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October 14, 2026

Jay C. Johnson

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Danielle Gosselin
Director
Office of Environmental Analysis
Surface Transportation Board
395 E Street, SW
Washington, DC 20423

Re: Docket No. FD 36500, CPKC Quarterly Environmental Mitigation Measures Report for June 15, 2026 to September 14, 2026

Dear Ms. Gosselin:

The Board's decision approving the merger in this proceeding requires CPKC to submit quarterly reports to the Office of Environmental Assessment "on the progress of, implementation of, and compliance with all Board-imposed environmental mitigation measures." The decision also explains that "[t]he Board's consistent practice in imposing environmental conditions is to mitigate only impacts resulting directly from the transaction." OEA studied those impacts in its EIS.

With this letter, CPKC is enclosing its fourteenth quarterly environmental mitigation measures report. You will see that the report covers mitigation for the impacts studied in the EIS during the quarter starting June 15 to September 14, 2026.

As always, we are happy to discuss these issues with you, so please contact me if you have any questions.

Sincerely,



Jay C. Johnson

cc: Elizabeth Webster

Joe Van Humbeck
Glen Wilson
Alan Summerville
Waymon Peer

CPKC Quarterly Environmental Mitigation Measure Compliance Report Number 14

This report includes compliance activities completed between June 15, 2026 and September 14, 2026 (Quarter 2, Year 4 of the STBs oversight period following the acquisition of KCS by CP, STB Docket FD 36500).

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
1	General Mitigation Measures	***VM-General-01***. *The Applicants will continue to engage in good faith with potentially affected communities along the combined network, listen to their input related to the proposed merger and strive to reach negotiated agreements to address merger-related impacts.*	CPKC representatives continue to regularly meet with communities and their key stakeholders along the combined network to listen to their input and address their concerns. In addition to this regular cadence of meetings, including those centered around the implementation of mitigation (which are discussed further below), CPKC representatives continue to engage with communities in meetings and events to ensure open lines of communication and an ongoing dialogue.
2	General Mitigation Measures	***VM-General-02***. *The Applicants will follow all applicable Federal Railroad Administration (FRA) and Occupational Safety and Health Administration construction and operational safety regulations to minimize the potential for incidents during construction of the Capital Improvement Projects and operation of the combined network.*	During the reporting period, CPKC complied with all applicable FRA and OSHA regulations, except that CPKC received one Recommended Violation from the FRA related to operational safety of employees: I. *Recommended Violation – June 25, 2026 – South West Region, Failure to apply sufficient number of hand brakes to hold equipment.*
3	General Mitigation Measures	***MM-General-01***. *If there is a material change in the facts or circumstances upon which the Board relied in imposing specific environmental mitigation conditions, and upon petition by any party who demonstrates such material change, the Board shall consider revising its final mitigation, if warranted and appropriate.*	CPKC is not aware of any material changes in the facts or circumstances upon which the Board relied.
4	General Mitigation Measures	***MM-General-02***. *The Applicants shall submit quarterly reports to OEA on the progress of, implementation of, and compliance with all Board-imposed environmental mitigation measures. The reporting period for these quarterly reports shall begin on the date of the Board's final decision authorizing the acquisition and continue for seven years, or one year after the Applicants have completed capital improvements related to the acquisition, whichever is longer. The Applicants shall submit copies of the quarterly reports within 30 days following the end of each quarterly reporting period and distribute the reports to appropriate federal and state agencies, as specified by OEA.*	This is CPKC's Fourteenth quarterly compliance report, covering the period of June 15, 2026 to September 14, 2026.
5	General Mitigation Measures	***MM-General-03***. *To minimize the potential for impacts for impacts on biological resources, water resources, hazardous materials release sites, and cultural resources, the Applicants shall, to the greatest extent possible, confine construction activities related to the planned capital improvements to the area within the existing ROW.*	CPKC continues to work with the selected contractors to limit construction work to the greatest extent possible to the existing Right-of-Way (ROW).

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6	Freight and Passenger Rail Safety	***VM-Rail-01***. *The Applicants will comply with FRA and Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations applicable to the safe and secure transportation of hazardous materials.*	During the reporting period, CPKC complied with all applicable FRA and PHMSA regulations and did not receive any fines or notices of violation from the FRA related to the transportation of hazardous materials.
7	Freight and Passenger Rail Safety	***VM-Rail-02***. *The Applicants will comply with the Safety Integration Plan (SIP), prepared pursuant to 49 C.F.R. Part 1106, which may be modified and/or updated as necessary to respond to evolving conditions and/or new information. In the event of a reportable hazardous materials release, the Applicants will notify appropriate federal, state, and local agencies, as required under applicable law.*	CPKC continues to progress the integration plans set out in its approved Safety Integration Plan (SIP) and has regular communications with the FRA regarding the SIP. All reportable hazardous material releases were reported to appropriate federal, state and local agencies as required under applicable law.
8	Freight and Passenger Rail Safety	***VM-Rail-03***. *The Applicants will conduct Transportation Community Awareness and Emergency Response Program (TRANSCAER) workshops (training for communities through which dangerous goods are transported) in potentially affected communities that request this training. The Applicants will conduct the workshops in English and, upon request, Spanish. Training will include support for appropriate access to the AskRail app and its use to facilitate rapid, real-time access for qualified responders to information about hazardous materials in rail transportation.*	The CPKC Emergency Response and Hazardous Materials team completed 48 TRANSCAER and other training events during the reporting period, engaging with over 1,563 first responders and other participants.
9	Freight and Passenger Rail Safety	***VM-Rail-04***. *The Applicants will offer to fund the participation in railroad focused emergency response training at the Association of American Railroads' Security and Emergency Response Training Center in Pueblo, Colorado, of two qualified firefighters providing service within each of the potentially affected communities.*	Complete.
10	Freight and Passenger Rail Safety	***VM-Rail-05***. *The Applicants will leverage CP's extensive emergency response equipment assets by reviewing coverage of those assets across CPKC. The Applicants will either redistribute existing assets or add new equipment assets to improve emergency response capabilities relating to the potentially affected communities on CPKC.*	Complete.

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11	Freight and Passenger Rail Safety	***VM-Rail-06***. *The Applicants will abide by their commitments to Amtrak in their agreement dated December 17, 2021. In general, the Applicants will support the efforts of Amtrak and the Southern Rail Commission to establish Amtrak service between New Orleans and Baton Rouge, and study the potential for Amtrak service between Meridian, Mississippi and Dallas, Texas. Additionally, Applicants will work with Amtrak to increase the frequency on the Hiawatha service between Chicago and Milwaukee; extend Hiawatha service from Milwaukee to Saint Paul and create a second round-trip on the Twin Cities-Milwaukee-Chicago corridor; and establish passenger service through the Detroit River Tunnel, connecting Detroit to Windsor, Ontario in order to facilitate passenger service between Detroit and Windsor connecting to VIA Rail.*	• **Detroit to Windsor –** CPKC is in engaged with Amtrak on establishing this service. CPKC is waiting for Amtrak to present the proposed route and details on the new service. • **Twin Cities-Milwaukee-Chicago corridor –**Amtrak has started the new Borealis service on May 22, 2024 to great success. CPKC has been engaged with stakeholders on the new infrastructure projects required for the added service. The new infrastructure projects are still in the design phase. • **Hiawatha service –** CPKC has been working with stakeholders from Amtrak and Wis-Dot on the agreed upon infrastructure projects around the Milwaukee area. Design work continues to progress on these projects. Wis-Dot is still working to secure the funding for the infrastructure projects around the Milwaukee area. Once these projects are completed Amtrak will be allowed to add an eighth-round trip. • **New Orleans-Baton Rouge**: During the recent round of CRISI grants, CPKC supported and provided the local funding match for a LADOTD application to upgrade a series of rail bridges in order to allow for passenger rail service. • **I-20**: CPKC representatives remain engaged on its commitments to studying I-20 service having participated in their Corridor ID review this quarter.
12	Freight and Passenger Rail Safety	***MM-Rail-01***. *The Applicants shall comply with the SIP prepared under 49 C.F.R. part 1106 and 49 C.F.R. § 244.9, which may be updated as necessary, and shall continue to coordinate with FRA in implementing the SIP during the operations integration period. The ongoing safety integration process shall continue until FRA has informed the Board that the integration of Applicants' operations has been safely completed.*	CPKC continues to progress the integration plans set out in its approved Safety Integration Plan (SIP) and has regular communication with the FRA regarding the SIP.
13	Grade Crossing Safety and Delay	***VM-Grade Crossing-01***. *Although the Applicants have not identified any grade crossings that would require mitigation based on precedent established in other approved mergers, the Applicants will, upon request, work with potentially affected communities in support of securing funding, in conjunction with appropriate state agencies, for crossing mitigation projects where they may be appropriate under criteria established by relevant state transportation departments to increase the safety of existing at-grade crossings.*	CPKC continues to engage with communities interested in securing funding for crossing mitigation projects, in conjunction with communities both seeking to secure grade separation funding or crossing improvements as well as those who have secured funding to assist in implementation. CPKC provided support and contributed towards the local match for a Rail Crossing Elimination Grant application by the Village of Roselle, IL to upgrade crossing protection throughout the community.

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			CPKC supported and the City of Liberty utilized CPKC's community investment funds towards a Rail Crossing Elimination planning grant for a future grade separation. CPKC provided a letter of support for a Missouri DOT application for the Rail Crossing Elimination Grant for a grade separation in Joplin, MO.
14	Grade Crossing Safety and Delay	***VM-Grade Crossing-02***. *The Applicants will operate under the General Code of Operating Rules rule numbers 6.32.6 (Blocked Public Crossings) and 6.32.4 (Clear of Crossings and Signal Circuits), which provide that, when practical, a standing train or switching movement must avoid blocking a public crossing longer than 10 minutes and, when practical, cars, engines and other equipment should not be left standing closer than 250 feet from a road crossing when there is an adjacent track.*	During the reporting period, CPKC received 450 reports to its Public Safety Communications Center (PSCC) / Community Connect regarding trains occupying/blocking crossings along the entire CPKC US network (this includes reports from the public as well as reports from CPKC's Operations team). To be as complete as possible, CPKC also queried the FRA's Blocked Crossing Database. That database showed 386 reports of blocked crossings. Because the FRA database is independent of reports to CPKC's PSCC, these 386 blocked crossings may involve some of the same incidents reported to the PSCC.
15	Grade Crossing Safety and Delay	***VM-Grade Crossing-03***. *The Applicants will consult with potentially affected communities to improve visibility at roadway/rail at-grade crossing by clearing vegetation where practicable.*	CPKC undertook mechanical vegetation management at 101 crossings during the reporting period.
16	Grade Crossing Safety and Delay	***VM-Grade Crossing-04***. *Where practicable, the Applicants will investigate the potential to create alternative access for properties whose sole access will be blocked more than once per week by a train stationary longer than 10 minutes at a single location.*	No new alternate access roads were proposed during the reporting period.
17	Grade Crossing Safety and Delay	***VM-Grade Crossing-05***. *For the construction of additional track through road crossings within the limits of the Capital Improvement Projects, where practicable, the Applicants will consult with local transportation officials regarding detours and associated signs, as appropriate, or attempt to maintain at least one open lane of traffic, as practicable, to allow the quick passage of emergency and other vehicles.*	During the reporting period, CPKC did not need to close any road crossings to facilitate the construction of the Capital Improvement Projects.

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18	Grade Crossing Safety and Delay	***VM-Grade Crossing-06***. *The Applicants will notify Emergency Services Dispatching Centers for potentially affected communities of all crossings blocked by trains that are stopped and may be unable to move for a significant period of time.*	During the reporting period, the CPKC Public Safety Communications Center provided notice on 371 occasions to local Emergency Services Dispatching Centers on those occasions when a train was blocking a crossing and wouldn't be able to move for a significant period of time.
19	Grade Crossing Safety and Delay	***MM-Grade Crossing-01***. *The Applicants shall consult with appropriate state Departments of Transportation and other appropriate agencies, including the Illinois Commerce Commission for grade crossings in Illinois, prior to constructing, relocating, upgrading, or modifying grade crossings as part of the acquisition, including grade crossing warning devices, and shall abide by those agencies' reasonable requirements for the design of grade crossings and associated warning devices.*	CPKC remains engaged with appropriate state Departments of Transportation and other state agencies responsible for crossing safety.
20	Noise and Vibration	***VM-Noise-01.*** *The Applicants will fund the improvements necessary to allow any potentially affected community with an existing Quiet Zone to maintain that designation should the increase in merger related train traffic cause that community to fall out of compliance with FRA regulations.*	CPKC is not aware of any Quiet Zones which have fallen out of compliance with FRA regulations as a result of merger related train traffic increases.
21	Noise and Vibration	***VM-Noise-02.*** *While building the Capital Improvement Projects, the Applicants will work with their construction contractors to minimize, where practicable, construction-related noise disturbances between the hours of 2100 and 0700 local time.*	During the reporting period, all construction-related noise disturbances were conducted between the hours of 2100 and 0700 local time.
22	Noise and Vibration	***VM-Noise-03***. *In the construction of the Capital Improvement Projects, the Applicants will, where practicable and consistent with safe and efficient operating practices, use continuously welded rail in order to reduce wheel/rail wayside noise.*	All the Capital Improvement Projects have been designed with continuously welded rail.
23	Noise and Vibration	***MM-Noise-01***. *To minimize noise and vibration, the Applicants shall maintain rail and rail beds according to American Railway Engineering and Maintenance-of-Way Association standards.*	During the reporting period, CPKC complied with all applicable FRA regulations, except that CPKC received two Recommended Violations and one Issued Violation from the FRA related to the maintenance of rail and rail beds. A. *Recommended Violation – July 14, 2026 – Midwest Region, Failure to maintain the minimum number of crossties per FRA track class for each 39-foot segment of track.* B. *Recommended Violation – August 18, 2026 – South West Region, Tread portion of frog worn more than allowable.*

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			C. *Issued Violation – September 2, 2026 – Shreveport (Louisiana) Failure to maintain the minimum number of crossties per FRA track class for each 39-foot segment of track.*
24	Noise and Vibration	***MM-Noise-02***. *The Applicants shall comply with FRA regulations establishing decibel limits for train operations.*	During the reporting period, CPKC complied with all applicable FRA regulations and did not receive any fines or notices of a recommended violation from the FRA related to the decibel limits for train operations.
25	Noise and Vibration	***MM-Noise-03***. *The Applicants shall consider lubricating curves where doing so would both be consistent with safe and efficient operating practices and significantly reduce noise for residential or other noise sensitive receptors.*	Complete.
26	Noise and Vibration	***MM-Noise-04***. *The Applicants shall employ safe and efficient operating procedures that, in lieu of, or as complement to, other noise mitigation measures can have the collateral benefit of effectively reducing noise from train operations. Such procedures may include:* *a) Inspecting rail car wheels to maintain wheels in good working order and minimize the development of wheel flats;* *b) Inspecting new and existing rail for rough surfaces and, where appropriate, grinding these surfaces to provide a smooth rail surface during operations;* *c) Regularly maintaining locomotives and keeping mufflers in good working order; and* *d) Removing or consolidating switches that the Applicants determine are no longer needed.*	a) During the reporting period, CPKC complied with all applicable FRA regulations except that CPKC received one Recommended Violations from the FRA related to the maintenance of rail car wheels: *i. Recommended Violation – August 1, 2026 – Shreveport (Louisiana) wheel flange thickness 7/8" or less at 3/8" above the tread.* b) CPKC completed 2,265 pass miles of rail grinding across the US portion of the network during the reporting period. c) As part of CPKC's routine locomotive maintenance program, mufflers and other components of the exhaust system are inspected at regular intervals and repaired as required. During the reporting period, CPKC was in compliance with all applicable FRA regulations except that CPKC received one Recommended Violation from the FRA related to the maintenance of locomotive mufflers. i. *Recommended Violation – June 15, 2026 – Shreveport (Louisiana) Exhaust manifold defective allowing gases to escape* d) CPKC removed no switches during the reporting period.
27	Noise and Vibration	***MM-Noise-05***. *The Applicants shall promptly respond to community inquiries concerning the establishment of Quiet Zones and assist communities in identifying supplemental or alternative safety measures, practical operational methods, or technologies that may enable the community to establish Quiet Zones in accordance with FRA's final rule on the "Use of Locomotive Horns at Highway-Rail Grade Crossings."*	CPKC remains engaged with communities inquiring about quiet zones and is working with a number of communities in reviewing and applying for quiet zones.

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28	Air Quality and Climate Change	***VM-Air-01***. *The Applicants commit to developing Green House Gas (GHG) reduction targets for the combined network and request verification as appropriate from the Science Based Targets initiative (SBTi). As reference, CP's current SBTi approved target is a 38.3% reduction in well-to-wheels GHG emissions (on an intensity basis) from locomotive operations by 2030 compared to a 2019 base year. CP has also committed to committed to 27.5% GHG reduction (on an absolute basis) by 2030 compared to a 2019 base year for non-locomotive Scope 1 and Scope 2 emissions. KCS has a SBTi target to reduce Scope 1 and 2 GHG emissions by 42% by 2034.*	Complete.
29	Air Quality and Climate Change	***VM-Air-02***. *The Applicants commit to undertaking a combined network in-depth climate scenario analysis aligned to Task Force on Climate-related Financial Disclosures (TCFD) recommendations to understand how a changing climate may impact CPKC. The Applicants further commit to improving the resiliency of the combined network to the physical risks of climate change through its capital program.*	Complete.
30	Air Quality and Climate Change	***VM-Air-03***. *As part of the ongoing reconfiguration of Bensenville Yard (a non-merger related project being undertaken as part of the development of the Illinois Tollway's Elgin O'Hare Western Access Project), the Applicants commit to undertake studies to identify ways to reduce the GHG emissions (and by extension, also reduce other air emissions) at Bensenville Yard.*	Complete.
31	Air Quality and Climate Change	***VM-Air-04***. *The Applicants will comply with U.S. Environmental Protection Agency (EPA) emissions standards for diesel-electric railroad locomotives when purchasing and rebuilding locomotives.*	CPKC took delivery of no new Tier 4 locomotives during the reporting period.
32	Air Quality and Climate Change	***VM-Air-05***. *The Applicants will develop an anti-idling policy for use in potentially affected communities on the combined network. The policy will capture both idling of construction equipment used on the Capital Improvement Projects as well as ongoing operations.*	Complete.
33	Air Quality and Climate Change	***VM-Air-06***. *To minimize fugitive dust emissions created during the construction of the Capital Improvement Projects, the Applicants will implement appropriate fugitive dust suppression controls, such as spraying water or other approved measures.*	To prevent fugitive dust emissions, the construction contractors have monitored dusting conditions and applied dust control measures, such as site watering, as required.
34	Air Quality and Climate Change	***VM-Air-07***. *The Applicants will work with the contractors selected to construct the Capital Improvement Projects to make sure that construction equipment is properly maintained and that mufflers and*	CPKC continues to work with all construction contractors selected for the Capital Improvement Projects to ensure that all of their equipment is properly maintained, and that mufflers and other required pollution control devices are in proper working order.

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		other required pollution-control devices are in working condition in order to limit construction-related air emissions.	
35	Air Quality and Climate Change	***VM-Air-08.*** *Where vegetation clearing has taken place during the construction of the Capital Improvement Projects, the Applicants will begin revegetation as soon as practicable to minimize impacts of wind erosion and fugitive dust. Where immediate revegetation is not practicable, the Applicants will implement alternative stabilization measures such as matting, mulching, or hydroseeding.*	CPKC's contractors are implementing measures to minimize wind erosion and fugitive dust. As part of the final site stabilization following completion of track construction, the contractors are applying matting, mulch and/or hydroseed.
36	Cultural Resources	***MM-Cultural-01****. Prior to beginning any construction activities related to the 25 planned capital improvements, the Applicants shall prepare a construction monitoring plan that addresses the following:* *• Training procedures to familiarize construction personnel with the identification and appropriate treatment of historic properties;* *• Monitoring of construction activities by a qualified professional archaeologist;* *• Provisions for monitoring and coordination for work within tribal reservation boundaries;* *• Provisions for the unanticipated discovery of archaeological sites or associated artifacts during construction activities, including procedures for notifying OEA and the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), pursuant to 36 C.F.R. § 800.13(b) in the event of an unanticipated discovery; and* *• Provisions for complying with the Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001-3013) and other applicable federal, state, and local laws and regulations in the event of inadvertent discoveries of an unanticipated discovery of unmarked human remains during construction activities.* *The Applicants shall provide the construction monitoring plan to OEA and appropriate THPOs for review no later than 30 days prior to the start of any construction activities related to the 25 planned capital improvements and shall abide by the provisions of the plan, including any revisions by OEA and appropriate THPOs, during construction activities.*	Complete.
37	Cultural Resources	***MM-Cultural-02****. The Applicants shall abide by their commitments to design and engineer the 25 planned capital improvements to remain within existing rail ROW, to maintain the existing rail footprint in locations immediately adjacent to archaeological sites that OEA has*	CPKC continues to abide by the commitment to design and engineer the 25 planned capital improvements so as to maintain the existing rail footprint in locations immediately adjacent to archaeological and historical sites which the OEA has identified as eligible for listing on the National Register.

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		identified as eligible for listing on the National Register, and to not perform any construction activities related to the 25 planned capital improvements within the boundaries of National Register-eligible archeological sites identified by OEA.	
38	Hazardous Material Release Sites	***VM-Haz. Material Sites-01**. The Applicants will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous material are encountered during construction of the Capital Improvement Projects. The Applicants will document all activities associated with the previously undocumented contamination and will notify the appropriate state agencies according to applicable regulations. The Applicants will use disposal methods which comply with applicable solid and hazardous waste regulations.*	CPKC's contractors have included measures in their Health and Safety Plans to protect workers in the event previously undocumented hazardous materials are discovered.
39	Hazardous Material Release Sites	***VM-Haz. Material Sites-02**. Prior to the start of construction for each Capital Improvement Project, the Applicants will develop a site-specific spill prevention, control and response plan. This plan will specify measures to prevent the release of petroleum products or other hazardous materials during construction activities and contain such discharges if they occur.*	Prior to the start of construction, CPKC's contractors have developed site specific spill prevention, control and response plans.
40	Hazardous Material Release Sites	***VM-Haz. Material Sites-03.** In the event of a spill over the applicable reportable quantity during the construction of a Capital Improvement Project, the Applicants will comply with its site-specific spill prevention, control and response plan and applicable federal and state regulations pertaining to spill containment, appropriate clean-up, and notifications.*	There were no reportable spills at the Capital Siding Improvement Projects during the reporting period.
41	Hazardous Material Release Sites	***VM-Haz. Material Sites-04.** During the construction of the Capital Improvement Projects, the Applicants will ensure that gasoline, diesel fuel, oil, lubricants, and other petroleum products are handled and stored to reduce the risk of spills contaminating soils or surface waters. If a petroleum spill occurs as a result of construction, and exceeds specific quantities or enters a waterbody, the Applicants (or its agents) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal and state regulations.*	All petroleum products on site are properly stored and inspected daily by each site's respective environmental monitor.
42	Hazardous Material Release Sites	***VM-Haz. Material Sites-05**. The Applicants will require contractors to dispose of waste generated on the Capital Improvement Projects in accordance with all applicable federal, state, and local regulations.*	All waste generated on site at the Capital Improvement Projects under construction was disposed of in accordance with applicable laws and regulations.

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43	Hazardous Material Release Sites	***MM-Haz Material Sites-01****. The Applicants shall notify EPA prior to undertaking any capital improvements related to the acquisition within the EPA Orongo-Duenweg Mining Belt Superfund site.*	CPKC will notify the EPA prior to beginning construction on the Asbury Siding Extension.
44	Hazardous Material Release Sites	***MM-Haz Material Sites-02****. The Applicants shall notify the Iowa Department of Natural Resources prior to undertaking any capital improvements related to the acquisition that could affect the Archer Daniels Midland Corn Processing Facility Industrial Waste Landfill near the Camanche, Iowa site.*	Complete.
N/A	Hazardous Material Release Sites	***MM-Haz Material Sites-03.*** *Appendix C of the Board's Decision approving, with conditions, CP acquisition of KCS did not contain a Mitigation Measure with this label.*	N/A
45	Hazardous Material Release Sites	***MM-Haz Material Sites-04.*** *The Applicants shall use established standards for recycling or reuse of construction materials, such as ballast and rail ties, during the construction of capital improvements related to the acquisition. When recycling construction materials is not a viable operation, the Applicants shall use disposal methods that comply with applicable solid and hazardous waste regulations.*	No used ballast or rail ties were generated at the Capital Improvement Projects during the reporting quarter and thus none were reused.
46	Hazardous Material Release Sites	***MM-Haz Material Sites-05****. For capital improvements related to the acquisition, the Applicants shall follow American Society of Testing and Materials E1527-05, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process in areas where potential contamination could be encountered. If the Applicants encounter contamination (or signs of potential contamination) during these activities, Applicants shall perform a Phase 2 environmental investigation. Should findings of a Phase 2 environmental investigation identify contamination in soil and/or groundwater, the Applicants shall coordinate with relevant state agencies on regulatory obligations and comply with those agencies' reasonable requirements for avoiding impacts related to soil and/or groundwater contamination.*	Complete.
47	Biological Resources	***VM-Biological-01****. In alignment with CP's Environmental Policy, the Applicants commit to implementing methods to promote No Net Loss of sensitive habitats (e.g., aquatic areas, wetlands, riparian areas, native prairie, old growth forest) when constructing the Capital Improvement Projects.*	CPKC continues to implement methods to promote No Net Loss of sensitive habitats on the Capital Improvement Projects.
48	Biological Resources	***VM-Biological-02****. Where practicable, the Applicants will clear vegetation in preparation for the Capital Improvement Projects before or after the breeding bird nesting season, specific to each project*	CPKC completed the clearing of vegetation for the 2026 Capital Improvement Projects by 3/31 to ensure compliance with the Migratory Bird Treaty Act.

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		location, to avoid inadvertent removal of active nests (nesting adults, young, or eggs) and to ensure compliance with the Migratory Bird Treaty Act. If clearing is required during a respective location's nesting season, the Applicants will consult with OEA and the local office of the U.S. Fish and Wildlife Service (USFWS) on appropriate nest survey methods for that area.	
49	Biological Resources	***VM-Biological-03**. The Applicants will not conduct construction related tree removal for the Capital Improvement Projects during the active season for the Indiana bat and the northern long-eared bat (April 1 to October 31).*	CPKC completed tree removal for the 2026 Capital Improvement Projects on 3/31 to avoid tree removal during the Indiana bat and northern long-eared bat active season.
50	Biological Resources	***VM-Biological-04**. During the construction of the Capital Improvement Projects, the Applicants will take steps to reduce the unnecessary removal of bat habitat outside of active bat season by limiting tree removal to only the areas necessary to safely construct and operate the new siding or second track, marking the limits of tree clearing through the use of flagging or fencing, and ensuring that construction contractors understand clearing limits and how they are marked in the field.*	Prior to the clearing of trees, surveyors clearly flagged clearing limits to ensure that there was no unnecessary removal of bat habitat.
51	Biological Resources	***VM-Biological-05.** If construction of the Capital Improvement Projects would require removal or alteration of bridges, culverts, or other structures that provide suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31), the Applicants will first conduct an inspection for the presence of, or evidence of use by, bats. The inspection will be completed by a qualified biologist. If the inspection finds bats or evidence of bats, then the Applicants will not commence work on the structure until coordinating with OEA and USFWS to determine appropriate follow-up or mitigative actions. The inspection must be completed during the same year that the work takes place.*	Prior to altering or removing any bridge or culvert on the Capital Improvement Projects, a qualified biologist completed an inspection for bats. No signs of roosting or use by bats was observed.
52	Biological Resources	***VM-Biological-06.** Where practicable, the Applicants will conduct any culvert or bridge removal as part of the Capital Improvement Projects outside of the roosting period of bat species, specific to each project location. Where practicable, if bridge or culvert removal is required during the bat roosting period where the individual Capital Improvement Project is located, the Applicants will consult with OEA*	Prior to altering or removing any bridge or culvert on the Capital Improvement Projects, a qualified biologist completed an inspection for bats using the approved methodology. No signs of roosting or use by bats was observed.

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		and the local USFWS office on appropriate methods to determine if bats are using the bridge or culvert as a roost.	
53	Biological Resources	***VM-Biological-07**. During construction of the Capital Improvement Projects, the Applicants will direct any temporary lighting away from suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31). The Applicants will use downward-facing, full cut-off lens lights for any temporary lighting used during the construction of the Capital Improvement Projects.*	All temporary lighting used during the quarter was downfacing with full cutoff lenses and aimed away from suitable bat habitat.
54	Biological Resources	***VM-Biological-08**. If the Capital Improvement Projects would involve installing any new, or replacing any existing, permanent lights, the Applicants will use downward facing, full cut-off lens lights (with the same intensity or less for replacement lighting).*	None of the Capital Improvement Projects have been designed with permanent lighting.
55	Biological Resources	***VM-Biological-09**. During construction of the Capital Improvement Projects, temporary barricades, fencing, and/or flagging will be used in sensitive habitats to contain construction related impacts to the area within the construction ROW. To the extent possible, staging areas will be located in previously disturbed sites and not in sensitive habitat areas.*	Sensitive habitats, such as wetlands, were flagged on site. The environmental monitors at each of the Capital Improvement Projects worked with the respective contractors to ensure that staging areas were not in sensitive habitat areas.
56	Biological Resources	***VM-Biological-10.** The Applicants will limit ground disturbance to only the areas necessary for the construction of the Capital Improvement Projects.*	Contractors are limiting ground disturbances to only the areas necessary for the construction of the Capital Improvement Projects.
57	Biological Resources	***VM-Biological-11**. The Applicants will use construction methods and seed mixes that minimize introduction and spread of noxious weeds on the Capital Improvement Projects. Noxious weed control will include combinations of mechanical and herbicide spray methods.*	The seed applied during the reporting period was purchased from local seed suppliers and came with seed inspection tags certifying it as weed free. Noxious weed control was not required during the reporting period at the Capital Improvement Projects under construction.
58	Biological Resources	***VM-Biological-12**. The Applicants will ensure that any herbicides used in ROW maintenance to control vegetation are approved by EPA and are applied by licensed individuals who will limit application to the extent necessary for safe rail operations. Herbicides will be applied so as to prevent or minimize drift off of the ROW onto adjacent areas.*	CPKC confirms all herbicide used in the reporting period was approved by the EPA and applied by licensed applicators. CPKC did not receive any reports of herbicide drift or overspray during the reporting period.

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
59	Biological Resources	***VM-Biological-13****. As applicable to each of the individual Capital Improvement Projects, the Applicants will protect bald and golden eagles by adhering to the Bald and Golden Eagle Protection Act. In addition, the Applicants will follow the USFWS National Bald Eagle Management Guidelines, as applicable.*	No new eagle nests have been observed at the Capital Improvement Project sites.
60	Biological Resources	***MM-Biological-01****. For capital improvements related to the acquisition, the Applicants shall not knowingly include any federally- or state-listed invasive weed species in seed mixes for revegetating disturbed areas within the rail ROW.*	The seed applied during the reporting period was purchased from local seed suppliers and came with seed inspection tags certifying it as weed free.
61	Biological Resources	***MM-Biological-02.*** *During final design and engineering of capital improvement projects related to the acquisition, the Applicants shall reexamine the USFWS list of threatened or endangered species. If the list has changed to include newly listed species or newly designated critical habitat, or if new information reveals that listed species or critical habitat could be affected by the capital improvements, the Applicants shall consult with OEA and USFWS regarding avoidance, minimization, and mitigation measures and shall implement the measures developed in consultation with OEA and USFWS.*	During the final design of the Capital Improvement Projects, CPKC continues to reexamine the USFWS list of Threatened and Endangered Species and designated critical habitat to consider whether any new information reveals that listed species could be affected. In addition, federal agencies that have permitting jurisdiction over any of the Capital Improvement Projects will oversee compliance with the Endangered Species Act.
62	Biological Resources	***MM-Biological-03.*** *The Applicants shall apply the mitigation measures identified in VM Biological-03, VM-Biological-04, VM-Biological-05, VM-Biological-06 and VM Biological-07 to any planned capital improvements potentially affecting the habitat of the Tricolored bat, which USFWS has proposed for listing as Endangered.*	The listed mitigation measures were applied for the protection of Tricolored Bat in addition to the Indiana Bat and Northern Long-eared Bat.
63	Biological Resources	***MM-Biological-04****. The Applicants shall implement Special Protective Measures and karst Best Management Practices if the construction of the planned capital improvements occurs in areas with karst features in Benton County, Arkansas and McDonald County, Missouri, to avoid potentially affecting the endangered Benton County Cave Crayfish, Hell Creek Cave Crayfish, and Ozark Cavefish.*	Complete.
64	Water Resources	***VM-Water-01****. The Applicants commit to remaining compliant with 33 C.F.R. Part 117 Drawbridge Operation Regulations.*	During the reporting period, CPKC complied with all applicable US Coast Guard regulations and did not receive any Notices of Violation or accompanying fines from the USCG related to the operation of drawbridges.
65	Water Resources	***VM-Water-02****. As applicable for each of the Capital Improvement Projects, the Applicants will request Clean Water Act Water Quality Certification from the jurisdiction where the respective project is located.*	As applicable, CPKC has requested Clean Water Act Water Quality Certification from the respective jurisdictions for the Capital Improvement Projects under construction.

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
66	Water Resources	***VM-Water-03****. As applicable for each of the individual Capital Improvement Projects, the Applicants will obtain an authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act before initiating project-related construction activities in jurisdictional waters of the U.S.*	As applicable, CPKC has obtained authorization under Section 404 of the Clean Water Act prior to initiating project-related construction activities in jurisdictional waters of the US.
67	Water Resources	***VM-Water-04.*** *As applicable to each of the individual Capital Improvement Projects, the Applicants will require its construction contractor(s) to follow all water quality control conditions identified in all permits including the Water Quality Certification from the respective jurisdiction and Section 404 Permits issued by USACE.*	The environmental monitor onsite daily at the respective Capital Improvement Projects under construction is ensuring that contractors comply with all applicable permit conditions.
68	Water Resources	***VM-Water-05****. Prior to initiating construction at a Capital Improvement Project location, the Applicants will develop a site-specific Stormwater Pollution Prevention Plan (SWPPP) which will incorporate Best Management Practices as well as site specific measures to control erosion and reduce the amount of sediment and pollutants entering surface waters, ground waters, and waters of the U.S.*	Prior to initiating construction at the Capital Improvement Projects, CPKC is ensuring that a site-specific SWPPP is in place.
69	Water Resources	***VM-Water-06****. For Capital Improvement Project locations which will involve construction activities in proximity to surface water, prior to the start of construction the Docket No. FD 36500 et al. 209 Applicants will develop a site-specific water quality monitoring plan and implement this monitoring plan throughout construction.*	For construction in proximity to surface waters, CPKC is ensuring a site-specific water quality monitoring plan is in place. Throughout the construction, the environmental monitor at each respective construction site has been implementing the respective water quality monitoring plan.
70	Water Resources	***VM-Water-07.*** *The Applicants will minimize impacts to wetlands where practicable in the final design of the individual Capital Improvement Projects. Applicants agree to compensate for the loss of any wetlands through any one, or a combination of: purchasing credits from an authorized wetland mitigation bank, restoring a previously existing wetland or other aquatic site, enhancing an existing aquatic site's function, preserving an existing aquatic site, and/or creating a new aquatic site.*	CPKC continues to minimize impacts to wetlands where practicable and to offset the loss of wetland habitat through the purchase of wetland credits or other means.
71	Water Resources	***VM-Water-08.*** *The Applicants will design all Capital Improvement Project drainage crossing structures to pass a 100-year storm event.*	CPKC continues to design all of the Capital Improvement Projects to pass a 1:100-year storm event.
72	Water Resources	***VM-Water-09****. The Applicants will consider the passage of aquatic organisms in the design of culverts and bridges required for the Capital Improvement Projects, where practicable.*	As applicable to each respective Capital Improvement Project, the passage of aquatic organisms is being considered in the design of culverts and bridges.

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
73	Water Resources	***VM-Water-10.*** *As applicable to each of the individual Capital Improvement Projects, the Applicants will comply with applicable in-water work windows and timing restrictions for the protection of fish species.*	In-water work is being scheduled at the Capital Improvement Projects to protect fish species as applicable to each respective site.
74	Water Resources	***VM-Water-11.*** *During the construction of Capital Improvement Projects, the Applicants will require all contractors to conduct daily inspections of all equipment for any fuel, lube oil, hydraulic or antifreeze leaks. If leaks are found, the Applicants will require the contractor to immediately remove the equipment from service and repair or replace it.*	The contractors are completing daily equipment inspections at each of the Capital Improvement Projects under construction.
75	Water Resources	***VM-Water-12****. During the construction of the Capital Improvement Projects, the Applicants will prohibit construction vehicles from driving in or crossing streams at other than established crossing points.*	The environmental monitors at each of the respective Capital Improvement Project construction sites are ensuring that the contractors are only crossing watercourses at established crossing points.
76	Water Resources	***VM-Water-13****. During the construction of the Capital Improvement Projects, the Applicants will take reasonable steps to ensure contractors use fill material appropriate for the project area.*	Contractors are complying with the engineering design for each of the respective Capital Improvement Projects including the material specifications for each site (which have been designed by a Professional Engineer to ensure they are appropriate for that respective site).
77	Water Resources	***MM-Water-01.*** *During the final engineering and design of the 25 capital improvements, the Applicants shall design culverts and bridges so as to maintain existing surface water drainage patterns to the extent practicable and not cause or exacerbate flooding.*	CPKC continues to design all culverts and bridges so as to maintain surface water drainage patterns and not cause or exacerbate flooding.
78	Water Resources	***MM-Water-02****. The Applicants shall coordinate with the Federal Emergency Management Agency if construction of bridges, culverts, or embankments related to the 25 planned capital improvements would result in an unavoidable increase greater than 1 foot to the 100-year water surface elevations.*	CPKC continues to design the Capital Improvement Projects to ensure that any rise in the 100-year water surface elevation is one foot or less.
79	Water Resources	***MM-Water-03****. The Applicants shall obtain and comply with National Pollutant Discharge Elimination System (NPDES) permits for storm water discharges resulting from project-related construction activities at each of the capital improvements that meet the requirements for a NPDES.*	CPKC has ensured NPDES permit coverage is in place prior to the start of construction on all Capital Improvement Projects which meet the requirements for a NPDES permit.
80	Environmental Justice	***VM-EJ-01****. The Applicants will use CP's experience building relationships with First Nations in Canada to engage with federally recognized Indian tribes in the U.S.*	During this reporting period, CPKC continued to build relationships with federally recognized Indian tribes in the U.S. on June 17 and 18, CPKC led a multi-agency, full-scale emergency response exercise at the Prairie Island Indian Community near Red Wing, MN. The exercise simulated a train derailment with a petrochemical release into the environment. One tested scenario, or inject, required local Tribal police to

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
			simulate responding to Tribal members attempting to launch boats to get a firsthand look at the response site, as well as others boating in from surrounding areas. This inject incorporated local cultural and Tribal values into the exercise. On July 7, CPKC conducted an emergency and environmental response debrief with the White Earth Tribal Council in Ogema, MN. CPKC also funded construction of a fence around the playground at Dreamcatcher Homes, a White Earth housing development located adjacent to CPKC's mainline. The fence was completed in early September.
81	Environmental Justice	***VM-EJ-02***. *The Applicants will make Operation Lifesaver programs available to potentially affected communities, including schools and other organizations (Operation Lifesaver is a non-profit education and awareness program that helps increase the public's awareness of the dangers around rail lines).*	During this reporting period, CPKC Police Officers and other CPKC Employees completed 82 Operation Lifesaver and other rail safety presentations across the US portion of the network.
82	Environmental Justice	***VM-EJ-03***. *For the construction contracts for the Capital Improvement Projects, the Applicants commit to allocate a minimum of 15% of contractor bid evaluation weighting to the inclusion of minority and tribal owned businesses and employees on the proposed project team.*	CPKC continues to allocate a minimum of 15% in evaluation of contractor bids for the prospective contractor's inclusion of minority and tribal owned businesses and employees.
83	Environmental Justice	***MM-EJ-01***. *The Applicants shall conduct proactive and targeted outreach to minority and low-income communities that would experience adverse noise impacts as a result of the acquisition to provide information about the process for establishing Quiet Zones. The Applicants shall assist interested communities in identifying supplemental or alternative safety measures, practical operational methods, or technologies that may enable the community to establish Quiet Zones in accordance with FRA's final rule on the "Use of Locomotive Horns at Highway-Rail Grade Crossings."*	CPKC is engaged with minority and low-income communities that are interested in or in the process of inquiring or applying for quiet zones.
84	Community Agreements and Coordination	***VM-Community-01***. *The Applicants commit that the new CPKC will meet regularly with community representatives in the Houston area. If those communities experience merger-related impacts, CPKC will work with them on ways to address their concerns. CPKC will also participate alongside other railroads serving Houston—notwithstanding that it will own no track there—to work cooperatively with communities to address the impacts of rail operations in the region.*	CPKC continues to engage with Houston communities. Larry Lloyd, Assistant Vice President of US Government Affairs, continues to serve as CPKC's Community Liaison for the Houston Area. His email is: larry.lloyd@cpkcr.com and mobile is: (224) 373-1746.
85	Community Agreements and Coordination	***VM-Community-02***. *The Applicants will provide community leaders in Houston with ways to report issues. CP has a "Community Connect" webpage that provides contact information, answers frequently asked questions, and offers other resources that will remain active for the new CPKC system. CP also has a Public Safety Communication Centre that operates 24 hours a day, 365 days a year with trained communication*	CPKC has communicated the different ways to reach CPKC to Houston area community leaders. CPKC did not receive any calls to the Community Connect line from the Houston area this quarter. CPKC continues to have regular engagement with stakeholders in the Houston area.

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
		officers who can be reached toll-free at 1-800-716-9132. Calls into that Centre, which includes the Community Connect line and CP's emergency lines, are tracked using sophisticated Computer Aided Dispatch (CAD) software. The communication officers in this Centre are trained to handle a range of issues, from a blocked crossing to a trespasser, and they regularly coordinate the involvement of other railroads as required for any specific incident.	
86	Community Agreements and Coordination	***VM-Community-03**. The Applicants will work with certain Chicago area communities with which they have not been able to reach agreements—DuPage County, the Village of Bartlett, the Village of Bensenville, the City of Elgin, the Village of Itasca, the Village of Hanover Park, the Village of Roselle, the City of Wood Dale, and the Village of Schaumburg—to mitigate potential acquisition-related environmental impacts. Specifically, they will work with them to accomplish:* *• Subject to necessary FRA approvals and practicability, funding efforts towards the creation and implementation of quiet zones, including the costs of installation.* *• Installing and funding a predictive mobility system, interconnected with existing railroad crossing signals, that will deliver advanced notice of blocked crossings to citizens, police, fire, and rescue operations, and others.* *• Installing and funding ITS Interconnect for Advanced Warning Signs at strategic locations to give drivers information about occupied crossings, allowing them to make better on-the-spot decisions.* *• Installing and funding Positive Train Control wireless technology tie-ins at crossings adjacent to Metra platforms, which will minimize the activation of crossing lights and gates.* *With respect to the work described above, the Applicants anticipate that the Applicants or their subcontractors will perform the work. In the case of instances where work may be performed by others, the Applicants would reimburse reasonable and customary charges for such work. Because Metra owns the trackage that CP uses in these communities, Metra would have to approve the implementation of these mitigation measures. The Applicants would work with Metra, the communities, and any other relevant agencies to seek approvals.*	LinqThingz has begun a series of meetings with the Chicagoland communities to advance the Advanced Warning Signs measure. Communities are evaluating with LinqThingz, CPKC and appropriate road authorities which crossings would make the best strategic locations for the mitigation.
87	Community Agreements and Coordination	***MM-Community-01**. The Applicants shall comply with the terms of the agreements reached between the Applicants and the City of Davenport, Iowa; the City of Bettendorf, Iowa; the City of Muscatine, Iowa; the City of LeClaire, Iowa; the City of Clinton, Iowa; the City of Washington, Iowa; the City of Fruitland, Iowa; the Village of*	CPKC continues to work with each community to comply with the terms of the agreements reached and remains engaged and focused on ensuring an open dialogue.

Measure Number	Mitigation Category	Voluntary/Mitigation Measure	Compliance Activity
		Hampshire, Illinois; the Village of Pingree Grove, Illinois; and the City of Liberty, Missouri.	
88	Community Agreements and Coordination	***MM-Community-02**. If Applicants reach additional agreements with communities or other entities following publication of this Final EIS, the Applicants shall notify the Board, and the Board will impose a condition that requires the Applicants to comply with the terms of the agreement.*	CPKC did not reach any additional agreements with communities in this quarter.
89	Community Agreements and Coordination	***MM-Community-03**. To facilitate compliance with VM-Community-01 and VM Community-02, the Applicants shall establish a Community Liaison to consult with Houston area community leaders. The Community Liaison shall be available for public meetings and to conduct periodic outreach to mayors and appropriate local officials. The Applicants shall establish and staff the Community Liaison position for a period of seven years following the Board's final decision authorizing the acquisition. The Applicants shall provide the name, telephone number, and email address of the Community Liaison to the Houston mayor and Harris County officials.*	CPKC continues to engage with Houston communities. Larry Lloyd, Assistant Vice President of US Government Affairs, continues to serve as CPKC's Community Liaison for the Houston Area. His email is: larry.lloyd@cpkcr.com and mobile is: (224) 373-1746.
90	Community Agreements and Coordination	***MM-Community-04**. To facilitate compliance with VM-Community-03, the Applicants shall establish a Community Liaison to consult with leaders of Chicago area communities referenced in that mitigation measure (the Village of Itasca, the Village of Bensenville, the City of Wood Dale, the Village of Roselle, the Village of Schaumburg, the Village of Hanover Park, the Village of Bartlett, the City of Elgin, and DuPage County). The Community Liaison shall be available for public meetings and to conduct periodic outreach to mayors and appropriate local officials. The Applicants shall establish and staff the Community Liaison position for a period of seven years following the approval of the acquisition. The Applicants shall provide the name, telephone number, and email address of the Community Liaison to mayors and other appropriate local officials in each community listed above.*	Larry Lloyd continues to serve as CPKC's Community Liaison for the Chicago Area.

CPKC Capital Improvement Project Updates

Turkey River, IA – New Siding

As CPKC reported in Quarterly Compliance Report 10, the Turkey River siding is complete.

Bellevue, IA – New Siding

As CPKC reported in Quarterly Compliance Report 6, the new Bellevue Siding is complete. CPKC and the USACE have not been able to reach an agreement respecting a new road crossing and the residence on the northern side of the tracks will continue to be reached using the existing crossing.

Monroe, IL – New Siding

As CPKC reported in Quarterly Compliance Report 7, the Monroe siding is complete.

Deer Creek, IA – Siding Extension

As CPKC reported in Quarterly Compliance Report 5, the Deer Creek siding is complete.

Camanche, IA – Siding Extension

As CPKC reported in Quarterly Compliance Report 6, the Camanche siding is complete.

Letts, IA – Siding Extension

In this reporting period, CPKC did not undertake any work on the proposed Letts Siding Extension.

Washington, IA – New Siding

As CPKC reported in Quarterly Compliance Report 5, the Washington siding is complete.

Ottumwa, IA – Siding Extension

In this reporting period, CPKC progressed design and environmental permitting work on the proposed Ottumwa Siding Extension. No physical construction was undertaken at this site.

Moravia, IA – New Siding

In this reporting period, CPKC completed construction on the new Moravia Siding.

CPKC had an environmental monitor on site full time during civil construction activities. No non-compliance with the construction-related mitigation measures were observed during the reporting period.

No new embankment construction or ground disturbance occurred during the reporting period.

Newtown, MO – Siding Extension

As CPKC reported in Quarterly Compliance Report 2, the Newtown Siding Extension is complete.

Laredo, MO – Siding Extension

As CPKC reported in the Quarterly Compliance Report 3, the Laredo Siding Extension is complete.

Dawn, MO – New Siding

As CPKC reported in Quarterly Compliance Report 9, the new Dawn siding is complete.

Blue Valley, MO – New Double Track

As CPKC reported in Quarterly Compliance Report 11, CPKC completed construction of the southern segment of the Blue Valley double track project. CPKC is completing a property purchase to the east of the northern double track segment to facilitate access and construction of the remaining segment.

No new embankment construction or ground disturbance occurred during the reporting period.

Grandview, MO – New Facility Working Tracks

As CPKC reported in Quarterly Compliance Report 10, CPKC completed work on switch reconfiguration and signal system upgrades.

Asbury, MO – Siding Extension

In this reporting period, CPKC did not undertake any work on the proposed Asbury Siding Extension.

Goodman, MO – New Siding

In this reporting period, CPKC did not undertake any work on the proposed Goodman Siding.

Gentry, AR – Siding Extension

In this reporting period, CPKC did not undertake any work on the proposed Gentry Siding Extension.

Baron, OK – New Siding

In this reporting period, CPKC did not undertake any work on the proposed Baron Siding.

Cave Springs, AR – Siding Extension

In this reporting period, CPKC completed construction on the proposed Cave Springs Siding Extension.

CPKC had an environmental monitor on site full time during civil construction activities. No non-compliance with the construction-related mitigation measures were observed during the reporting period.

No new embankment construction or ground disturbance occurred during the reporting period.

Spiro, OK – Siding Extension

As CPKC reported in the Quarterly Compliance Report 5, the Spiro Siding Extension is complete.

Heavener, OK – Siding Extension

In this reporting period, CPKC did not undertake any work on the proposed Heavener Siding Extension.

Mena, AR – New Siding

In this reporting period, CPKC did not undertake any work on the proposed Mena Siding.

Mansfield, LA – Siding Extension

As CPKC reported in Quarterly Compliance Report 3, the Mansfield Siding Extension is complete.

Loring, LA – Siding Extension

As CPKC reported in Quarterly Compliance Report 9, the Loring Siding Extension is complete.

Singer, LA – Siding Extension

As CPKC reported in Quarterly Compliance Report 7, the Singer Siding Extension is complete.

TECHNICAL MEMORANDUM

To: Joe Van Humbeck, Director Impact Assessment & Natural Environment, CPKC
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Kyle Sumsion, Manager System Environmental Assessment
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From: Josh Fletcher, Principal Investigator, HDR
Monica Zsigmond, Archaeologist, Actalent

December 9, 2025

HDR Rail Cultural Resources Monitoring Final Summary Report, Moravia, Iowa

PROJECT DESCRIPTION

HDR, Inc. (HDR) was contracted by Canadian Pacific and Kansas City Southern (CPKC) to monitor for cultural resources during the construction of capital improvements along the CPKC rail right-of-way. This summary report for the Moravia new siding project area documents the completed cultural resource monitoring activities undertaken by HDR from March 24, 2025, to October 31, 2025.

The Moravia new siding project area is located between MP 323.72 and MP 325.69 near Moravia, IA. The project limits are approximately 2.10 miles long. The proposed siding has a 9,900-foot clear length with No. 15 power operated turnouts on both ends. Access to the north control point is from a private farm crossing at MP 323.70 and requires connection to nearby 672nd Avenue. Access to the south end control point requires a short connection to 655th Avenue near the existing MP 323.73 655th Avenue roadway overpass.

The work occurred on the west side (compass north) of the existing main track, with a track center of 15 feet. Widening of the existing embankment was necessary to accommodate the typical sections for the new siding. The terrain in general is undulating pastureland and the embankment widening and subsequent track ditches pass through both cut and fill areas. Cut areas are typically 3 to 6 feet in depth and fill areas typically 10 to 12 feet in height, reaching up to 25 to 30 feet at some drainage crossings. Excavations were made for topsoil removal and in cut areas. Topsoil excavations are 12 inches in depth. Construction site access was the same

as the access to the control points. There are no other obvious construction access points within the limits of the siding project.

A main track realignment is required at the north end of the project to create a tangent for placement of the north end siding turnout. The realignment supports the current timetable track speed of 40 MPH. Due to the realignment and turnout location, a retaining wall along the west side of the north control point was required to keep the project within the existing right of way (ROW).

Within the limits of the project there are eighteen existing culverts, all 30 inches in diameter or less, and one existing 4-span timber trestle bridge at MP 325.22. The existing culverts are of insufficient length for the proposed embankment width and were removed and replaced by new culvert structures. The minimum culvert size for track culverts is 36 inches in diameter, subject to hydrologic and hydraulic (H&H) analysis during final design. The timber trestle bridge was either replaced with a new double track concrete bridge or RCP culverts subject to H&H analysis during final design. All drainage structures were per applicable H&H requirements.

As stated above, there is one private farm crossing at MP 323.70, within the overall project limits but outside of the siding limits. This crossing was reinstalled as part of the main track realignment.

Archaeologist Monica Zsigmond was the assigned archaeological monitor for the Project, under the direction of Secretary of the Interior (SOI)-qualified Senior Archaeologist Josh Fletcher (Principal Investigator).

MONITORING METHODS

HDR monitoring methods consisted of visual inspection of all ground-disturbing activities, including but not limited to:

- Equipment setup and staging area creation
- Staking and signage placement
- Clearing areas with skid steer
- Topsoil removal, hauling, and stockpiling
- Grubbing tree roots and stump removal
- Grading, leveling, and smoothing ROW
- Blading and leveling proposed siding route
- Building and compacting subsoil and gravel base layers
- Rolling and compacting soil and gravel
- Excavating hillside and ROW sections
- Excavating trenches for culvert installation and replacement
- Excavating in advance of culvert work
- Hauling and redepositing soil

- Culvert installation and trenching
- Driving sheet piling and pilings
- Headwall construction
- Constructing drainage swales
- Boring/drilling under track for culvert installation
- Installing and maintaining BMPs (silt fence, silt socks, erosion blankets)
- Spraying hydro mulch
- Dewatering pooled areas
- Water pumping near drainage areas
- Setup and movement of cranes and drilling equipment
- Delivery and placement of rip rap
- Moving welding boxes and other equipment

The archaeologist on-site observed and inspected all soil removal and disturbance and monitored for the presence of cultural resources. Cultural resources could include bone, thermal or stone features, Pre-Contact (Native American) lithic and ceramic artifacts, isolated artifacts, artifact concentrations, and historic artifacts. The archaeologist also inspected the surrounding area and topsoil stockpiles for cultural resources. The archaeologist worked closely with construction management and field personnel about expectations for monitoring and the process if cultural resources are uncovered, and field personnel were cooperative in the effort. The archaeologist remained onsite daily until all new ground disturbance was complete.

MONITORING SUMMARY

The specific construction activities monitored and results at the Moravia new siding project area between the dates of March 24, 2025, and October 31, 2025, are presented in Table 1.

Table 1. Project Area Construction Activities and Results

Summary of Construction Activities	Results
Site Preparation • Equipment setup and staging area creation • Staking and signage placement • Clearing areas with skid steer • Topsoil removal, hauling, and stockpiling • Grubbing tree roots and stump removal **Grading and Base Construction** • Grading, leveling, and smoothing ROW • Blading and leveling proposed siding route • Building and compacting subsoil and gravel base layers	No intact features or cultural materials were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.

• Rolling and compacting soil and gravel **Excavation and Soil Movement** • Excavating hillside and ROW sections • Excavating trenches for culvert installation and replacement • Excavating in advance of culvert work • Hauling and redepositing soil **Culvert and Drainage Work** • Culvert installation and trenching • Driving sheet piling and pilings • Headwall construction • Constructing drainage swales • Boring/drilling under track for culvert installation **Environmental and Erosion Control** • Installing and maintaining BMPs (silt fence, silt socks, erosion blankets) • Spraying hydro mulch • Dewatering pooled areas • Water pumping near drainage areas **Additional Construction Activities** • Setup and movement of cranes and drilling equipment • Delivery and placement of rip rap • Moving welding boxes and other equipment • General housekeeping	

RESULTS

No intact features or cultural materials were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.

CONCLUSIONS

From March 24, 2025, to October 31, 2025, HDR archaeologist Monica Zsigmond, under direction of SOI-qualified Senior Archaeologist Josh Fletcher, monitored all new ground disturbance in the designated project area between Moravia MPs 323.72-325.69 (Tables 2-9). During this period, no significant intact archaeological deposits were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.

Table 2. Monitoring Locations and Results – March 2025

Date	Monitoring Location	Construction Activities Monitored	Results
March 24, 2025	MP 323.72-325.69	Mobilization of equipment to project area, clearing areas with skidsteer for staging, first day preparation for future work.	No findings.
March 25, 2025	MP 323.72-325.69	Preparation of equipment and staging areas, staking, signage placement, delivery of tools and machinery.	No findings.
March 26, 2025	MP 323.72-325.69	Moving of equipment, creating & leveling staging areas, staking, placing signage, preparing equipment for construction.	No findings.
March 27, 2025	MP 323.72-325.69	Installation of silt fence at various locations along proposed siding route.	No findings.
March 28, 2025	MP 323.72-325.69	Preparation of equipment and staging areas, staking, surveying, preparing of tools and machinery for construction.	No findings.
March 29, 2025	MP 323.72-325.69	No work.	None.
March 30, 2025	MP 323.72-325.69	No work.	None.
March 31, 2025	MP 323.72-325.69	No work.	None.

Table 3. Monitoring Locations and Results – April 2025

Date	Monitoring Location	Construction Activities Monitored	Results
April 1-5, 2025	MP 323.72-325.69	No work.	None.
April 6, 2025	MP 323.72-325.69	No work. Sunday.	None.
April 7, 2025	MP 323.72-325.69	Pulling existing barbed wire fence along western ROW, grubbing tree roots, blading & grading proposed new siding.	No findings.
April 8, 2025	MP 323.72-325.69	Wire fencing removal, tree stump removal, topsoil removal, grading along new siding ROW.	No findings.
April 9, 2025	MP 323.72-325.69	Fence removal, topsoil removal and grading.	No findings.
April 10, 2025	MP 323.72-325.69	Fence removal, topsoil removal, grading and leveling ROW, tree stump removal.	No findings.

April 11, 2025	MP 323.72-325.69	Topsoil removal, grading and leveling ROW, tree stump removal.	No findings.
April 12, 2025	MP 323.72-325.69	Topsoil removal, grading and leveling ROW.	No findings.
April 13, 2025	MP 323.72-325.69	No work. Sunday.	None.
April 14, 2025	MP 323.72-325.69	Removal of topsoil, leveling and grading along length of ROW.	No findings.
April 15, 2025	MP 323.72-325.69	Removal of topsoil, leveling and grading along length of ROW.	No findings.
April 16, 2025	MP 323.72-325.69	Removal of topsoil, grading and leveling area to be constructed.	No findings.
April 17-19, 2025	MP 323.72-325.69	No work.	None.
April 20, 2025	MP 323.72-325.69	No work. Sunday.	None.
April 21-26, 2025	MP 323.72-325.69	No work.	None.
April 27, 2025	MP 323.72-325.69	No work. Sunday.	None.
April 28, 2025	MP 323.72-325.69	Removal of topsoil, grading and leveling length of ROW, building of base of new siding.	No findings.
April 29, 2025	MP 323.72-325.69	Removal of topsoil, deposition of new base material, grading and filling along length of ROW.	None.
April 30, 2025	MP 323.72-325.69	Removal of topsoil, leveling and grading area in preparation for laying down new siding base layer.	None.

Table 4. Monitoring Locations and Results – May 2025

Date	**Monitoring Location**	**Construction Activities Monitored**	**Results**
May 1, 2025	MP 323.72-325.69	No work.	None.
May 2, 2025	MP 323.72-325.69	Excavating topsoil, grading and leveling, placing topsoil into piles for removal	No findings.
May 3, 2025	MP 323.72-325.69	Grading areas level, staking, creation of staging areas.	No findings.
May 4, 2025	MP 323.72-325.69	No work. Sunday.	None.
May 5, 2025	MP 323.72-325.69	Grading and leveling portions of ROW, removing topsoil, creation of staging areas.	No findings.

May 6, 2025	MP 323.72-325.69	Excavation of topsoil, hauling topsoil out to new location, depositing soil and leveling/grading to create new siding base.	No findings.
May 7, 2025	MP 323.72-325.69	Excavating topsoil, haul out and redeposit into new location, excavation in advance of culvert installation, creation of new siding base.	No findings.
May 8, 2025	MP 323.72-325.69	Removal of soil and haul out, redepositing to new location, grading areas prior to culvert installation.	No findings.
May 9, 2025	MP 323.72-325.69	Grading and leveling along portions of ROW that have been previously stripped of topsoil.	No findings.
May 10, 2025	MP 323.72-325.69	No work.	None.
May 11, 2025	MP 323.72-325.69	No work. Sunday.	None.
May 12, 2025	MP 323.72-325.69	Excavating portions of ROW to remove undesirable clay, smoothing and compacting new siding base.	No findings.
May 13, 2025	MP 323.72-325.69	Hauling and depositing excavated soil to build new siding base; depositing gravel; excavating, grading and leveling new base.	No findings.
May 14, 2025	MP 323.72-325.69	Excavating soil from portions of ROW and redepositing them to build a level base for new siding, hauling gravel and building up, compacting and rolling deposited gravel for base construction.	No findings.
May 15, 2025	MP 323.72-325.69	Excavating soil, hauling and redepositing same soil to other portions of ROW, creating level siding base.	No findings.
May 16, 2025	MP 323.72-325.69	Excavating soil in one portion of ROW, hauling and redepositing to another lower portion, spreading and leveling soil to create a level base for new siding.	No findings.
May 17, 2025	MP 323.72-325.69	Excavating new access roads around project area, creating staging area space via leveling and	No findings.

		grading soil surface flat, removing excavated topsoil.	
May 18, 2025	MP 323.72-325.69	No work. Sunday.	None.
May 19, 2025	MP 323.72-325.69	No work.	None.
May 20, 2025	MP 323.72-325.69	No work.	None.
May 21, 2025	MP 323.72-325.69	No work.	None.
May 22, 2025	MP 323.72-325.69	No work.	None.
May 23, 2025	MP 323.72-325.69	No work.	None.
May 24, 2025	MP 323.72-325.69	No work.	None.
May 25, 2025	MP 323.72-325.69	No work. Sunday.	None.
May 26, 2025	MP 323.72-325.69	No work.	None.
May 27, 2025	MP 323.72-325.69	Topsoil removal, soil sampling, grading, arrival and setup of equipment from boring crew plus foundations.	No findings.
May 28, 2025	MP 323.72-325.69	Setup of foundations crane and associated drilling equipment, soil sampling, excavation of topsoil.	No findings.
May 29, 2025	MP 323.72-325.69	Topsoil removal, grading, soil sampling, drilling equipment setup.	No findings.
May 30, 2025	MP 323.72-325.69	Culvert installation, grading and leveling portions of ROW.	No findings.
May 31, 2025	MP 323.72-325.69	Drilling under track in advance of culvert installation, grading and leveling ROW.	No findings.

Table 5. Monitoring Locations and Results – June 2025

Date	Monitoring Location	Construction Activities Monitored	Results
June 1, 2025	MP 323.72-325.69	No work. Sunday.	None.
June 2, 2025	MP 323.72-325.69	Topsoil removal, staging and equipment setup.	No findings.
June 3, 2025	MP 323.72-325.69	Removal of topsoil, hauling gravel.	No findings.
June 4, 2025	MP 323.72-325.69	Grading and leveling ROW, boring underneath track.	No findings.
June 5, 2025	MP 323.72-325.69	Setup of crane and drilling equipment, haulout of	No findings.

		topsoil, grading and leveling portions of ROW.	
June 6, 2025	MP 323.72-325.69	Removal and haulout of topsoil, setup of crane for drilling and setting wall panels into new retaining wall under highway.	No findings.
June 7, 2025	MP 323.72-325.69	Removal of topsoil, Grading and leveling, Delivery of equipment and setup for driving piling.	No findings.
June 8, 2025	MP 323.72-325.69	No work. Sunday.	None.
June 9, 2025	MP 323.72-325.69	Driving sheet piling, grading and leveling soil base, topsoil removal and haulout.	No findings.
June 10, 2025	MP 323.72-325.69	Continuation of retaining wall installation via driving sheet pile, topsoil removal, haulout and subsoil base grading and compacting.	No findings.
June 11, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base, topsoil removal and haulout.	No findings.
June 12, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base.	No findings.
June 13, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting subsoil base.	No findings.
June 14, 2025	MP 323.72-325.69	Grading and leveling subsoil siding base.	No findings.
June 15, 2025	MP 323.72-325.69	No work. Sunday.	None.
June 16, 2025	MP 323.72-325.69	Grading and compacting soil base, topsoil removal and haulout.	No findings.
June 17, 2025	MP 323.72-325.69	Grading and leveling subsoil siding base, miscellaneous activities associated with foundations retaining wall, equipment arrival.	No findings.
June 18, 2025	MP 323.72-325.69	Driving sheet piling, subsoil base import, grading and compacting base, topsoil removal and haulout.	No findings.
June 19, 2025	MP 323.72-325.69	Drilling/ driving sheet piling, subsoil compacting and grading.	No findings.
June 20, 2025	MP 323.72-325.69	Grading gravel base, setting up vibratory hammer for continued	No findings.

		driving, general housekeeping.	
June 21, 2025	MP 323.72-325.69	Driving sheet piling, grading and leveling ROW.	No findings.
June 22, 2025	MP 323.72-325.69	No work. Sunday.	None.
June 23, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base, topsoil removal and haulout.	No findings.
June 24, 2025	MP 323.72-325.69	No work.	None.
June 25, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base, topsoil removal and haulout.	No findings.
June 26, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base, topsoil removal and haulout.	No findings.
June 27, 2025	MP 323.72-325.69	Driving sheet piling, grading and compacting soil base, topsoil removal and haulout, culvert installation.	No findings.
June 28, 2025	MP 323.72-325.69	Topsoil removal and haulout, grading and leveling, culvert installation.	No findings.
June 29, 2025	MP 323.72-325.69	No work. Sunday.	None.
June 30, 2025	MP 323.72-325.69	Removal of topsoil and grading of ROW, cleanup after rain from weekend.	No findings.

Table 6. Monitoring Locations and Results – July 2025

Date	Monitoring Location	Construction Activities Monitored	Results
July 1, 2025	MP 323.72-325.69	Culvert installation, grading and compacting soil base.	No findings.
July 2, 2025	MP 323.72-325.69	Culvert installation, grading and compacting soil base.	No findings.
July 3, 2025	MP 323.72-325.69	Culvert installation, grading and compacting soil base, topsoil removal & haulout.	No findings.
July 4-7, 2025	MP 323.72-325.69	No work. Holiday weekend.	None.
July 8, 2025	MP 323.72-325.69	Culvert installation, grading and leveling portions of ROW.	No findings.
July 9, 2025	MP 323.72-325.69	Topsoil removal & haulout/redistribution,	No findings.

		culvert installation, grading & leveling subsoil siding base.	
July 10, 2025	MP 323.72-325.69	Continuation of culvert installation, grading and leveling portions of ROW.	No findings.
July 11, 2025	MP 323.72-325.69	Culvert installation, driving piling, grading and leveling portions of ROW.	No findings.
July 12, 2025	MP 323.72-325.69	Culvert installation and driving pile.	No findings.
July 13, 2025	MP 323.72-325.69	No work. Sunday.	None.
July 14, 2025	MP 323.72-325.69	Topsoil removal and haulout, topsoil deposit and grading & leveling portions of ROW, and driving pile.	No findings.
July 15, 2025	MP 323.72-325.69	Topsoil removal and haulout, topsoil deposit and grading & leveling portions of ROW	No findings.
July 16, 2025	MP 323.72-325.69	Culvert installation, pit excavation.	No findings.
July 17, 2025	MP 323.72-325.69	Topsoil removal and haulout, topsoil deposit and grading & leveling portions of ROW.	No findings.
July 18, 2025	MP 323.72-325.69	Excavating pit, soil haulout & redeposit, grading and leveling.	No findings.
July 19, 2025	MP 323.72-325.69	Topsoil grading & leveling portions of ROW.	No findings.
July 20, 2025	MP 323.72-325.69	No work. Sunday.	None.
July 21, 2025	MP 323.72-325.69	Reinstalling silt fence where it is not functioning properly, adding BMPs to culvert drainage areas, addressing all environmental concerns due to recent heavy rain and excess drainage issues.	No findings.
July 22, 2025	MP 323.72-325.69	Topsoil removal and haulout, topsoil deposit and grading & leveling portions of ROW.	No findings.
July 23, 2025	MP 323.72-325.69	Excavation of hillside, grading and leveling portions of ROW.	No findings.
July 24, 2025	MP 323.72-325.69	No work.	None.
July 25, 2025	MP 323.72-325.69	Excavation of hillside, grading and leveling portions of ROW.	No findings.
July 26, 2025	MP 323.72-325.69	Moving and maintaining BMP silt socks along portions of ROW that require erosion control.	No findings.

July 27, 2025	MP 323.72-325.69	No work. Sunday.	None.
July 28, 2025	MP 323.72-325.69	De-watering ponds, environmental maintenance, grading and leveling portions of ROW.	No findings.
July 29, 2025	MP 323.72-325.69	Culvert installation, grading and leveling portions of ROW.	No findings.
July 30, 2025	MP 323.72-325.69	No work.	None.
July 31, 2025	MP 323.72-325.69	Culvert installation, grading and leveling portions of ROW.	No findings.

Table 7. Monitoring Locations and Results – August 2025

Date	Monitoring Location	Construction Activities Monitored	Results
August 1, 2025	MP 323.72-325.69	Excavating hillside, hauling soil, grading, leveling and rolling, compacting re-deposited soil.	No findings.
August 2, 2025	MP 323.72-325.69	Excavating hillside, grading and leveling portions of ROW.	No findings.
August 3, 2025	MP 323.72-325.69	No work. Sunday.	None.
August 4, 2025	MP 323.72-325.69	Soil testing for hydraulic stress load, rolling and compacting hauled-in soil, grading and leveling ROW.	No findings.
August 5, 2025	MP 323.72-325.69	Rolling and compacting soil base, grading and leveling portions of ROW.	No findings.
August 6, 2025	MP 323.72-325.69	Setting up and moving crane, grading and leveling portions of ROW.	No findings.
August 7, 2025	MP 323.72-325.69	No work.	None.
August 8, 2025	MP 323.72-325.69	Moving welding boxes, placing silt socks in front of water drainage areas for environmental maintenance.	No findings.
August 9, 2025	MP 323.72-325.69	No work.	None.
August 10, 2025	MP 323.72-325.69	No work. Sunday.	None.
August 11, 2025	MP 323.72-325.69	Excavating portions of ROW, topsoil hauling and	No findings.

		redeposition, grading and leveling	
August 12, 2025	MP 323.72-325.69	Environmental BMP silt sock installation, water pumping, equipment moving.	No findings.
August 13, 2025	MP 323.72-325.69	Excavating portions of ROW, grading and leveling	No findings.
August 14, 2025	MP 323.72-325.69	Trenching and culvert installation, grading and leveling portions of ROW.	No findings.
August 15, 2025	MP 323.72-325.69	Excavating and trenching for culvert installation, grading and leveling portions of ROW.	No findings.
August 16, 2025	MP 323.72-325.69	Rolling gravel base, grading and leveling portions of ROW, environmental maintenance.	No findings.
August 17, 2025	MP 323.72-325.69	No work. Sunday.	None.
August 18, 2025	MP 323.72-325.69	Drilling equipment arrival and setup for drilling, excavating portions of ROW, grading and leveling.	No findings.
August 19, 2025	MP 323.72-325.69	Culvert trenching, excavating portions of ROW, grading, leveling and building up new siding.	No findings.
August 20, 2025	MP 323.72-325.69	Culvert trenching and installation, excavating, grading and leveling portions of ROW.	No findings.
August 21, 2025	MP 323.72-325.69	Excavating portions of ROW in advance of culvert installation, delivery and placement of rip rap.	No findings.
August 22, 2025	MP 323.72-325.69	Continuation of delivery and placement of rip rap, excavating in advance of next culvert installation, grading, leveling and compacting portions of ROW.	No findings.
August 23, 2025	MP 323.72-325.69	Grading, rolling and compacting newly deposited gravel base layer, excavating in advance of culvert replacement.	No findings.
August 24, 2025	MP 323.72-325.69	No work. Sunday.	None.
August 25, 2025	MP 323.72-325.69	Excavating, grading, leveling, and compacting	No findings.

		portions of ROW, culvert installation.	
August 26, 2025	MP 323.72-325.69	Culvert installation, excavating, grading and compacting portions of ROW.	No findings.
August 27, 2025	MP 323.72-325.69	Culvert installation, grading and compacting portions of ROW	No findings.
August 28, 2025	MP 323.72-325.69	Excavating, grading, leveling and compacting portions of ROW.	No findings.
August 29, 2025	MP 323.72-325.69	No work.	None.
August 30, 2025	MP 323.72-325.69	No work.	None.
August 31, 2025	MP 323.72-325.69	No work. Sunday.	None.

Table 8. Monitoring Locations and Results – September 2025

Date	Monitoring Location	Construction Activities Monitored	Results
September 1, 2025	MP 323.72-325.69	No work. Labor Day.	None.
September 2, 2025	MP 323.72-325.69	Excavating portions of ROW, grading, leveling + compacting.	No findings.
September 3, 2025	MP 323.72-325.69	Excavating, grading, leveling and compacting portions of ROW, Culvert installation work.	No findings.
September 4, 2025	MP 323.72-325.69	Excavating, grading, leveling, & compacting portions of ROW.	No findings.
September 5, 2025	MP 323.72-325.69	Excavating, grading & leveling portions of ROW, culvert installation.	No findings.
September 6, 2025	MP 323.72-325.69	Excavating, grading, leveling, hauling and depositing soil from portions of ROW, work associated with culvert installation.	No findings.
September 7, 2025	MP 323.72-325.69	No work. Sunday.	None.
September 8, 2025	MP 323.72-325.69	Excavating, grading, leveling, smoothing and compacting portions of ROW.	No findings.
September 9, 2025	MP 323.72-325.69	Trenching along access road edges, constructing drainage swales, grading, leveling and compacting portions of ROW	No findings.

September 10, 2025	MP 323.72-325.69	Culvert installation activities, grading, leveling and smoothing portions of ROW.	No findings.
September 11, 2025	MP 323.72-325.69	Grading, rolling and compacting soil on ROW edges, culvert installation activities/headwall construction.	No findings.
September 12, 2025	MP 323.72-325.69	Rolling and compacting portions of ROW, spraying hydromulch, applying erosion blankets.	No findings.
September 13, 2025	MP 323.72-325.69	Hydromulch spraying, loading and installing erosion blankets.	No findings.
September 14, 2025	MP 323.72-325.69	No work. Sunday.	None.
September 15, 2025	MP 323.72-325.69	Excavating, grading, leveling, compacting and smoothing portions of ROW in advance of adding gravel base layer.	No findings.
September 16, 2025	MP 323.72-325.69	Excavating, grading, leveling, and compacting portions of ROW in advance of laying base gravel layer.	No findings.
September 17, 2025	MP 323.72-325.69	Excavating, loading and re-depositing of soil, grading, and leveling portions of ROW in advance of building up new siding base.	No findings.
September 18, 2025	MP 323.72-325.69	No work.	None.
September 19, 2025	MP 323.72-325.69	Excavating and loading soil from one portion of ROW to other lower portions requiring build up.	No findings.
September 20, 2025	MP 323.72-325.69	General housekeeping, moving silt socks, maintenance of environmental BMPs.	No findings.
September 21, 2025	MP 323.72-325.69	No work. Sunday.	None.
September 22, 2025	MP 323.72-325.69	Headwall construction, dewatering in pooled areas.	No findings.
September 23, 2025	MP 323.72-325.69	Dewatering pooled areas from recent rains, moving and adjusting BMPs.	No findings.
September 24, 2025	MP 323.72-325.69	Excavating, grading, compacting portions of ROW.	No findings.
September 25, 2025	MP 323.72-325.69	Excavating, grading, compacting portions of ROW.	No findings.

September 26, 2025	MP 323.72-325.69	Excavating, grading, compacting portions of ROW.	No findings.
September 27, 2025	MP 323.72-325.69	No work.	None.
September 28, 2025	MP 323.72-325.69	No work. Sunday.	None.
September 29, 2025	MP 323.72-325.69	Excavating, grading, leveling, smoothing & compacting portions of ROW alongside newly built siding	No findings.
September 30, 2025	MP 323.72-325.69	Excavating, moving soil, grading + compacting portions of ROW next to new siding	No findings.

Table 9. Monitoring Locations and Results –October 2025

Date	Monitoring Location	Construction Activities Monitored	Results
October 1, 2025	MP 323.72-325.69	Excavating, grading, smoothing, compacting portions of ROW next to newly built siding.	No findings.
October 2, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 3, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 4, 2025	MP 323.72-325.69	Rainout. No work.	None.
October 5, 2025	MP 323.72-325.69	No work. Sunday.	None.
October 6, 2025	MP 323.72-325.69	Rainout. No work.	None.
October 7, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 8, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 9, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 10, 2025	MP 323.72-325.69	Excavating, moving soil, grading and compacting	No findings.

		portions of ROW next to newly built siding.	
October 11, 2025	MP 323.72-325.69	Installation of BMPs ahead of predicted rain, grading portions of ROW.	No findings.
October 12, 2025	MP 323.72-325.69	No work. Sunday.	None.
October 13, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 14, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 15, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 16, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 17, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 18, 2025	MP 323.72-325.69	No work.	None.
October 19, 2025	MP 323.72-325.69	No work. Sunday.	None.
October 20, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 21, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 22, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 23, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 24, 2025	MP 323.72-325.69	Excavating, moving soil, grading and compacting portions of ROW next to newly built siding and culvert	No findings.
October 25, 2025	MP 323.72-325.69	No work.	None.
October 26, 2025	MP 323.72-325.69	Excavating, moving soil, grading, and compacting portions of ROW next to newly built siding.	No findings.
October 27, 2025	MP 323.72-325.69	Grading, rolling, compacting and	No findings.

		smoothing drainage swales next to newly built siding.	
October 28, 2025	MP 323.72-325.69	Grading drainage swales alongside newly built siding.	No findings.
October 29, 2025	MP 323.72-325.69	Excavating, moving soil, grading and compacting portions of ROW next to newly built siding.	No findings.
October 30, 2025	MP 323.72-325.69	Excavating, moving soil, grading and compacting portions of ROW next to newly built siding	No findings.
October 31, 2025	MP 323.72-325.69	Excavating, moving soil, grading and compacting portions of ROW next to newly built siding	No findings.



Photo Date: March 26, 2025
Photo Direction: Northwest
Description of photo: Inspection of exposed soils in cleared area next to existing rail where proposed siding will be placed.



Photo Date: April 14, 2025
Photo Direction: Southeast
Description of photo: Removal of topsoil along ROW.



Photo Date: May 17, 2025
Photo Direction: Northeast
Description of photo: Blading and leveling a new access road into project area.



Photo Date: July 11, 2025
Photo Direction: Southeast
Description of photo: Newly installed culvert.



Photo Date: August 23, 2025
Photo Direction: East
Description of photo: Trucks with gravel loads arriving to deposit gravel.



Photo Date: September 17, 2025
Photo Direction: Southwest
Description of photo: Excavating soil from one portion of ROW and loading into truck to deposit to another area where elevation differences require building up base with extra soil.



Photo Date: October 31, 2025
Photo Direction: Southwest
Description of photo: Seed mix sprayed along graded and smoothed ROW/ siding intersection as part of final steps in project completion.

MORAVIA SIDING

CPKC Final Environmental Monitoring Report

MORAVIA SIDING

CPKC Final Environmental Monitoring Report

This is the final Environmental Monitoring Report for the Moravia Siding project located in Appanoose County, IA (Kansas City Subdivision from MP 328.03 to MP 330.21). This project is part of the Canadian Pacific – Kansas City Southern railroad merger approved by the Surface Transportation Board on March 15, 2023. The siding is required to manage the impacts of increased traffic by creating additional passing capacity and maintain system fluidity post-merger. All capital improvement projects approved as part of the merger are subject to a series of mitigation measures as is outlined in the Final Environmental Impact Statement (and included as Approval Conditions in the Board' Final Decision), and this is the final report showing Moravia's compliance with those measures. Construction on Moravia started on March 24th, 2025, and the siding has not been placed into service yet. All construction activities which were part of this project were in compliance with the Board's construction related Conditions.

Compliance with Mitigation Measures

MM-General-03. To minimize the potential for impacts on biological resources, water resources, hazardous materials release sites, and cultural resources, the Applicants shall, to the greatest extent possible, confine construction activities related to the planned capital improvements to the area within the existing ROW.

ROW boundary/limits are marked by blue survey stakes.







VM-Noise-02. While building the Capital Improvement Projects, the Applicants will work with their construction contractors to minimize, where practicable, construction-related noise disturbances between the hours of 2100 and 0700 local time.

All noise on project was within acceptable limits of the project permits at all times.





VM-Air-05. The Applicants will develop an anti-idling policy for use in potentially affected communities on the combined network. The policy will capture both idling of construction equipment used on the Capital Improvement Projects as well as ongoing operations.

The anti-idling policy was discussed in the morning job briefings with all personnel onsite. Equipment and vehicles onsite were not run unless being utilized for operations.



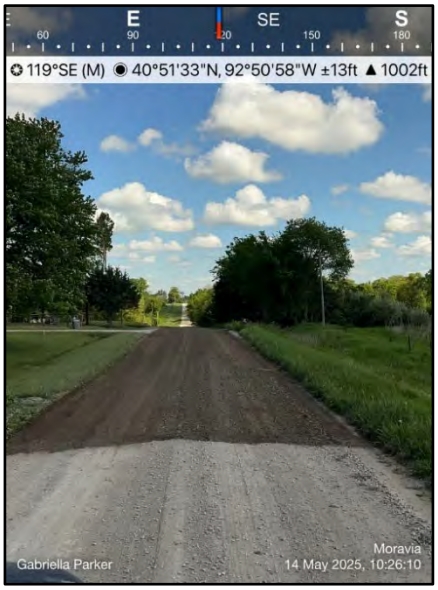


VM-Air-06. To minimize fugitive dust emissions created during the construction of the Capital Improvement Projects, the Applicants will implement appropriate fugitive dust suppression controls, such as spraying water or other approved measures.

The contractor had Smith Fertilizer & Seed treat 420th Street, 430th Street, and 230th Avenue with Calcium Chloride on 05/14/25 and 06/17/25. Roads were saturated from frequent rain and snow.

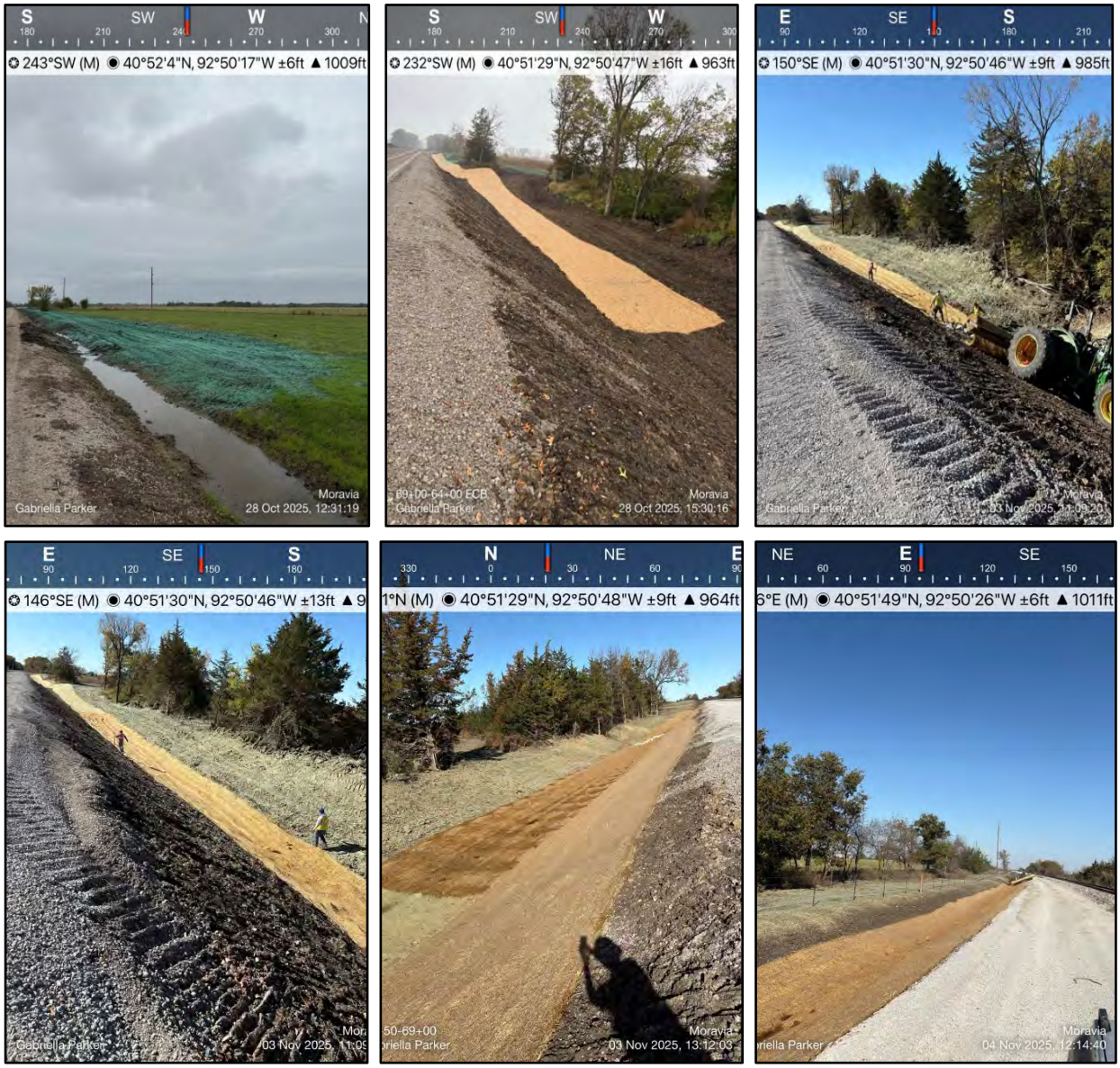






VM-Air-08. Where vegetation clearing has taken place during the construction of the Capital Improvement Projects, the Applicants will begin revegetation as soon as practicable to minimize impacts of wind erosion and fugitive dust. Where immediate revegetation is not practicable, the Applicants will implement alternative stabilization measures such as matting, mulching, or hydroseeding.

Seeding, hydromulching, and blanketing was completed at the North access road to the overpass, 420th-112+00, and 420th- 130+75 on 9/12/25. Seeding at 60+00-112+00 was completed on 10/27/25 and hydromulched on 10/28/25. ECB was installed from 64+00-84+00 and spread seed and fertilizer from 130+50-HWY5 on 11/3/25. ECB from 84+00-420th Street and hydromulched 112+00-HWY5 on 11/4/25. ECB installed from 112+00-155+00 on 11/5/25 and at 115+00-165+00 on 11/6/25.



VM-Haz. Material Sites-01. The Applicants will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction of the Capital Improvement Projects. The Applicants will document all activities associated with the previously undocumented contamination and will notify the appropriate state agencies according to applicable regulations. The Applicants will use disposal methods which comply with applicable solid and hazardous waste regulations.

No hazardous materials or issues relating to hazardous materials were observed during construction.

VM-Haz. Material Sites-03. In the event of a spill over the applicable reportable quantity during the construction of a Capital Improvement Project, the Applicants will comply with its site-specific spill prevention, control and response plan and applicable federal and state regulations pertaining to spill containment, appropriate clean-up, and notifications.

Contractors have a spill response plan along with readily available spill kits in their equipment and trailer.



VM-Haz. Material Sites-04. During the construction of the Capital Improvement Projects, the Applicants will ensure that gasoline, diesel fuel, oil, lubricants, and other petroleum products are handled and stored to reduce the risk of spills contaminating soils or surface waters. If a petroleum spill occurs as a result of construction, and exceeds specific quantities or enters a waterbody, the Applicants (or its agents) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal and state regulations.

Any extensive maintenance or large quantity fluid change was performed offsite to minimize risk of spill or impact to surrounding environment.





VM-Haz. Material Sites-05. The Applicants will require contractors to dispose of waste generated on the Capital Improvement Projects in accordance with all applicable federal, state, and local regulations.

Garbage was carried out with personnel at the end of each day. Garbage cans and a covered dumpster were available at the contractor's trailer at the water tower.







VM-Biological-02. Where practicable, the Applicants will clear vegetation in preparation for the Capital Improvement Projects before or after the breeding bird nesting season, specific to each project location, to avoid inadvertent removal of active nests (nesting adults, young, or eggs) and to ensure compliance with the Migratory Bird Treaty Act. If clearing is required during a respective location's nesting season, the Applicants will consult with OEA and the local office of the U.S. Fish and Wildlife Service (USFWS) on appropriate nest survey methods for that area.

Clearing for this project was completed 12/3/24.







VM-Biological-03. The Applicants will not conduct construction related tree removal for the Capital Improvement Projects during the active season for the Indiana bat and the northern long-eared bat (April 1 to October 31).

All clearing operations were completed outside of the above-listed dates.







VM-Biological-04. During the construction of the Capital Improvement Projects, the Applicants will take steps to reduce the unnecessary removal of bat habitat outside of active bat season by limiting tree removal to only the areas necessary to safely construct and operate the new siding or second track,

marking the limits of tree clearing through the use of flagging or fencing, and ensuring that construction contractors understand clearing limits and how they are marked in the field.

The clearing and construction boundaries were defined through survey stakes. All contractors were made aware of suitable bat habitats on ROW.



VM-Biological-05. If construction of the Capital Improvement Projects would require removal or alteration of bridges, culverts, or other structures that provide suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31), the Applicants will first conduct an inspection for the presence of, or evidence of use by, bats. The inspection will be completed by a qualified biologist. If the inspection finds bats or evidence of bats, then the Applicants will not commence work on the structure until coordinating with OEA and USFWS to determine appropriate follow-up or mitigative actions. The inspection must be completed during the same year that the work takes place.

I (Gabriella Parker) performed inspection of suitable habitat structures on the project on 12/3/24 & 12/4/24. No bats or signs of bats were discovered. Please see Appendix A for the Bat Inspection Report.

VM-Biological-06. Where practicable, the Applicants will conduct any culvert or bridge removal as part of the Capital Improvement Projects outside of the roosting period of bat species, specific to each project location. Where practicable, if bridge or culvert removal is required during the bat roosting period where the individual Capital Improvement Project is located, the Applicants will consult with OEA and the local USFWS office on appropriate methods to determine if bats are using the bridge or culvert as a roost.

I (Gabriella Parker) performed inspection of suitable habitat structures on the project on 12/3/24 & 12/4/24. No evidence of bats were present.







VM-Biological-07. During construction of the Capital Improvement Projects, the Applicants will direct any temporary lighting away from suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31). The Applicants will use downward-facing, full cut-off lens lights for any temporary lighting used during the construction of the Capital Improvement Projects.

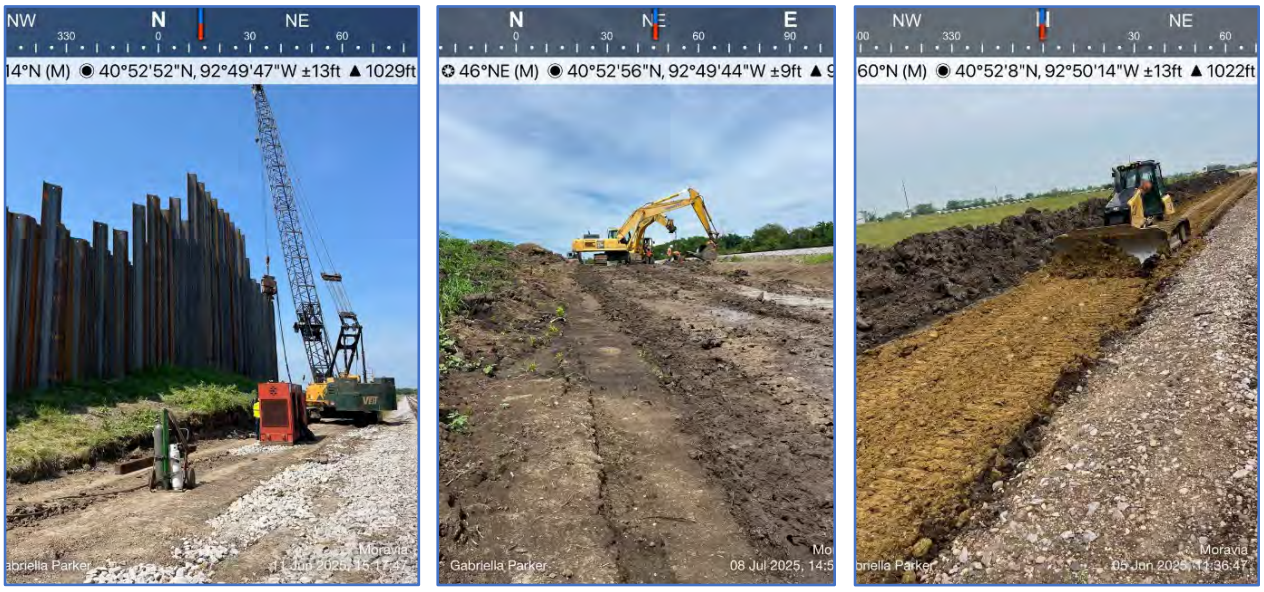
No temporary lighting was used and it was communicated that any light should be directed away from suitable habitats for the long-eared bat.

VM-Biological-09. During construction of the Capital Improvement Projects, temporary barricades, fencing, and/or flagging will be used in sensitive habitats to contain construction related impacts to the area within the construction ROW. To the extent possible, staging areas will be located in previously disturbed sites and not in sensitive habitat areas.

The construction boundaries and limits were marked out by survey. Equipment was staged at the water tower at the north access road.

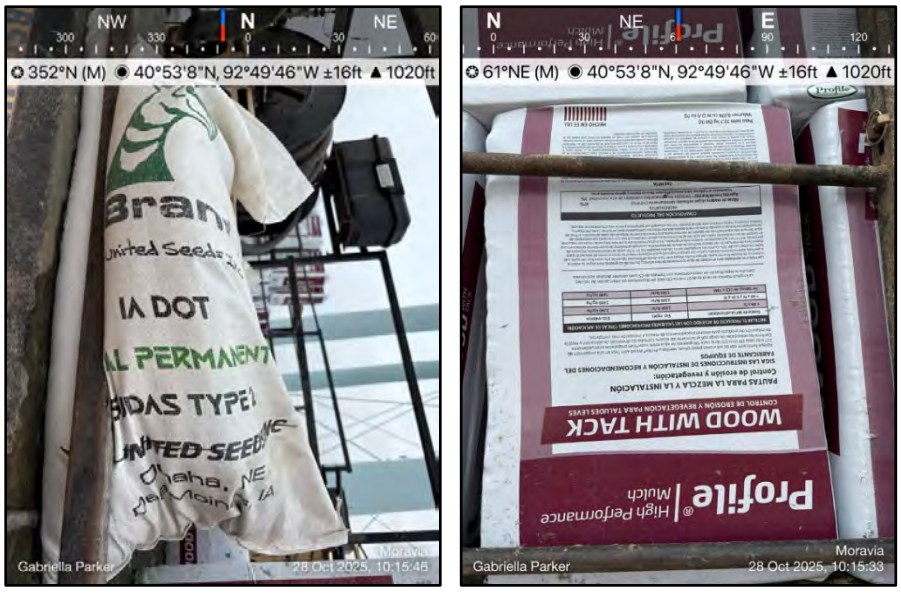
VM-Biological-10. The Applicants will limit ground disturbance to only the areas necessary for the construction of the Capital Improvement Projects.

Ground disturbance took place only in the necessary areas for construction.



VM-Biological-11. The Applicants will use construction methods and seed mixes that minimize introduction and spread of noxious weeds on the Capital Improvement Projects. Noxious weed control will include combinations of mechanical and herbicide spray methods.

All seed mixtures used on the siding for stabilization/restoration showed no noxious weeds on the tag. See used was IDOT RURAL PERM SUDAS TYPE 2.



VM-Biological-13. As applicable to each of the individual Capital Improvement Projects, the Applicants will protect bald and golden eagles by adhering to the Bald and Golden Eagle Protection Act. In addition, the Applicants will follow the USFWS National Bald Eagle Management Guidelines, as applicable.

No presence of bald or golden eagles were observed throughout construction.

MM-Biological-01. For capital improvements related to the Proposed Acquisition, the Applicants shall not knowingly include any federally- or state-listed invasive weed species in seed mixes for revegetating disturbed areas within the rail ROW.

Each see tag was inspected by the environmental monitor prior to use to ensure no invasive weed species were present. The contractor used IDOT RURAL PERM SUDAS TYPE 2 Rye seed to vegetate disturbed areas.





VM-Water-04. As applicable to each of the individual Capital Improvement Projects, the Applicants will require its construction contractor(s) to follow all water quality control conditions identified in all permits including the Water Quality Certification from the respective jurisdiction and Section 404 Permits issued by USACE.

The contractor followed all water quality control identified in all permits including the Water Quality Certification. A site-specific Stormwater Pollution Prevention Plan SWPPP was provided to all contractors onsite. Following the plan, environmental monitor and contractors worked together on the installation/maintenance of erosion control devices and best management practices to minimize potential for erosion and sediment affecting the waterways. Routine SWPPP/rain event inspections are conducted appropriately until the site reaches 70% uniform vegetation.







VM-Water-05. Prior to initiating construction at a Capital Improvement Project location, the Applicants will develop a site-specific Stormwater Pollution Prevention Plan which will incorporate Best Management Practices as well as site specific measures to control erosion and reduce the amount of sediment and pollutants entering surface waters, ground waters, and waters of the U.S.

The contractor complied with the approved site-specific SWPPP plan. Following the plan, environmental monitor and contractors worked together on the installation of erosion control devices and best management practices near and around waterways including the wetlands and culverts to reduce the amount of sediment and pollutants entering surface waters and ground waters. Implemented examples include bio logs, secondary containment, filter bags and silt fence.






VM-Water-06. For Capital Improvement Project locations which will involve construction activities in proximity to surface water, prior to the start of construction the Applicants will develop a site-specific water quality monitoring plan and implement this monitoring plan throughout construction.

A site-specific water quality monitoring plan was implemented by the on site environmental monitor. Waterways were inspected regularly prior and during construction and at least once weekly since operations have ceased.







VM-Water-10. As applicable to each of the individual Capital Improvement Projects, the Applicants will comply with applicable in-water work windows and timing restrictions for the protection of fish species.

No in-water work was performed for the construction of Moravia Siding.

VM-Water-11. During the construction of Capital Improvement Projects, the Applicants will require all contractors to conduct daily inspections of all equipment for any fuel, lube oil, hydraulic or antifreeze leaks. If leaks are found, the Applicants will require the contractor to immediately remove the equipment from service and repair or replace it.

No spills or leaks observed throughout construction. Operators inspected equipment at the beginning and end of each work day.

VM-Water-13. During the construction of the Capital Improvement Projects, the Applicants will take reasonable steps to ensure contractors use fill material appropriate for the project area.

¾” minus, class A, 3”, class 5, erosion rock, clay, rip rap and sub-ballast material were delivered by local Cantera Aggregates and on project site.


NE E SE
60 90 120 150
108°E (M) 40°53'9"N, 92°49'43"W ±13ft
Gabriella Parker
16 Jul 2025, 15:1


SW W NW
210 240 270 300 330
3°W (M) 40°53'5"N, 92°49'36"W ±13ft ▲1003ft
Moravia
13 Aug 2025, 15:23:54


SE S SW
120 150 180 210
62°S (M) 40°53'3"N, 92°49'39"W ±9ft ▲979ft
Moravia
17 Jul 2025, 07:40:29

MORAVIA SIDING

CPKC Final Environmental Monitoring Report

APPENDIX A

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 11:54AM	CPKC Project Name: Moravia	Bridge Milepost: MP 330.22	County: Appanoose
Structure Name (if exists): Ex Bridge 330.22	Structure Coordinates (latitude and longitude): 40°51'21"N 92°50'56"W	Structure Height (approximate): 12'	Structure Length: 18'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

○ Box	
○ Pipe/Round	○
○ Other:	

Other Structure

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☒ Concrete
☐ Concrete	☐ Concrete	☒ Timber
☒ Timber	☒ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Culvert Material

☐ Metal	
☐ Concrete	
☐ Plastic	
☐ Stone/Masonry	
☐ Other:	

Creosote Evidence

◉ Yes	○ No	○ Unknown

Notes:

Crossings Traversed (check all that apply)

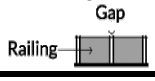
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☒ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A

Name: Gabriella Parker

Signature: Gabriella Parker


N NE E
330 0 30 60 90
37°NE (M) 40°51'21"N, 92°50'56"W ±13ft 979ft
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:53:39


E SE S
90 120 150 180 210
151°SE (M) 40°51'21"N, 92°50'56"W ±13ft 981ft
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:53:00


SE S SW W
150 180 210 240 270
205°SW (M) 40°51'21"N, 92°50'56"W ±13ft 981ft
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:53:06


N NE E
330 0 30 60 90
37°NE (M) 40°51'21"N, 92°50'56"W ±13ft 980ft
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:53:35


S
SW
W
150
180
210
240
270
219°SW (M) 40°51'21"N, 92°50'56"W ±9ft 977ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 11:52:17


NW
N
NE
300
330
0
30
60
5°N (M) 40°51'21"N, 92°50'56"W ±9ft 984ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 11:54:08


SE
S
SW
120
150
180
210
240
177°S (M) 40°51'21"N, 92°50'56"W ±13ft 978ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 11:52:29


S
SW
W
150
180
210
240
270
213°SW (M) 40°51'21"N, 92°50'56"W ±13ft 976ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 11:52:37


S
180
210
SW
240
W
270
300
232°SW (M) 40°51'21"N, 92°50'56"W ±9ft 992ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 11:52:11





CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 11:43AM	CPKC Project Name: Moravia	Bridge Milepost: MP 330	County: Appanoose
Structure Name (if exists): Ex Culvert CV5	Structure Coordinates (latitude and longitude): 40°51'30"N 92°50'46"W	Structure Height (approximate): 36"	Structure Length: 70'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss (Side View)
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☒ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☒ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☒ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck (Gap / Railing)	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☒ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


E
90
SE
120
150
S
180
135°SE (M) 40°51'30"N, 92°50'46"W ±9ft ▲ 973ft
Ex Culvert CV5
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:43:53


W
270
NW
300
330
N
0
30
N
335°NW (M) 40°51'29"N, 92°50'46"W ±32ft ▲ 917ft
Ex Culvert CV5
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:46:52


E
60
90
SE
120
150
S
180
127°SE (M) 40°51'30"N, 92°50'46"W ±13ft ▲ 975ft
Ex Culvert CV5
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:43:32


W
270
NW
300
330
N
0
30
322°NW (M) 40°52'1"N, 92°51'43"W ±18828ft ▲ 1050ft
Ex Culvert CV5
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:46:47

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 11:34AM	CPKC Project Name: Moravia	Bridge Milepost: MP 329.75	County: Appanoose
Structure Name (if exists): Ex Culvert CV6	Structure Coordinates (latitude and longitude): 40°51'40"N 92°50'34"W	Structure Height (approximate): 36"	Structure Length: 35'

Structure Type (check one)

Bridge Construction Style

○	Cast-in-place	○	Pre-stressed Girder
○	Flat Slab/Box	○	Steel I-beam
○	Truss (Side View)	○	Covered
○	Parallel Box Beam	○	Other:

Culvert Type

○	Box
○	Pipe/Round
○	Other:

Other Structure

○	

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

○ Yes	○ No	○ Unknown

Culvert Material

☒	Metal
☐	Concrete
☐	Plastic
☐	Stone/Masonry
☐	Other:

Notes:

Crossings Traversed (check all that apply)

☒	Bare ground	☒	Open vegetation
☐	Rip-rap	☐	Closed vegetation
☐	Flowing water	☒	Railroad
☒	Standing water	☐	Road/trail - Type:
☐	Seasonal water	☐	Other:

Surrounding Habitat (check all that apply)

☐	Agricultural	☐	Grassland
☐	Commercial	☒	Ranching
☐	Residential-urban	☒	Riparian/wetland
☒	Residential-rural	☐	Mixed use
☐	Woodland/forested	☐	Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck (Gap / Railing)	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker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150
180
119°SE (M) 40°51'40"N, 92°50'35"W ±16ft 1020ft
Ex Culvert CV6
Gabriella Parker
Moravia Clearing
03 Dec 2024 11:37:26


W
NW
N
270
300
330
0
314°NW (M) 40°51'40"N, 92°50'34"W ±9ft 993ft
Ex Culvert CV6
Gabriella Parker
Moravia Clearing


W
NW
N
270
300
330
0
30
325°NW (M) 40°51'40"N, 92°50'35"W ±13ft 1000ft
Moravia Clearing

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/04/2024 9:20AM	CPKC Project Name: Moravia	Bridge Milepost: MP 326.69	County: Appanoose
Structure Name (if exists): Ex Culvert CV7	Structure Coordinates (latitude and longitude): 40°51'42"N 92°50'32"W	Structure Height (approximate): 18"	Structure Length: 20'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Creosote Evidence

○ Yes ○ No ○ Unknown

Notes:

Crossings Traversed (check all that apply)

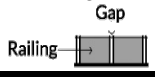
☒ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☒ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


S
SW
W
180
210
240
270
300
235°SW (M) 40°51'43"N, 92°50'32"W ±9ft 994ft
PR CV7
Gabriella Parker
Moravia Clearing
04 Dec 2024, 09:20:54


N
NE
E
0
30
60
90
45°NE (M) 40°51'42"N, 92°50'32"W ±13ft 992ft
PR CV7
Gabriella Parker
Moravia Clearing
04 Dec 2024, 09:20:11

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 11:28AM	CPKC Project Name: Moravia	Bridge Milepost: MP 329.55	County: Appanoose
Structure Name (if exists): Ex Culvert CV8	Structure Coordinates (latitude and longitude): 40°51'48"N 92°50'27"W	Structure Height (approximate): 20"	Structure Length: 40'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Creosote Evidence

○ Yes ○ No ○ Unknown

Notes:

Crossings Traversed (check all that apply)

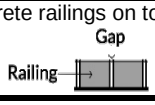
☐ Bare ground	☒ Open vegetation
☒ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


E
SE
S
60
90
120
150
180
118°SE (M) 40°51'48"N, 92°50'27"W ±13ft ▲1002ft
Ex Culvert CV8
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:28:15


W
NW
N
270
300
330
0
30
332°NW (M) 40°51'48"N, 92°50'26"W ±13ft ▲1001ft
Ex Culvert CV8
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:29:28


E
SE
S
90
120
150
180
132°SE (M) 40°51'48"N, 92°50'27"W ±13ft ▲1005ft
Ex Culvert CV8
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:28:38


W
NW
N
270
300
330
0
314°NW (M) 40°51'48"N, 92°50'26"W ±13ft ▲1000ft
Ex Culvert CV8
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:29:21

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:57AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.53	County: Appanoose
Structure Name (if exists): Ex Culvert CV9	Structure Coordinates (latitude and longitude): 40°52'36"N 92°49'58"W	Structure Height (approximate): 20"	Structure Length: 50'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

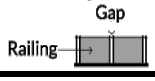
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☒ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


W NW N NE
270 300 330 0 30
338°N (M) 40°52'36"N, 92°49'57"W ±13ft 997ft
Ex Culvert CV9
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:00:38


NE E SE
30 60 90 120 150
84°E (M) 40°52'36"N, 92°49'58"W ±13ft 985ft
Ex Culvert CV9
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:58:20


NE E SE
30 60 90 120 150
97°E (M) 40°52'36"N, 92°49'58"W ±19ft 942ft
Ex Culvert CV9
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:57:53


W NW N
270 300 330 0
320°NW (M) 40°52'36"N, 92°49'57"W ±13ft 997ft
Ex Culvert CV9
Gabriella Parker
Moravia Clearing
03 Dec 2024, 11:00:22

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:54AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.43	County: Appanoose
Structure Name (if exists): Ex Culvert CV10	Structure Coordinates (latitude and longitude): 40°52'41"N 92°49'54"W	Structure Height (approximate): 20"	Structure Length: 40'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Creosote Evidence

○ Yes ○ No ○ Unknown

Notes:

Crossings Traversed (check all that apply)

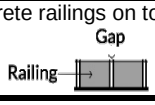
☒ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


NE E SE
60 90 120 150
105°E (M) 40°52'41"N, 92°49'55"W ±13ft 972ft
Ex Culvert CV10
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:55:22


W NW N
240 270 300 330 0
308°NW (M) 40°52'41"N, 92°49'54"W ±13ft 998ft
Ex Culvert CV10
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:54:14


NE E SE S
60 90 120 150 180
112°E (M) 40°52'41"N, 92°49'55"W ±9ft 974ft
Ex Culvert CV10
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:55:15

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:48AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.37	County: Appanoose
Structure Name (if exists): Ex Culvert CV11	Structure Coordinates (latitude and longitude): 40°52'44"N 92°49'53"W	Structure Height (approximate): 20"	Structure Length: 40'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

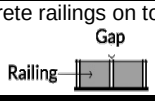
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☒ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


NE E SE
30 60 90 120 150
99°E (M) 40°52'44"N, 92°49'53"W ±13ft 998ft
Ex Culvert CV11
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:48:34


W NW N
270 300 330 0
317°NW (M) 40°52'44"N, 92°49'52"W ±13ft 1002ft
Ex Culvert CV11
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:50:12


NW N NE
300 330 0 30
340°N (M) 40°52'44"N, 92°49'53"W ±13ft 995ft
separate cor. Pipe Ex
Culvert CV11
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:49:11


W NW N
270 300 330 0
312°NW (M) 40°52'44"N, 92°49'52"W ±13ft 997ft
Ex Culvert CV11
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:50:29

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:29AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.03	County: Appanoose
Structure Name (if exists): Ex Culvert CV13	Structure Coordinates (latitude and longitude): 40°53'0" N 92°49'41" W	Structure Height (approximate): 42"	Structure Length: 100'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

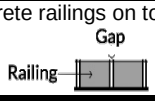
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☒ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☒ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead #; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


W NW N
270 300 330 0 30
327°NW (M) 40°53'0"N, 92°49'40"W ±13ft 983ft
Ex Culvert CV13
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:33:39


W NW N
270 300 330 0 30
322°NW (M) 40°53'0"N, 92°49'40"W ±9ft 991ft
Ex Culvert CV13
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:33:29


NE E SE
30 60 90 120 150
99°E (M) 40°53'0"N, 92°49'41"W ±13ft 984ft
Ex Culvert CV13
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:29:20


NE E SE
0 60 90 120 150
101°E (M) 40°53'0"N, 92°49'40"W ±13ft 988ft
Ex Culvert CV13
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:29:02

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:42AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.20	County: Appanoose
Structure Name (if exists): Ex Bridge	Structure Coordinates (latitude and longitude): 40°52'52"N 92°49'48"W	Structure Height (approximate): 20'	Structure Length:

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☒ Concrete
☒ Concrete	☐ Concrete	☐ Timber
☒ Timber	☒ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Creosote Evidence

○ Yes ○ No ○ Unknown

Notes:

Crossings Traversed (check all that apply)

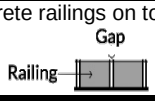
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

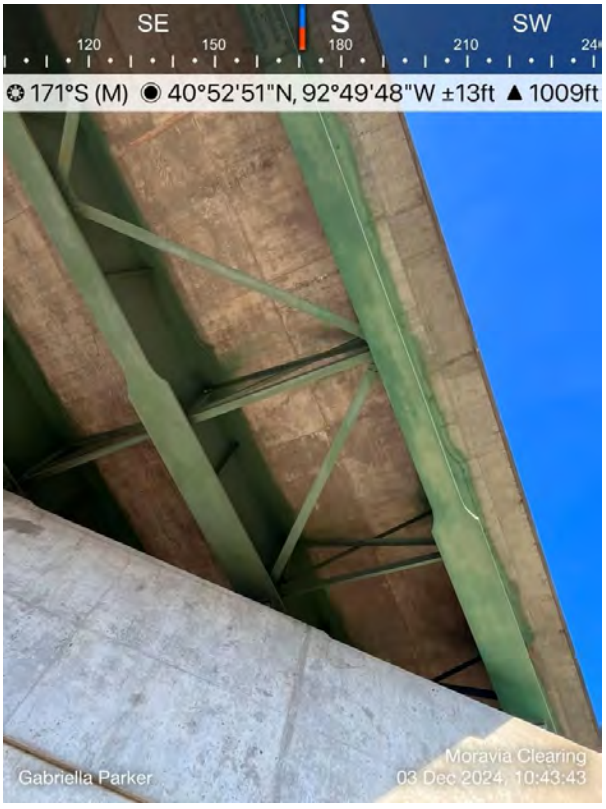
Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A
☒ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0 ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species N/A

Name: Gabriella Parker

Signature: Gabriella Parker


S
SW
W
150
180
210
240
270
215°SW (M) 40°52'52"N, 92°49'47"W ±13ft ▲1012ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 10:42:47


NW
N
NE
300
330
0
30
60
1°N (M) 40°52'51"N, 92°49'48"W ±13ft ▲1006ft
Moravia Clearing
Gabriella Parker


SE
S
SW
120
150
180
210
171°S (M) 40°52'51"N, 92°49'48"W ±13ft ▲1009ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 10:43:43


NW
N
NE
300
330
0
30
60
7°N (M) 40°52'52"N, 92°49'48"W ±13ft ▲1009ft
Moravia Clearing
Gabriella Parker
03 Dec 2024, 10:43:25


SE
120
150
S
180
210
SW
240
173°S (M) 40°52'51"N, 92°49'48"W ±13ft 1005ft
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:44:07


NW
300
330
N
0
30
NE
347°N (M) 40°52'52"N, 92°49'48"W ±13ft 1007ft
Gabriella Parker
Moravia Clearing
03 Dec 2024

CPKC OEA Compliance Program
Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 12/03/2024 10:40AM	CPKC Project Name: Moravia	Bridge Milepost: MP 328.13	County: Appanoose
Structure Name (if exists): Ex Culvert CV12	Structure Coordinates (latitude and longitude): 40°52'55"N 92°49'44"W	Structure Height (approximate): 36"	Structure Length: 60'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

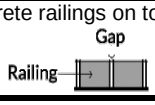
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☒ Railroad
☒ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☒ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☒ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Vertical surfaces on concrete I-beams	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☒ Spaces between walls, ceiling joists	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All guiderails	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A
☐ All expansion joints	☒ Not present	☒ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining	☐ Audible; ☐ Odor; ☐ Photos	☐ Species: N/A

Name: Gabriella Parker

Signature: Gabriella Parker


E 90 120 SE 150 S 180
135°SE (M) 40°52'55"N, 92°49'44"W ±13ft 985ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:40:08


W 270 300 NW 330 N 0
316°NW (M) 40°52'54"N, 92°49'44"W ±9ft 985ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:37:41


W 270 300 NW 330 N 0 30
325°NW (M) 40°52'55"N, 92°49'44"W ±9ft 974ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing


NE 60 E 90 120 SE 150 S 180
112°E (M) 40°52'55"N, 92°49'45"W ±13ft 985ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing
03 Dec 2024, 10:40:40


E
SE
S
60
90
120
150
180
124°SE (M) 40°52'55"N, 92°49'45"W ±9ft ▲ 983ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing
03 Dec 2024 10:40:32


W
NW
N
240
270
300
330
0
299°NW (M) 40°52'54"N, 92°49'44"W ±9ft ▲ 986ft
Ex Culvert CV12
Gabriella Parker
Moravia Clearing
03 Dec 2024 10:37:45

TECHNICAL MEMORANDUM

To: Joe Van Humbeck, Director Impact Assessment & Natural Environment, CPKC
Joe.Vanhumbeck@cpkcr.com

Kyle Sumsion, Manager System Environmental Assessment
Kyle.Sumsion@cpkcr.com

From: Josh Fletcher, Principal Investigator, HDR
Erika Niemann, Archaeologist, Actalent

September 28, 2026

HDR Rail Cultural Resources Monitoring Final Summary Report, Cave Springs, Oklahoma

PROJECT DESCRIPTION

HDR, Inc. (HDR) was contracted by Canadian Pacific and Kansas City Southern (CPKC) to monitor for cultural resources during the construction of capital improvements along the CPKC rail right-of-way. This summary report for the Cave Springs new siding project area documents the completed cultural resource monitoring activities undertaken by HDR from February 16, 2026, to April 1, 2026.

This Cave Springs siding extension project is in Cave Springs, Oklahoma on the KCS Heavener Subdivision between mileposts (MP) 267.3 and 266.25. The project is approximately one mile long. The existing portion of the siding has a clear length of approximately 8,760 feet with No. 12 turnouts on either end. The existing siding was extended north for approximately 5,400 feet from its current north control point located at MP 267.3 and ending at approximately MP 266.25. The existing siding and siding extension are all on the west side of the mainline. The siding extension provides a clear length of approximately 1,750 feet from its current south control point to the new north control point.

Existing culverts were extended in-kind. No bridges exist within the construction limits of the extension. Existing topsoil was removed, and the subgrade was prepared for the new embankment. Topsoil excavations were 12 inches in depth. A maximum thickness of three feet of fill and sub ballast was added. Minor clearing of trees within the extension limits was necessary. Access to the construction site was from the northern end of the Project, where the rail crosses S 4660 Road.

Archaeologist Erika Niemann was the assigned archaeological monitor for the Project, under the direction of Secretary of the Interior (SOI)-qualified Senior Archaeologist Josh Fletcher (Principal Investigator).

MONITORING METHODS

HDR monitoring methods consisted of visual inspection of all ground-disturbing activities, including but not limited to:

- Cutting and grading of the access road
- Access road maintenance
- Placement of gravel on the access road
- General site grading, including siding areas
- Stripping, shaping, and grading of embankments
- Separation of large rocks from soil
- Lift construction
- Sub-ballast placement
- Ditch excavation
- Culvert installation
- Trenching for silt fence installation
- Rip-rap placement
- Clearing debris and tree roots for fence installation
- Fence post removal and installation
- General fence installation
- Placement of mulch on berms
- Final site stabilization, including hydroseeding

The onsite archaeologist observed and inspected all soil removal and disturbance and monitored for the presence of cultural resources. Cultural resources could include bone, thermal or stone features, Pre-Contact (Native American) lithic and ceramic artifacts, isolated artifacts, artifact concentrations, and historic-era artifacts. The archaeologist also inspected the surrounding area and topsoil stockpiles for cultural resources. The archaeologist worked closely with construction management and field personnel about expectations for monitoring and the process if cultural resources are uncovered, and field personnel were cooperative in the effort. The archaeologist remained onsite daily until all new ground disturbance was complete.

MONITORING SUMMARY

The specific construction activities monitored and results at the Cave Springs new siding project area between the dates of February 16, 2026, and April 1, 2026, are presented in Table 1.

Table 1. Project Area Construction Activities and Results

Summary of Construction Activities	Results
Access Road & Grading Activities • Cutting and grading of the access road • Access road maintenance • Placement of gravel on the access road • General site grading, including siding areas	No intact features or cultural materials were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.
Earthwork & Embankment Preparation • Stripping, shaping, and grading of embankments • Separation of large rocks from soil • Lift construction • Sub-ballast placement	
Drainage & Erosion Control • Ditch excavation • Culvert installation • Trenching for silt fence installation • Rip-rap placement	
Fencing Work • Clearing debris and tree roots for fence installation • Fence post removal and installation • General fence installation	
Site Stabilization & Finishing • Placement of mulch on berms • Final site stabilization, including hydroseeding	

RESULTS

No intact features or cultural materials were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.

CONCLUSIONS

From February 16, 2026, to April 1, 2026, archaeologist Erika Niemann, under direction of SOI-qualified Senior Archaeologist Josh Fletcher, monitored all new ground disturbance in the designated project area between Cave Springs MPs 267.3 and 266.25 (Tables 2-4). During this period, no significant intact archaeological deposits were identified during the cultural resource monitoring, and no known significant cultural resources were impacted by construction.

Table 2. Monitoring Locations and Results – February 2026

Date	Monitoring Location	Construction Activities Monitored	Results
February 16, 2026	MP 267.3-266.25	No monitoring. Only Kick-Off Meeting/Job Walk. No soil was disturbed and no dirt work took place.	No findings.
February 17, 2026	MP 267.3-266.25	Cutting and grading the access road area.	No findings.
February 18, 2026	MP 267.3-266.25	Access road graded and fluffed to promote drying. Topsoil and rock shelf busted near end of access road, near mile marker 267. Dirt removed for 2 temporary culverts on access road.	Three small pieces of glazed whiteware pottery—a rim sherd, a plate base sherd, and a small body sherd—were found on an embankment along the access road, likely originating from a historic house site on private property beyond a nearby fence. Near the start of the access road by the rail crossing and S. 4660 Road, two non-refitting fragments of a glass bottle bottom marked “Duraglas,” “G-2808,” and “PAT 120.27,” likely dating to the 1940s–1950s and probably discarded as road trash, were found. None of the items were considered significant, and no work was delayed as a result of the discoveries.
February 19, 2026	MP 267.3-266.25	1/3 of the access road covered by gravel. Surveyed embankments along the access road.	No findings.
February 20, 2026	MP 267.3-266.25	Areas covered in gravel were surveyed prior to being covered.	Four pieces of decorated whiteware ceramic pottery were found on the second high spot down the access road where the others from 2/18/26 were found. The pieces were found on the edge of the access road at the bottom of the embankment. The four pieces exhibit fresh breaks, were found together, and refit back together; therefore, they form one body sherd. The decoration would have been near the

			rim, though no rim remains. The decoration is blue feathered and likely dates to the 19th century. As the site where the whiteware originated from is likely on private property on the other side of the fence at the top of the embankment, the find is not significant. No work was stopped or impeded due to the find.
February 21, 2026	MP 267.3-266.25	Surveyed area where mulch was removed from access road. Surveyed embankments where slight stripping occurred.	No findings.
February 22, 2026	MP 267.3-266.25	No construction activities.	None.
February 23, 2026	MP 267.3-266.25	1/3 of access road nearest the project area covered with gravel. CM surveyed the area prior to it being covered in gravel.	No findings.
February 24, 2026	MP 267.3-266.25	Mulch moved into berms - bare ground was surveyed. Track hoe separating large rocks from dirt.	No findings.
February 25, 2026	MP 267.3-266.25	Track hoe separating large rocks from dirt near end of access rock. Checked dirt as visibility increased from moving mulch.	No findings.
February 26, 2026	MP 267.3-266.25	Stripping to grade between 5+25 - 10+50. Embankment stripped 6+00 - 8+00. Ditch excavated 7+00 - 8+00. Trench for silt fence 2+25 - 4+75 and 10+50 - 13+00.	No findings.
February 27, 2026	MP 267.3-266.25	Excavation of ditch between 9+50-10+25. Grading of siding between 7+00-11+75.	No findings.
February 28, 2026	MP 267.3-266.25	No construction activities.	None.

Table 3. Monitoring Locations and Results – March 2026

Date	Monitoring Location	Construction Activities Monitored	Results
March 1, 2026	MP 267.3-266.25	No construction activities.	None.
March 2, 2026	MP 267.3-266.25	No construction activities.	None.
March 3, 2026	MP 267.3-266.25	Gravel/base dumped between stations -1+00 - 3+00. Bore pit excavated with track hoe W side of track at station 5+00.	No findings.
March 4, 2026	MP 267.3-266.25	Fill added for lifts between -1+00 - 2+00. Maintenance to access road.	No findings.
March 5, 2026	MP 267.3-266.25	Maintenance to access road and grade between -1+00 - 2+00. Dirt from bore at station 5+00.	No findings.

March 6, 2026	MP 267.3-266.25	Bore at station 5+00. Lifts added between -1+00 - 1+00.	No findings.
March 7, 2026	MP 267.3-266.25	No construction activities. Weekend.	None.
March 8, 2026	MP 267.3-266.25	No construction activities. Weekend.	None.
March 9, 2026	MP 267.3-266.25	Dozer stripped and cut material between 2+50 - 4+25. Lifts built between -1+00 - 3+00.	No findings.
March 10, 2026	MP 267.3-266.25	Unsuitable material excavated between 4+50 - 5+00. Track hoe spreading material on slop of grade 2+00 - 5+00. Lifts built between 2+00 - 5+00.	No findings.
March 11, 2026	MP 267.3-266.25	Clay around culvert at 5+00. Lifts built 2+00 - 5+50. Dozer rolled up grade 5+50 - 10+00. Bore crew above end of culvert in embankment at 12+00; excavating out around end of culvert on E side 5+00. Clay and large rock removal on embankment 5+50 - 8+00.	No findings.
March 12, 2026	MP 267.3-266.25	Flow fill stone box culvert at 5+00. Lifts built 2+00 - 10+00. Dozer and track hoe separating large rocks from material -1+00 - 0+25.	No findings.
March 13, 2026	MP 267.3-266.25	Large rocks removed 0+25-1+25. Topsoil spread on embankment and patted down 2+50-5+00. Smoothed out culvert area W side, and excavated & smoothed out area E side 5+00 for rip rap. Dozer built lifts between 1+00-2+00.	No findings.
March 14, 2026	MP 267.3-266.25	No construction activities. Weekend.	None.
March 15, 2026	MP 267.3-266.25	No construction activities. Weekend.	None.
March 16, 2026	MP 267.3-266.25	Lifts between -1+00 - 5+00. Monitored areas around siding during geo-fabric and sub-ballast between -1+00 - 5+00.	A Native American projectile point was found at station 11+00 along the inside of the silt fence. The artifact was likely kicked up from silt fence installation then exposed from recent rain events. The CM looked in the surrounding area (~30m N and S of the find on either side of the silt fence) and did not find any more definite artifacts. Determined to be an isolated find; not significant.
March 17, 2026	MP 267.3-266.25	Sub-ballast -1+00 - 10+00. Dug shovel test-A at station 11+00 on outer side of the silt fence.	A shovel test was excavated approx. one meter from the projectile point location several possible lithic flakes were recovered. Artifacts likely redeposited by runoff.

			Determined to be an isolated find; not significant.
March 18, 2026	MP 267.3-266.25	Grading siding between 10+00 - 12+00. Lift construction and sub-ballast between -1+00 - 12+00. Unsuitable material previously piled at 8+50 moved to raise a low spot at the end of the access road.	No findings.
March 19, 2026	MP 267.3-266.25	Dug ST-B and ST-C. Lift and sub-ballast work between -1+00 - 10+00. Shaping and smoothing embankment between 5+00 - 8+00. Material added and smoothed out around culvert on W side of track at 12+00.	ST-B was placed ~35m N of ST-A, near station 9+90. Recovered a nail, one flake, and one possible utilized flake. Determined to be an isolated find; not significant. No artifacts recovered from ST-B.
March 20, 2026	MP 267.3-266.25	Maintenance to access road. Finished smoothing area around culvert on W side of track at 12+00, rip-rap added. Smoothed out area on E side of track around culvert at 5+00, rip-rap added. Topsoil pile moved and ditch line dug near site area.	No findings.
March 21, 2026	MP 267.3-266.25	Ditch cut 5+00 - 10+00. Ditch line and back slope -1+00 - 1+00.	No findings.
March 22, 2026	MP 267.3-266.25	No construction activities. Weekend.	None.
March 23, 2026	MP 267.3-266.25	Sub-ballast 4+00 - 12+00. Dozer bladed 12+25 - 13+75, then lifts, then sub-ballast. Ditch line cut 12+25 - 13+75, topsoil used on embankment.	No findings.
March 24, 2026	MP 267.3-266.25	12+00 - 15+00 lifts built and sub-ballast. Culvert installed in ditch behind bungalow near station 14+00.	No findings.
March 25, 2026	MP 267.3-266.25	Sub-ballast 15+00-17+50. Skid steer cleaned up the embankment 9+50-12+00.	No findings.
March 26, 2026	MP 267.3-266.25	Sub-ballast 16+00-17+50. Maintenance to access road. Rip-rap at culverts at 12+00 and 14+00-15+00 on W side of track. Topsoil from ditch pulled to embankment 12+25-14+50. Topsoil from ditch pulled to embankment 15+00-17+50.	No findings.
March 27, 2026	MP 267.3-266.25	Siding rolled with smooth drum. Skid steer packing topsoil 14+00-15+00. Skid steer touching up ditches, back slopes, embankments.	No findings.
March 28, 2026	MP 267.3-266.25	No construction activities. Weekend.	No construction activities. Weekend.
March 29, 2026	MP 267.3-266.25	No construction activities. Weekend.	No construction activities. Weekend.
March 30, 2026	MP 267.3-266.25	Bare ground covered by hydroseed -1+00 - 17+50. Fencing replacement halfway	No findings.

		down access road, fence post removal and installation.	
March 31, 2026	MP 267.3-266.25	Installation of new fence posts 1/2 to 2/3 down the access road near second high spot.	No findings.

Table 4. Monitoring Locations and Results – April 2026

Date	Monitoring Location	Construction Activities Monitored	Results
April 1, 2026	MP 267.3-266.25	Clearing and cleaning out debris and tree roots for fence installation. Fence post removal and installation, E side of the track.	No findings. Final day of monitoring.



Photo Date: February 17, 2026
Photo Direction: South
Description of photo: Bulldozer grading area for access road to the south of the rail crossing at Road S. 4660.



Photo Date: February 24, 2026
Photo Direction: South
Description of photo: Skid steer building and shaping mulch berm near the beginning of the access road.



Photo Date: March 9, 2026
Photo Direction: North
Description of photo: Bulldozer building lifts.



Photo Date: March 18, 2026
Photo Direction: North
Description of photo: Bulldozer grading siding.



Photo Date: April 1, 2026
Photo Direction: Southeast
Description of photo: Newly installed fenceposts.

CAVE SPRINGS SIDING EXTENSION

CPKC Final Environmental Monitoring Report

Cave Springs Siding Expansion

CPKC Final Environmental Monitoring Report

This is the final Environmental Monitoring Report for the Cave Springs Siding Expansion project (commonly referred to as “Cave Springs”) located near the city of Cave Springs, OK, (Heavener Subdivision from MP 266.30 to MP 269.00). This project is part of the Canadian Pacific-Kansas City Southern railroad merger approved by the Surface Transportation Board on March 15, 2023. The extended siding is required to manage the impacts of increased traffic by creating additional passing capacity and maintain system fluidity post-merger. All capital improvement projects approved as part of the merger are subject to a series of mitigation measures as is outlined in the Final Environmental Impact Statement (and included as Approval Conditions in the Board’s Final Decision), and this is the final report showing Cave Springs’ compliance with those measures.

Construction on Cave Springs started on February 25, 2026 and the extension was placed in service on July 22, 2026 at 0155. All construction activities which were part of this project were in compliance with the Board’s construction-related conditions.

Compliance with Mitigation Measures

MM-General-03. To minimize the potential for impacts on biological resources, water resources, hazardous materials release sites, and cultural resources, the Applicants shall, to the greatest extent possible, confine construction activities related to the planned capital improvements to the area within the existing ROW.



Right-of-way (ROW) boundaries were marked with orange ribbon on wood lath and wetlands were marked with pink ribbon to indicate work limits. All workers on site were made aware that they were to keep work within the ROW. Work on the project was successfully kept within the ROW with minimal disturbance to wetland areas. The photos below show these color-coded boundaries.



VM-Noise-02. While building the Capital Improvement Projects, the Applicants will work with their construction contractors to minimize, where practicable, construction-related noise disturbances between the hours of 0700 and 2100 local time.

The Environmental Monitor (EM) held weekly briefings with crew members regarding equipment noise throughout the duration of the Cave Springs capital improvement project. All work was performed between the hours of 0700 and 2100 throughout construction. Noise was kept within acceptable limits of the project permits at all times.





VM-Air-05. The Applicants will develop an anti-idling policy for use in potentially affected communities on the combined network. The policy will capture both idling of construction equipment used on the Capital Improvement Projects as well as ongoing operations.

The anti-idling procedure was discussed during the initial and weekly briefings held by the Flagger. These briefings occurred during Safety/JSA meetings, and all new subcontractors were also briefed as they joined the project and began their work. The anti-idling procedure was adhered to throughout the duration of the Cave Springs Capital Improvement Project.
The photos below provide examples of some equipment that followed this policy during the project's construction period.





VM-Air-06. To minimize fugitive dust emissions created during the construction of the Capital Improvement Projects, the Applicants will implement appropriate fugitive dust suppression controls, such as spraying water or other approved measures.

The primary method of dust control suppression was an available water truck. Dust suppression was needed throughout the Cave Springs Capital Improvement Project.





VM-Air-08. Where vegetation clearing has taken place during the construction of the Capital Improvement Projects, the Applicants will begin revegetation as soon as practicable to minimize impacts of wind erosion and fugitive dust. Where immediate revegetation is not practicable, the Applicants will implement alternative stabilization measures such as matting, mulching, or hydroseeding.

The project was able to ensure that all stabilization measures needed throughout the project were utilized within the 14-day window. This included the reutilization of topsoil material. At the end of the project, the environmental monitor returned to the site to ensure that revegetation had been maintained and was successful in its attempts to restabilize the land post-construction.

The photos below show some of the areas where revegetation measures were implemented along the construction site.





VM-Haz. Material Sites-01. The Applicants will require its construction contractor(s) to implement measures to protect workers' health and safety and the environment in the event that undocumented hazardous materials are encountered during construction of the Capital Improvement Projects. The Applicants will document all activities associated with the previously undocumented contamination and will notify the appropriate state agencies according to applicable regulations. The Applicants will use disposal methods which comply with applicable solid and hazardous waste regulations.

No hazardous materials were discovered within the project limits throughout the duration of the Cave Springs capital improvement project. All parties on site were frequently briefed on the importance of strict adherence to the measures outlined in the Health & Safety and Materials Management Plans if hazardous materials were identified.

VM-Haz. Material Sites-03. In the event of a spill over the applicable reportable quantity during the construction of a Capital Improvement Project, the Applicants will comply with its

site-specific spill prevention, control and response plan and applicable federal and state regulations pertaining to spill containment, appropriate clean-up, and notifications.

No spills occurred during the construction period of the Cave Springs capital improvement project. All equipment on site was equipped with spill kits with additional kits available within the contractor trailer.



VM-Haz. Material Sites-04. During the construction of the Capital Improvement Projects, the Applicants will ensure that gasoline, diesel fuel, oil, lubricants, and other petroleum products are handled and stored to reduce the risk of spills, contaminating soils or surface waters. If a petroleum spill occurs as a result of construction, and exceeds specific quantities or enters a waterbody, the Applicants (or its agents) will be responsible for promptly cleaning up the spill and notifying responsible agencies in accordance with federal and state.

Petroleum products used during the Cave Springs improvement project were all handled properly with either a secondary contaminant method or storage within an enclosed job trailer. Each piece of equipment used on the project was also equipped with its own spill kit to manage containment immediately in case of a spill.

The photos below show these containment measures.





VM-Haz. Material Sites-05. The Applicants will require contractors to dispose of waste generated on the Capital Improvement Projects in accordance with all applicable federal, state, and local regulations.

In accordance with the Materials Management Plan, all waste products requiring disposal throughout the Cave Springs Capital Improvement Project were placed in the permitted dumpsters and removed by service company. Dumpsters were not needed on the project, and the contractor kept all trash gathered and disposed of daily.

VM-Biological-02. Where practicable, the Applicants will clear vegetation in preparation for the Capital Improvement Projects before or after the breeding bird nesting season, specific to each project location, to avoid inadvertent removal of active nests (nesting adults, young, or eggs) and to ensure compliance with the Migratory Bird Treaty Act. If clearing is required during a respective location's nesting season, the Applicants will consult with OEA and the local office of the U.S. Fish and Wildlife Service (USFWS) on appropriate nest survey methods for that area.

Tree clearing at Cave Springs was completed before April 1, 2024. No eagles nests or other active bird nests were identified on the project site during tree clearing or construction, and no more trees were cleared than necessary for construction.

VM-Biological-03. The Applicants will not conduct construction related tree removal for the Capital Improvement Projects during the active season for the Indiana bat and the northern long-eared bat (April 1 to October 31).

Similarly to bird nesting concerns, all tree clearing activities occurred prior to active bat species season, and no active bats were observed within the project limits during tree clearing and construction. Tree clearing was limited specifically to areas needed for construction.

VM-Biological-04. During the construction of the Capital Improvement Projects, the Applicants will take steps to reduce the unnecessary removal of bat habitat outside of active bat season by limiting tree removal to only the areas necessary to safely construct and operate the new siding or second track, marking the limits of tree clearing through the use of flagging or fencing, and ensuring that construction contractors understand clearing limits and how they are marked in the field.

After tree clearing was complete, areas where trees had been cleared were marked with flagged survey limits so contractors could easily identify any area within ROW and near bridges where bat species could potentially be present. No bat habitat or nesting was identified throughout the Cave Springs Capital Improvement Project. The photo below shows one of the areas that was inspected for bats.



VM-Biological-05. If construction of the Capital Improvement Projects would require removal or alteration of bridges, culverts, or other structures that provide suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31), the Applicants will first conduct an inspection for the presence of, or evidence of use by, bats. The inspection will be completed by a qualified biologist. If the inspection finds bats or evidence of bats, then the Applicants will not commence work on the structure until coordinating with OEA and USFWS to determine appropriate follow-up or mitigating actions. The inspection must be completed during the same year that the work takes place.

A complete inspection for the presence of bat species was conducted by Kyle Kosovich, Environmental Specialist for CPKC on 2/25/2026. The inspection report is attached to this report as Exhibit A.

VM-Biological-06. Where practicable, the Applicants will conduct any culvert or bridge removal as part of the Capital Improvement Projects outside of the roosting period of bat species, specific to each project location. Where practicable, if bridge or culvert removal is required during the bat roosting period where the individual Capital Improvement Project is located, the Applicants will consult with OEA and the local USFWS office on appropriate methods to determine if bats are using the bridge or culvert as a roost.

Daily monitoring of bat species was completed by the environmental monitor, followed with a complete inspection by Kyle Kosovich, Environmental Specialist for CPKC. No bat species was present before or during the installation process.



VM-Biological-07. During construction of the Capital Improvement Projects, the Applicants will direct any temporary lighting away from suitable habitat for the northern long-eared bat or the Indiana bat during the active season for those species (April 1 to October 31). The Applicants will use downward-facing, full cut-off lens lights for any temporary lighting used during the construction of the Capital Improvement Projects.

All culvert installation activities were completed within daylight hours. No temporary lighting was used during the Cave Springs capital improvement project.

VM-Biological-09. During construction of the Capital Improvement Projects, temporary barricades, fencing, and/or flagging will be used in sensitive habitats to contain construction related impacts to the area within the construction ROW. To the extent possible, staging areas will be located in previously disturbed sites and not in sensitive habitat areas.

Wetlands were outlined in pink ribbon to indicate sensitive habitats within the ROW. Orange ribbon on wooden lath was used to identify project ROW boundaries. Construction staging occurred within the ROW but outside of areas identified as sensitive habitats. No barricades or fencing was used.

VM-Biological-10. The Applicants will limit ground disturbance to only the areas necessary for the construction of the Capital Improvement.

Ground disturbance within the duration of the Cave Springs capital improvement project was limited to what was necessary for construction to complete the Cave Springs siding extension between MP 266.30 – MP 269.0. Ground disturbance began on February 17, 2026 and was completed on April 1, 2026.

VM-Biological-11. The Applicants will use construction methods and seed mixes that minimize introduction and spread of noxious weeds on the Capital Improvement Projects. Noxious weed control will include combinations of mechanical and herbicide spray methods.

Seed mixes used within the Cave Springs capital improvement project for the minimization of the introduction and spread of noxious weeds were verified by the environmental monitor prior to use. The seed tag for the seeds utilized specified No Noxious Weeds found and the ODOT Seeding type Requirements of the Oklahoma Standard Specifications for Highway Construction. No herbicide spray methods were used on the project.




VM-Biological-13. As applicable to each of the individual Capital Improvement Projects, the Applicants will protect bald and golden eagles by adhering to the Bald and Golden Eagle Protection Act. In addition, the Applicants will follow the USFWS National Bald Eagle Management Guidelines, as applicable.

The environmental monitor observed that no bald or golden eagles or nests were identified within the limits of the project, thus adhering to the bald and Golden Eagle Protection Act as required.

MM-Biological-01. For capital improvements related to the Proposed Acquisition, the Applicants shall not knowingly include any federally- or state-listed invasive weed species in seed mixes for revegetating disturbed areas within the rail ROW.

Seed mixes used for revegetative efforts on the Cave Springs capital improvement project were verified according to seed tags and the ODOT Seeding Type Requirements of the Oklahoma Standard Specifications for Highway Construction.

VM-Water-04. As applicable to each of the individual Capital Improvement Projects, the Applicants will require its construction contractor(s) to follow all water quality control conditions identified in all permits including the Water Quality Certification from the respective jurisdiction and Section 404 Permits issued by USACE.

During construction of the Cave Springs Capital Improvement Project, the contractor followed all requirements to minimize impact to water quality per the Water Quality Monitoring plan (WQMP). A site-specific Stormwater Pollution Prevention Plan (SWPPP) for the project was also implemented, which incorporated best management practices and site-specific measures to control erosion and reduce the amount of sediment and pollutants that could enter surface waters, groundwater, and wetlands. Minimal impacts to wetland areas were identified including the placement of fill material or conveyance structures.

VM-Water-05. Prior to initiating construction at a Capital Improvement Project location, the Applicants will develop a site-specific Stormwater Pollution Prevention Plan which will incorporate Best Management Practices as well as site specific measures to control erosion and reduce the amount of sediment and pollutants entering surface waters, ground waters, and waters of the U.S.

The contractor followed Pre/Post construction measures using site-specific SWPPP developed for the Cave Springs Capital Improvement Project. These measures included the installation of Erosion Control Devices prior to and during construction, which eliminated any sediment or pollutant discharges throughout the project. See below photos for examples of where this was used on the project.



The contractor followed Best Management Practices by utilizing secondary containment while refueling, designated equipment cleaning areas, utilizing spill prevention measures, minimizing sediment on public roadways and utilizing good waste management practices. Weekly and post rain event SWPPP inspections were completed throughout the construction phase of the project and continued through 70% post-construction.

VM-Water-06. For Capital Improvement Project locations which will involve construction activities in proximity to surface water, prior to the start of construction the Applicants will develop a site-specific water quality monitoring plan and implement this monitoring plan throughout construction.

A site-specific WQMP was developed prior to construction of the Cave Springs Capital Improvement Project. The environmental monitor evaluated potential surface water and stormwater quality impacts due to project construction activities throughout the project. Routine sampling and analysis of instream surface water and site stormwater sources during project construction activities was not deemed necessary at the Cave Springs Capital Improvement Project to ensure adherence to the WQMP.

VM-Water-10. As applicable to each of the individual Capital Improvement Projects, the Applicants will comply with applicable in-water work windows and timing restrictions for the protection of fish species.

No fish-bearing water bodies were identified within the Cave Springs Capital Improvement Project location, so in-water windows and timing restrictions were not applicable.

VM-Water-11. During the construction of Capital Improvement Projects, the Applicants will require all contractors to conduct daily inspections of all equipment for any fuel, lube oil, hydraulic or antifreeze leaks. If leaks are found, the Applicants will require the contractor to immediately remove the equipment from service and repair or replace it.

Daily equipment inspections were conducted by all contractors on the Cave Springs Capital Improvement Project, followed by daily inspection reports. Any leaks identified by environmental monitor were immediately brought to the contractor's attention and equipment was placed out of service as needed.

VM-Water-13. During the construction of the Capital Improvement Projects, the Applicants will take reasonable steps to ensure contractors use fill material appropriate for the project area.

Suitable fill materials used within the Cave Springs Capital Improvement Project consisted of primary reused Native soils, Clean Fill and ballast material previously approved by project engineers and contractors and from state licensed local sources.





CAVE SPRINGS SIDING EXTENSION

CPKC Final Environmental Monitoring Report

CPKC Bridge/Culvert
Bat Assessment Form

Date & Time of Assessment: 25-FEB-26	Subdivision-Milepost: Heavener 267.0	Crossing Name: 266.33	Age: undetermined
Nearest City: Stilwell, OK	Structure Coordinates (latitude and longitude): 35°44'21.74"N 94°43'25.61"W	Structure Height (approximate): 36"	Structure Length: 50'

Structure Type (check one)

Bridge Construction Style:

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss (Side View)
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ○ Box
- ◉ Pipe/Round CMP
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*Abutment Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ◉ No
- ○ Unknown

Culvert Material

- ☑ Metal
- ☐ Concrete
- ☑ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes: Metal Pipe coated with Plastic/Rubber coating.

Crossings Traversed (check all that apply)

- ☐ Bare ground
- ☐ Rip-rap
- ☑ Flowing water
- ☐ Standing water
- ☐ Seasonal water
- ☐ Open vegetation
- ☐ Closed vegetation
- ☐ Railroad
- ☐ Road/trail - Type:
- ☐ Other:

Surrounding Habitat (check all that apply)

- ☐ Agricultural
- ☐ Commercial
- ☐ Residential-urban
- ☐ Residential-rural
- ☑ Woodland/forested
- ☑ Grassland
- ☑ Ranching
- ☑ Riparian/wetland
- ☐ Mixed use
- ☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☑ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☑ Not present; No Bat Signs observed	☐ Visual - live # 0 dead # 0; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Concrete surfaces (open roosting on concrete)	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Spaces between concrete end walls and the bridge deck	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Crack between concrete railings on top of the bridge deck (Gap / Railing)	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Vertical surfaces on concrete I-beams	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Spaces between walls, ceiling joists	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ Weep holes, scupper drains, and inlets/pipes	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ All guiderails	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:
☐ All expansion joints	☐ Not present	☐ Visual - live # dead #; ☐ Guano; ☐ Staining; ☐ Audible; ☐ Odor; ☐ Photos; Species:

Name: Kyle Kossuth

Signature: