to intersect Bryan Road.
 - #6 The south outer road has been constructed and will service McCluer Road [and Bates Road].
 - #7 Bryan Road will be a partial folded diamond interchange, which preserves capacity along Bryan Road by combining the westbound ramp and North Outer Road traffic movements at one traffic signal, thus eliminating a signalized intersection and optimizing traffic signal spacing. This will provide high-quality service at the interchange (LOS D or better) through 2040.
 - #8 Hanley Road will be grade separated with Route 364 going over Hanley Road, thus preserving existing mobility and access options that will attract traffic from Bryan Road.
 - #9 Route 364 at Henke is grade separated, with the Route 364 profile going over Henke. This alternate includes a half diamond interchange at Route 364 and Henke Road servicing the east side of the interchange. This will divert significant traffic volume from Bryan Road, preserve capacity on Bryan Road for future growth, and allow the Route N and Feise Road intersections to function at acceptable LOS through the design life of the project. The Henke Road intersection will operate at a LOS B or better through 2040.
 - #10 Route 364 and I-64 will be a fully functional interchange with multiple free flow movements. In lieu of a directional EB I-64 to EB Route 364 ramp, a loop ramp will be constructed to handle this movement. EB I-64 to WB Highway N ramp will remain functional and unchanged. WB I-64 to EB Route 364 movement will be accessed by a new ramp. WB I-64 to WB Route 364 ramp will remain functional and merge onto WB Route 364. EB Route 364 to EB I-64 will remain functional and unchanged. EB Route 364 to WB I-64 will remain functional and unchanged. WB Route 364 to EB I-64 will remain functional and unchanged. WB Route 364 to WB I-64 movement will be accessed by a new ramp. The full cloverleaf interchange provides adequate capacity and good traffic operations through the design life of the project. The only portion of the semi-directional interchange that is not included with the design is the EB I-64 to EB MO 364. A loop ramp will be constructed for this movement that will include a weaving section with an anticipated opening day (2014) operation of LOS B and 2040 operation of this weaving area is LOS D. The geometric design of this loop ramp is compatible with the future fly-over ramp when and if it is needed in the future.
 - #11 A connection is already constructed west of Route 40 to tie Page Avenue into Route N, where four lanes will converge into two west of the interchange before it joins to the existing Route N.
 - #12 The north outer road will be constructed from Bates Road to Bryan Road but not from Bryan Road to the west. The north outer service road from Bryan Road to the west can be constructed at any time in the future with no impacts to traffic along Route 364. This frontage road will fit within the established right of way and can easily tie into the cut and fill slopes of Route 364. A future roundabout intersection can be constructed at the frontage intersection with Bryan Road ramps in the NW quadrant of the interchange. A future roundabout can be constructed at the Henke Road Ramp and Frontage Road intersection in the NE quadrant of the interchange. The North Outer Road

between Bryan Road and Technology Drive is not needed to support efficient traffic flow on Route 364 or the local roadway system in the foreseeable future. The North Outer Road was planned in the early 1990s, before Feise Road was improved and extended and Technology Drive was built. In 2004–2005, Feise Road was improved to a three-lane cross section and extended west of Hanley Road, and Technology Drive now connects Feise Road to the I-64 North Outer Road. These new roadways have eliminated the need for an extended North Outer Road.

Impacts

Right-of-Way and Socioeconomic Impacts

After the ROD was issued in 1993, most of the right of way needed to complete the Page Avenue Extension was protected from development in anticipation of construction. Although the surrounding areas have seen extensive development, that development was carried out with the roadway construction in mind, thus limiting (if not negating) any adverse socioeconomic impacts from the final construction. These areas will benefit from completion of the planned transportation system around which their development occurred.

MoDOT is in the process of acquiring approximately 4.95 acres and anticipates possession of all right of way in the spring of 2013. Many relocations have taken place since the original EIS in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and all provisions of 23 CFR and 49 CFR Part 24. When the design-build contract procurement began, there were eight remaining relocations. As this reevaluation was prepared, one relocation remains that should be complete by the time the contract is signed with a successful proposer.

The project will not bisect any neighborhoods other than those described in the original EIS (Greenwood Acres, Cottle Heights, and Westwood Manor). Two community centers—St. Charles County Skate Park and Dardenne Prarie City Hall Park—are adjacent to the project corridor. Access to their current entrances will be maintained during construction, although minor detours may be necessary for short durations. Impacts will be minimized by encouraging public communication with submittal of a Public Information Plan and traffic control in accordance with the *Manual on Uniform Traffic Control Devices*.

Farmland

The project was rated for farmland conversion impact during development of the original EIS. According to the August 31, 1989, Farmland Conversion Impact Rating completed by NRCS, the proposed project had both prime or unique farmland and farmland of statewide or local importance. Although the right of way requirements have been reduced since then, the farmland rating is still pertinent due to the similarity in location. Given the reduction in farmland impacts, therefore, no further assessment is needed. Furthermore, much of the proposed and set aside right of way now falls within city limits. The portion of the project corridor within city limits meets the Farmland Protection Policy Act (FPPA) definition of “land committed to other uses” and does not need to be evaluated.

Floodplains

The proposed roadway embankment crosses the Dardenne Creek floodplain, which is also the shared floodplain with the Crooked Creek tributary. The roadway has a northwest to southeast alignment, and both creeks generally flow west to east. The two creeks share floodplains in the vicinity of the roadway crossing. Land use in the area is primarily agricultural floodplain, bordered with residential high ground

and some utility easements. The channel bank edges of Dardenne Creek and Crooked Creek include agricultural levees having locations of significant breaches. The primary land cover is row crops with trees along the creeks. A review of historic USGS quadrangle maps indicates Dardenne Creek was channelized between 1903 and 1937. Originally Dardenne Creek was the meandering stream that is now called Crooked Creek, and the channelized portion was unnamed. Between 1940 and 1954, the channelized portion became known as Dardenne Creek and the meandering portion became Crooked Creek.

The project impacts approximately 7,900 linear feet (about 120 acres) of 1% floodplain and regulatory floodway associated with Dardenne and Crooked Creeks. The new bridges that will be constructed over these creeks and fill for the new road embankment will be placed within the floodplain and regulatory floodway. Approximately 6,565 feet of channel along Dardenne Creek will be re-graded in order to achieve a “no rise” condition. MoDOT submitted a floodplain development permit application and “no rise” certification based on the conceptual design to the State Emergency Management Agency (SEMA), which issues floodplain development permits for projects involving the state of Missouri. A permit conditional on the Federal Emergency Management Agency’s (FEMA’s) approval of the Letter of Mapping Revision (LOMR) that will be submitted upon completion of the project was received August 29, 2012.

FEMA Buyout Lands: The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program (HMGP), including the acquisition and relocation of flood damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to “buy out” flood damaged property, which had been affected by the Great Flood of 1993.

These FEMA buyout properties have numerous restrictions that are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving use of these properties should take into consideration that obtaining an exemption from FEMA can take 2–3 years and would likely be a permanent easement rather than a transfer of property.

Available references indicate that there are three FEMA buyout properties on Dardenne Drive, approximately eight tenths of a mile north of the project area. The project will not impact these properties.

Biological Resources

The Biological Assessment in the 1992 FEIS stated that three federally listed species were found within or near the 21-mile corridor studied—the pallid sturgeon (*Scaphirhynchus albus*), the sicklefin chub (*Macrhybopsis meeki*, formerly *Hybopsis meeki*), and the bald eagle (*Haliaeetus leucocephalus*). This reevaluation covers only the westernmost 8.9 miles of the overall corridor, as the rest is constructed.

Although the pallid sturgeon is federally listed as endangered, this species occurs within the lower Mississippi River and throughout the Missouri River (associated with an earlier construction phase east of the reevaluation limits). The species does not occur in Dardenne and Crooked Creeks and will not be affected by the action discussed herein.

Like the pallid sturgeon, the sicklefin chub is a species associated with the Missouri River Basin and the Mississippi River basin downstream of the confluence with the Missouri River. In 1992, this species

was a candidate for federal listing. However, it was removed from the candidate list in 2001 because it was found to be more common than previously thought.

Bald eagles were removed from the federal list of threatened and endangered species in 2007. However, the species is still protected by the Bald and Golden Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918. The Missouri Department of Conservation's (MDC's) Natural Heritage Database indicates that there is a nest approximately 2 miles south of the western project limit at the I-64/Route N interchange. The nest is located within the northeast corner of Busch Conservation Area and an adult was seen on the nest in 2011. No nests have been observed within the project corridor, however, so the current action should not impact this species.

In 1992 there were no records of rare or endangered bats in St. Charles and St. Louis Counties, although the FEIS mentioned several bat species as possibly being present in the area at times during the year. More recently, federally listed endangered Indiana bats (*Myotis sodalis*) have been found within 5 miles of the project location. This species hibernates in caves during the winter and uses live or dead trees with loose, peeling bark to roost and raise young during the summer. A review of the Missouri Department of Conservation's Natural Heritage Database revealed several records for Indiana bats captured during the summer of 2011 in the U.S. Army Weldon Spring Training Center south of the project corridor.

In accordance with Section 7 of the Endangered Species Act, MoDOT conducted consultation with the U.S. Fish and Wildlife Service (FWS) to address project impacts to approximately 100 acres of forested habitat that could potentially contain roost and maternity trees used by Indiana bats. MoDOT proposed the conservation measure of identifying all potential roost and maternity trees within the project corridor and removing them between November 1 and March 31 when the bats are hibernating in caves. Consultation concluded February 3, 2012, with FWS concurrence that this project may affect, but is not likely to adversely affect, the Indiana bat. During November 2012, MoDOT biologists identified trees in the project corridor with the characteristics preferred by Indiana bats. The removal of these trees, which represented only marginally suitable habitat, began in November 2012 and will be complete prior to March 31, 2013.

There are no other anticipated impacts to threatened or endangered species within the project corridor. Development and agriculture have fragmented wooded areas within the corridor, and these areas were disturbed in the past. Dardenne Creek was channelized and straightened in the early twentieth century and agricultural levees are a prominent feature along the banks of both Dardenne and Crooked Creeks. The levees have largely eliminated functional riparian corridors or floodplain habitats that could be used by species of conservation concern. The remaining habitat impacted by the project is suitable for generalist species that have adapted to urbanization and anthropogenic disturbance.

Wetland/Stream Impacts

The extended Individual Permit for the entire Page Avenue corridor expired in December 2011. A new Individual Permit Application was submitted to the Corps December 18, 2012. The impacts are shown in the table below. The COE has verbally approved on-site mitigation consisting of wet prairie and riparian tree plantings in the overbank excavation areas along Dardenne Creek.

Feature	Length (linear feet)	Area (acres)
S1	485	0.02
S2	615	0.04
S3	425	0.03
S4	400	0.02
S5	275	0.003
S6	175	0.02
S7	200	0.005
S8 Tributary B	1,260	0.58
S9 Dardenne Creek	5,460 (bank impact for Overbank/Mitigation)	
S10 Crooked Creek	410	Bridge
S11	490	0.01
S12	394	0.03
S13	2,150	0.49
S14	446	0.03
P1		0.90
P2		0.017
W1		0.0092
W2		0.032
M1 Top Soil Pit		6.81

Note: Locations of features listed in table are depicted on pages 19 and 20.

Water Quality

The design-build contractor will obtain a Section 402 stormwater permit (Missouri State Operating Permit) from the Missouri Department of Natural Resources (MDNR). The MDNR-issued 402 permit requires the permit holder to develop a Storm Water Pollution Prevention Plan (SWPPP) to prevent or minimize adverse impacts to streams, water courses, lakes, ponds, wetlands, or other impoundments within and adjacent to the project area. The SWPPP will describe best management practices and procedures designed to reduce suspended solids, turbidity, and downstream sedimentation that may degrade water quality and adversely impact aquatic life. The SWPPP will provide for temporary and permanent erosion and sediment control measures that may include a combination of ditch checks, silt fence, berms, slope drains, sediment basins, temporary and permanent seeding, etc.

Public Lands

Earlier construction phases east of the reevaluation limits involved the use of public lands eligible for Section 4(f) and Section 6(f) protection. However, Section 601 of the Pipeline Security Act of 1992 authorized the Secretary of Transportation to waive the requirements of Section 4(f) for the proposed Red Alignment (the selected alignment) of the Page Avenue Extension. Further information about the provisions of the waiver can be found in the original Record of Decision.

In any case, the action covered in this reevaluation does not use any public lands eligible for Section 4(f) or Section 6(f) protection. One property, owned by St. Charles County and next to the St. Charles County Youth Activity Park, was set aside by the County specifically to be used for the Route 364 alignment (see letter on pages 21–22). This property was not used for recreational purposes, nor was it intended for recreational use when purchased. No other publicly owned lands are being acquired for this final phase of the project.

Hazardous Waste

The area near the project corridor is a mixture of rural, wooded, and private homes. A 2012 file search of the project area found no hazardous waste sites within the alignment. MoDOT environmental personnel also conducted a physical survey of the corridor November 6–9, 2012, and found no hazardous waste in the project area. There are some solid waste concerns, such as old household dumps, scrap tires, and the possibility of wells or cisterns and unregistered heating oil tanks, that will be handled by the contractor. The potential to encounter wastes from sites unknown to MoDOT should always be a consideration. Any unknown sites that are found during project construction will be handled in accordance with federal and state laws and regulations.

Cultural Resources

In 1992 a Memorandum of Agreement (MOA) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the Missouri Department of Transportation, and the Missouri State Historic Preservation Officer (SHPO) was developed to address archaeological investigations and architectural resources indirectly affected by the construction of the Route D project in St. Louis and St. Charles Counties, Missouri (MoDOT Job No. J6U0803). The original project number and route designation changed in the ensuing two decades, with Route D becoming Route 364 and J6U0803 now designated as J6U1028.

The only remaining architectural resource the FEIS identified is the John Campbell House. The Campbell House is a one-and-a-half story, 1838 stone building significant for its craftsmanship. The house is outside the right of way for this project and will be indirectly affected. The MOA specifies that plantings and construction of a retaining wall would be implemented to screen the project from the house. Although the current project impacts do not require the construction of a retaining wall, MoDOT determined through consultation with the SHPO that plantings or screening to shield the house will be provided, if desired by the owner. This will be included in the design-build contract and will occur before December 2014 project completion.

MoDOT historic preservation staff conducted archaeological investigations for the project in 2012 from Mid-Rivers Mall Road west to I-64 and identified twenty archaeological sites within the corridor. Eighteen of these sites (23SC438, 23SC822/825, 23SC824, 23SC828, 23SC831, 23SC832/23SC834, 23SC833, 23SC835, 23SC837, 23SC838, 23SC839, 23SC841, 23SC840, 23SC842, 23SC843, 23SC845, 23SC846, and 23SC847) were specifically mentioned in the MOA.

Using the MOA for guidance, the eighteen sites in the MOA were reexamined and two additional sites (23SC2180 and 23SC2181) were identified. This reevaluation was submitted to SHPO for concurrence that 17 sites were not eligible for listing on the National Register of Historic Places (NRHP) (23SC438, 23SC824, 23SC828, 23SC831, 23SC832/23SC834, 23SC833, 23SC835, 23SC837, 23SC838, 23SC839, 23SC841, 23SC840, 23SC842, 23SC843, 23SC845, 23SC846, and 23SC847), site 23SC2181 would not be impacted, and sites 23SC822/825 and 23SC2180 needed further investigation to determine their NRHP eligibility. The SHPO concurred with these findings in a letter dated October 11, 2012 (SHPO Log No. 138-SC-12; see page 23).

A Phase II investigation of sites 23SC822/825 and 23SC2180 concluded that site 23SC2180 is not NRHP eligible and site 23SC822/825 is considered eligible under criterion D. Given site 23SC822/825's possible NRHP eligibility, discussions with the MoDOT project team determined that negative impacts to the site could be minimized, thus having a no adverse effect to this historic property. The SHPO

concluded with these findings in a January 24, 2013, letter (SHPO Log No. 138-SC-12; see page 24). Per MoDOT/SHPO consultation on site 23SC822/825, a MoDOT archaeologist will monitor the excavation of proposed ditches within the site limits and shall be granted sufficient time to document and recover any significant archaeological deposits exposed.

Air Quality

This project is located in an area that currently violates two of the Clean Air Act's National Ambient Air Quality Standards (NAAQS). NAAQS for particulate matter (PM_{2.5}, annual primary standard) and ground level ozone (Ozone) are the two requirements not in compliance in the St. Louis region's Missouri portion of the air quality boundary (Jefferson, Franklin, St. Charles and St. Louis counties and the City of St. Louis). The draft Ozone National Ambient Air Quality Standards (NAAQSs) were withdrawn September 2, 2011, so as not to require that state and local governments begin implementing a new standard which will be reconsidered in 2013. The East-West Gateway Council of Governments (EWGCOG)—the region's Metropolitan Planning Organization—must ensure that all capacity projects included in the Transportation Improvement Program (TIP) within the Missouri portion of the air quality boundary meet air quality conformity requirements established by the Clean Air Act (CAA). EWGCOG has done air quality modeling for the project and it is in conformance with 40 CFR parts 51 and 93 as indicated in the FEIS and ROD. This added-capacity project is included in the 2013–2016 TIP as Numbers 6006S-13 and 6006-96.

The need for project “hot spot” analysis was considered when the previous construction phase (Phase II) of the Page Avenue extension project was programmed. At that time, the project was determined to be regionally significant and located within the PM_{2.5} nonattainment area but not in the CO maintenance area. A project-level hot spot analysis was determined not to be required for the Phase II project because the ADT and diesel truck ADT were not sufficient to classify it as a "project of air quality concern" that would require a project level analysis.

Similarly, this final project phase (Phase III) is regionally significant and located within the PM_{2.5} nonattainment area but not in the CO maintenance area. The ADT of 26,500 vehicles per day and diesel truck ADT of 2120 trucks per day are not sufficient to classify it as a "project of air quality concern" that would require a project-level hot spot analysis.

Noise Impacts

In keeping with the original EIS, this project falls under MoDOT's 1991 noise policy. Noise impacts were identified on the three easternmost developments on the alignment. In keeping with the 1991 noise policy, these areas will be reevaluated to determine whether noise abatement is both reasonable and feasible prior to any construction activities. If any noise abatement is found to be both reasonable and feasible, it will be constructed as part of the project. Minor design modifications, such as an acceleration lane or auxiliary lanes included in some design-build proposals, will also fall under the 1991 policy. Such modifications are exempt under the 1991 noise policy and would not result in a change in the number of impacts because the noise study conducted for the EIS evaluated a worst-case scenario.

Construction Impacts

Construction of the project will result in some short-term, temporary adverse impacts near the proposed action, including noise, dust, and pollutants discharged by construction equipment as well as impacts to motorized and non-motorized traffic and to businesses in the area. These kinds of short-term impacts are generally among the most readily mitigated impacts. Pollution control measures outlined in the Missouri

Standard Specifications for Highway Construction will be used to minimize impacts associated with the construction of any alternative; these measures pertain to air, noise, and water pollution as well as traffic control (e.g., detours) and safety measures. Best management practices will be employed to minimize or mitigate potential impacts.

Contractors must comply with all federal, state, and local laws and regulations to protect air quality during construction. They must also work within the requirements of their operating permits issued through the Missouri Department of Natural Resources. Exhaust emissions from construction equipment will be controlled in accordance with emission standards prescribed under state and federal regulations. Any burning, when permitted, will be conducted in accordance with applicable local laws and state regulations.

Contractors are required to control fugitive dust to keep it from leaving project limits, just as they must make efforts to control soil particles that stormwater tends to carry away.

To reduce the impacts of construction noise, MoDOT has special provisions in the construction contract requiring that all contractors comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. Construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications.

The Missouri Department of Natural Resources (MDNR) regulates the control of runoff from land disturbance. Erosion control measures must be put in place before land clearing begins. The design-build contractor will obtain a Section 402 stormwater permit (Missouri State Operating Permit) from the MDNR. The Section 402 permit requires the permit holder to develop a Storm Water Pollution Prevention Plan (SWPPP) that will provide for temporary erosion and sediment control measures. Careful refueling practices will limit spills of gasoline and diesel fuels. Oil spills can be minimized by frequent checks of construction equipment.

A Traffic Management Plan (TMP) to manage the work zone impacts will be developed during project design. A TMP lays out a set of coordinated traffic management strategies. Traffic management strategies for this project could include staging construction to impact traffic as little as possible, conducting active public information and outreach, scheduling high-impact work for hours of off-peak traffic, installing temporary traffic control devices, and possibly enlisting the help of law enforcement, if necessary.

MoDOT will send a news release out to local newspapers and radio stations giving local commuters information about construction activities that could impact their daily travels. MoDOT also publishes construction-related news releases and information on its web site at www.modot.org for those who have Internet access.

There are numerous utilities located along and within the project corridor. It is anticipated that several of the existing utilities will be in conflict with the design-build contractor's final design details. The extent of the necessary utility relocations will not be determined until the final design is complete. MoDOT utility engineers, contractor representatives, and utility representatives will work out details of individual utility adjustments on a case-by-case basis. Collaboration between all parties is necessary to minimize impacts to utilities. When utility relocations are necessary, they will be performed according

to MoDOT's Engineering Policy Guide Category 643 Utility Procedures and reimbursement policies.

Commitments

The commitments listed herein were also included in the design-build RFP.

The Contractor shall comply with commitments, permits, clearances, and mitigation measures in the Final Environmental Impact Statement and Record of Decision (ROD). If the Contractor proposes an alternative or a modification to the selected alternative in the ROD, the Contractor will be responsible for complying with the required National Environmental Policy Act (NEPA) documentation as determined by the Federal Highway Administration (FHWA).

During preparation of the final design, the potential for sinkholes proximate to the roadway will be specifically identified and the Contractor shall take measures to ensure that construction activities will not impact groundwater connections.

During construction, the Contractor shall follow the Missouri Department of Natural Resources (MDNR) Solid Waste Management Program.

The Contractor shall be responsible for acquiring a Missouri State Operating Permit Section 402 NPDES (Land Disturbance Permit) for this project.

The Contractor shall conduct all Utility Work in accordance with the Contract Documents and the Utility Agreements.

Other than site 23SC822/825, the construction of the preferred alternative as shown in the Right of Way Plans has been cleared with SHPO to comply with Section 106 of the National Historic Preservation Act. The design-build contract will stipulate that no ground disturbance shall occur at site 23SC822/825 without the presence of a MoDOT archaeologist to monitor the excavation of ditches and recover any significant archaeological deposits exposed. If the Contractor elects to work outside the cleared area, they will be required to obtain any additional Section 106 clearances that may be required by SHPO. Plantings shall be used to provide screening to the Captain John Campbell House (West of Route K, north of Route 364) if the owners of the house want it.

The contractor shall install 300 new trees throughout the corridor.

The Indiana Bat is a known endangered species present in Missouri. In November 2012 MoDOT identified all trees in the right of way that are considered suitable roosts for Indiana bats and began removal of those trees, which will be complete before March 31, 2013. The Contractor shall identify and clear all other trees and forested areas needed for the work prior to October 31, 2013.

MoDOT will obtain Clean Water Act Section 401 and 404 permits from the U.S. Army Corps of Engineers (COE). The Contractor is encouraged to minimize stream and wetland impacts in their proposal and during final design and construction. This project will require an individual 404 permit from the Corps of Engineers. MoDOT will obtain the individual 404 permit and the 401 permit within four months from the time acceptable preliminary plans are provided.

MoDOT and the COE have agreed on mitigation measures and costs for the project, based on stream impacts anticipated:

- A box culvert proposed at Tributary B would require mitigation costs not to exceed \$160,300
- The Dardenne Creek basin shall be seeded with 13 acres of prairie grass including the overbank excavation areas of Dardenne Creek.
- The Dardenne Creek channel shall be restored with 3,000 seedling trees planted in three rows with an eight-foot center-to-center spacing between the top of the Dardenne Creek bank overexcavation.

Temporary stream crossings shall be designed so that no drops or dams are created that impede the passage of fish. Stream channel modifications shall be minimized. Where modifications are necessary for highway design safety or protection of state resources, they shall be designed using the Missouri state channel modification guidelines. The following materials shall not be used for stream bank stabilization: earthen fill, gravel, fragmented asphalt, broken concrete with exposed rebar, large slabs of unbroken concrete, tires, vehicle bodies or liquid concrete, including grouted riprap. During construction, clearing of vegetation shall be kept to the minimum necessary to accomplish the project. Petroleum products, hazardous chemicals, hazardous waste, equipment, and solid waste shall not be stored after construction hours below the ordinary high water mark. Equipment shall not be operated in wetland areas, except where permitted, expressed by the project plans, or the engineer in writing. Petroleum products shall not be stored in wetlands. Riparian areas and stream banks shall be restored to a stable condition as soon as possible after final contouring. Work done in streams shall be conducted during low flows whenever that is reasonably possible. Petroleum products spilled into any stream or body of water or in areas where those materials could enter a stream or body of water shall be cleaned up immediately and the collected petroleum products shall be disposed of properly. MoDOT shall be notified immediately of the spill and the remediation actions taken.

MoDOT has obtained a No Rise Certificate and a Floodplain Development Permit for Dardenne Creek and Crooked Creek based on the preferred alignment in the right of way plans. The Contractor shall be responsible for obtaining a No Rise Certificate and a Floodplain Development Permit for these creeks as a result of any deviation or modification to the bridge pier locations or, bridge openings or channel grading below 478.00 National Geodetic Vertical Datum of 1929 (NGVD-29) as part of the final design.

The Contractor shall be responsible for obtaining a No Rise Certificate and a Floodplain Development Permit for Tributary B.

The Contractor shall perform a sound study, based on their proposed design, for properties within 500' of the corridor between Motherhead Road and the Route 94/364/Mid Rivers Mall Drive interchange. The Contractor shall perform the noise analysis in this area using MoDOT's 1991 noise policy, for which the criteria shall be as follows, in accordance with the FEIS and ROD:

- Noise wall must provide noise reduction of at least 5 dBA.
- Noise wall must provide an Leq of 65 dBA or less.
- Noise wall must provide attenuation for more than one receptor.
- Noise wall must be 18' or less in height above ground.
- Noise wall must not interfere with normal access to the property.

- Noise wall must not pose a traffic safety hazard.
- Noise wall must not exceed a cost of \$20,000 per benefited receptor.

The Contractor shall submit a plan to mitigate construction noise and vibration impacts that meets all applicable laws and regulations. This project includes dense residential properties adjacent to the corridor. MoDOT is interested in minimizing nighttime construction noise impacts to the residents.

Conclusion

There are no other additional impacts to consider. The affected environmental and cultural resources are well within the footprint of the original EIS. We request your concurrence that the Record of Decision, issued on January 6, 1993, is still applicable and this project is in compliance with NEPA.

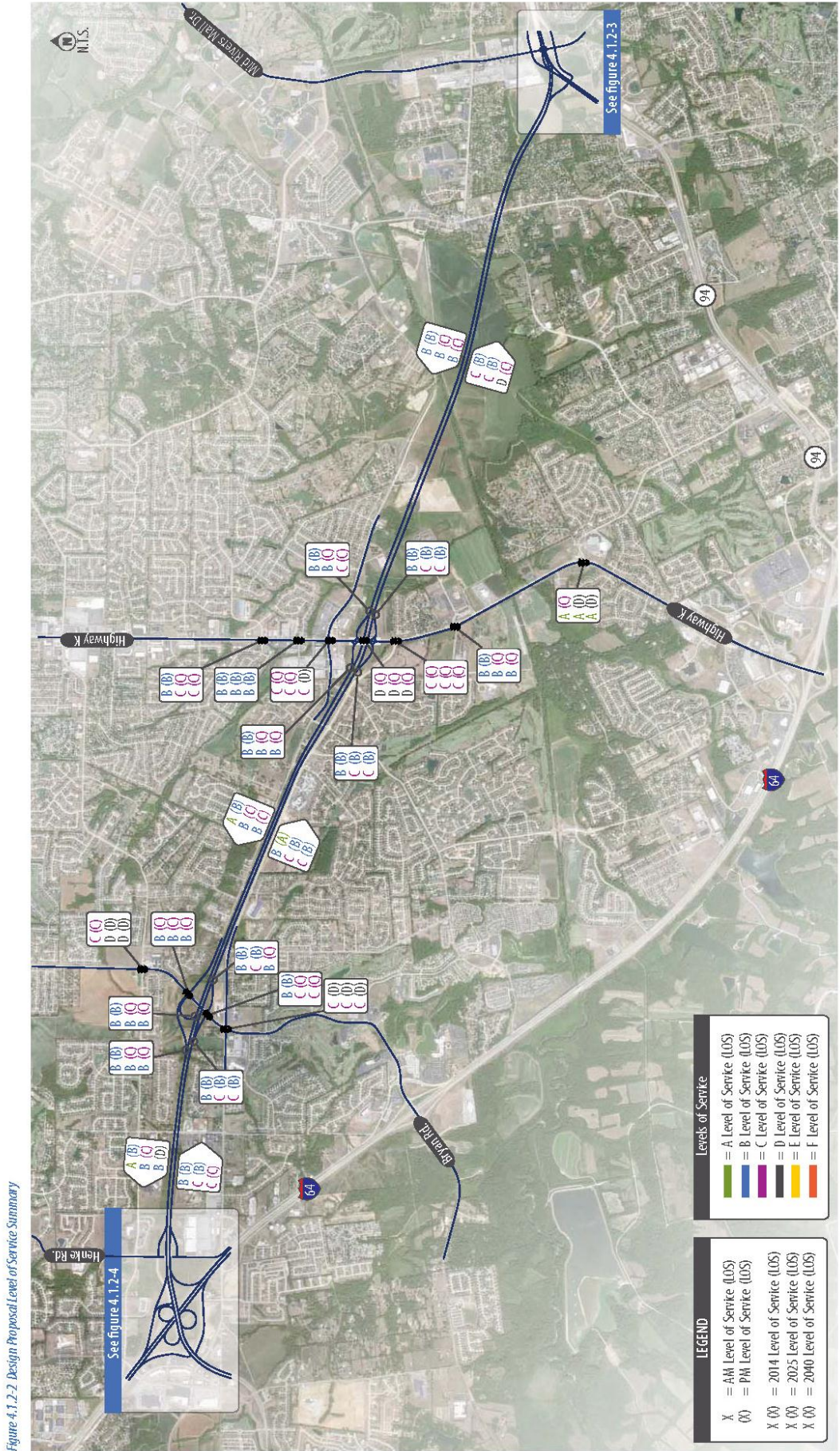


Figure 4.1.2.2 Design Proposal Level of Service Summary

Figure 4.1.2-3 Mid Rivers Mall Drive/Route 94/Route 364 Interchange Level of Service Summary

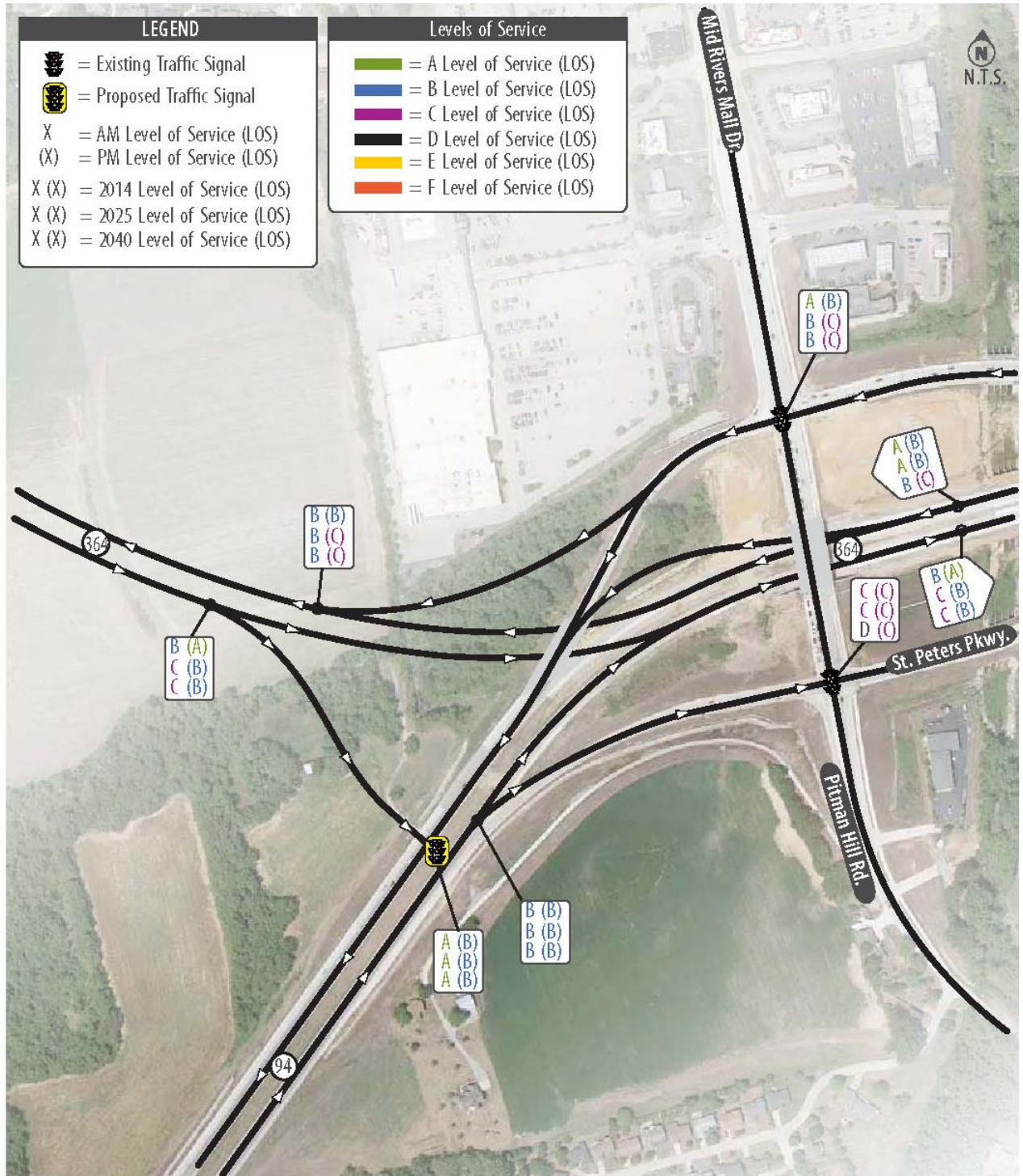
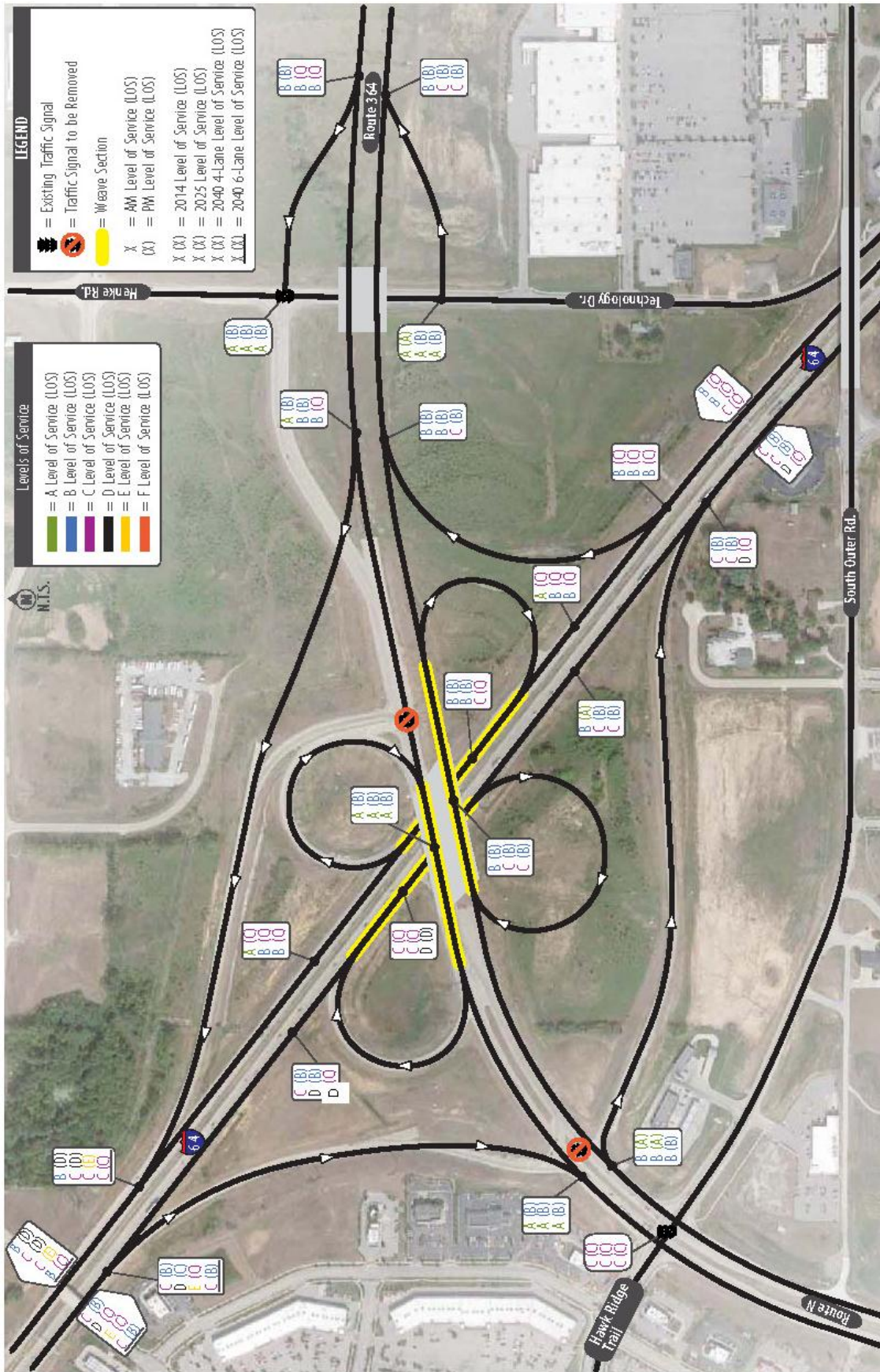
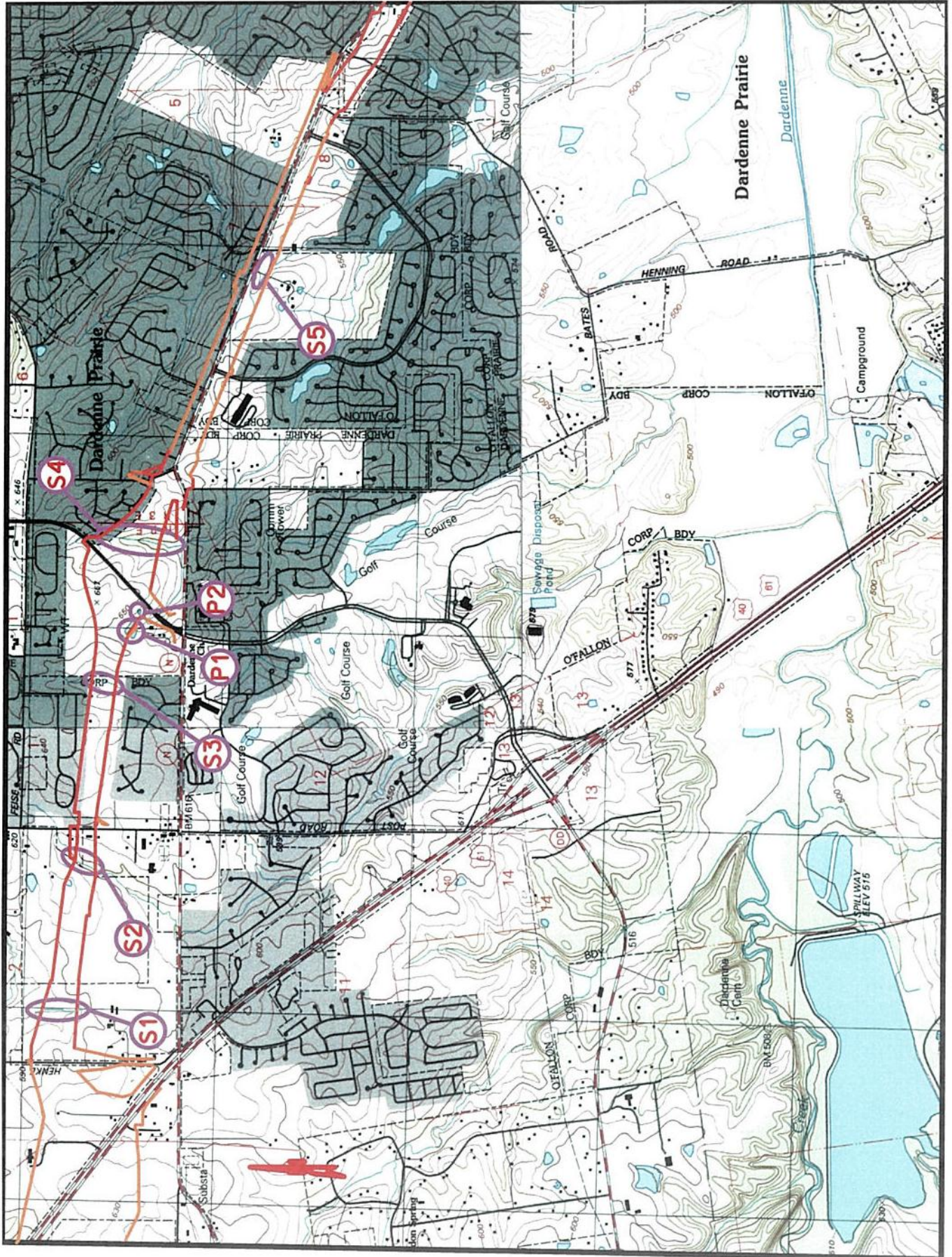
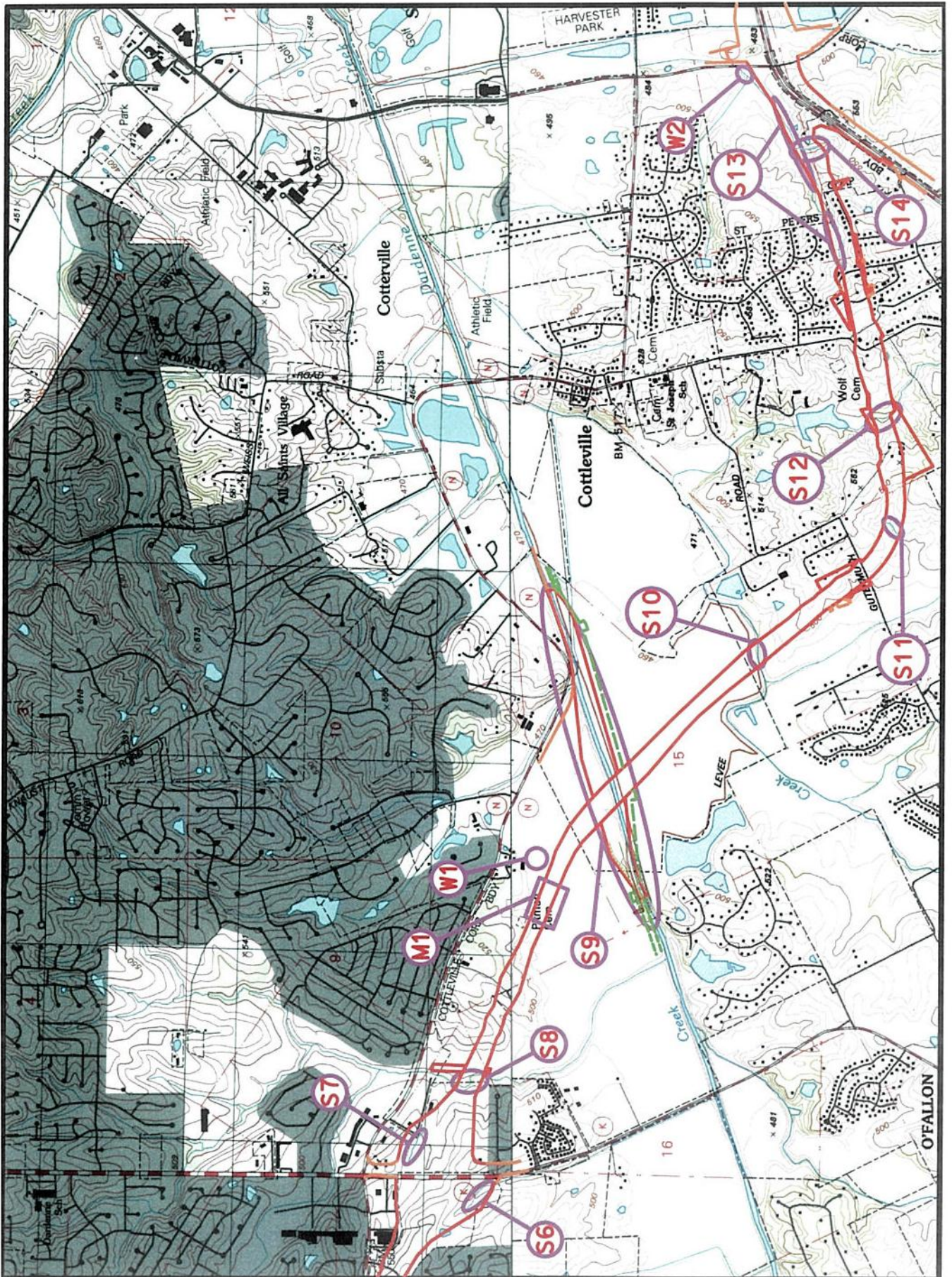
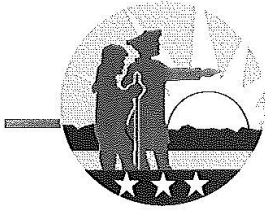


Figure 4.1.2.4 1-64/Route W/Route 364 Interchange Level of Service Summary









Office of the County Executive

St. Charles County

Don Boehmer
Director of
Intergovernmental Affairs

July 25, 2012

Mike Castro, Project Manager
MoDOT
1590 Woodlake Drive
Chesterfield, Missouri 63017

RE: Excess Land Adjacent to the Youth Activity Park

Dear Mr. Castro:

Please be advised that St. Charles County is aware of the Missouri Department of Transportation project to construct Phase 3 of Missouri Highway 364. We are further aware that a portion of land owned by St. Charles County is needed for the right-of-way in order to construct the project.

The land in question, which is adjacent to the County's Youth Activity Park, was acquired by the County in a fair market value purchase in 2001. The source of funds for the purchase was the County's Capital Projects Fund in the County Budget. That fund is not funded in any way by the County's dedicated Parks Use Tax revenues. The Parks Use Tax revenues are held in a separate fund—they do not commingle at any time with the County's general revenue or the Capital Projects revenue. No other type of land conservation funds were used for the acquisition, either.

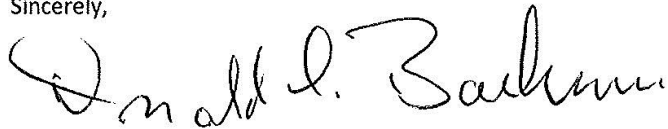
At the time of this land purchase, the approximate alignment of the future Highway 364 was known to the County. The County's plan was to acquire the land, develop part of it for a park, and hold the remainder vacant to help preserve the future Highway 364 right-of-way corridor. The exact amount of land needed for the future right-of-way was not then known, but the County intended to set aside more than enough land to accommodate the planned highway. The land was unimproved when the County acquired it. Since that time, the County constructed what is known as the Youth Activity Park on a portion of the land. That construction left several acres at the north end of the property untouched. It also fenced the perimeter of the portion of the property that was to be used as a park. The park, and all recreational activity on the property, has never extended north of the existing fence line. MoDOT's latest right-of-way plans show the location of the northern fence line, which is still south of the location of the 4.62 acres of proposed right-of-way.

Page 2

Therefore, the land that comprises the proposed right-of-way has never been used for recreational purposes and in fact was never intended to be used for recreational purposes. It was acquired as surplus land to hold until it was needed for Highway 364. St. Charles County is fully supportive of the project. The proposed acquisition of right-of-way from the County will not compromise the activities, features and attributes that make the Youth Activity Park an asset to the community or otherwise eligible for Section 4(f) protection.

If you would like any further information about the history of the County's ownership of the land in question, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Donald L. Boehmer". The signature is written in a cursive style with a large, stylized initial "D".

Don Boehmer,
Director of Intergovernmental Affairs

cc: Greg H. Dohrman, Assoc. County Counselor

Kevin Ward
January 25, 2013
Page 23



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

October 11, 2012

Robert L. Reeder
Historic Preservation Manager
Missouri Department of Transportation
P.O. Box 270
Jefferson City, Missouri 65102

Re: Route 94, Job No. J6U1028 (FHWA) St. Charles County, Missouri

Dear Dr. Reeder:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which require identification and evaluation of cultural resources.

We have reviewed the Section 106 Survey Memo entitled *Re-evaluations of Sites Identified during the Pge Avenue extension Corridor Study, St. Charles County, Missouri*. Based on this review, it is evident that a thorough and adequate cultural resources survey has been conducted. We concur with your recommendation that archaeological sites 2323SC822/825, 23SC2180 and 23SC2181 may be eligible for inclusion in the National Register of Historic Places.

We understand that 23SC822/825 will require additional testing, and that it may be possible to avoidance 23SC2180 and 23SC2181 of this site. If avoidance is not feasible, Phase II testing should be conducted in order to determine if these sites are eligible for inclusion in the National Register of Historic Places. The results of the evaluation should be submitted to the State Historic Preservation Office in accordance with the Council's regulations. Pending completion of this process, no actions should be taken that would foreclose consideration of alternatives to avoid or satisfactorily mitigate any adverse effects to historic properties.

We also concur the 23SC438, 23SC824, 23SC828, 23SC831, 23SC832, 23SC834, 23SC833, 23SC835, 23SC837, 23SC838, 23SC839, 23SC840, 23SC841, 23SC842, 23SC843, 23SC845, 23SC846, 23SC847 and 23SC2055 are not eligible for the National Register. If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number (138-SC-12) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

A handwritten signature in cursive script that reads "Mark A. Miles".

Mark A. Miles
Director and Deputy
State Historic Preservation Officer

MAM:jd

c Peggy Casey, FHWA





Ernie E. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

January 24, 2013

Robert L. Reeder
Historic Preservation Manager
Missouri Department of Transportation
P.O. Box 270
Jefferson City, Missouri 65102

Re: Route 94, Job No. J6U1028 (FHWA) St. Charles County, Missouri

Dear Dr. Reeder:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the Section 106 Survey Memo entitled *Phase II Investigation of Sites 23SC822/825 and 23SC2180 for the Page Avenue Extension Project, MoDOT Job No. J6U1028*. Based on this review it is evident that a thorough and adequate cultural resources evaluation has been conducted of the project area. We concur with your recommendation that 23SC822/825 may be eligible for inclusion in the National Register of Historic Places, and that there will be **no adverse effect** with the condition that an archaeologist is present to monitor the ditch trenching at the site location.

We also concur that 23SC2180 is not eligible for inclusion in the National Register of Historic Places. Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions, please write the State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 attention Review and Compliance, or call Judith Dael at 573/751-7862. Please be sure to include the SHPO Log Number (13B-SO-12) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Handwritten signature of Mark A. Miles in black ink.

Mark A. Miles
Director and Deputy
State Historic Preservation Officer

MAM:d