



## Programmatic/Individual Categorical Exclusion

|          |            |            |
|----------|------------|------------|
| <b>X</b> | <b>PCE</b> | <b>ICE</b> |
|----------|------------|------------|

|                                                                                                                             |                                                                |                                                                                                      |                       |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------|
| Date                                                                                                                        | <b>11/05/2023</b>                                              | Project Number                                                                                       | <b>J3-3821(004)</b>   |
| County                                                                                                                      | <b>Mayes</b>                                                   | State Job Piece No:                                                                                  | <b>33821(04)</b>      |
| NEPA Project Manager                                                                                                        | <b>Erin Faulkner</b>                                           | Phone Number                                                                                         | <b>(405) 521-2315</b> |
| ODOT Field District                                                                                                         | <b>8</b>                                                       | Bridge NBI No. <i>(For County &amp; State Projects)</i> & Location No. <i>(County Projects Only)</i> | <b>NA</b>             |
| Project Description from JPINFO                                                                                             | <b>PAVEMENT REHABILITATION: SH-412B: FROM SH-69A TO US-412</b> |                                                                                                      |                       |
| <b>This project is included in:</b> <i>(Check all applicable ones)</i>                                                      | <b>X</b>                                                       | <b>State 8 Year Construction Program</b>                                                             |                       |
|                                                                                                                             |                                                                | <b>County 5 Year Construction Program</b>                                                            |                       |
|                                                                                                                             | <b>X</b>                                                       | <b>State Transportation Improvement Program</b>                                                      |                       |
| <b>This project has federal funds:</b> <i>(Check applicable one.)</i>                                                       | <b>X</b>                                                       | <b>Currently has Federal Funds</b>                                                                   |                       |
|                                                                                                                             |                                                                | <b>Potential for Future Federal Funds</b>                                                            |                       |
| <b>This project is in the Metropolitan Transportation Improvement Program (If applicable)</b> <i>(Check applicable one)</i> |                                                                | <b>Yes</b>                                                                                           |                       |
|                                                                                                                             | <b>X</b>                                                       | <b>Not Applicable</b>                                                                                |                       |

The Oklahoma Department of Transportation (ODOT) has completed the environmental analysis and review of the referenced project. ODOT has determined that this project does not individually or cumulatively have a significant impact of the environment as defined by the National Environmental Policy Act (NEPA) or involve unusual circumstances as defined in 23 CFR 771.117(b) and is therefore excluded from the requirements to prepare an Environmental Assessment or Environmental Impact Assessment.

|                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Existing Conditions:</b><br>The existing SH-412B roadway has two 12 ft. wide asphalt driving lanes and 8 to 10 ft. wide asphalt shoulders. The pavement is in poor condition and there are sight distance deficiencies. The current Annual Average Daily Traffic (AADT) is 10,000 vehicles per day (vpd) with a future 20-year AADT 19,000. |
| <b>Purpose &amp; Need</b><br>The purpose & need of the project are to correct pavement deficiencies.                                                                                                                                                                                                                                           |

| <b>Alternatives considered &amp; Proposed Improvement</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                              |                          |                     |                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------|---------------------|-------------------------------------|
| The proposed improvement consists of rehabilitating the pavement of the existing 12 ft. wide asphalt driving lanes and 8 to 10 ft. wide asphalt shoulders, and variable width left turn lanes. Slight widening will occur on the south end of the project, where US-412 ties into the project to allow for turning vehicles from both 412 onto 412B and 412B going west onto 412. The road will remain open during construction and no new rights-of-way are required. |                              |                          |                     |                                     |
| <b>Did the project have public involvement</b> (Check the applicable items and include public involvement <i>summary</i> and supporting documents in the appendix)                                                                                                                                                                                                                                                                                                     |                              |                          |                     |                                     |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                               | Property Owner Notification  | <input type="checkbox"/> | Road Closure Letter | <input type="checkbox"/>            |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                               | Legal Notice/Website Posting | <input type="checkbox"/> | Small City Letter   | <input checked="" type="checkbox"/> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |                          |                     | Public/Stakeholder Meeting          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |                          |                     | None                                |

All documentation, analyses, and agency coordination regarding this Categorical Exclusion are attached to this document and maintained in the project file at the Oklahoma Department of Transportation, Environmental Programs Division.

| <b>Criteria Identified in Section IV.A.1.b. of the 2019 FHWA/ODOT Programmatic Agreement for Processing Categorical Exclusions that would require Individual Review and Approval by FHWA:</b>                                                                                                                                                                                                                                                                                |            |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| <b>Check Yes or No below. If the answer to any of the questions below is Yes, an Individual CE will be required.</b>                                                                                                                                                                                                                                                                                                                                                         |            |           |
| <b>Description/Question</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Yes</b> | <b>No</b> |
| i. Does the project result in capacity expansion of a roadway by addition of through lanes?                                                                                                                                                                                                                                                                                                                                                                                  |            | <b>X</b>  |
| ii. Does the project involve any permanent changes limits of access control or to the operation of an Interstate highway, associated interchanges or ramps or requires an Access Justification Report (AJR)?                                                                                                                                                                                                                                                                 |            | <b>X</b>  |
| iii. Is the project not included in or is inconsistent with the statewide transportation improvement program, and in applicable urbanized areas, the transportation improvement program?                                                                                                                                                                                                                                                                                     |            | <b>X</b>  |
| iv. Does the project involve acquisition of more than minor right-of-way not adjacent to the existing facility?                                                                                                                                                                                                                                                                                                                                                              |            | <b>X</b>  |
| v. Does the project involve residential or commercial relocation?                                                                                                                                                                                                                                                                                                                                                                                                            |            | <b>X</b>  |
| vi. Does the project include acquisition of land for hardship or protective purposes, or early acquisition pursuant to Federal acquisition project (23 U.S.C. § 108(d))                                                                                                                                                                                                                                                                                                      |            | <b>X</b>  |
| vii. Does the project have potential for disproportionately high and adverse impact on minority or low-income populations, based on known demographics in the project vicinity, extent of R/W, relocations, and other identified impacts?                                                                                                                                                                                                                                    |            | <b>X</b>  |
| viii. Does the project involve property in which another Federal Agency or Federally Recognized Tribe has ownership, oversight or any other encumbrance?                                                                                                                                                                                                                                                                                                                     |            | <b>X</b>  |
| ix. Does the project involve a determination of adverse effect by Oklahoma State Preservation Office (SHPO) or a designated Tribal Historic Preservation Office (THPO) in accordance with Section 106?                                                                                                                                                                                                                                                                       |            | <b>X</b>  |
| x. Does the project involve a Programmatic Section 4(f) or de minimis finding which has not been previously approved by FHWA?                                                                                                                                                                                                                                                                                                                                                |            | <b>X</b>  |
| xi. Requires the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act of 1965 (54 U.S.C. § 200305), the Federal Aid in Sport Fish Restoration Act (16 U.S.C. 777-777k, 64 Stat. 430), the Federal Aid in Wildlife Restoration Act (16 U.S.C. 669-669i; 50 Stat. 917), or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property |            | <b>X</b>  |
| xii. Does the project involve any impact on Noise Abatement Criteria (NAC) Category A, B, C or D receptors?                                                                                                                                                                                                                                                                                                                                                                  |            | <b>X</b>  |
| xiii. Does the project involve a finding of “may effect, likely to adversely affect” determination                                                                                                                                                                                                                                                                                                                                                                           |            | <b>X</b>  |

| <b>Criteria Identified in Section IV.A.1.b. of the 2019 FHWA/ODOT Programmatic Agreement for Processing Categorical Exclusions that would require Individual Review and Approval by FHWA:</b>                                                                  |            |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| <b>Check Yes or No below. If the answer to any of the questions below is Yes, an Individual CE will be required.</b>                                                                                                                                           |            |           |
| <b>Description/Question</b>                                                                                                                                                                                                                                    | <b>Yes</b> | <b>No</b> |
| under Section 7 of the Endangered Species Act or the Bald and Gold Eagle Protection Act and can be processed as under programmatic agreement?                                                                                                                  |            |           |
| a. Does the project involve a Section 7 Formal Consultation Process prior to start of construction?                                                                                                                                                            |            | <b>X</b>  |
| xiv. Does the project require an Individual Section 404 Permit (This is generally for major River Crossings, waters or wetlands impact greater than 3.0 AC, Projects with Formal Consultation, structures on new alignment or others as determined by USACE.)? |            | <b>X</b>  |
| xv. Does the project involve construction across or adjacent to a river designated as a component in the National System of Wild and Scenic Rivers?                                                                                                            |            | <b>X</b>  |
| xvi. Does the project require a Coast Guard Permit?                                                                                                                                                                                                            |            | <b>X</b>  |
| xvii. Does the project involve an adverse impact on prime farmland where Natural Resources Conservation Agency (NRCS) has required consideration of alternatives and measures to avoid and minimize impacts?                                                   |            | <b>X</b>  |
| xviii. Does the project involve increase to the base 100 Year floodplain in a regulatory floodway (Zone A-E in a FEMA Map) that will require a flood map revision as determined by the appropriate state or local authority?                                   |            | <b>X</b>  |
| xix. Does the project not conform to the State Implementation Plan which is approved or promulgated by the U.S. Environmental Protection Agency in air quality non-attainment areas                                                                            |            | <b>X</b>  |
| xx. Does the project involve any known Superfund site?                                                                                                                                                                                                         |            | <b>X</b>  |
| xxi. If the project involves road or bridge closure or ramp closure, do any of the following conditions apply? (Check the boxes ONLY if the project involves road closure)                                                                                     |            |           |
| a. No Access will be provided to local traffic or posted                                                                                                                                                                                                       |            |           |
| b. Through traffic dependent businesses will be affected                                                                                                                                                                                                       |            |           |
| c. The detour or closure will substantially alter the environmental consequences of the action, such as by creating unsafe conditions on the detour route or requiring additional work or expansion to detour routes to carry the additional traffic.          |            |           |
| d. There is a public controversy associated with the detour or closure                                                                                                                                                                                         |            |           |
| e. The detour closure will interfere with special events or activities                                                                                                                                                                                         |            |           |
| xxii. Does the project have substantial public or agency controversy on environmental grounds?                                                                                                                                                                 |            | <b>X</b>  |
| <b>Explanation for Individual CE (If any of the answers above are YES):</b>                                                                                                                                                                                    |            |           |
| Item for which the answer is YES                                                                                                                                                                                                                               |            |           |
| Explanation that CE Classification is appropriate                                                                                                                                                                                                              |            |           |
|                                                                                                                                                                                                                                                                |            |           |
| Item for which the answer is YES                                                                                                                                                                                                                               |            |           |
| Explanation that CE Classification is appropriate                                                                                                                                                                                                              |            |           |
|                                                                                                                                                                                                                                                                |            |           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Pre-Construction Commitments:</b></p> <p>The action may involve work in potentially jurisdictional waters and potentially jurisdictional wetlands. The 404 permit application form needs to be submitted by the Designer through Project Management Division to Environmental Programs Division at the time of Right-of-Way submittal for evaluation and determination of the appropriate Clean Water Act Section 404 permit application for the project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><b>Right-of-Way and Utility Commitments</b></p> <p>The following Construction Commitments requiring avoidance, restrictions or minimization of natural and human resources during Right-of-Way clearance and Utility relocation activities will be discussed with the Right-of-Way and Utility Owners at the start of Right-of-Way and Utility Process.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>Construction Commitments</b></p> <p>ODOT Commitment: All operators, employees, and contractors will be made aware of all environmental commitments, including the following Plan Notes.</p> <p>The following plan notes requiring avoidance, restrictions or minimization of natural and human resources in the project and off-site project areas will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2.</p> <p><b>Cultural Resources Plan Note</b></p> <p><b>Locations outside the project area in the following area must not be utilized for borrow, equipment staging, haul roads, spoil dumps or any off-site project-related activity.</b></p> <p><b>T20N R19E:</b><br/> <b>Section 10: NE¼</b><br/> <b>Section 16: NE¼ NE¼ SE¼</b></p> <p><b>Species Plan Notes</b></p> <p><b>Non-Compliance: Failure to implement the commitments specified in the Plan Notes can result in non-compliance issues on the project. Work activities may be suspended on the project, for an undetermined duration, while working with regulators to bring the project back into compliance. The contractor will not be compensated for time lost.</b></p> <p><b>Water Quality Conservation: Appropriate Best Management Practices to minimize impacts from storm water discharges and sedimentation in streams, as established by the Oklahoma Department of Environmental Quality, shall be conscientiously implemented throughout the proposed construction periods, in order to minimize any potential impacts to any listed species. The effectiveness of erosion controls shall be maintained for the duration of construction activities. Hazardous materials, chemicals, fuels, lubricating oils, and other such substances shall be stored at least 100 feet outside of the ordinary high water mark (OHWM). Refueling of construction equipment shall also be conducted at least 100 feet from the OHWMs. Sediment and erosion controls shall be installed around staging areas to prohibit discharge of materials from these sites. Construction waste materials and debris shall be stockpiled at least 25 feet outside of the OHWMs, and these materials shall be removed and disposed of properly following completion of the project. Preventative measure must be taken to prohibit the discharge of contaminants into any surface waters.</b></p> <p><b>American Burying Beetle Note: The American Burying Beetle is a large carrion burying beetle that occurs within the project limits. Artificial lighting may be used during construction for night activities if the equipment specifications outlined in Special Provision 656-5(a-b)19 for ABB are adhered to and measures to minimize use of artificial lighting have been implemented. Carcasses and all food trash shall</b></p> |

continuously be removed from the permanent and temporary right-of-way throughout the duration of project activities. Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented when appropriate. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will not be stored within areas of native vegetation (ie. outside of ABB habitat).

**Bat Lighting Note:** All temporary lighting, if used, will be directed away from suitable bat habitat during the active season for bats (April 1- November 15). If any permanent lighting is installed or replaced, downward-facing full cut-off lens lights shall be installed and directed away from wooded areas and streams.

**Bald Eagle Note:** Suitable nesting, roosting or foraging habitat for the Bald Eagle occurs within the project’s action area, and a nest was observed during field studies within 1000-ft of the south end of the project area. The Bald Eagle nesting season in Oklahoma extends from September 16, through May 31. The Resident Engineer shall contact the ODOT Biologist to schedule a nest survey. Nest search surveys can only be conducted when leaves are not on the trees typically between December 1st and February 28th. No work may occur within suitable Bald Eagle habitat, located between STA. 100+53.00 and STA 119+62.48, during the nesting season (September 16, through May 31) until the completion of the survey by the ODOT Biologist. If nests are observed, a no-work buffer up to a distance of 660 feet shall be placed around the nest. The exact distance of the buffer zone shall be established by the ODOT Biologist in consultation with US Fish and Wildlife Services. If the buffer cannot be maintained, all clearing, external construction and landscaping activities, within the buffer, shall be conducted between June 1 and September 15 (outside the nesting season).


| <u>Species (choose those that apply)</u> | <u>Seasonal Restriction Period</u> |
|------------------------------------------|------------------------------------|
| Bald Eagle                               | September 16 – May 31              |

The Environmental Programs Division shall provide **the final plan sheet with the mitigation notes** to the Designer for inclusion in Final Plans and keep a copy for the project records. The mitigation measures above should be discussed at all Pre-work conferences per Policy Directive C-201-2.

All documentation, analyses, and agency coordination regarding this Categorical Exclusion are contained in a Supporting Appendix maintained in the project file at the Oklahoma Department of Transportation, Environmental Programs Division.

Development of the project including coordination and assessment of potential social, economic and environmental impacts has been considered in accordance with DOT ORDER 5610.1C, and CEQ REGULATIONS 40 CFR 1500 - 1508 as amended, 23 CFR 771.117 and the 2019 FHWA/ODOT Programmatic Agreement for processing of categorical exclusions. Implementation of this action as a “Categorical Exclusion” will satisfy the requirements of the National Environmental Policy Act.

**Preparer/Reviewer Signatures**

|                                                                                                                                                                                                                                                                          |                                     |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------|
|                                                                                                                                                                                         | <b>11/5/2023</b>                    |            |
| Environmental Consultant Project Manager (If Applicable)<br>Olsson                                                                                                                                                                                                       | Date                                |            |
| Environmental Consultant Firm Name (If Applicable)                                                                                                                                                                                                                       | Date                                |            |
| County Commissioner or City Manager<br>(For Local Government Projects)                                                                                                                                                                                                   | Date                                |            |
| ODOT NEPA Project Manager                                                                                                                                                                                                                                                | Date                                |            |
| ODOT Environmental Programs Assistant Division Manager                                                                                                                                                                                                                   | Date                                |            |
| ODOT Environmental Programs Division Manager                                                                                                                                                                                                                             | Date                                |            |
| CONCLUSION:                                                                                                                                                                                                                                                              |                                     |            |
| <b>ODOT has reviewed the conditions identified in Section IV.A.1.b of Federal Highway Administration 2019 (FHWA)/ODOT Programmatic Agreement for Processing Categorical Exclusions (CE) and determined that an Individual CE must be submitted to FHWA for approval.</b> | <input type="checkbox"/>            | <b>YES</b> |
|                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> | <b>NO</b>  |

**For Individual CEs requiring FHWA Approval:**

Concurrence that this project qualifies for a Categorical Exclusion:

|                                      |      |
|--------------------------------------|------|
|                                      |      |
| Environmental Programs Manager, FHWA | Date |

Attachments:

1. Location Map
2. Current Plans and Study Footprint
3. Studies and Coordination
4. Other Section – Initiation Memo; QA/QC Checklist

Distribution List (Check Applicable Ones)

|                                     |                                                                                                                        |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Project Management Division (All State Projects)                                                                       |
| <input checked="" type="checkbox"/> | Roadway Design Division (All State projects with the exception of projects from Traffic Division and Special Projects) |
| <input type="checkbox"/>            | Bridge Division (All State Bridge Projects)                                                                            |
| <input type="checkbox"/>            | Traffic Division (For projects from Traffic Division)                                                                  |
| <input type="checkbox"/>            | Local Government Division (County, City, TAP or Special Projects)                                                      |
| <input checked="" type="checkbox"/> | District Engineer (All Projects)                                                                                       |
| <input checked="" type="checkbox"/> | Right-of-Way Division (All Projects)                                                                                   |
| <input type="checkbox"/>            | Noise Specialist (For projects with noise studies)                                                                     |



**RIGHT-OF-WAY PLANS OR FINAL PLANS  
AND  
NEPA STUDY FOOTPRINT OR STUDY  
PLANS**



STATE OF OKLAHOMA  
DEPARTMENT OF TRANSPORTATION

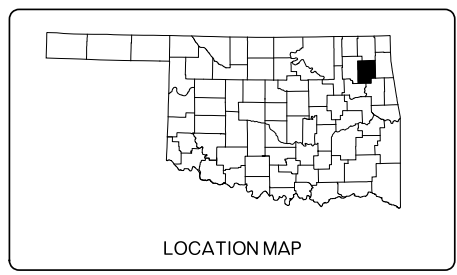
PLAN OF PROPOSED  
**STATE HIGHWAY 412B**  
STATE JOB NO. 33821(04)  
**MAYES COUNTY**

PAVEMENT REHAB  
STATE HIGHWAY 412B  
CONTROL SECTION NO. 412B-49-48

OKLAHOMA DEPARTMENT OF TRANSPORTATION  
THIS DOCUMENT IS PRELIMINARY  
IN NATURE AND IS NOT A FINAL,  
SIGNED AND SEALED DOCUMENT.  
11/3/2023

OKLAHOMA DEPARTMENT OF TRANSPORTATION  
**PROPOSED  
R/W**  
11/3/2023

CONTROL SURVEY DATA:  
SEE SURVEY DATA SHEETS



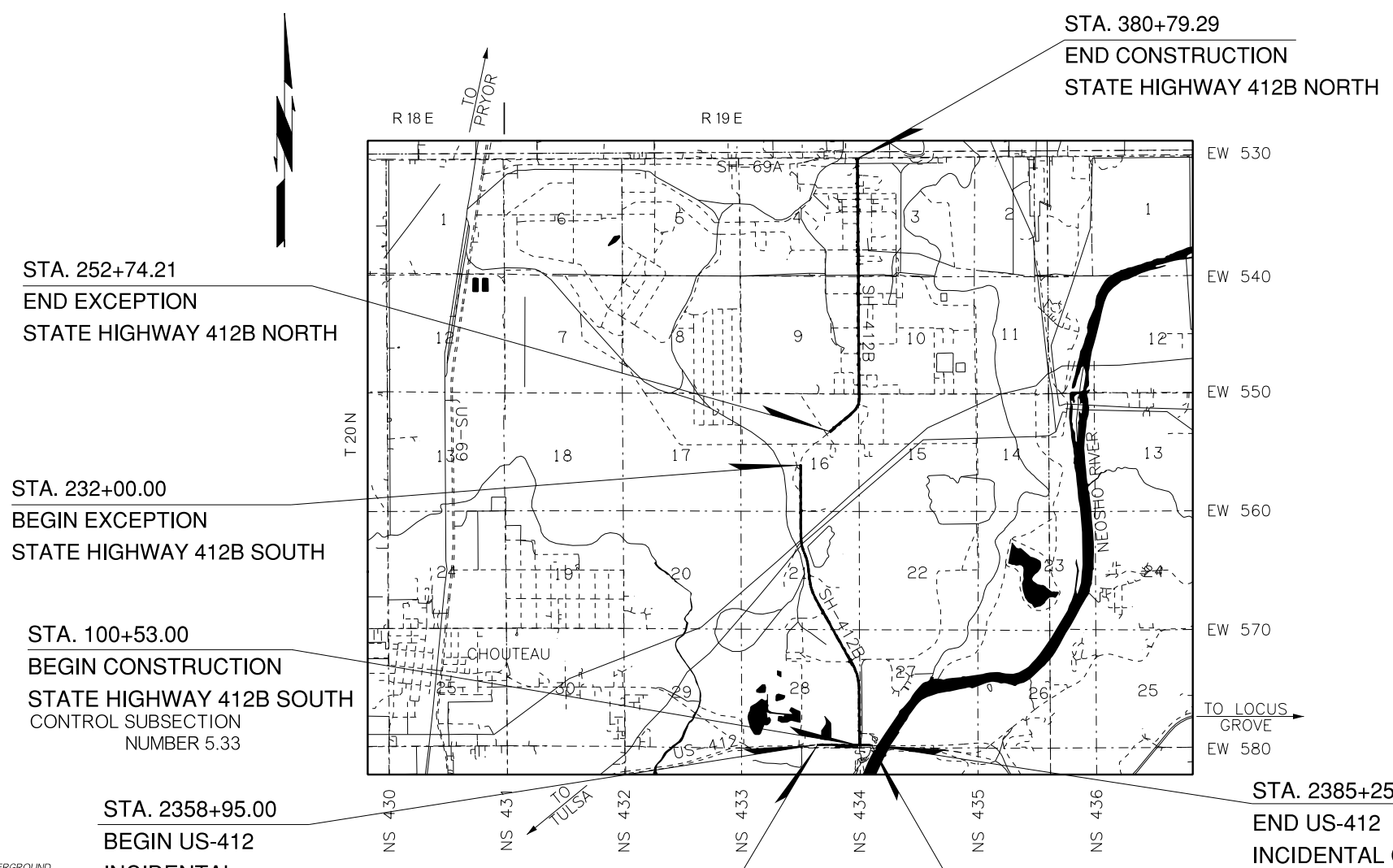
SH-412B DESIGN DATA

|              |   |           |
|--------------|---|-----------|
| ADT 2023     | = | 10,000    |
| ADT 2043     | = | 19,000    |
| DESIGN SPEED | = | 45/55 MPH |
| D            | = | 50%       |
| T3           | = | 18.0%     |
| FLEX ESALS   | = | 22.65 M   |

SCALES 1" = 50'  
PLAN 1" = 50'  
PROFILE HOR. 1" = 50'  
VER. 1" = 10'  
LAYOUT MAP 1" = 2,000'

CONVENTIONAL SYMBOLS

|  |                       |  |                                         |
|--|-----------------------|--|-----------------------------------------|
|  | PROPOSED ROAD         |  | TELEPHONE UNDERGROUND                   |
|  | RAILROADS             |  | SANITARY SEWER                          |
|  | RANGE & TOWNSHIP      |  | GAS LINE                                |
|  | SECTION LINES         |  | WATER LINE                              |
|  | QUARTER SECTION LINES |  | DRAINAGE STRUCTURES - IN PLACE          |
|  | FENCES                |  | DRAINAGE STRUCTURES - NEW               |
|  | GROUND LINE           |  | RIGHT-OF-WAY LINES - EXISTING           |
|  | EXISTING ROADS        |  | RIGHT-OF-WAY LINES - NEW                |
|  | BASE LINE             |  | RIGHT-OF-WAY MARKERS - IN PLACE         |
|  | GRADE LINES           |  | RIGHT-OF-WAY MARKERS - REMOVE & REPLACE |
|  | TELEPHONE & TELEGRAPH |  | RIGHT-OF-WAY MARKERS - NEW              |
|  | POWER LINES           |  | CONTROLLED ACCESS                       |
|  | BUILDINGS             |  | RIGHT-OF-WAY FENCE                      |
|  | OIL WELL              |  |                                         |



INDEX OF SHEETS

| DESCRIPTION        | SHEET     |
|--------------------|-----------|
| TITLE SHEET        | 001       |
| TYPICAL SECTIONS   | 002-004   |
| GEOMETRIC DATA     | R001-R007 |
| PLAN AND PROFILES  | R008-R027 |
| SURVEY DATA SHEETS | S001-S014 |
| CROSS SECTIONS     | X001-X086 |

ROADWAY LENGTH ----- 28382.08 FT. 5.375 MI.  
BRIDGE LENGTH ----- 00.00 FT. 0.0000 MI.  
PROJECT LENGTH ----- 5.375 MI.  
EQUATIONS: NONE  
EXCEPTIONS: SH-412B STA. 232+00.00 TO STA 252+74.21

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, DECEMBER 18 2019.

**olsson**  
1717 S. BOULDER, SUITE 600  
TULSA, OKLAHOMA 74119  
C.A. 2483  
EXP. 06-30-2025

PREPARED BY:  
OLSSON, INC.  
RUSSELL L. BEATY, P.E.  
OKLA. REG. NO. 20685

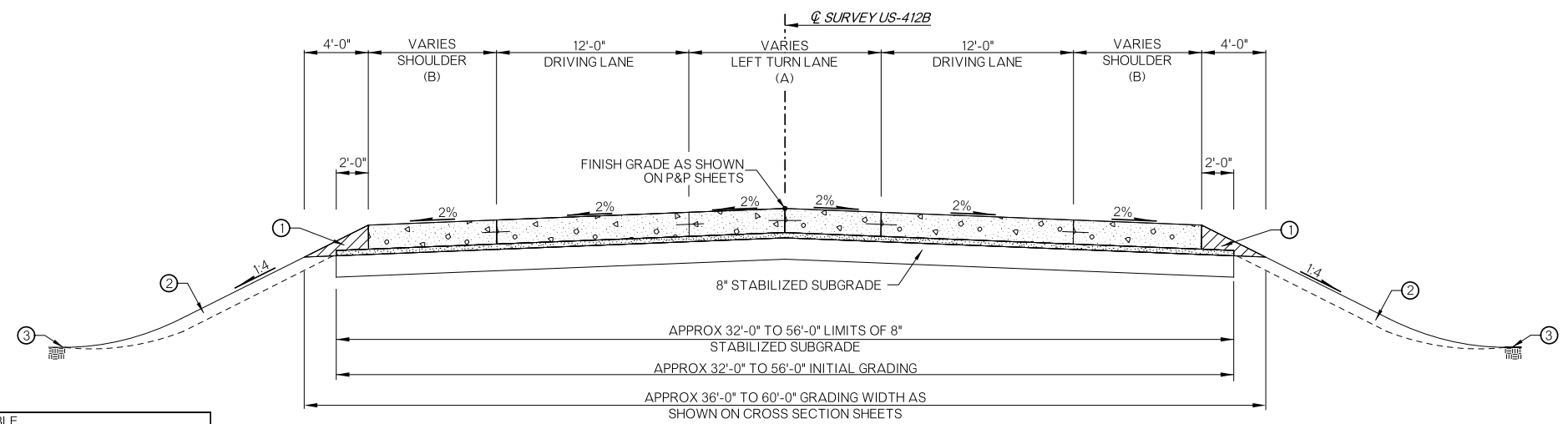
DATE \_\_\_\_\_

|                                          |                                                                |
|------------------------------------------|----------------------------------------------------------------|
| OKLAHOMA<br>DEPARTMENT OF TRANSPORTATION | DEPARTMENT OF TRANSPORTATION<br>FEDERAL HIGHWAY ADMINISTRATION |
| DATE APPROVED _____                      | DATE APPROVED _____                                            |
| BY _____                                 | BY _____                                                       |
| CHIEF ENGINEER                           | DIVISION ADMINISTRATOR                                         |

S.W.O. XXXX Project No. XXXXX Sheet No. 001

11/3/2023 10:27:52 AM

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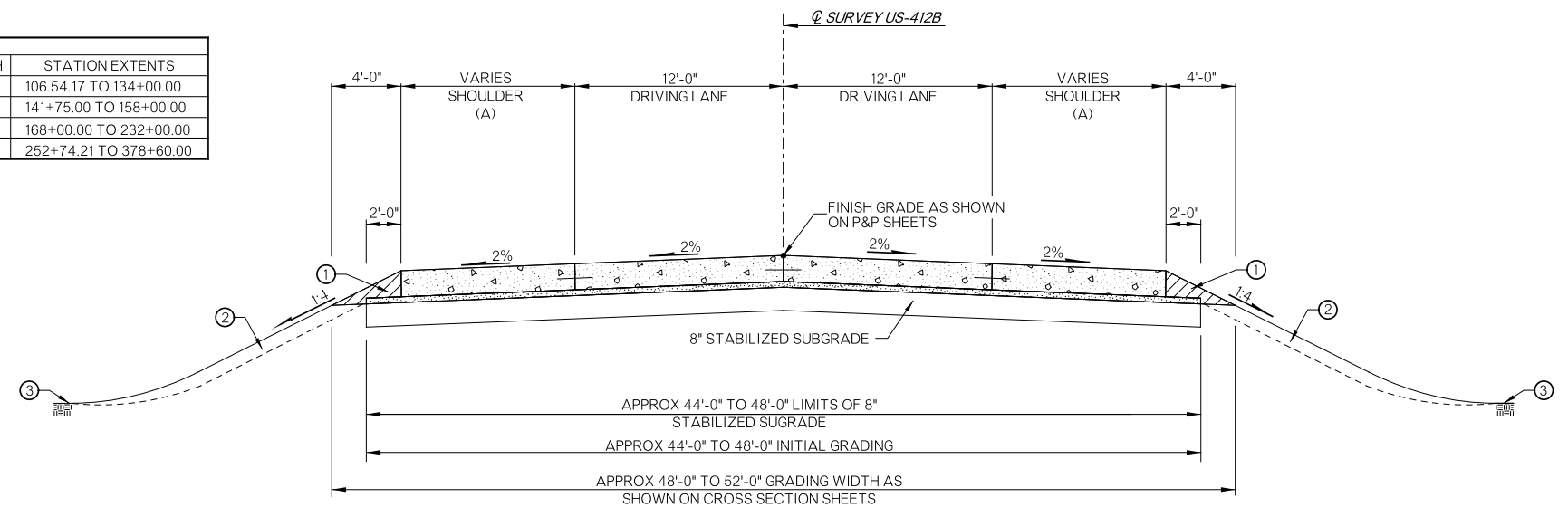


| VARIABLE WIDTH TABLE |         |                 |                        |
|----------------------|---------|-----------------|------------------------|
| TYPICAL SECTION      | SEGMENT | VARIABLE WIDTH  | STATION EXTENTS        |
| 1                    | (A)     | 12'-0"          | 100+53.00 TO 105+00.00 |
| 1                    | (A)     | 12'-0" TO 0'-0" | 105+00.00 TO 106+54.17 |
| 1                    | (B)     | 2'-0"           | 100+53.00 TO 105+00.00 |
| 1                    | (B)     | 2'-0" TO 8'-0"  | 105+00.00 TO 106+54.17 |

TYPICAL NO. 1  
 STATE HIGHWAY 412B  
 STA. 100+53.00 TO STA. 106+54.17

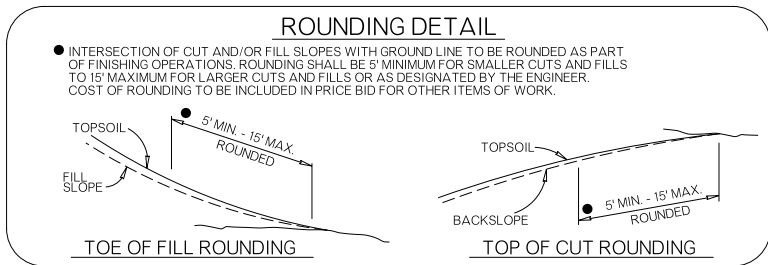
| PAVEMENT REQUIREMENT |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| 11" PAVT. STRUCTURE  | 12'-0" DRIVING LANES                | 8'-0" PAVED SHOULDERS               |
| SURFACE COURSE       | 9" DOWEL JOINTED P.C. CONCRETE      | 9" P.C. CONCRETE PAVEMENT           |
| BASE COURSE          | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) |

| VARIABLE WIDTH TABLE |         |                |                        |
|----------------------|---------|----------------|------------------------|
| TYPICAL SECTION      | SEGMENT | VARIABLE WIDTH | STATION EXTENTS        |
| 2                    | (A)     | 8'-0"          | 106.54.17 TO 134+00.00 |
| 2                    | (A)     | 8'-0"          | 141+75.00 TO 158+00.00 |
| 2                    | (A)     | 8'-0"          | 168+00.00 TO 232+00.00 |
| 2                    | (A)     | 10'-0"         | 252+74.21 TO 378+60.00 |



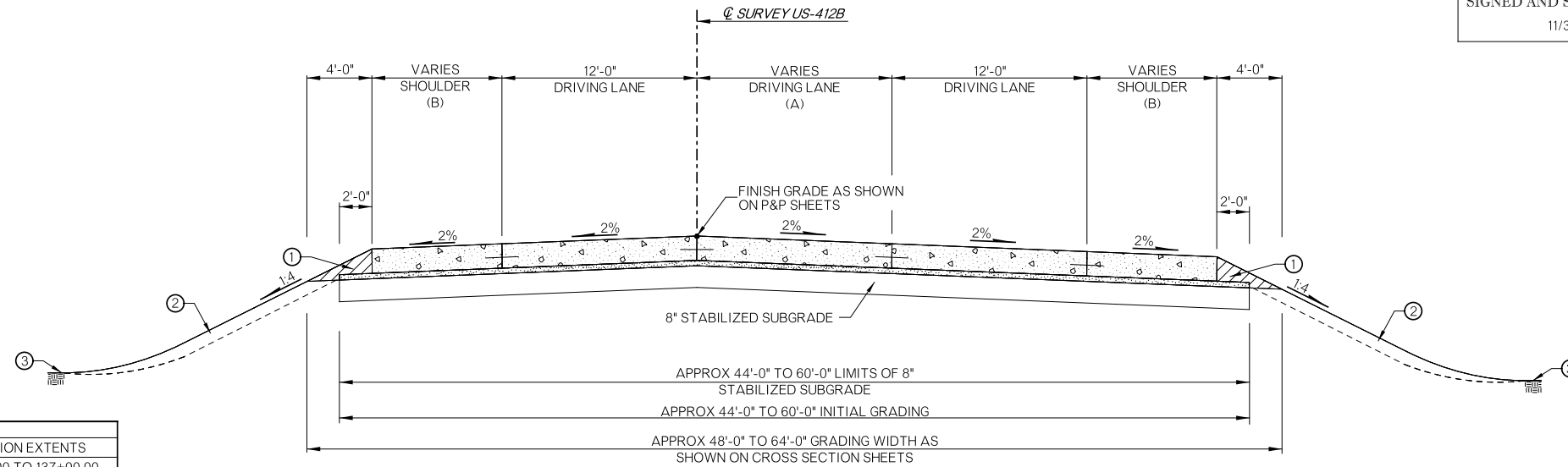
TYPICAL NO. 2  
 STATE HIGHWAY 412B  
 STA. 106.54.17 TO STA. 134+00.00  
 STA. 141+75.00 TO STA. 158+00.00  
 STA. 168+00.00 TO STA. 232+00.00  
 STA. 252+74.21 TO STA. 378+60.00

| PAVEMENT REQUIREMENT |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| 11" PAVT. STRUCTURE  | 12'-0" DRIVING LANES                | 8'-0" PAVED SHOULDERS               |
| SURFACE COURSE       | 9" DOWEL JOINTED P.C. CONCRETE      | 9" P.C. CONCRETE PAVEMENT           |
| BASE COURSE          | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) |



- (1) BACKFILL NOTE:  
TO BE BACKFILLED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN UNCLASSIFIED BORROW
- (2) TOPSOIL NOTE:  
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.  
  
THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.
- (3) SEE ROUNDING DETAIL THIS SHEET

|               |        |                                                                  |      |
|---------------|--------|------------------------------------------------------------------|------|
| DESIGN        |        | OKLAHOMA DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION |      |
| DRAWN         |        | <b>TYPICAL SECTIONS</b><br>(SHEET 1 OF 3)                        |      |
| CHECKED       |        |                                                                  |      |
| APPROVED      |        |                                                                  |      |
| SQUAD         |        |                                                                  |      |
| COUNTY        | ROGERS | HIGHWAY                                                          | 412B |
| STATE JOB NO. |        | 33821(04)                                                        |      |
| SHEET NO.     |        | 002                                                              |      |

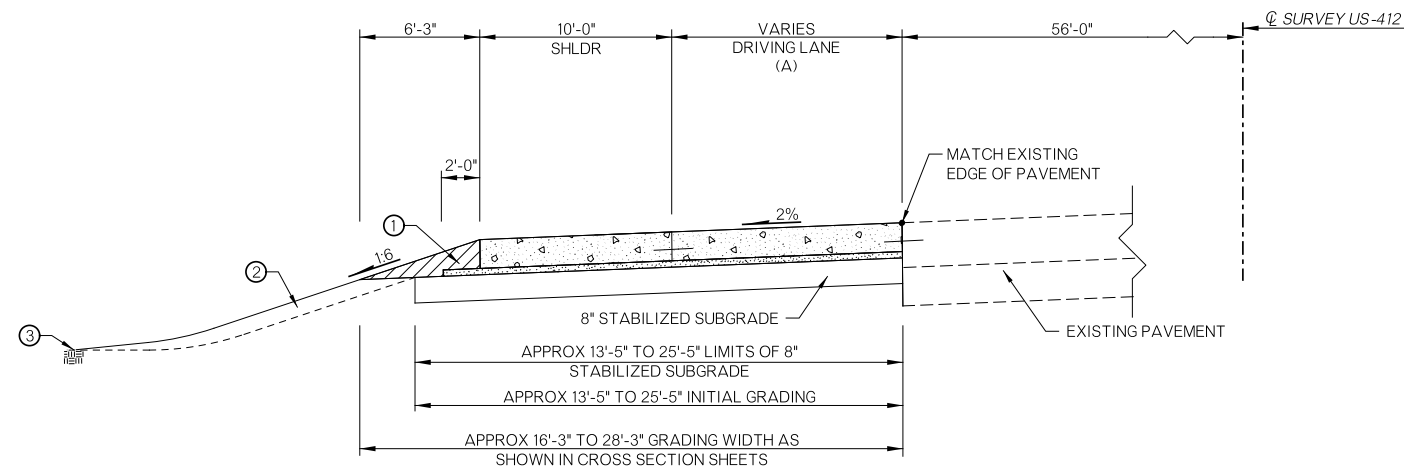


| VARIABLE WIDTH TABLE |         |                 |                        |
|----------------------|---------|-----------------|------------------------|
| TYPICAL SECTION      | SEGMENT | VARIABLE WIDTH  | STATION EXTENTS        |
| 3                    | (A)     | 0'-0" TO 12'-0" | 134+00.00 TO 137+00.00 |
| 3                    | (A)     | 12'-0"          | 137+00.00 TO 139+75.00 |
| 3                    | (A)     | 12'-0" TO 0'-0" | 139+75.00 TO 141+75.00 |
| 3                    | (A)     | 0'-0" TO 12'-0" | 158+00.00 TO 161+00.00 |
| 3                    | (A)     | 12'-0"          | 161+00.00 TO 165+00.00 |
| 3                    | (A)     | 12'-0" TO 0'-0" | 165+00.00 TO 168+00.00 |
| 3                    | (A)     | 0'-0" TO 12'-0" | 378+60.00 TO 380+30.00 |
| 3                    | (A)     | 8'-0"           | 380+30.00 TO 380+79.29 |
| 3                    | (B)     | 8'-0"           | 134+00.00 TO 141+75.00 |
| 3                    | (B)     | 8'-0"           | 158+00.00 TO 168+00.00 |
| 3                    | (B)     | 10'-0" TO 2'-0" | 378+60.00 TO 379+30.00 |
| 3                    | (B)     | 2'-0"           | 379+30.00 TO 380+30.00 |
| 3                    | (B)     | 2'-0" TO 5'-0"  | 380+30.00 TO 380+79.29 |

**TYPICAL NO. 3**  
**STATE HIGHWAY 412B**  
STA. 134+00.00 TO STA. 141+75.00  
STA. 158+00.00 TO STA. 168+00.00  
STA. 378+60.00 TO STA. 380+79.29

| PAVEMENT REQUIREMENT |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| 11" PAVT. STRUCTURE  | 12'-0" DRIVING LANES                | 8'-0" PAVED SHOULDERS               |
| SURFACE COURSE       | 9" DOWEL JOINTED P.C. CONCRETE      | 9" P.C. CONCRETE PAVEMENT           |
| BASE COURSE          | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) |

| VARIABLE WIDTH TABLE |         |                 |                          |
|----------------------|---------|-----------------|--------------------------|
| TYPICAL SECTION      | SEGMENT | VARIABLE WIDTH  | STATION EXTENTS          |
| 3                    | (A)     | 0'-0" TO 12'-0" | 2359+95.00 TO 2362+95.00 |
| 3                    | (A)     | 12'-0"          | 2362+95.00 TO 2383+00.00 |
| 3                    | (A)     | 12'-0" TO 0'-0" | 2383+00.00 TO 2384+25.00 |



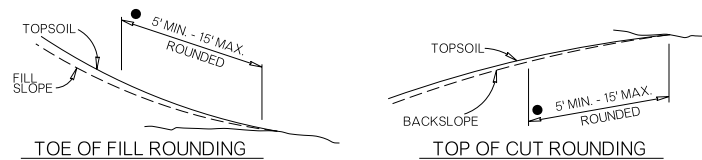
**TYPICAL NO. 4**  
**US 412 WEST BOUND**  
STA. 2359+95.00 TO STA. 2384+25.00

| PAVEMENT REQUIREMENT |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| 11" PAVT. STRUCTURE  | 12'-0" DRIVING LANES                | 8'-0" PAVED SHOULDERS               |
| SURFACE COURSE       | 9" DOWEL JOINTED P.C. CONCRETE      | 9" P.C. CONCRETE PAVEMENT           |
| BASE COURSE          | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) |

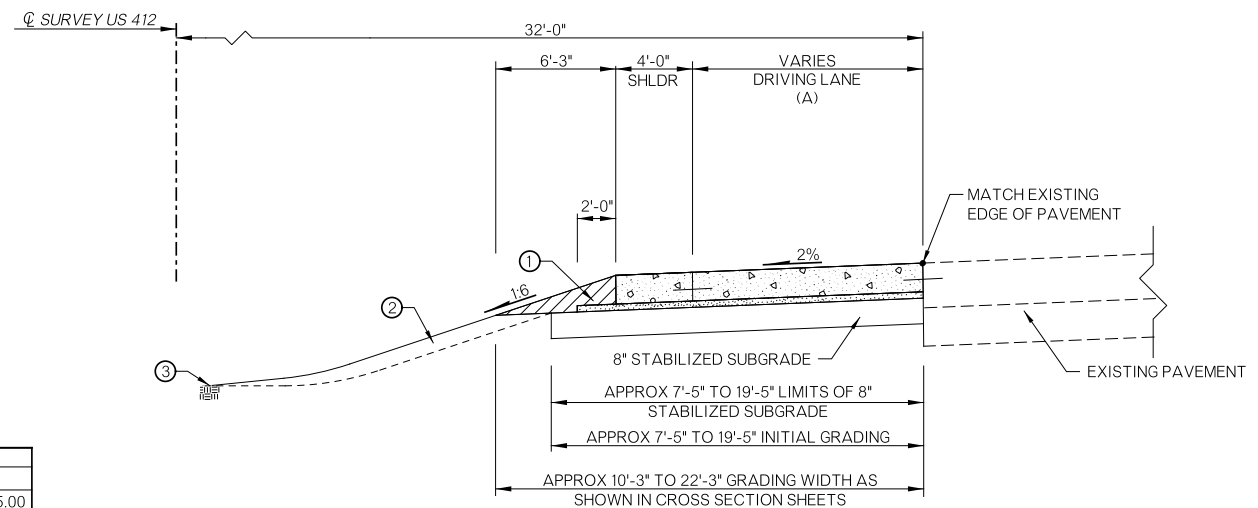
- (1) BACKFILL NOTE:  
TO BE BACKFILLED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN UNCLASSIFIED BORROW
- (2) TOPSOIL NOTE:  
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THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.
- (3) SEE ROUNDING DETAIL THIS SHEET

**ROUNDING DETAIL**

● INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



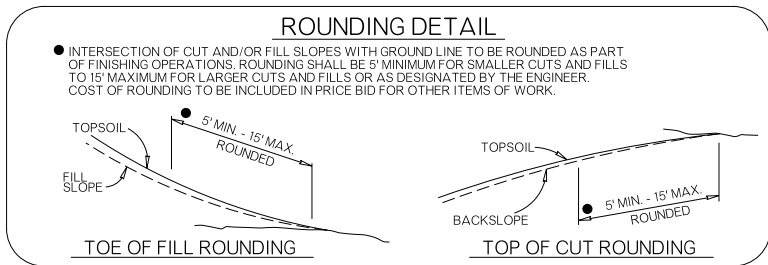
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|----------|--------|------------------------------------------------------------------|-----------|
| DESIGN   |        | OKLAHOMA DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION |           |
| DRAWN    |        | <b>TYPICAL SECTIONS</b><br>(SHEET 2 OF 3)                        |           |
| CHECKED  |        |                                                                  |           |
| APPROVED |        |                                                                  |           |
| SQUAD    |        |                                                                  |           |
| COUNTY   | ROGERS | HIGHWAY                                                          | 412B      |
|          |        | STATE JOB NO.                                                    | 33821(04) |
|          |        | SHEET NO.                                                        | 003       |



| VARIABLE WIDTH TABLE |         |                 |                          |
|----------------------|---------|-----------------|--------------------------|
| TYPICAL SECTION      | SEGMENT | VARIABLE WIDTH  | STATION EXTENTS          |
| 4                    | (A)     | 0'-0" TO 12'-0" | 2368+25.00 TO 2370+25.00 |
| 4                    | (A)     | 12'-0"          | 2370+25.00 TO 2377+90.00 |

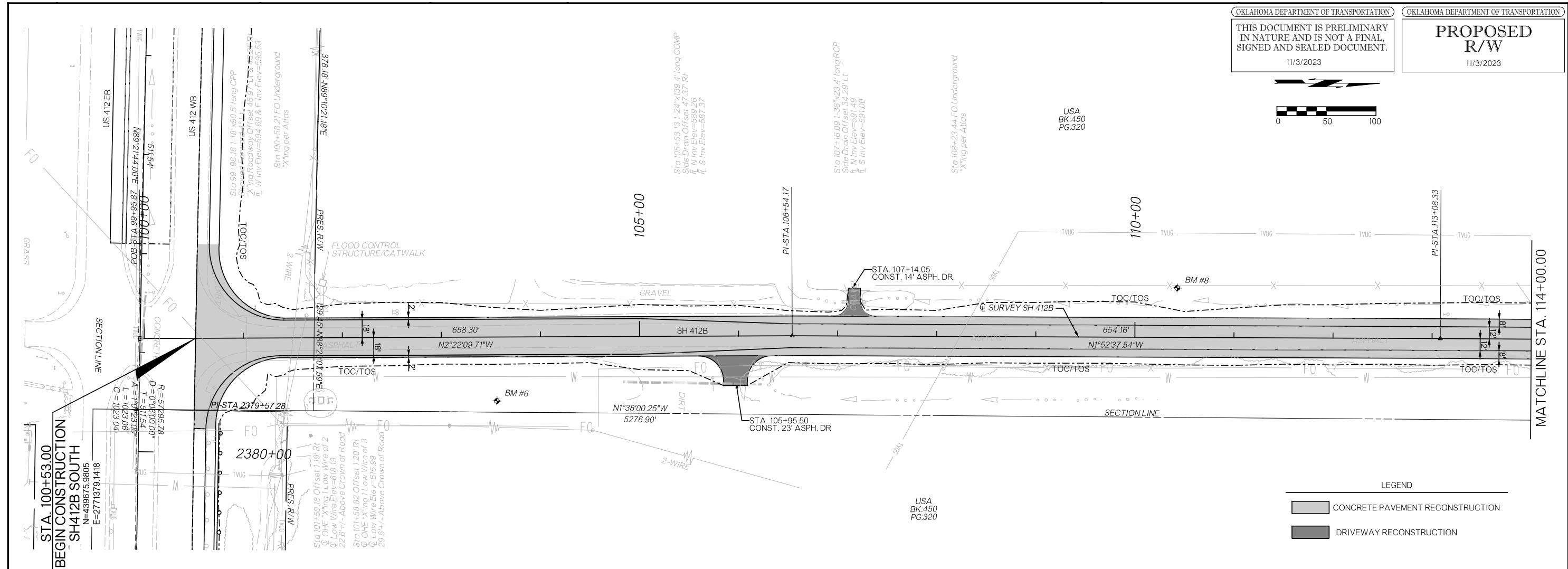
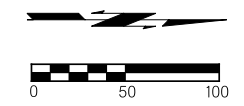
**TYPICAL NO. 5**  
US 412 EAST BOUND  
STA. 2368+25.00 TO STA. 2377+90.00

| PAVEMENT REQUIREMENT |                                     |                                     |
|----------------------|-------------------------------------|-------------------------------------|
| 11" PAVT. STRUCTURE  | 12'-0" DRIVING LANES                | 8'-0" PAVED SHOULDERS               |
| SURFACE COURSE       | 9" DOWEL JOINTED P.C. CONCRETE      | 9" P.C. CONCRETE PAVEMENT           |
| BASE COURSE          | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) | 2" SUPERPAVE, TYPE S3 (PG 64-22 OK) |



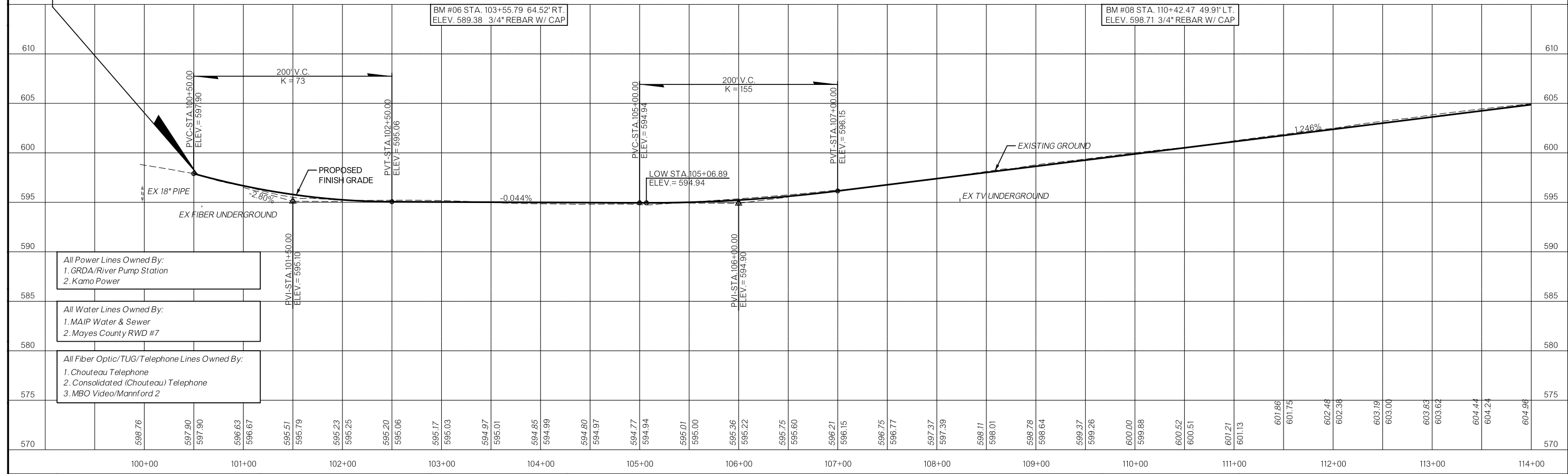
- (1) BACKFILL NOTE:  
TO BE BACKFILLED AS PART OF THE FINISHING OPERATIONS.  
QUANTITY IS MEASURED IN UNCLASSIFIED BORROW
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- (3) SEE ROUNDING DETAIL THIS SHEET

|          |        |                                                                  |
|----------|--------|------------------------------------------------------------------|
| DESIGN   |        | OKLAHOMA DEPARTMENT OF TRANSPORTATION<br>ROADWAY DESIGN DIVISION |
| DRAWN    |        | <b>TYPICAL SECTIONS</b><br>(SHEET 3 OF 3)                        |
| CHECKED  |        |                                                                  |
| APPROVED |        |                                                                  |
| SQUAD    |        |                                                                  |
| COUNTY   | ROGERS | HIGHWAY 412B STATE JOB NO. 33821(04) SHEET NO. 004               |

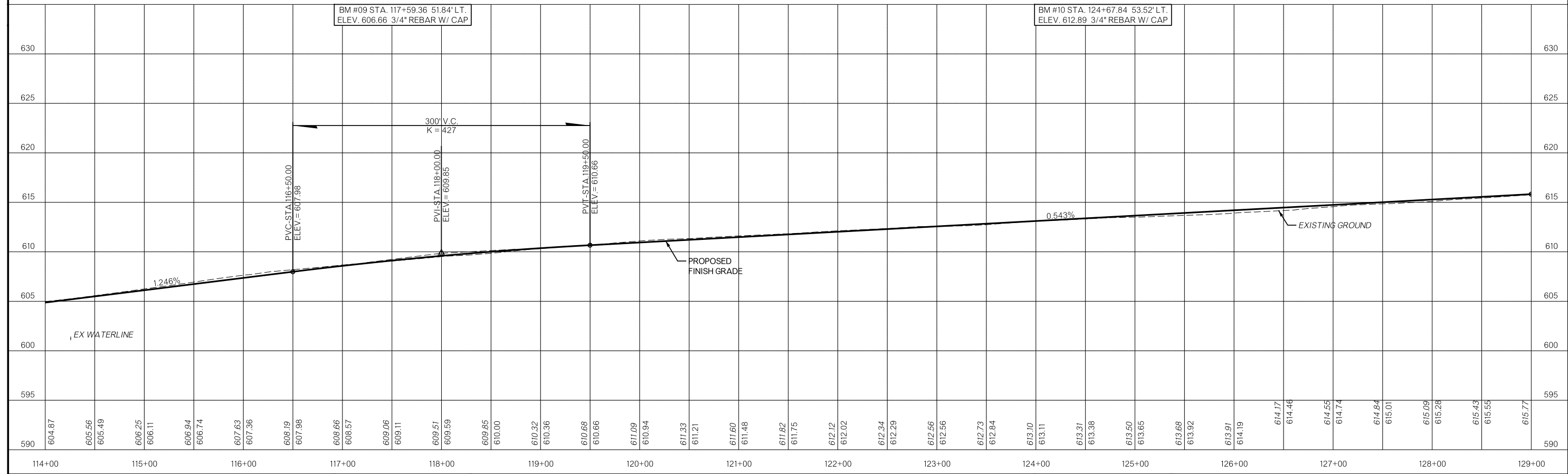
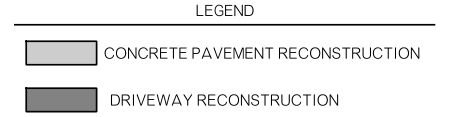
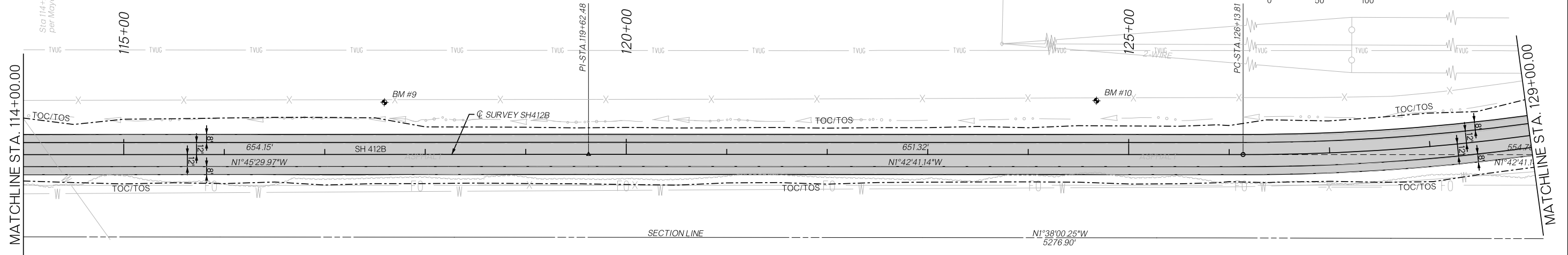


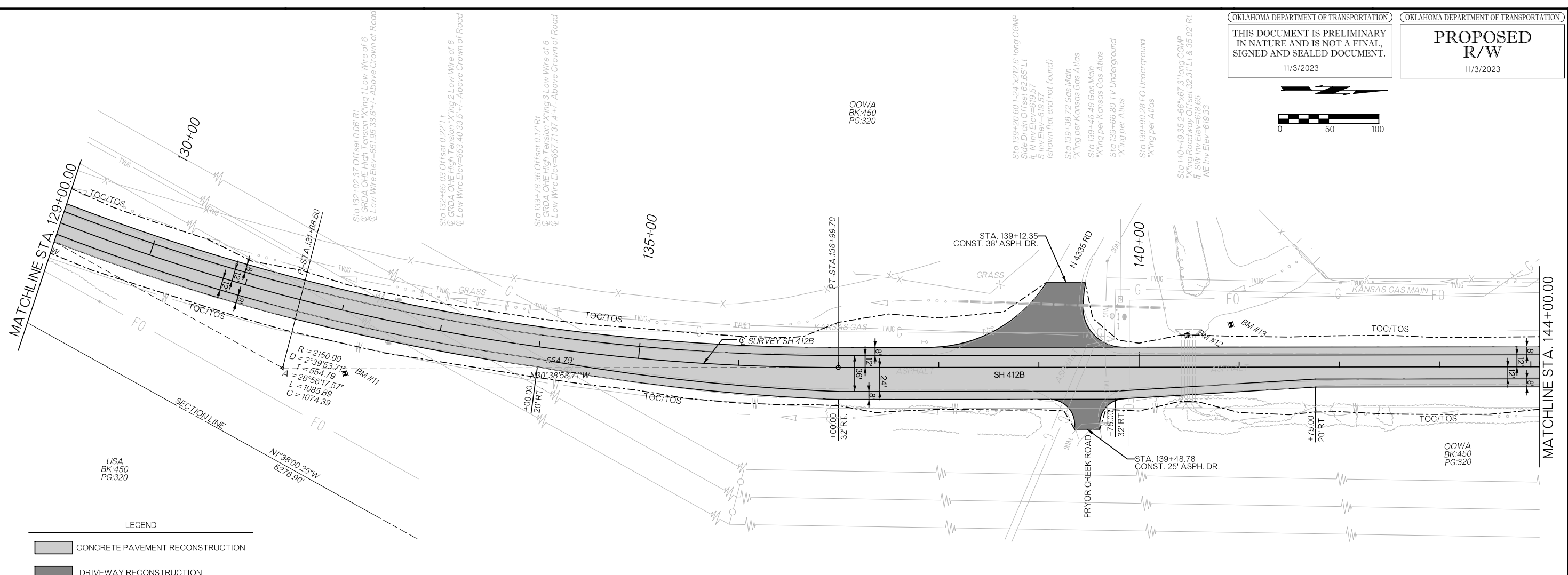
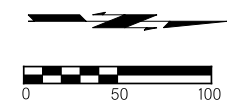
**LEGEND**

- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION



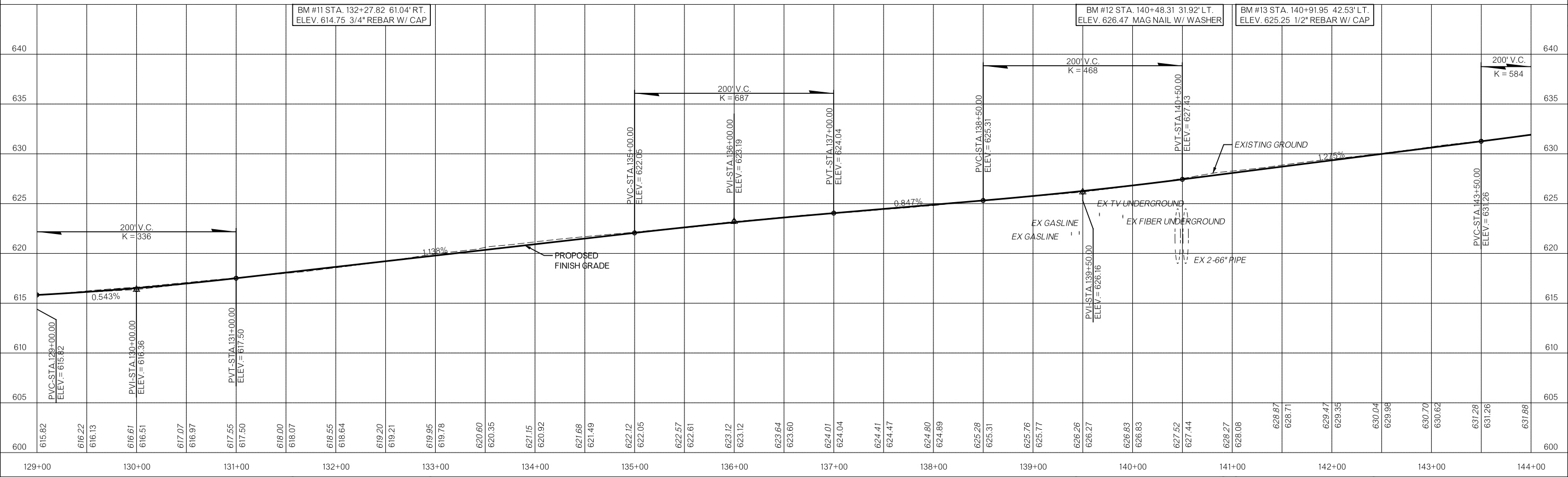
- All Power Lines Owned By:
- GRDA/River Pump Station
  - Kamo Power
- All Water Lines Owned By:
- MAIP Water & Sewer
  - Mayes County RWD #7
- All Fiber Optic/TUG/Telephone Lines Owned By:
- Chouteau Telephone
  - Consolidated (Chouteau) Telephone
  - MBO Video/Mannford 2



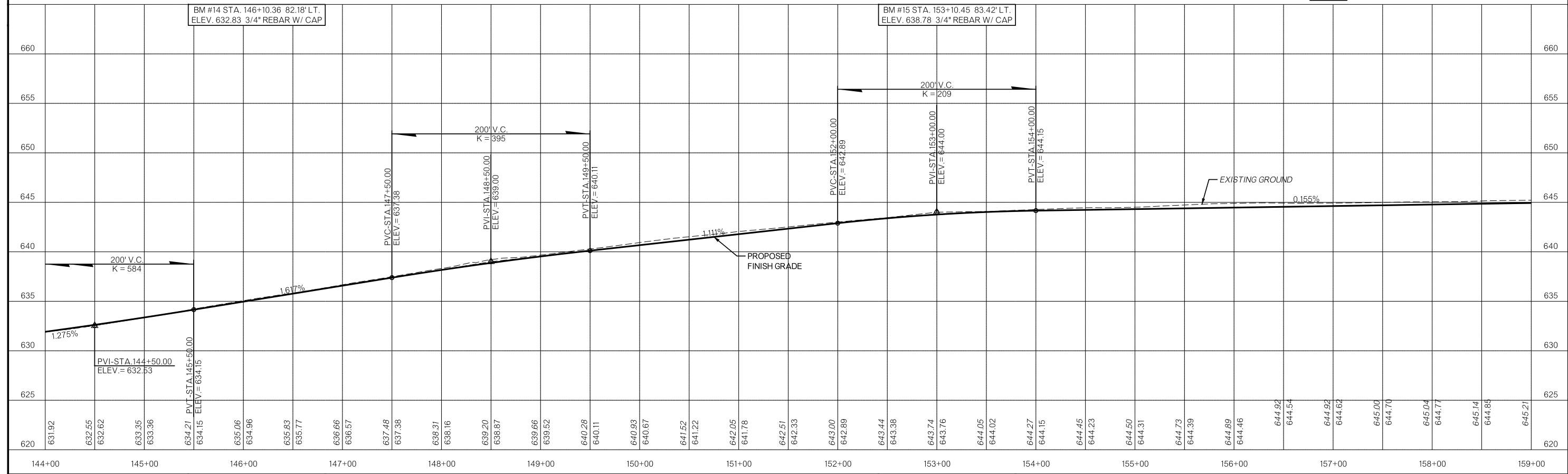
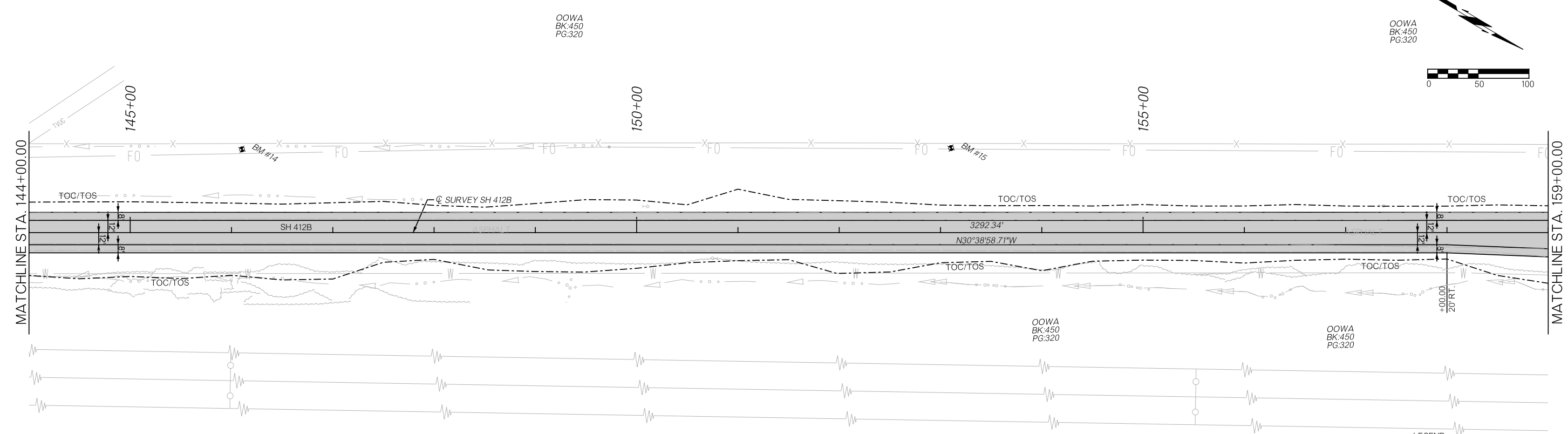


**LEGEND**

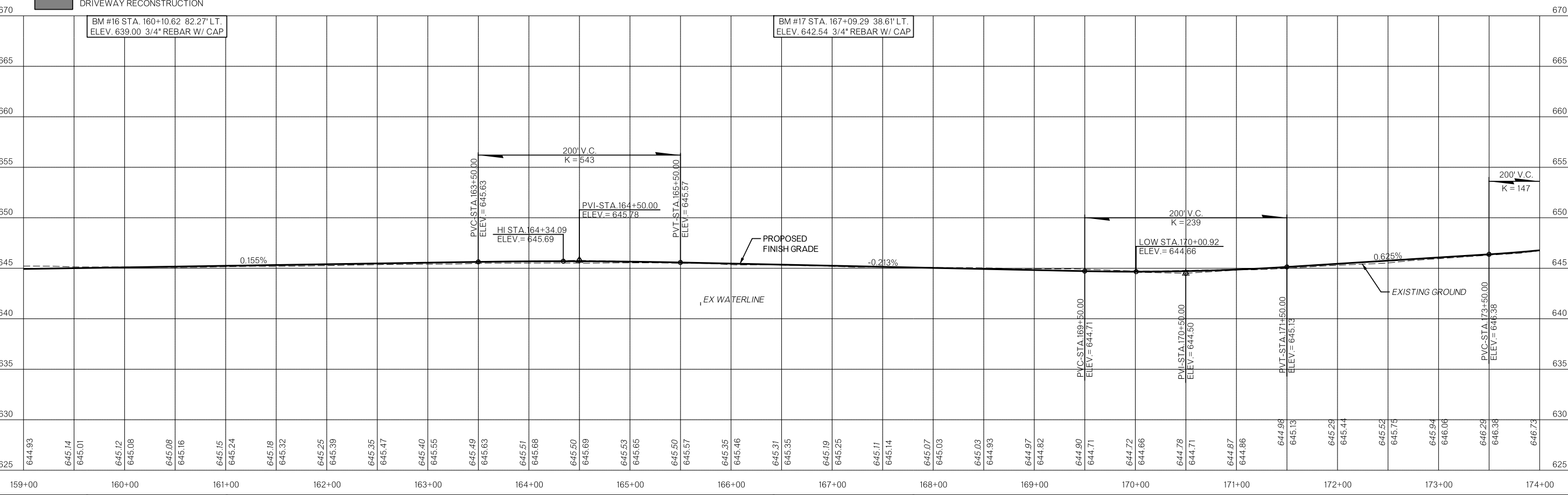
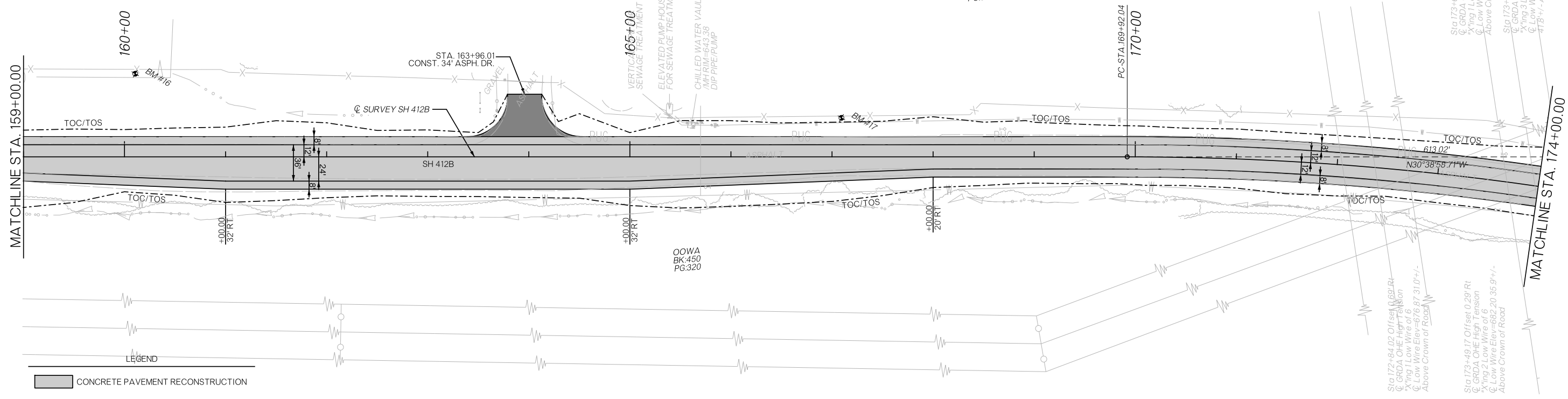
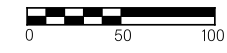
- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION



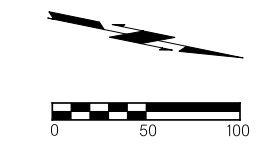
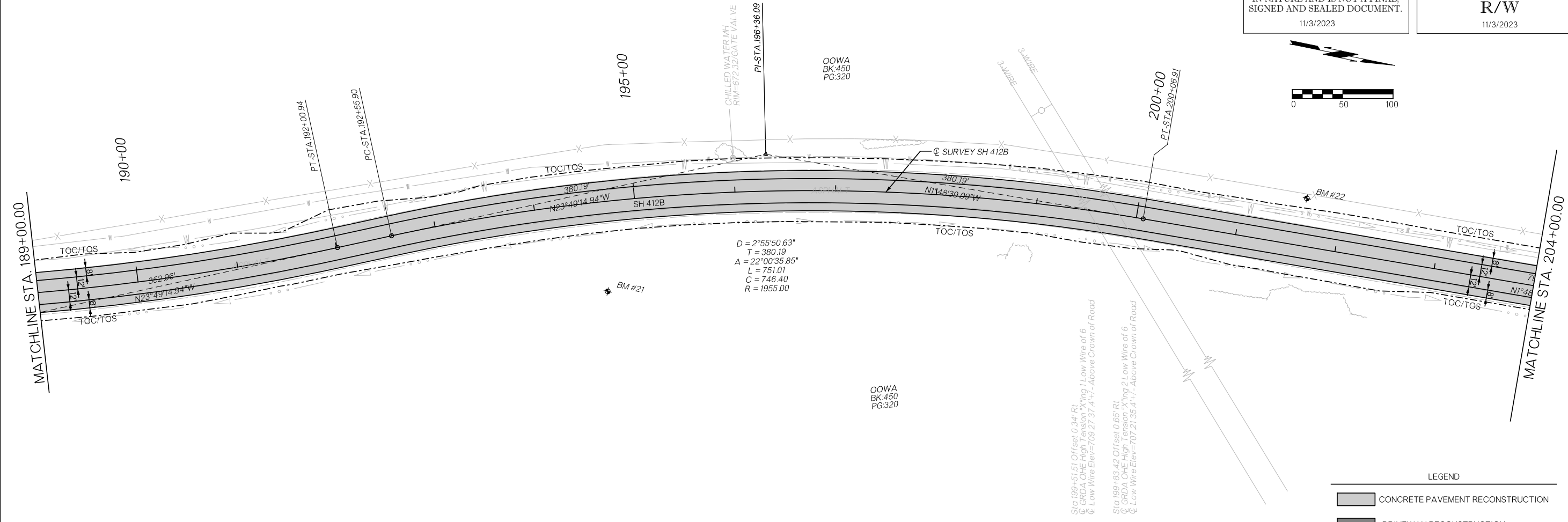
OOWA  
BK:450  
PG:320









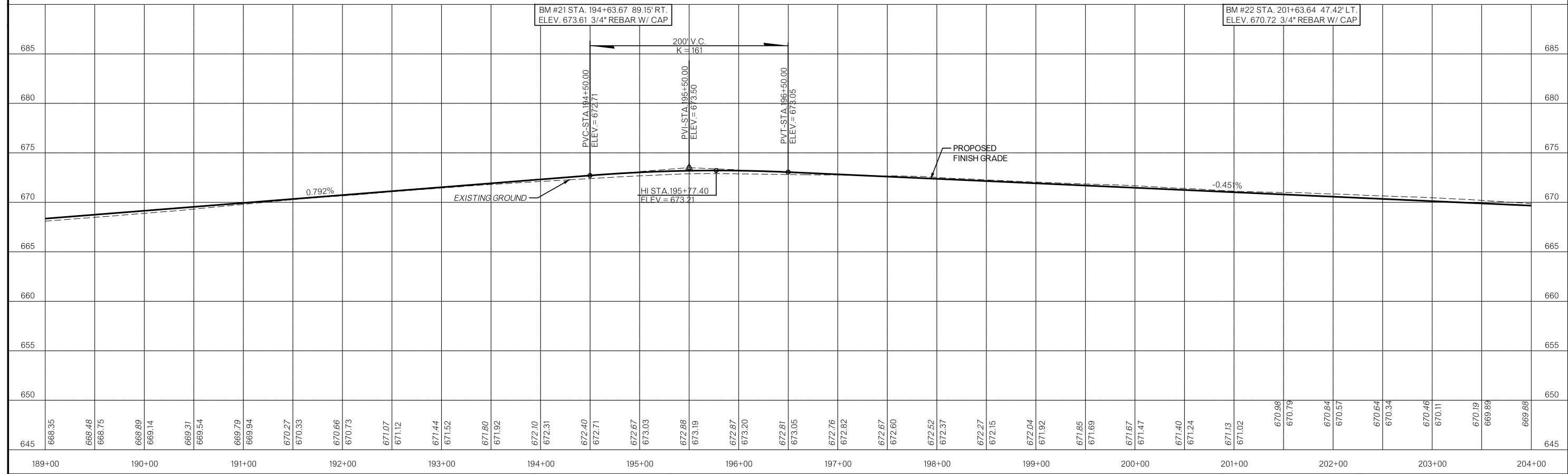


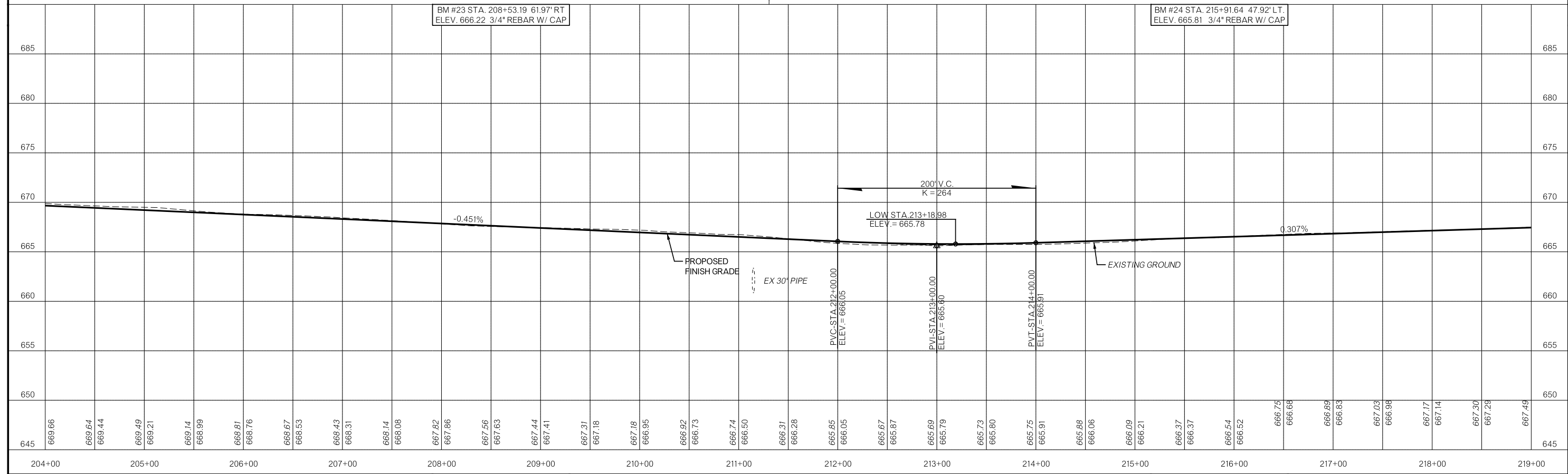
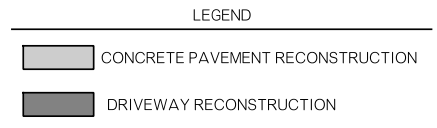
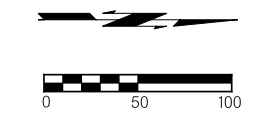
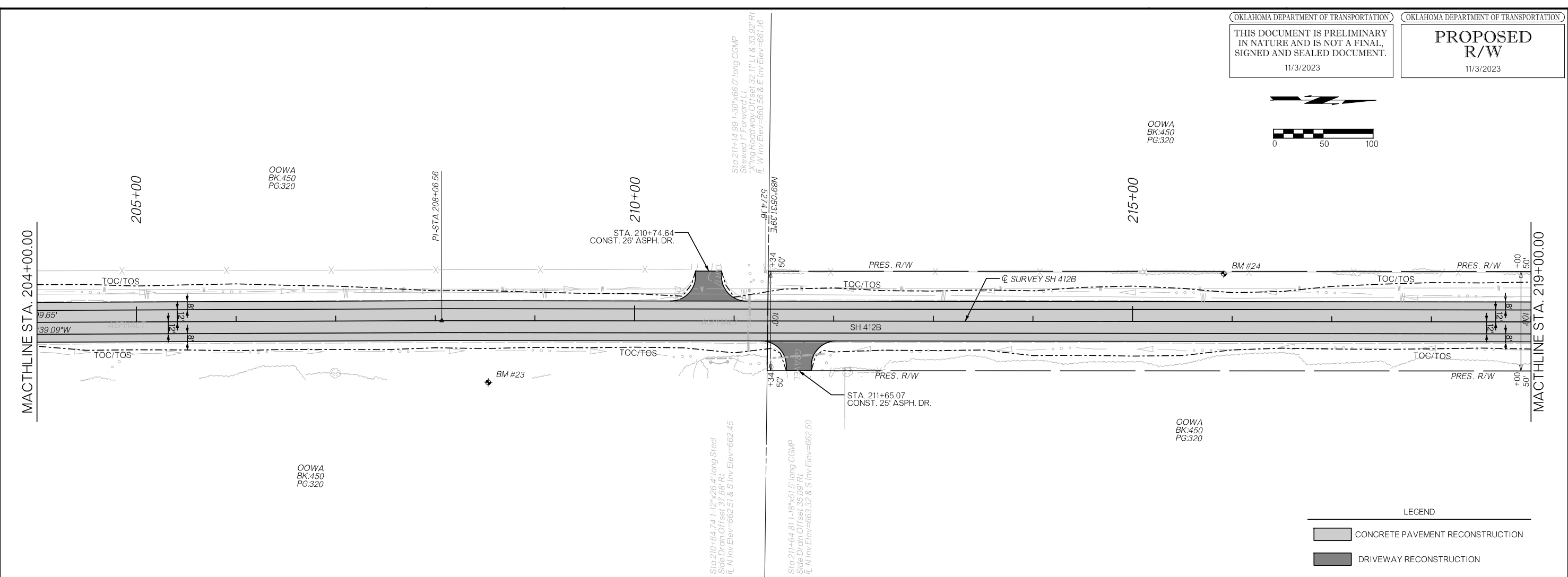
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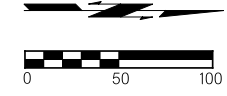
- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION

Sta 199+51.51 Offset 0.34' RL  
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 @ Low Wire Elev=709.27 3'4\"/>

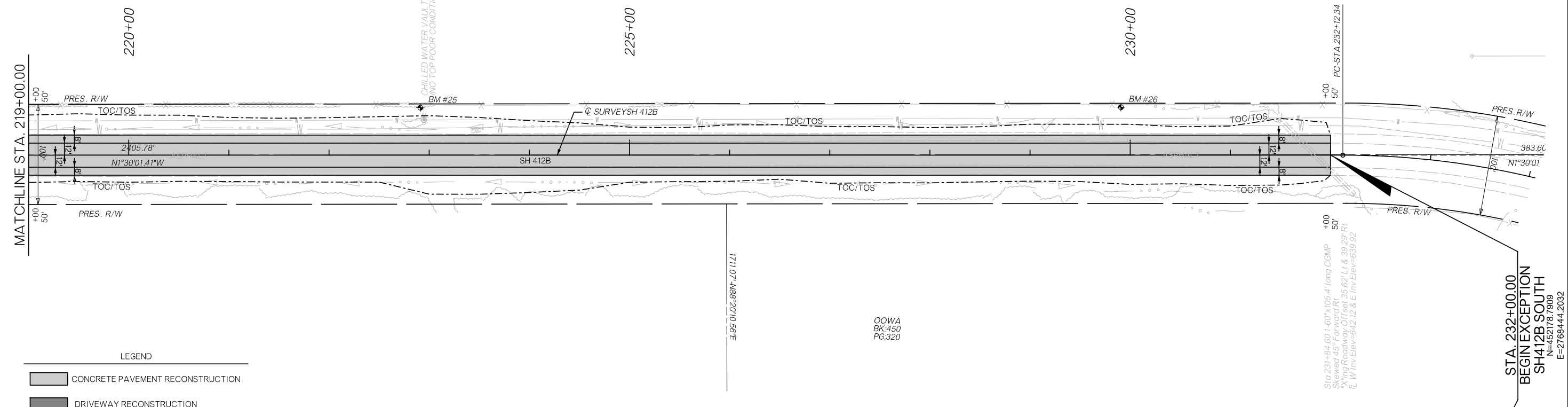
Sta 199+83.42 Offset 0.65' RL  
 @ GRDA OHE High Tension \*Xing 2 Low Wire of 6  
 @ Low Wire Elev=707.21 3'5'4\"/>





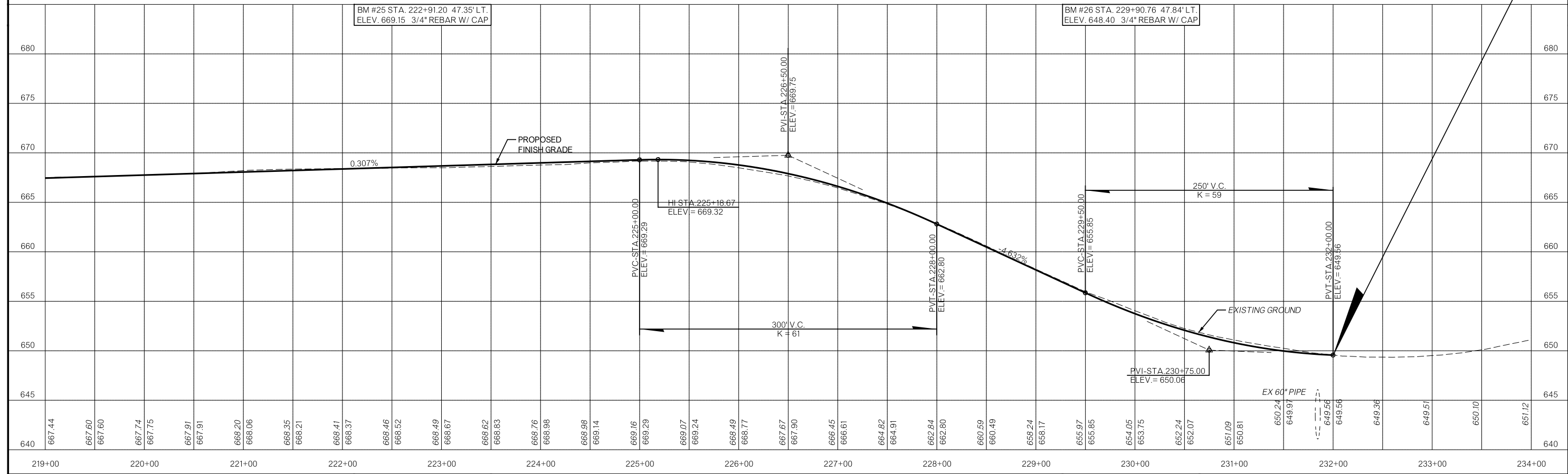


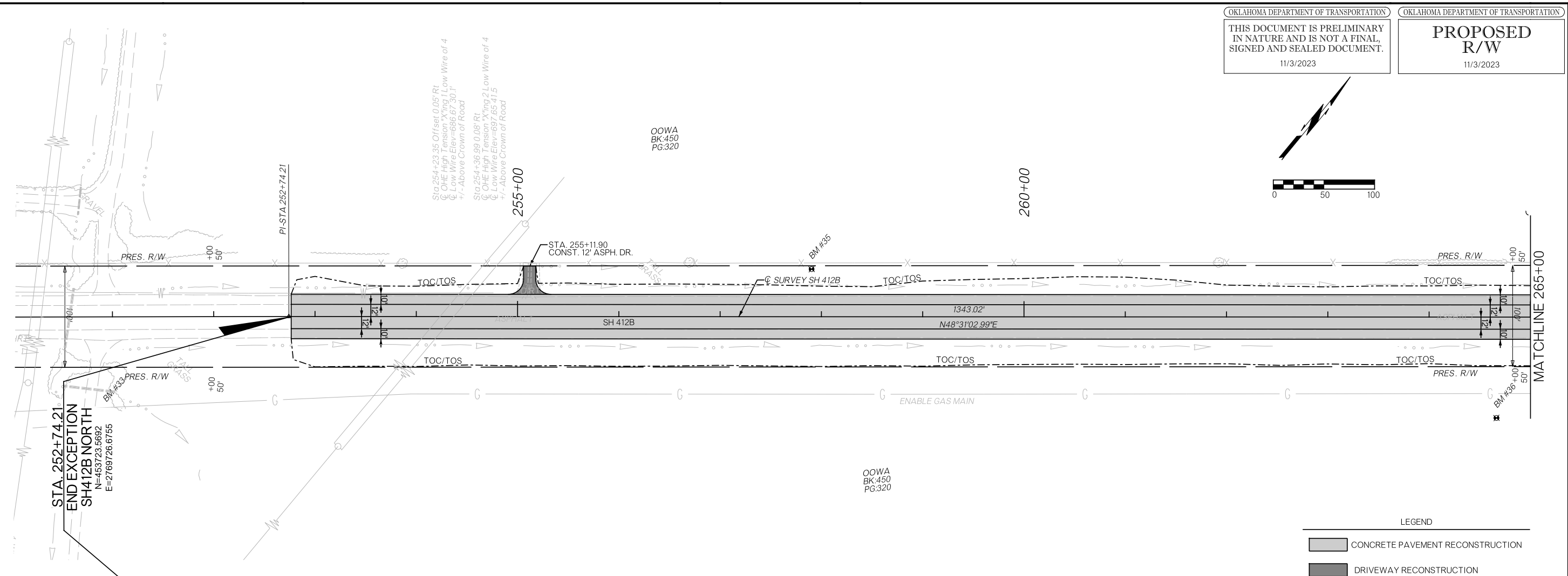
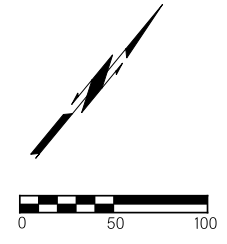
OOWA  
 BK:450  
 PG:320



**LEGEND**

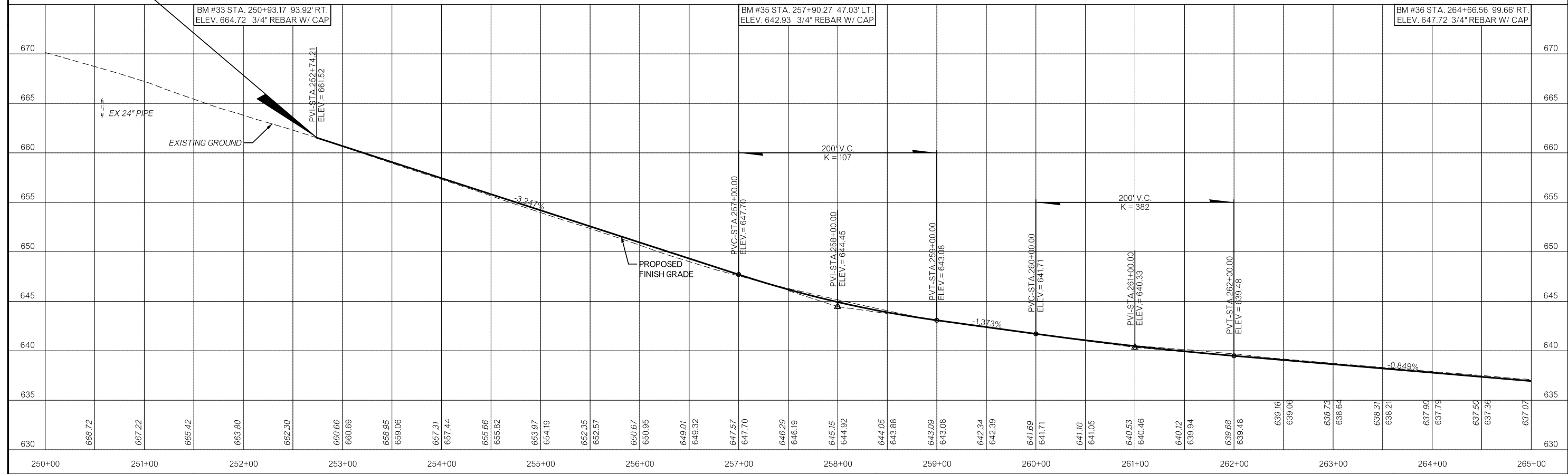
- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION

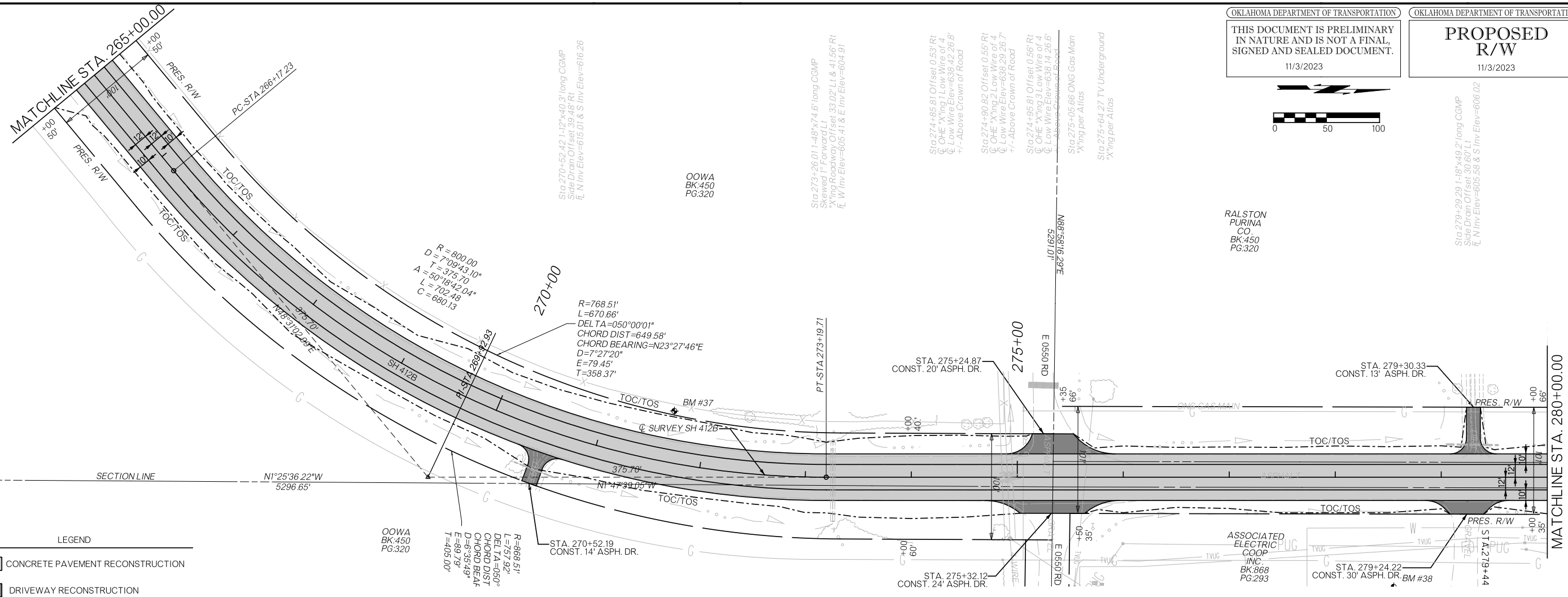
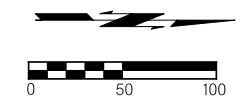




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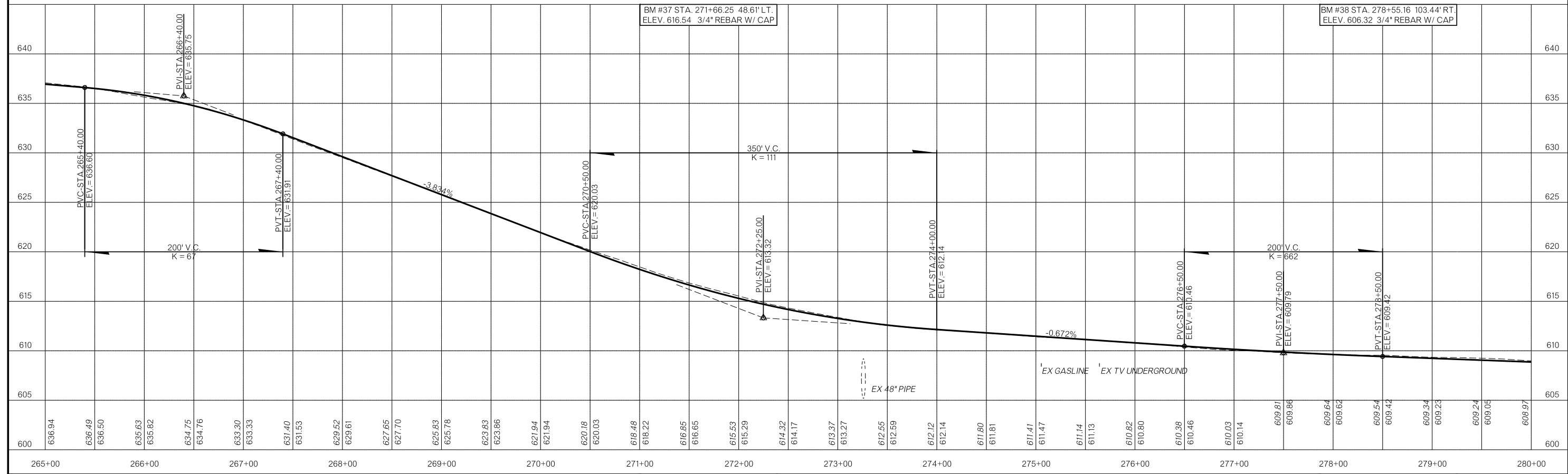
- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION





**LEGEND**

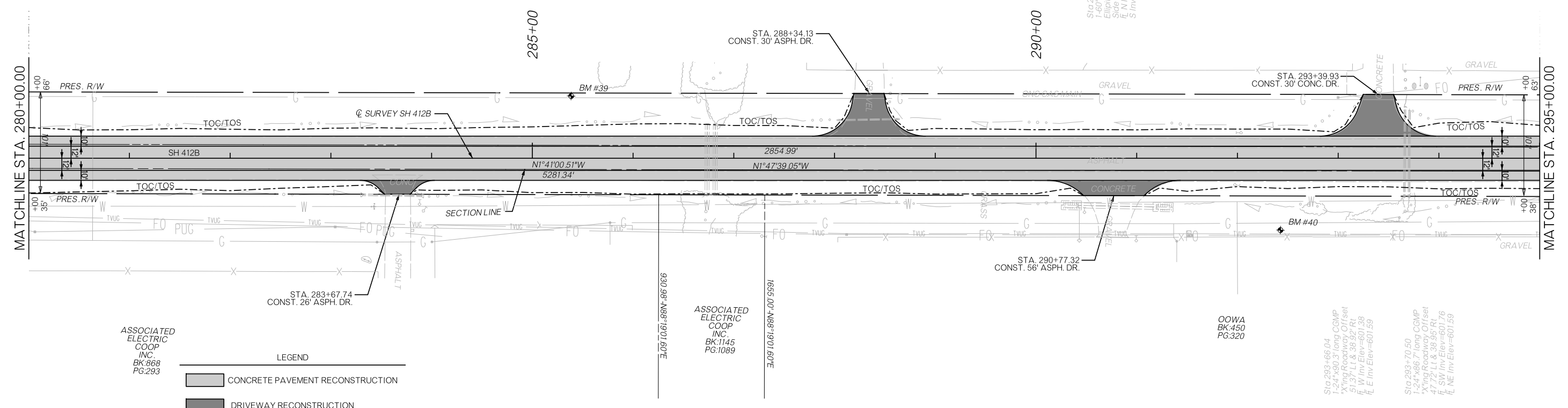
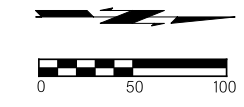
- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION



THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT.  
11/3/2023

**PROPOSED R/W**  
11/3/2023

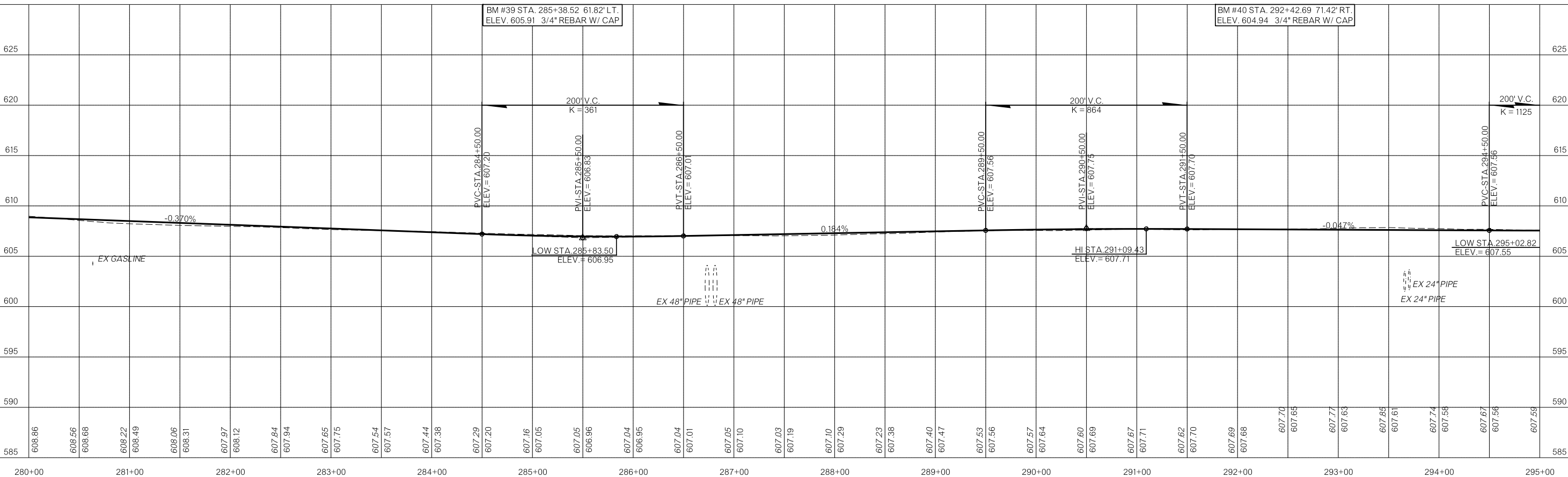
RALSTON PURINA CO.  
BK:450  
PG:320



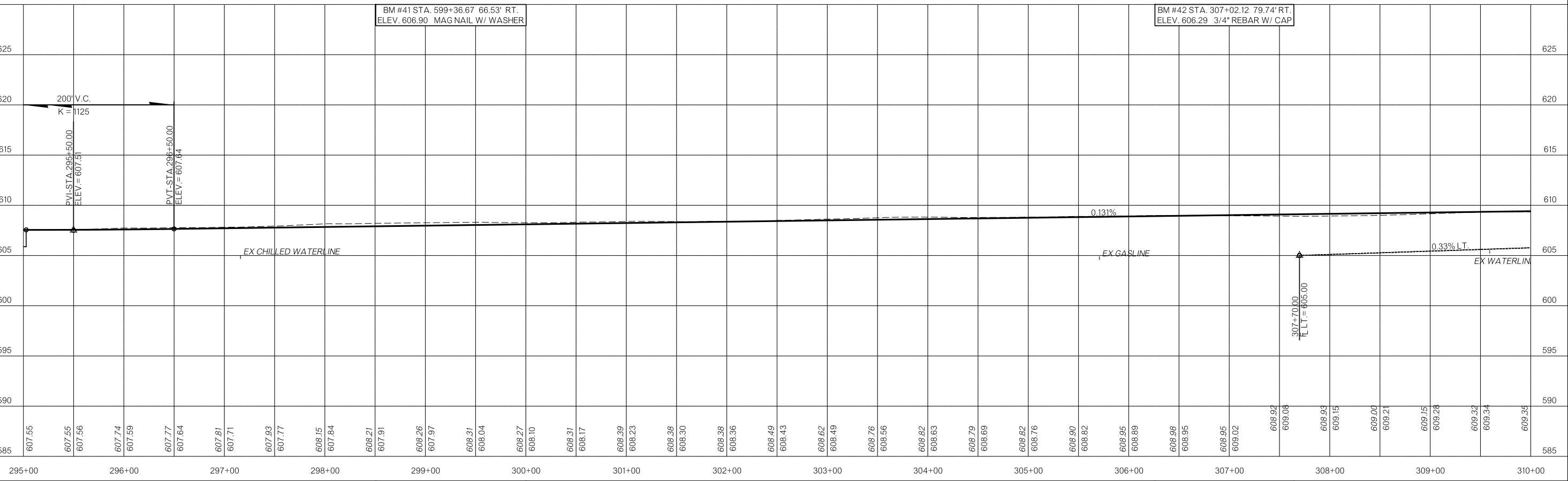
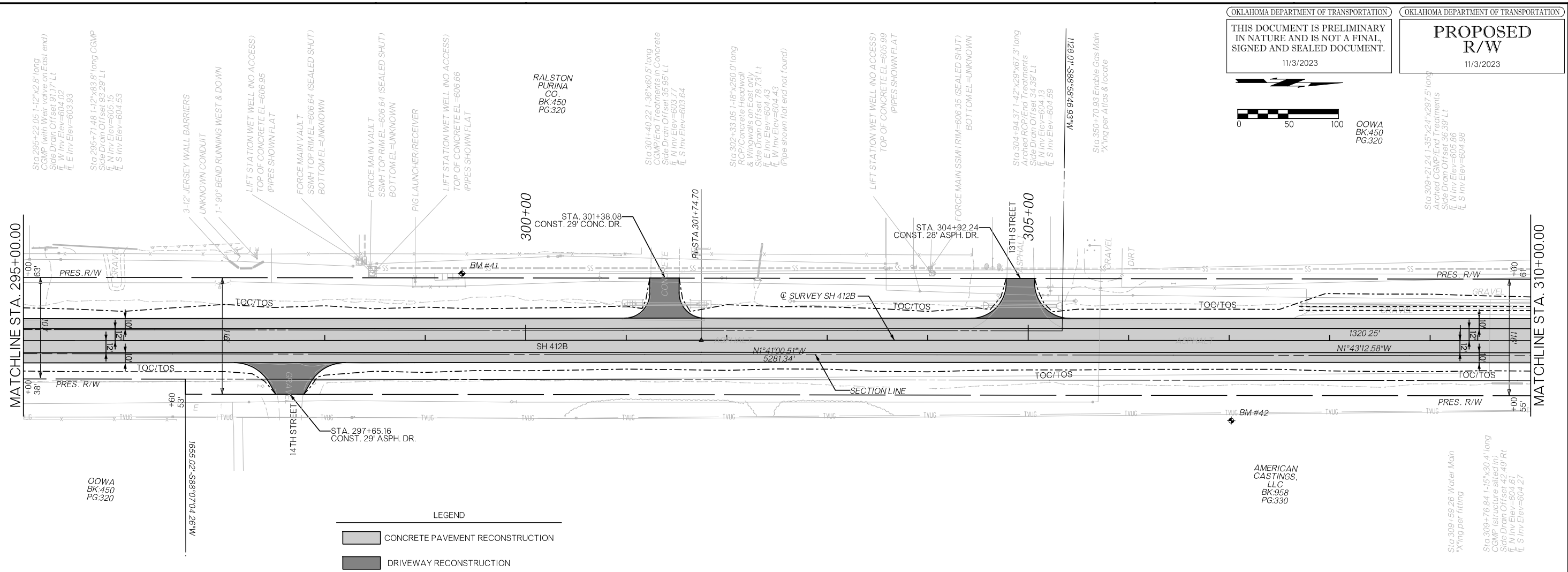
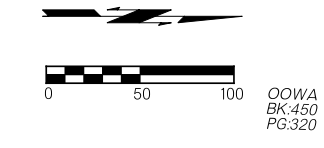
**ASSOCIATED ELECTRIC COOP INC. BK:868 PG:293**

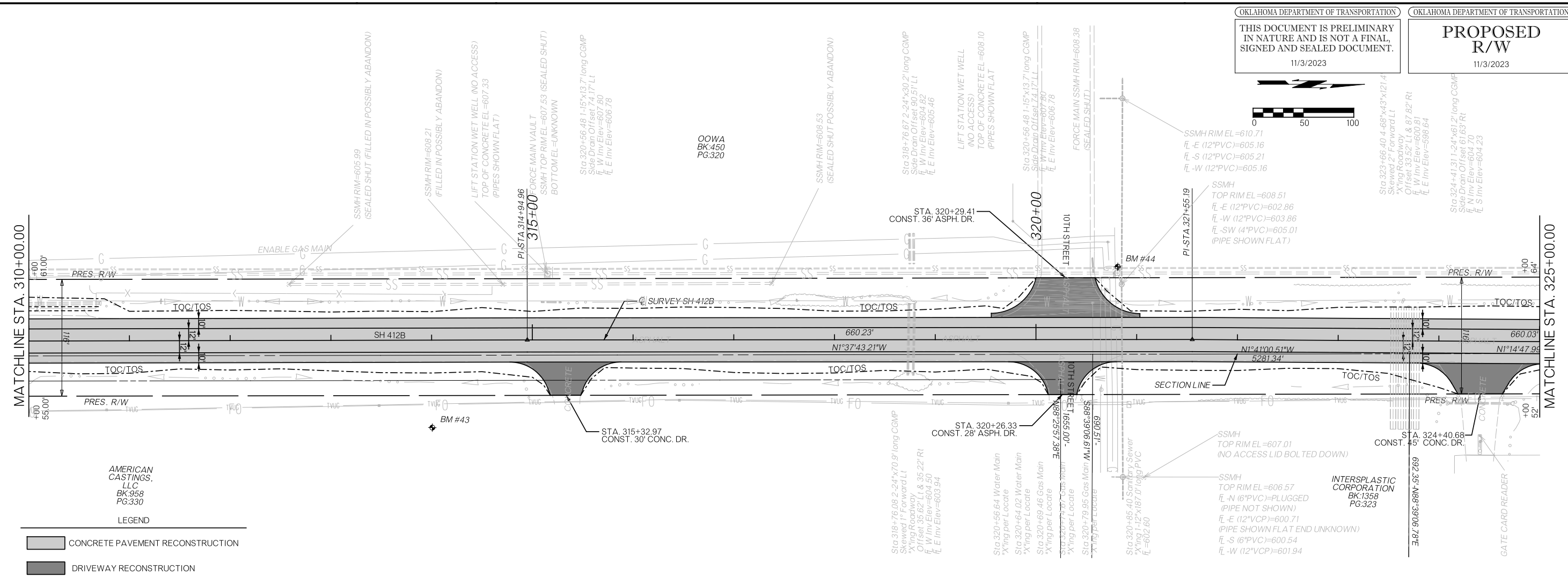
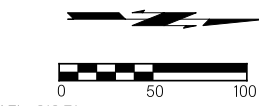
**LEGEND**

- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION





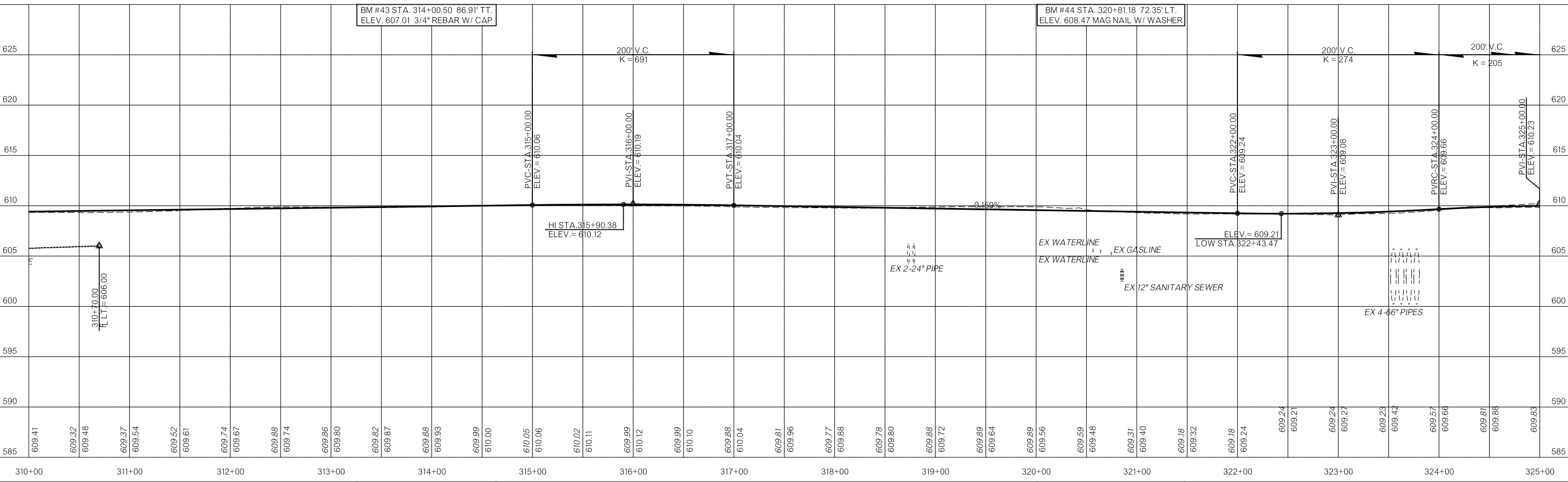


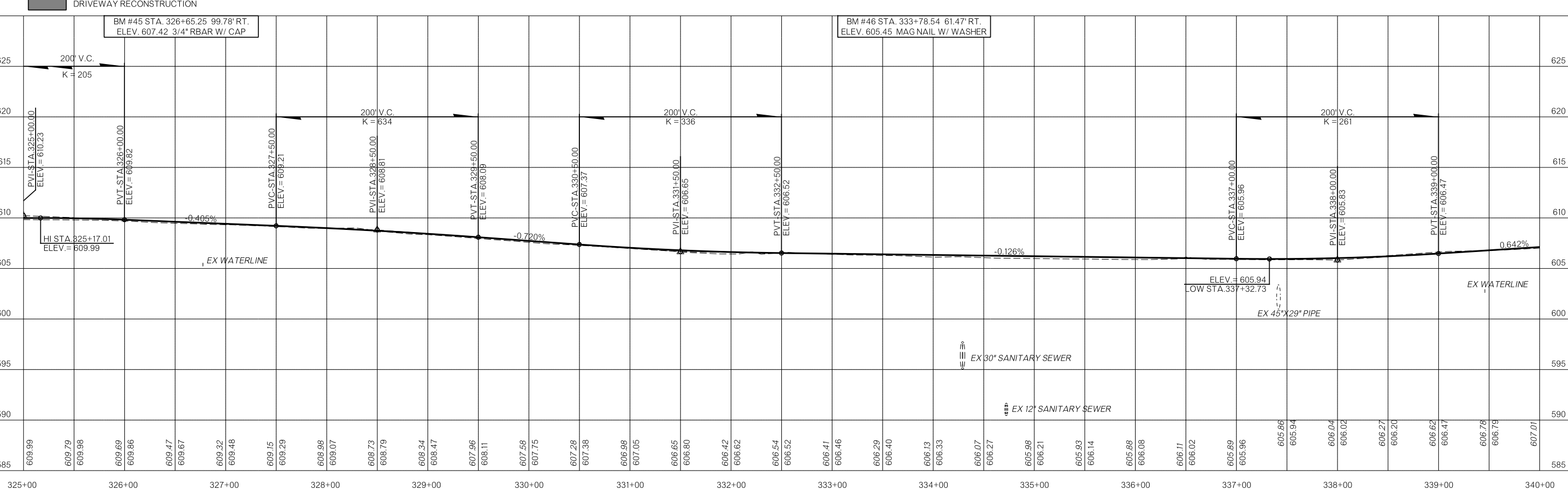
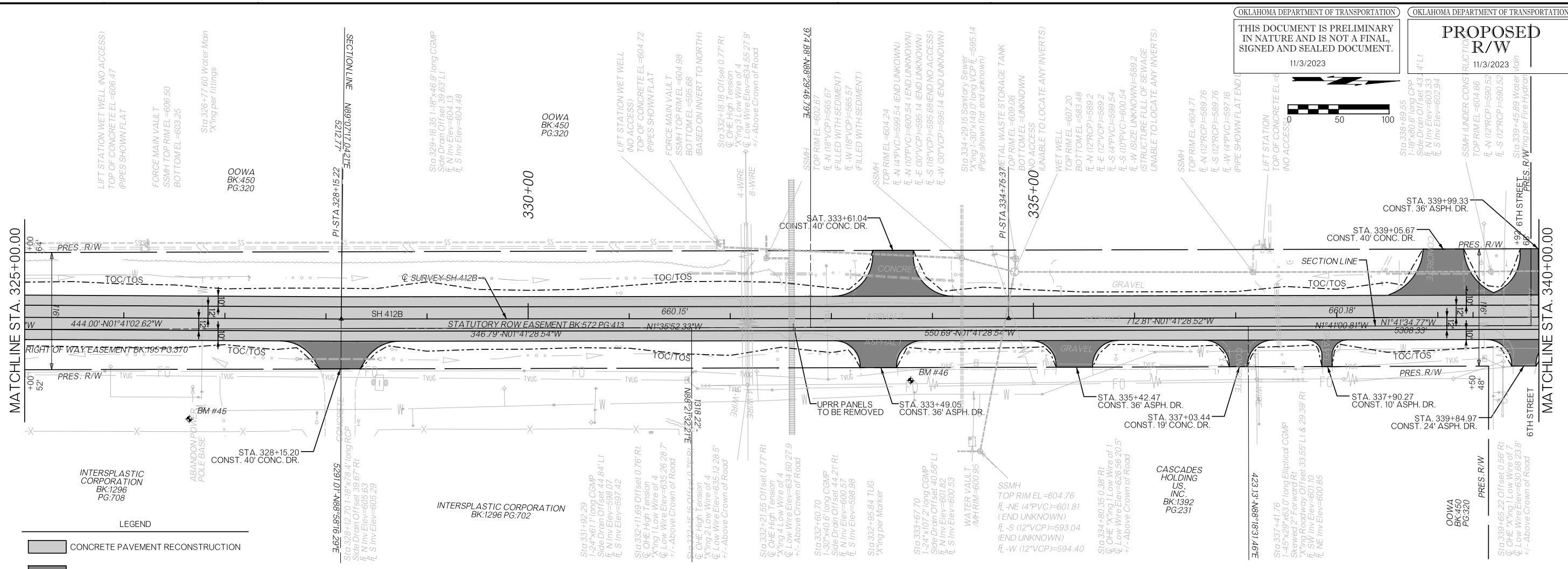


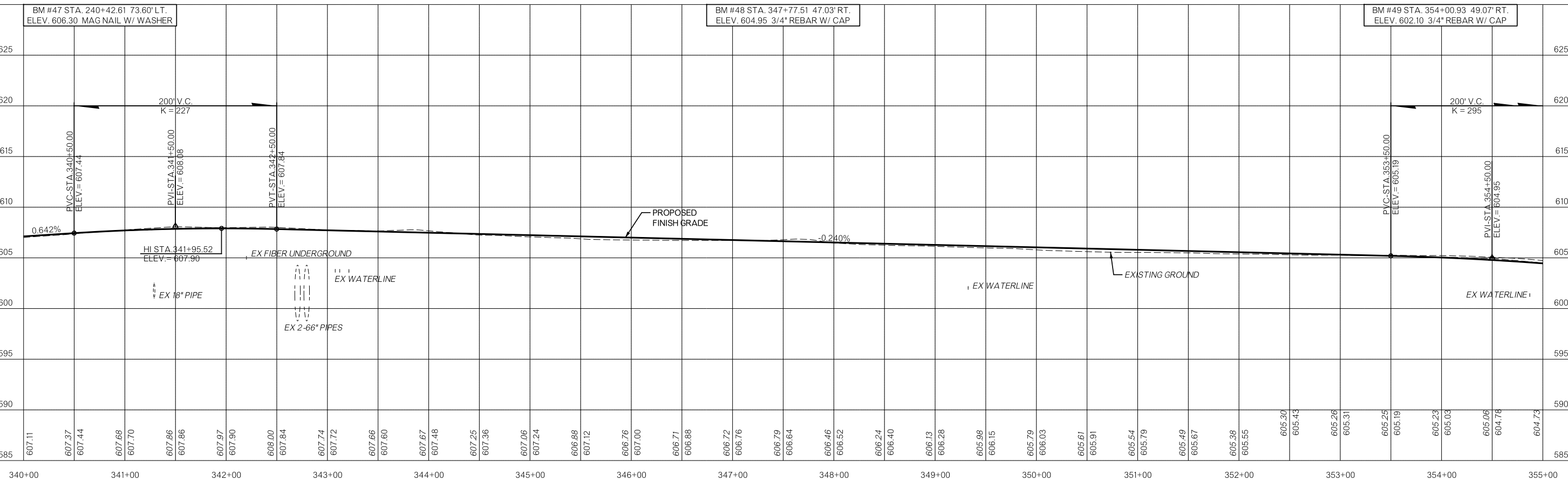
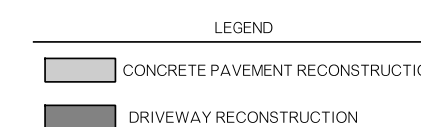
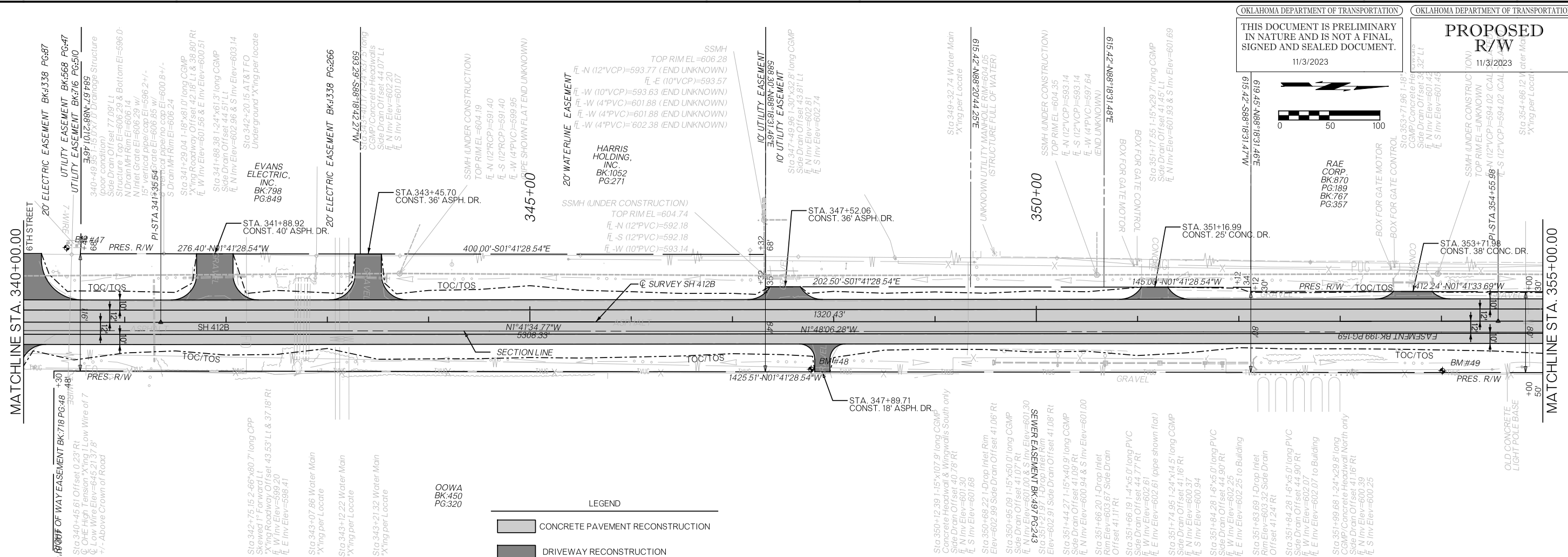
**AMERICAN CASTINGS, LLC**  
 BK:958  
 PG:330

**LEGEND**

- CONCRETE PAVEMENT RECONSTRUCTION
- DRIVEWAY RECONSTRUCTION





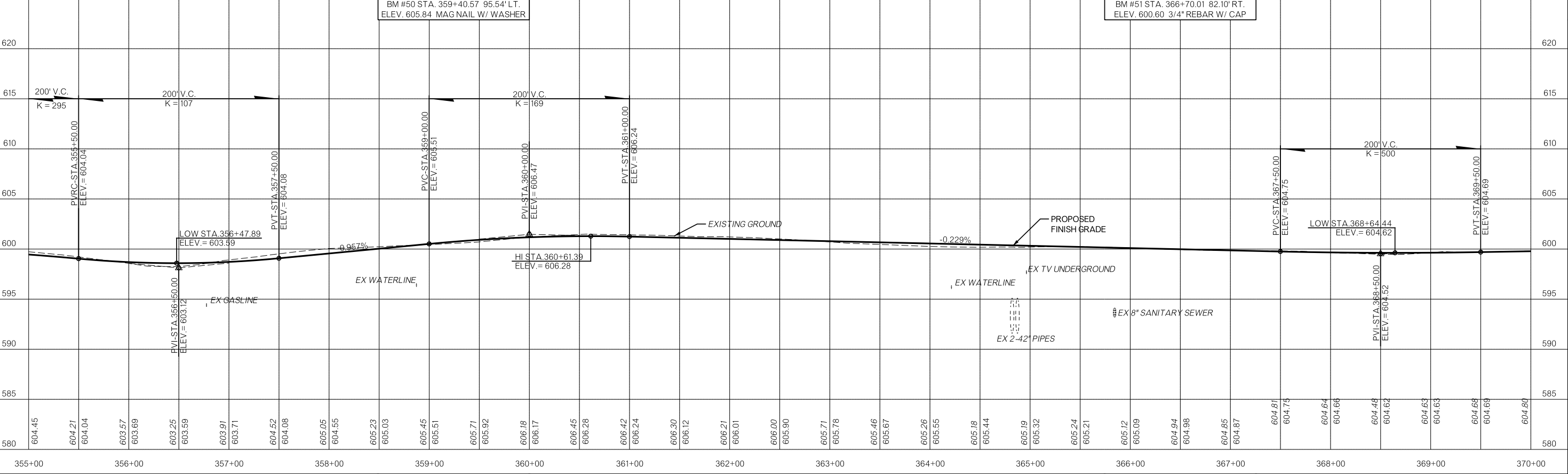
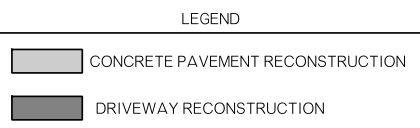
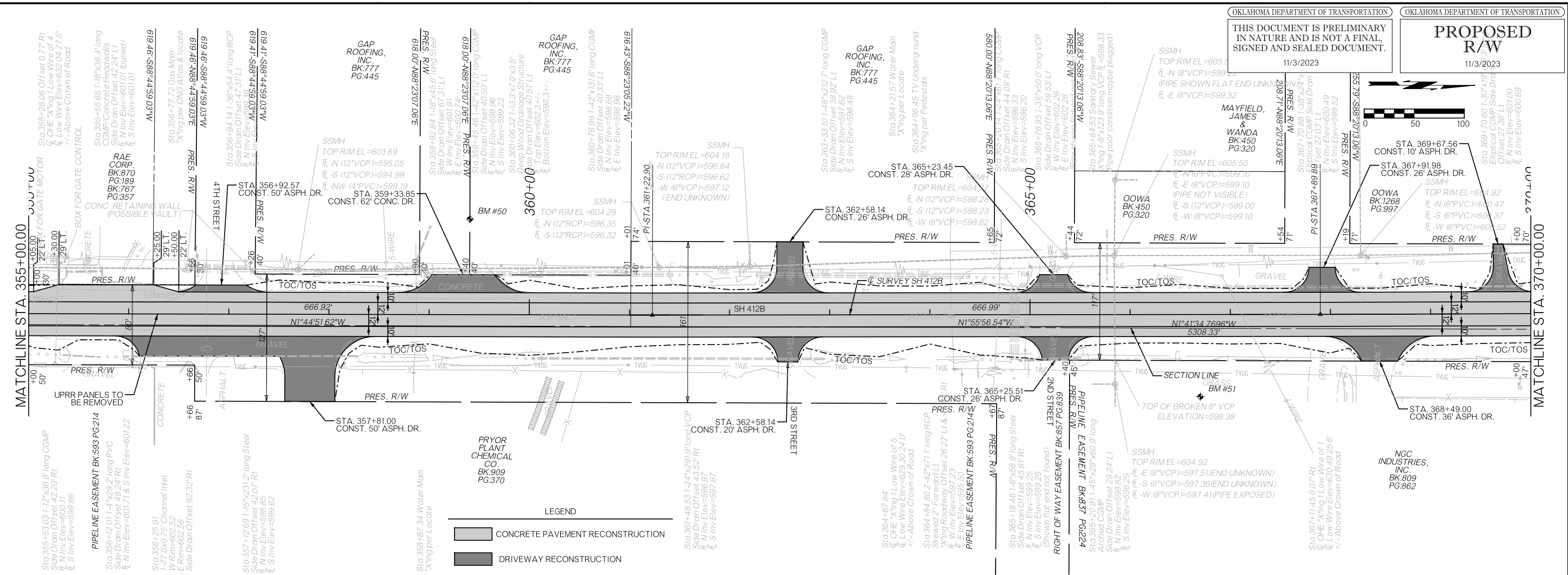
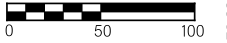


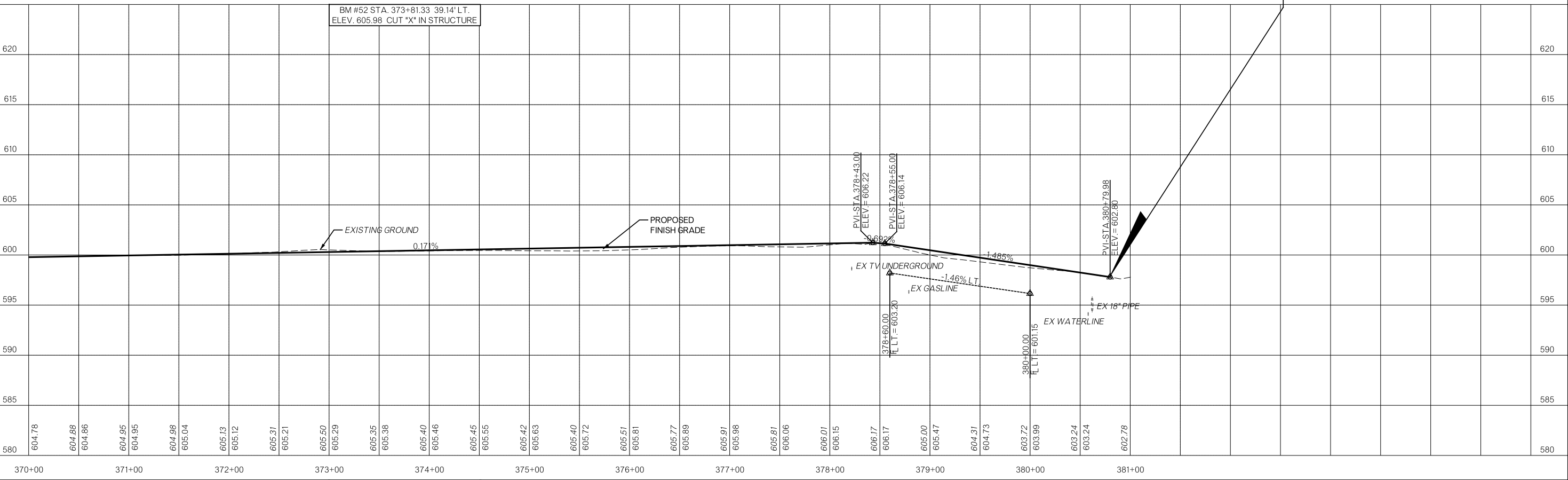
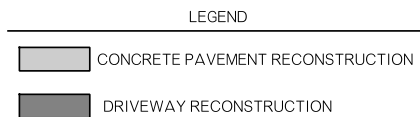
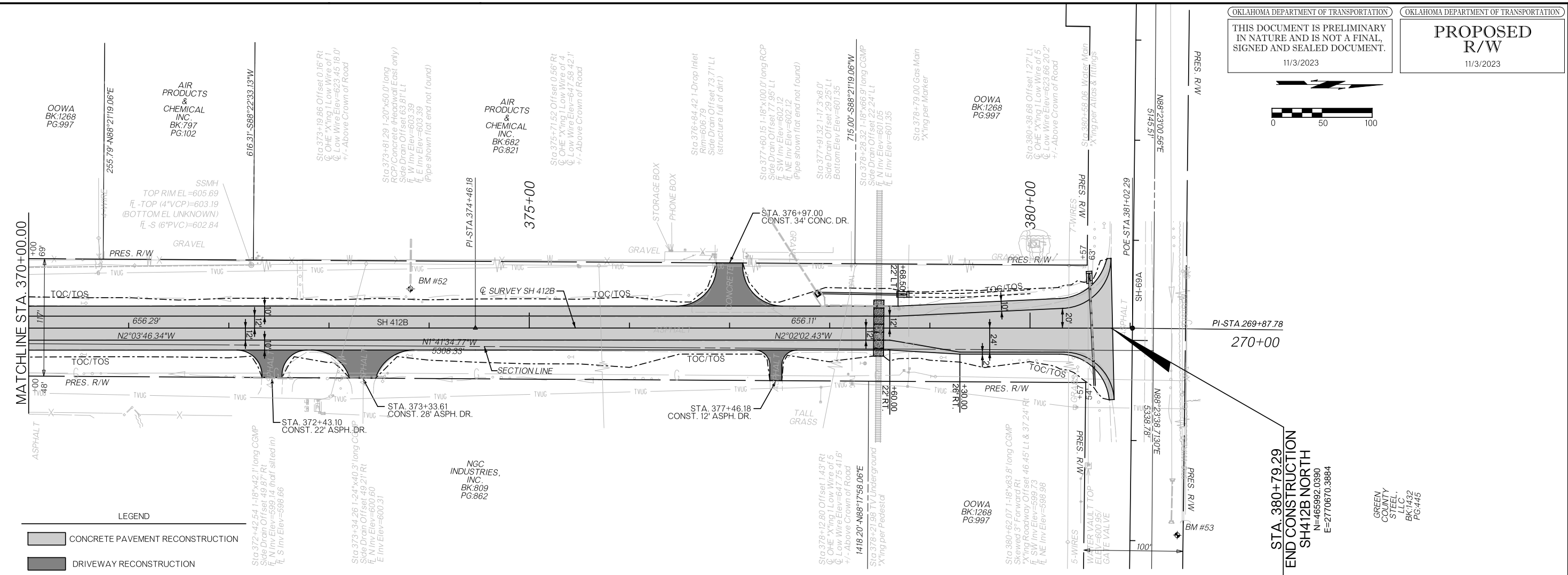
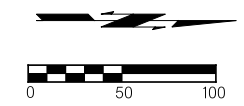
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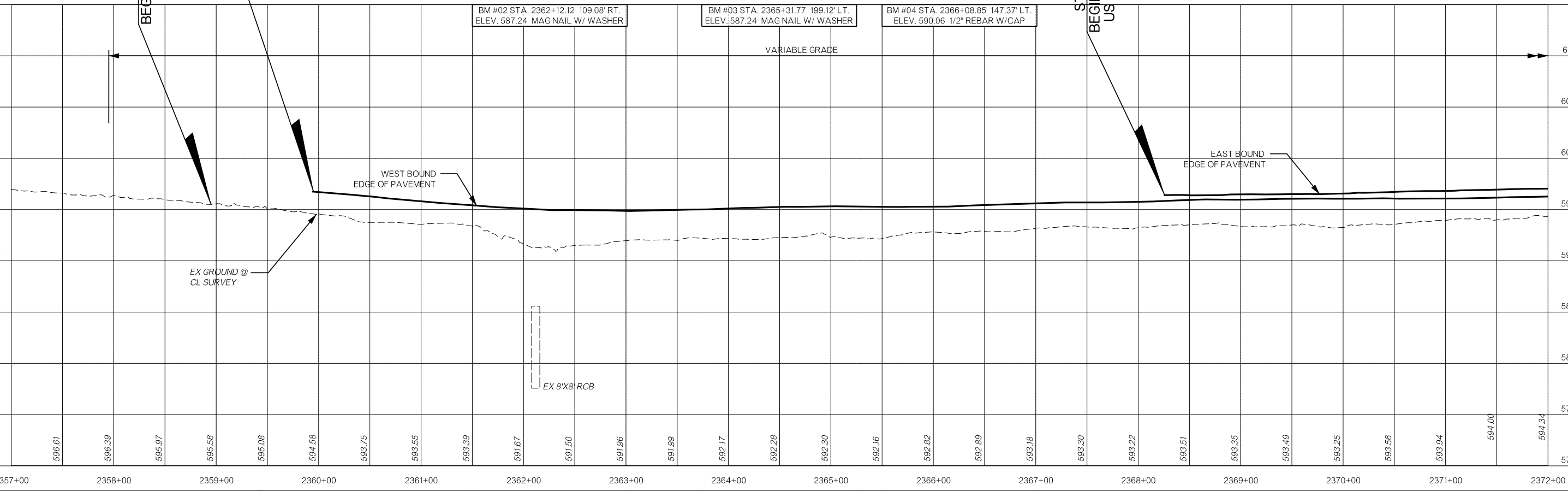
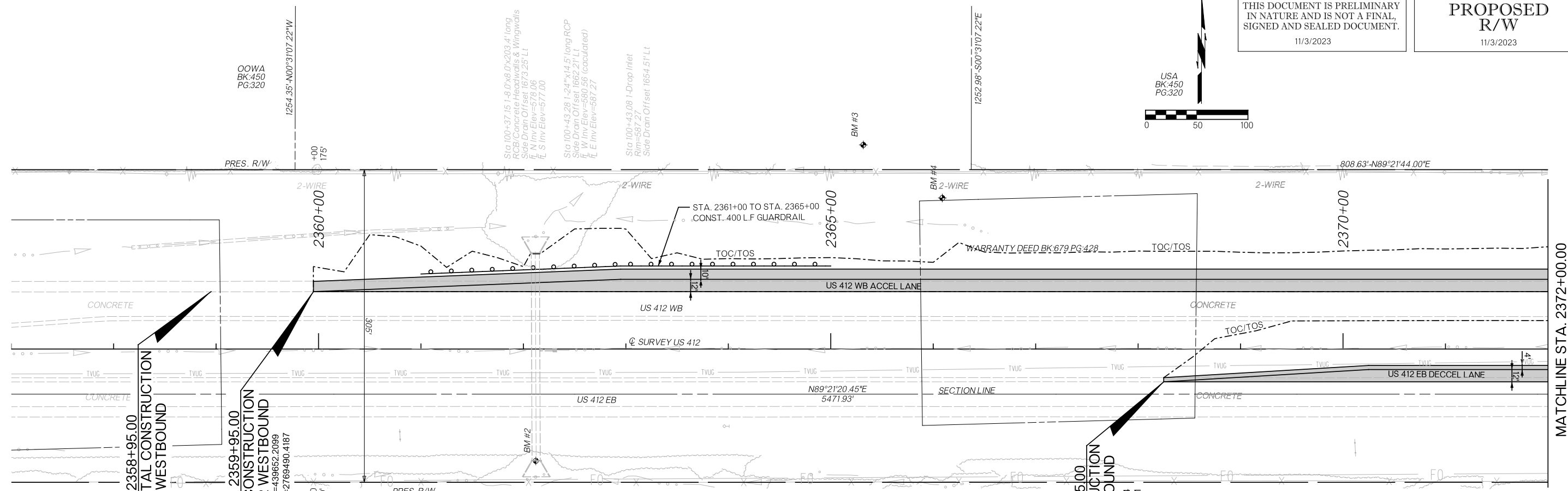
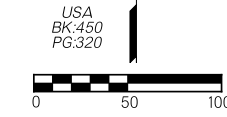
11/3/2023

PROPOSED R/W

11/3/2023







LEGEND

|  |                                  |
|--|----------------------------------|
|  | CONCRETE PAVEMENT RECONSTRUCTION |
|  | DRIVEWAY RECONSTRUCTION          |

OKLAHOMA DEPARTMENT OF TRANSPORTATION

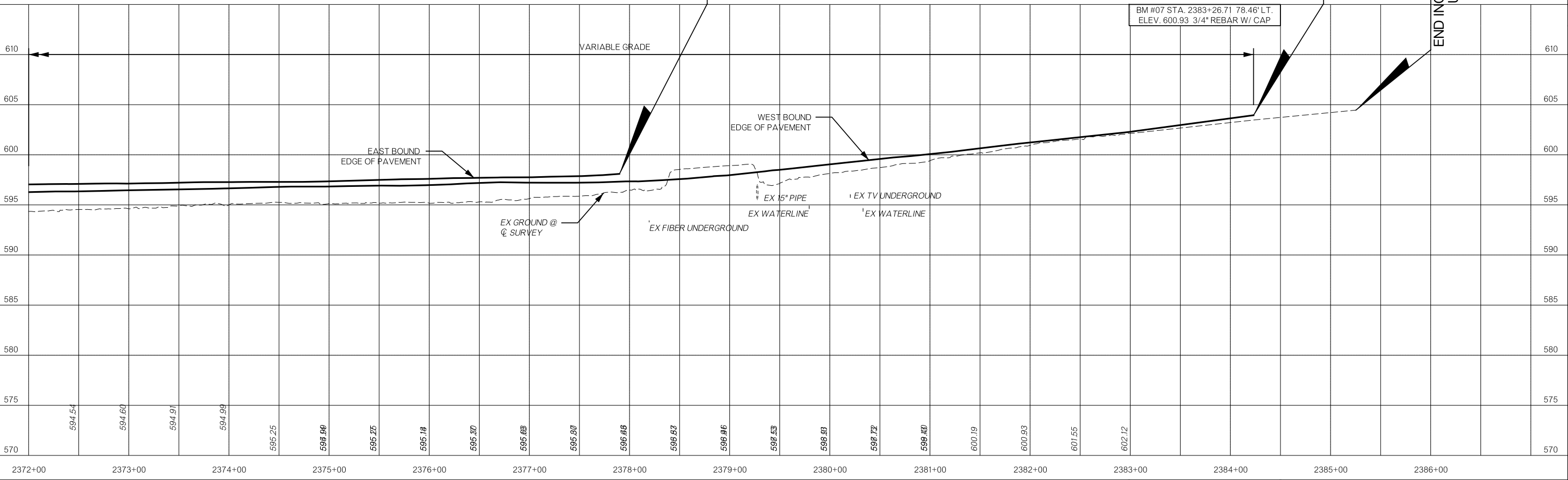
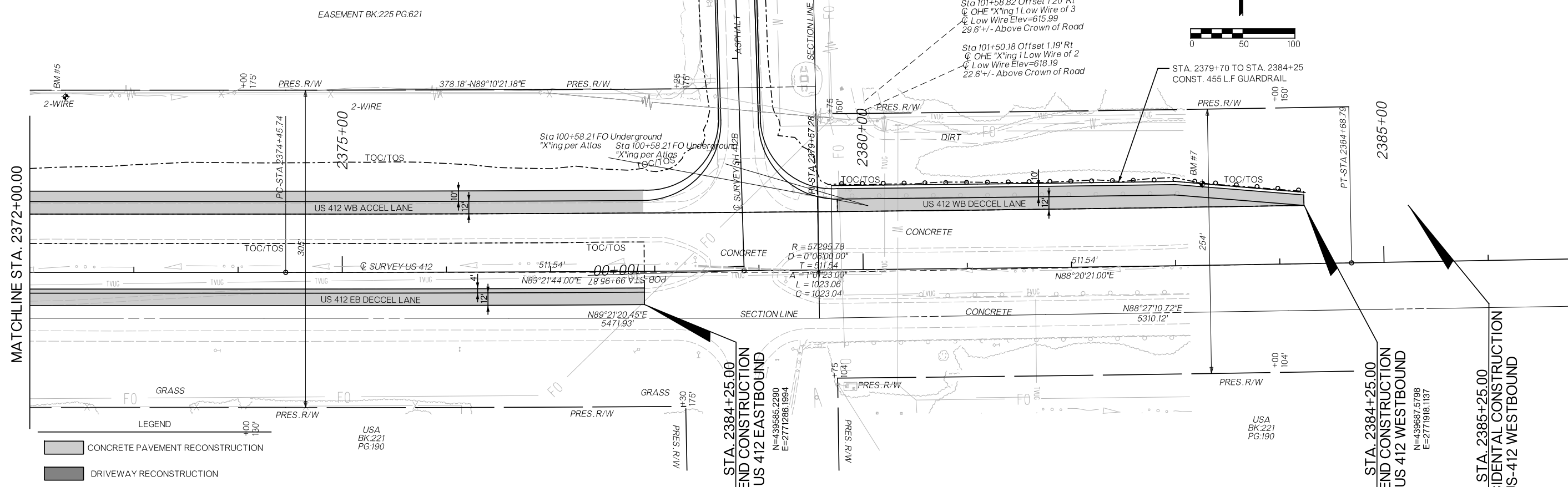
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11/3/2023

OKLAHOMA DEPARTMENT OF TRANSPORTATION

**PROPOSED R/W**

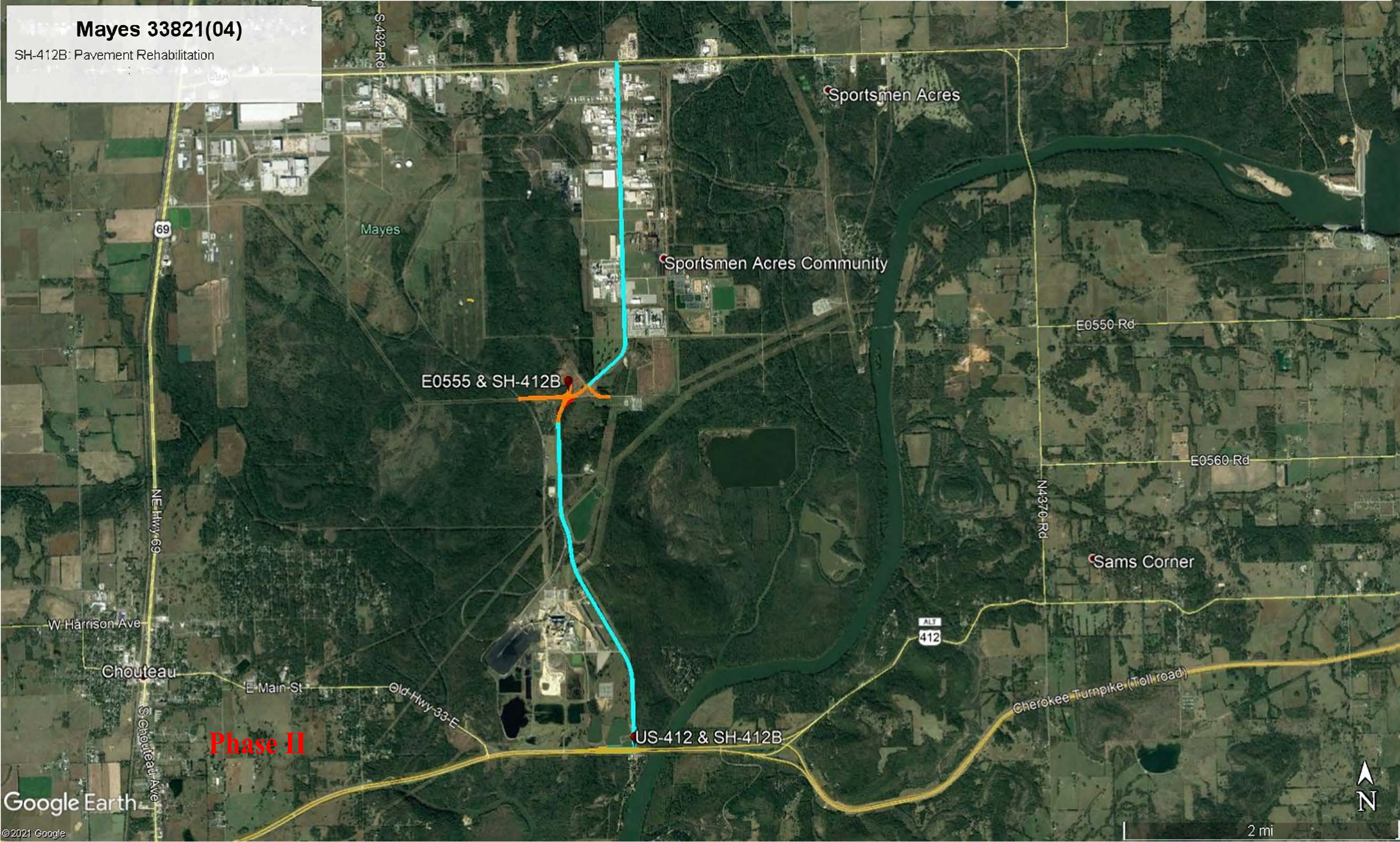
11/3/2023





# Mayes 33821(04)

SH-412B: Pavement Rehabilitation



E0555 & SH-412B

US-412 & SH-412B


**Phase II**

**SECTION 106**  
**CULTURAL RESOURCES STUDIES**



**OKLAHOMA**  
Transportation

Environmental Programs Division  
Office 405.521.3050 / Fax 405.522.5193

**DATE:** March 01, 2022  
**TO:** Project Management Division  
**FROM:** Environmental Programs Division – Cultural Resources Program   
**SUBJECT:** Mayes County JP 33821(04): PAVEMENT REHABILITATION – SH-412B:  
FROM SH-69A TO US-412.

---

There are potentially significant cultural resources within the general vicinity of the referenced project. Please have the following note added to a section of the project plans entitled “Environmental Mitigation Notes” per Policy Directive C-201-2D(2):

**Locations outside the project area in the following area must not be utilized for borrow, equipment staging, haul roads, spoil dumps or any off-site project-related activity.**

**T20N R19E:**

**Section 10:**

**NE<sup>1</sup>/<sub>4</sub>**

**Section 16:**

**NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub>**

SAS

# ODOT CULTURAL RESOURCES PROGRAM SCREENED EXEMPTION PROJECT REVIEW

County: Mayes  
JP No: 33821(04)  
Staff CRP Reviewer: Mike McKay

Request Date: 2/24/2022  
Completion Date: 3/1/2022  
NEPA Project Manager: Julianne Whitaker  
ODOT Division: Olsson (Div. 8)

---

## 1. PROJECT DESCRIPTION:

PAVEMENT REHABILITATION – SH-412B: FROM SH-69A TO US-412.

### Project specifications:

existing pavement lines  
 existing R/W  
 previously disturbed soil  
 other, describe:

---

## 2. CULTURAL RESOURCES REVIEW FOR PREVIOUSLY RECORDED HISTORIC PROPERTIES:

### Archival Review:

National Register of Historic Places (NRHP) List (Property has been listed on the NRHP)  
 State Historic Preservation Office's (SHPO) Determination of Eligibility (DOE) List for the NRHP (Property has been determined eligible for listing on the NRHP)  
 Oklahoma Archeological Survey (OAS) Archeological site files  
 Program Comment bridge  
 Depression-era Bridges Programmatic Agreement  
 Interstate Highway Exception  
 Tribal Coordination Database  
 Other: describe

Comments:

### Results:

No historic properties in the area of potential effect (APE)  
 Historic properties in or adjacent to the APE

Comments:

### Project subjected to field review:

No  
 Yes

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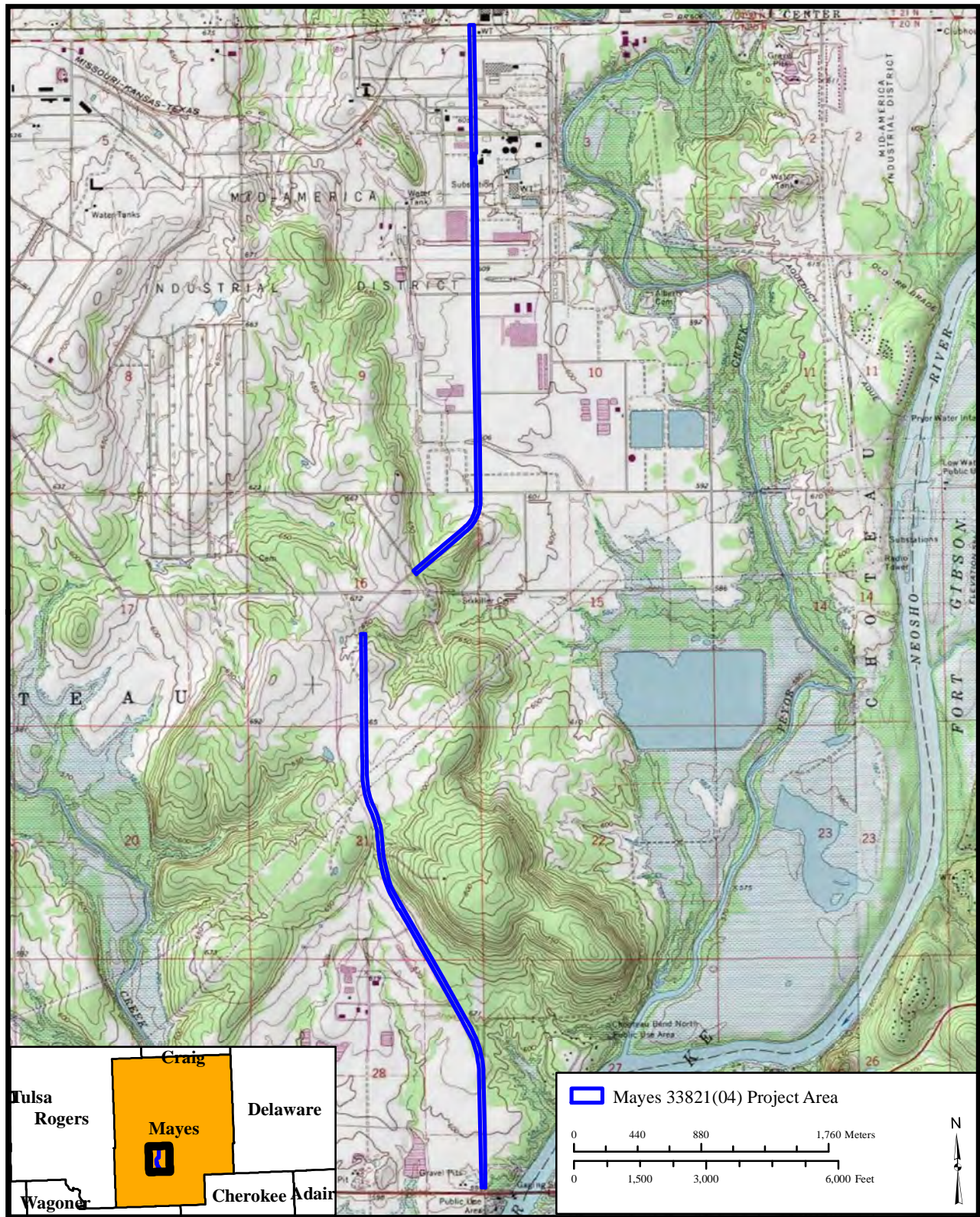
## 3. RECOMMENDATIONS:

Project has no potential to affect historic properties

The ODOT Cultural Resources Program has completed a review of the Area of Potential Effect (APE) as defined in the project request dated February 16, 2022 for this project and has examined the SHPO's online DOE and NRHP files as well as the archaeological site files at the OAS. The proposed project was reviewed by an archaeologist who meets the Secretary of Interior Qualifications. The proposed undertaking is, by nature, a project that has no potential to cause effects to historic properties as defined in 36 CFR 800.3(a)(1). Since there is no apparent potential to affect historic properties then no further work regarding cultural resources is recommended.

Project requires review of final plans to ensure no affect to historic properties  
 Project requires field investigations and consultation with reviewing agencies.  
 Off-project avoidance notes

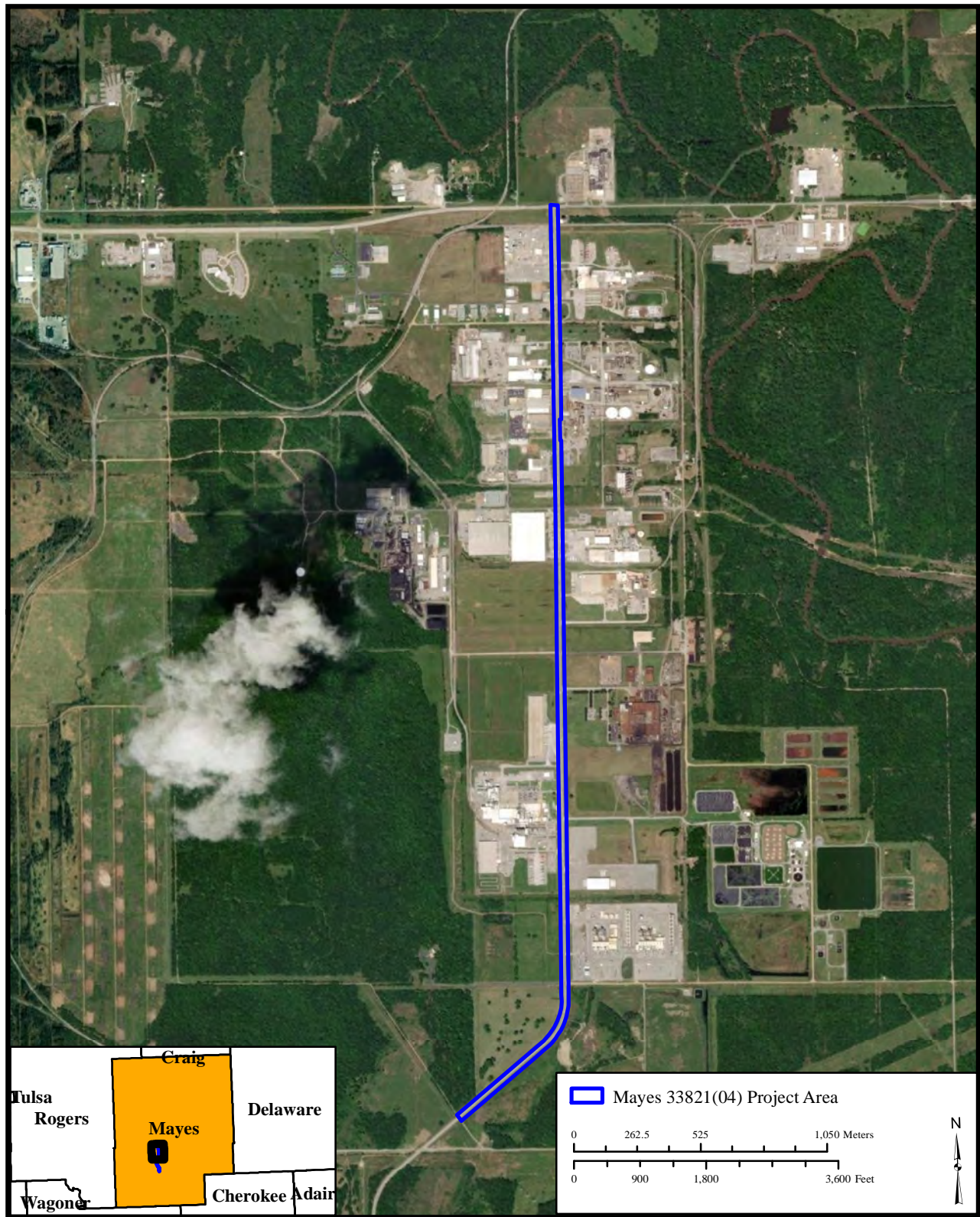
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**Figure 1. Mayes County JP 33821(04): SH-412B: PAVEMENT REHABILITATION FROM SH-69A TO US-412.**

**Basemap: USGS Chouteau 7.5' Quadrangle (1970; PR 1982);  
 Legal Location: T20N R19E.**

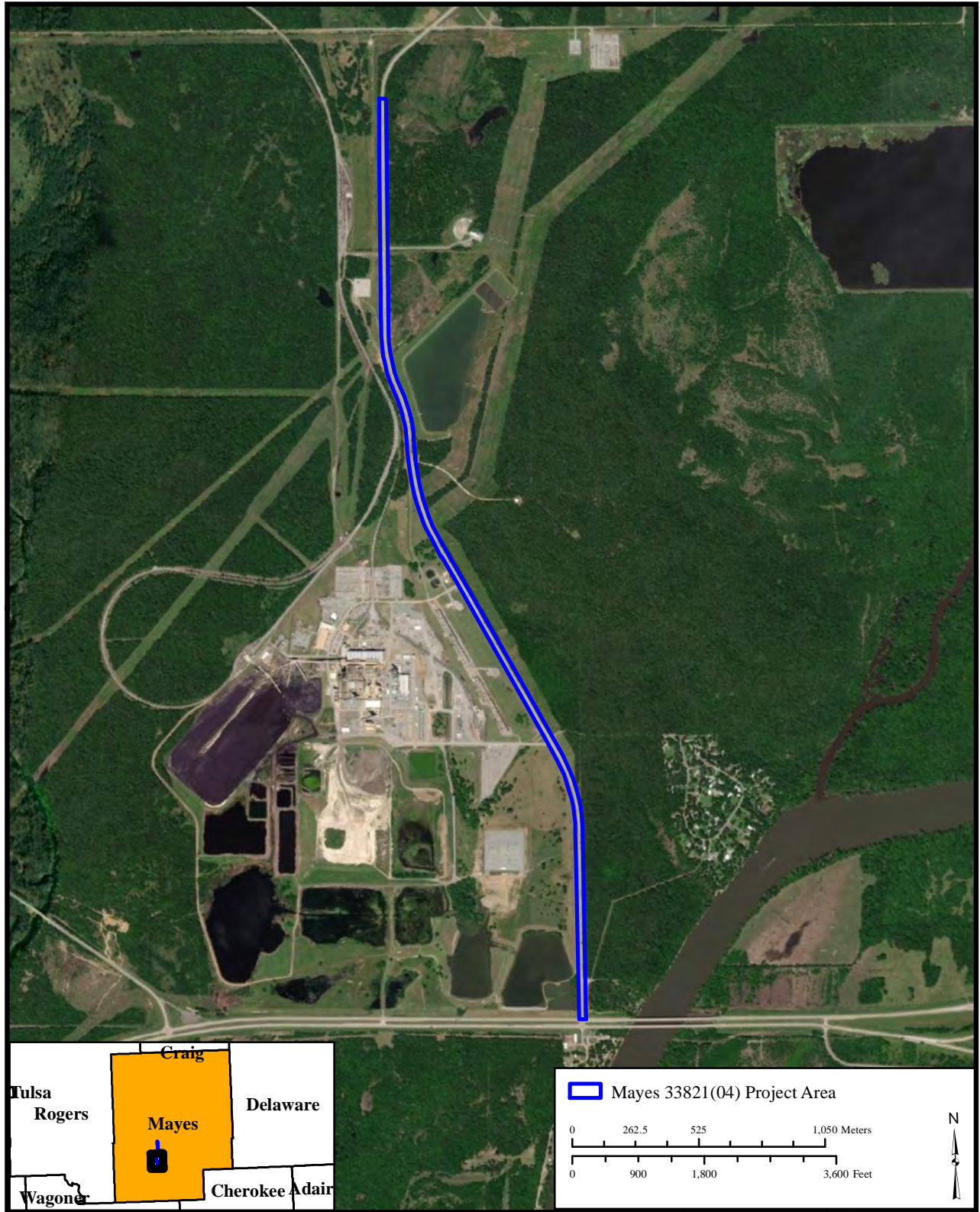




**Figure 2. Mayes County JP 33821(04): SH-412B: PAVEMENT REHABILITATION FROM SH-69A TO US-412.**

**Basemap: USGS Chouteau 7.5' Quadrangle (1970; PR 1982);  
Legal Location: T20N R19E.**





**Figure 3. Mayes County JP 33821(04): SH-412B: PAVEMENT REHABILITATION FROM SH-69A TO US-412.**

**Basemap: USGS Chouteau 7.5' Quadrangle (1970; PR 1982);  
 Legal Location: T20N R19E.**



# **BIOLOGICAL STUDIES**



**BIOLOGICAL STUDIES TRACKING FORM**

|                                                                            |                                   |                   |
|----------------------------------------------------------------------------|-----------------------------------|-------------------|
| NEPA Project Manager                                                       | Julianne Whitaker / Erin Faulkner |                   |
| State or Local Government Project                                          | State                             |                   |
| USFWS Project Code #                                                       | <b>2022-0007566</b>               |                   |
| Original IPaC List                                                         | 2/15/2022                         |                   |
| Email used to request IpaC official species list                           | jwhitaker@olsson.com              |                   |
| Last Updated Species List Date                                             | 5/18/2022                         |                   |
| ROW                                                                        | Click here to enter a date.       |                   |
| Let Date                                                                   | 11/1/2023                         |                   |
| 90 Day Prior to Let IpaC List                                              | 8/1/2023                          |                   |
| Duration expected                                                          | Click here to enter text.         |                   |
| Original Biological Assessment and Waters and Wetlands Report Prepared By: | Olsson                            |                   |
| Most Recent Field Date:                                                    | 4/184/1/2022                      |                   |
| Original Report Date:                                                      | 5/18/2022                         | Revised 6/22/2022 |
| USFWS Consultation Submittal:                                              | 6/22/2022                         |                   |
| USFWS Concurrence:                                                         | 6/27/2022                         |                   |
| Original Tracking Form Prepared by:                                        | Elizabeth Nichols                 |                   |
| Original Tracking Form date:                                               | 6/28/2022                         |                   |
| Update Reason                                                              | Click here to enter text.         |                   |
| Amended USFWS Consultation Submittal:                                      | Click here to enter a date.       |                   |
| Amended USFWS Concurrence:                                                 | Click here to enter a date.       |                   |
| Tracking Form Updated By Whom:                                             | Click here to enter text.         |                   |
| Tracking Form Updated Date:                                                | Click here to enter a date.       |                   |
| <b><i>ADD MORE LINES AS NEEDED FOR EACH TIME PROJECT IS UPDATED</i></b>    |                                   |                   |

Form Date: February 2022

**Project Name from Oracle**

SH-412B from SH-69A to US-412

**Project Description**

Pavement Reconstruction or Rehabilitation

Check if any of the following is expected as part of the proposed action

- Work within the OHWM is expected
- Project is OFF-SET alignment
- Project is NEW alignment
- Project involves **NO OFF EXISTING PAVEMENT** work
- Project requires new ROW (permanent &/or temporary)

**2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT**

| Species                                | Listing Status | IPaC                                | Effect Determination for IPaC listed species                                      |
|----------------------------------------|----------------|-------------------------------------|-----------------------------------------------------------------------------------|
|                                        |                | Check if Yes                        |                                                                                   |
| Red-cockaded Woodpecker                | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Whooping Crane                         | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Gray Bat                               | Endangered     | <input checked="" type="checkbox"/> | May Affect, Not likely to adversely affect                                        |
| Indiana Bat                            | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Ozark Big-eared Bat                    | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Peppered Chub                          | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Neosho Mucket                          | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Ouachita Rock Pocketbook               | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Scaleshell Mussel                      | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Winged Mapleleaf                       | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Harperella                             | Endangered     | <input type="checkbox"/>            | Choose an item.                                                                   |
| American Burying Beetle                | Threatened     | <input checked="" type="checkbox"/> | Final Effect Analysis and Determination covered in the BO for the final 4(d) rule |
| Eastern Black Rail                     | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Piping Plover                          | Threatened     | <input checked="" type="checkbox"/> | No Effect                                                                         |
| Red Knot                               | Threatened     | <input checked="" type="checkbox"/> | No Effect                                                                         |
| Northern Long-eared Bat                | Threatened     | <input checked="" type="checkbox"/> | Final Effect Analysis and Determination covered in the Programmatic BA & BO       |
| Arkansas River Shiner                  | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Leopard Darter                         | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Neosho Madtom                          | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Ozark Cavefish                         | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| American Alligator                     | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Rabbitsfoot Mussel                     | Threatened     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Alligator Snapping Turtle              | Proposed       | <input type="checkbox"/>            | Choose an item.                                                                   |
| Monarch Butterfly                      | Candidate      | <input checked="" type="checkbox"/> | No Effect                                                                         |
| Rattlesnake-master Borer Moth          | Candidate      | <input type="checkbox"/>            | Choose an item.                                                                   |
| Whooping Crane Critical Habitat        | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Peppered Chub Critical Habitat         | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Arkansas River Shiner Critical Habitat | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Leopard Darter Critical Habitat        | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Neosho Mucket Critical Habitat         | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |
| Rabbitsfoot Critical Habitat           | Designated     | <input type="checkbox"/>            | Choose an item.                                                                   |

|                                                                                                                      | NEPA Footprint | Construction Footprint    |
|----------------------------------------------------------------------------------------------------------------------|----------------|---------------------------|
| Number of acres within the NEPA Study Footprint & Construction Footprint (if known)                                  | 69.9           | Click here to enter text. |
| Number of acres of perennial plant vegetation (ABB habitat) within the NEPA & Construction Footprints (if known)     | 0              | 0                         |
| Number of acres of forested/wooded area (Ibat and NLEB habitat) within the NEPA & Construction Footprints (if known) | 0              | 0                         |

|                                        |                               |
|----------------------------------------|-------------------------------|
| ABB Conservation Lands adjacent        | NO                            |
| Presence of milkweed and nectar plants | NO                            |
| Gray Bat Cave Buffer                   | Outside any known cave buffer |

|                                                        |                                                                  |
|--------------------------------------------------------|------------------------------------------------------------------|
| Bald Eagle Assessment                                  | May impact                                                       |
| Migratory Bird Assessment of Transportation Structures | no migratory birds observed nesting on transportation structures |
| Migratory Bird Impacts                                 | nesting habitat for migratory birds will not be impacted         |
| Birds of Conservation Concern                          | No impacts to listed BCC                                         |
| Interior Least Tern (MBTA)                             | No habitat                                                       |

| <b>Species (choose those that apply)</b> | <b>Seasonal Restriction Period</b> |
|------------------------------------------|------------------------------------|
| Bald Eagle                               | September 16 – May 31              |

**Conservation Commitments**

**ODOT Commitment:** All operators, employees, and contractors will be made aware of all environmental commitments, including the following Plan Notes.

**Species Plan Notes**

**Non-Compliance:** Failure to implement the commitments specified in the Plan Notes can result in non-compliance issues on the project. Work activities may be suspended on the project, for an undetermined duration, while working with regulators to bring the project back into compliance. The contractor will not be compensated for time lost.

**Water Quality Conservation:** Appropriate Best Management Practices to minimize impacts from storm water discharges and sedimentation in streams, as established by the Oklahoma Department of Environmental Quality, shall be conscientiously implemented throughout the proposed construction periods, in order to minimize any potential impacts to any listed species. The effectiveness of erosion controls shall be maintained for the duration of construction activities. Hazardous materials, chemicals, fuels, lubricating oils, and other such substances shall be stored at least 100 feet outside of the ordinary high water mark (OHWM). Refueling of construction equipment shall also be conducted at least 100 feet from the OHWMs. Sediment and erosion controls shall be installed around staging areas to prohibit discharge of materials from these sites. Construction waste materials and debris shall be stockpiled at least 25 feet outside of the OHWMs, and these materials shall be removed and disposed of properly following completion of the project. Preventative measure must be taken to prohibit the discharge of contaminants into any surface waters.

**American Burying Beetle Note:** The American Burying Beetle is a large carrion burying beetle that occurs within the project limits. Artificial lighting may be used during construction for night activities if the equipment specifications outlined in Special Provision 656-5(a-b)19 for ABB are adhered to and measures to minimize use of artificial lighting have been implemented. Carcasses and all food trash shall continuously

be removed from the permanent and temporary right-of-way throughout the duration of project activities. Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented when appropriate. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will not be stored within areas of native vegetation (ie. outside of ABB habitat).

**Bat Lighting Note:** All temporary lighting, if used, will be directed away from suitable bat habitat during the active season for bats (April 1- November 15). If any permanent lighting is installed or replaced, downward-facing full cut-off lens lights shall be installed and directed away from wooded areas and streams.

**Bald Eagle Note:** Suitable nesting, roosting or foraging habitat for the Bald Eagle occurs within the project's action area, and a nest was observed during field studies within 1000-ft of the south end of the project area. The Bald Eagle nesting season in Oklahoma extends from September 16, through May 31. The Resident Engineer shall contact the ODOT Biologist to schedule a nest survey. Nest search surveys can only be conducted when leaves are not on the trees typically between December 1st and February 28th. No work may occur within suitable Bald Eagle habitat, located between STA. 100+53.00 and STA 119+62.48, during the nesting season (September 16, through May 31) until the completion of the survey by the ODOT Biologist. If nests are observed, a no-work buffer up to a distance of 660 feet shall be placed around the nest. The exact distance of the buffer zone shall be established by the ODOT Biologist in consultation with US Fish and Wildlife Services. If the buffer cannot be maintained, all clearing, external construction and landscaping activities, within the buffer, shall be conducted between June 1 and September 15 (outside the nesting season).

**Waters and Wetlands Delineation Status**

Original delineation

**Wetlands and Ponds**

| Total Number of Sites | Water Body Type | Potential Jurisdiction Status | Acres within the NEPA Footprint |
|-----------------------|-----------------|-------------------------------|---------------------------------|
| None                  | Choose an item. | Choose an item.               | 0                               |

**Streams and Drainages**

| Total Number of sites              | Water body name             | USGS Designation | Potential Jurisdictional Status | Acres within the NEPA Footprint | Liner Feet within the NEPA Footprint |
|------------------------------------|-----------------------------|------------------|---------------------------------|---------------------------------|--------------------------------------|
| 3                                  | Tributaries to Pryor Creek  | mapped perennial | Likely Jurisdictional           | 0.27                            | 209                                  |
| 1                                  | Tributary to Chouteau Creek | mapped perennial | Likely Jurisdictional           | 0.23                            | 5,010                                |
| <b>Total Likely Jurisdictional</b> |                             |                  |                                 | <b>0.5</b>                      | <b>5,219</b>                         |

## Nichols, Elizabeth

---

**From:** Goins, Kassandra (Kasey) <kassandra\_goins@fws.gov>  
**Sent:** Monday, June 27, 2022 12:27 PM  
**To:** Nichols, Elizabeth  
**Cc:** Amber McIntyre; Echo-Hawk, Patricia  
**Subject:** Re: [EXTERNAL] 2022-0007566 ODOT Mayes JP 33821(04) Consultation

**Follow Up Flag:** Flag for follow up  
**Flag Status:** Flagged

Hello Liz,

The Service has reviewed consultation package 2022-0007566 Mayes JP 33821(04).

Based on the information provided, the project will occur within the range of the American burying beetle (*Nicrophorus americanus*; ABB) and you have concluded that the project may affect the species. The Service agrees with this determination. Any take that may occur as a result of the project is not prohibited under the Endangered Species Act of 1973 (Act; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), Section 4(d) rule adopted for this species at 50 CFR 17.47(d) (85 FR 65241). The Service asks that the conservation measures as articulated in the assessment, and in conjunction with the guidelines set forth by the Federal Highway Administration, be implemented and maintained.

Additionally, potential impacts to the Northern long-eared bat (*Myotis septentrionalis*; NLEB) have been addressed using the FHWA NLEB/Ibat Programmatic BA & BO. You have concluded that the project may affect the NLEB. The Service concurs with this determination. ODOT shall ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments on this project. Please note that there will be a need to re-initiate consultation, if the amended FHWA programmatic BO includes additional BMPs, AMMs, that have not been included with this project. You have further concluded that the project may effect, but is not likely to adversely affect the endangered gray bat (*Myotis grisescens*). The Service agrees with this determination. The Service asks that the conservation/mitigation measures as articulated in the assessment and in conjunction with the guidelines set forth by the Federal Highway Administration, be implemented and maintained.

You have determined that the project will have no effect on the threatened piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*).

This project is also within the range of several species that are considered Birds of Conservation Concern. The Service asks that all avoidance of impacts to these species be implemented in accordance with the direction set forth by the Federal Highway Administration.

Additionally, based on the potential presence of migratory birds/nests on structures involved in this project, the Services asks that ODOT proceed in conjunction with guidance set forth by the Federal Highway Administration to avoid and minimize potential impacts to migratory birds, nests, and/or eggs.

In order to avoid impacts to Bald Eagles, if Bald Eagles or their habitat are observed during the biological assessment, a survey for eagles and their nests will be conducted within 660 feet of the work zone, during the winter prior to, and within one year of, the start of construction. If a nest is found, appropriate conservation measures based on the National Bald Eagle Management Guidelines will be implemented.

The Service also recommends ODOT/FHWA replace box culverts with structures that are fish passage friendly, as suggested in the Service email to ODOT dated 8/16/2021. This applies to project culverts (being demolished, repaired, retrofitted, maintained or rehabilitated) along perineal or intermittent streams still providing habitat to native fish species.

The online project review concurrence letter signed by the Field Supervisor is now valid, and the project may proceed accordingly. The Service asks that, within 90 days prior to construction, a new species list be obtained to see if any changes have occurred. If changes have occurred, please verify with the Oklahoma Ecological

Services Field Office to determine if further consultation is needed. If you have any questions, please contact the Field Office.

Sincerely,

**Kasey Goins**

Fish & Wildlife Biologist (T&E Species)  
U.S. Fish and Wildlife Service  
Oklahoma Ecological Services Field Office



9014 E. 21st St.  
Tulsa, OK 74129  
[561.603.0556](tel:561.603.0556)

---

**From:** Goins, Cassandra (Kasey) <kassandra\_goins@fws.gov> on behalf of OK Project Review, FWS <OKProjectReview@fws.gov>  
**Sent:** Thursday, June 23, 2022 10:08 AM  
**To:** Goins, Cassandra (Kasey) <kassandra\_goins@fws.gov>  
**Subject:** Fw: [EXTERNAL] 2022-0007566 ODOT Mayes JP 33821(04) Consultation

---

**From:** Elizabeth Nichols <ENichols@odot.org>  
**Sent:** Wednesday, June 22, 2022 8:37 PM  
**To:** OK Project Review, FWS <OKProjectReview@fws.gov>  
**Cc:** Amber McIntyre <AMCINTYRE@ODOT.ORG>  
**Subject:** [EXTERNAL] 2022-0007566 ODOT Mayes JP 33821(04) Consultation

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Elizabeth Nichols  
Assistant Manager, Natural Resources Program  
Oklahoma Department of Transportation  
Oklahoma Biological Survey  
111 E. Chesapeake  
Norman, OK 73019  
405.325.6802 (office)  
enichols@odot.org



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Oklahoma Ecological Services Field Office  
9014 East 21st Street  
Tulsa, OK 74129-1428  
Phone: (918) 581-7458 Fax: (918) 581-7467

In Reply Refer To:

June 22, 2022

Project code: 2022-0007566

Project Name: Sh-412B Pavement Rehab Mayes County JP 33821(04)

Subject: Verification letter for 'Sh-412B Pavement Rehab Mayes County JP 33821(04)' project under the October 15, 2020, Programmatic Biological Opinion on Final 4(d) Rule for the American burying beetle and Activities Excepted from Take Prohibitions (50 CFR § 17.47(d), Federal Register Citation 85 FR 65241).

Dear Elizabeth Nichols:

The U.S. Fish and Wildlife Service (Service) received on **June 22, 2022** your effect determination(s) for the 'Sh-412B Pavement Rehab Mayes County JP 33821(04)' (the Action) using the American burying beetle (*Nicrophorus americanus*) determination key within the Information for Planning and Consultation (IPaC) system.

This determination key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's October 15, 2020, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from incidental "take"<sup>[1]</sup> prohibitions applicable to the American burying beetle under the Endangered Species Act of 1973 (Act) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the American burying beetle; however, any incidental take that may occur as a result of the Action is not prohibited under the Act Section 4(d) rule adopted for this species at 50 CFR §17.47(d). **Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under Act Section 7(a)(2) with respect to the American burying beetle.**

Please report any changes to the information about the Action that you submitted in IPaC, the results of any American burying beetle surveys conducted in the Action area, and any dead, injured, or sick American burying beetles that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with Act Section 7(a)(2) only for the American burying beetle.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (Act, Section 3(19)).

This letter covers only the American burying beetle. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Gray Bat *Myotis grisescens* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Threatened
- Piping Plover *Charadrius melodus* Threatened
- Red Knot *Calidris canutus rufa* Threatened

If your project may affect additional listed species, you must evaluate additional DKeys for other species, or submit a request for consultation for the additional species to your local Ecological Services Field Office.

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**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

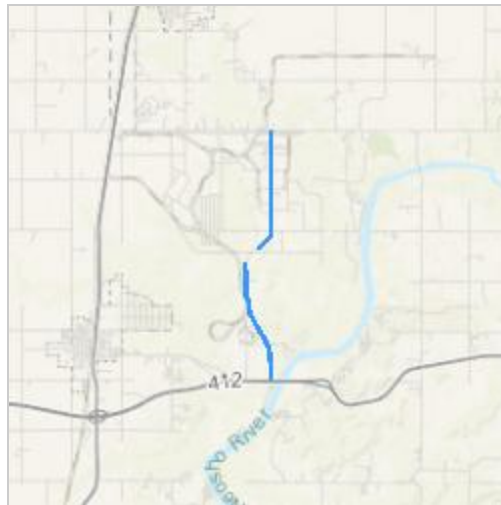
Sh-412B Pavement Rehab Mayes County JP 33821(04)

**2. Description**

The following description was provided for the project 'Sh-412B Pavement Rehab Mayes County JP 33821(04)':

Pavement Rehabilitation SH-412B: from SH-69A to US-412

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.194236599999996,-95.28526302304945,14z>



## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

*Yes*

2. Have you determined that the proposed action will have “no effect” on the American burying beetle? (If you are unsure select "No")

*No*

3. Will your activity **purposefully take** American burying beetles?

*No*

4. Is your project wholly inside the 4d rule Analysis Area? For areas of your project occurring inside the Analysis Area (New England, Northern Plains, Southern Plains), your project may qualify for exemptions. For areas of your project occurring outside the Analysis Area, all incidental take is exempted according to the ABB 4d Rule.

**Automatically answered**

*Yes*

5. Is American burying beetle [suitable habitat](#) present within the action area?

*Yes*

6. Will suitable habitat be affected by the proposed action? Suitable habitat may be impacted if the action involves soil disturbance, use of vehicles or heavy equipment, artificial lighting, vegetation removal, use of herbicides, pesticides, other hazardous chemicals.

*Yes*

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## Project Questionnaire

Please select the activity that best matches your proposed action.

*8. Soil disturbance related to road construction and maintenance*

If you chose 13 above, please describe below. If you did not choose 13 above, please type "0".

0

Estimate the total acres of suitable American burying beetle habitat that may be affected.

0

Please estimate the total number of acres of **temporary impacts** to American burying beetle habitat. See definitions

0

Please estimate the total number of acres of **permanent impacts** to American burying beetle habitat. See definitions

0

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## **IPaC User Contact Information**

Agency: Oklahoma Department of Transportation  
Name: Elizabeth Nichols  
Address: 111 E. Chesapeake St.  
Address Line 2: ODOT Highway Program at Oklahoma Biologist Survey  
City: Norman  
State: OK  
Zip: 73019  
Email: elizabeth.nichols@ou.edu  
Phone: 4053256802

## **Lead Agency Contact Information**

Lead Agency: Federal Highway Administration

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Oklahoma Ecological Services Field Office  
9014 East 21st Street  
Tulsa, OK 74129-1428  
Phone: (918) 581-7458 Fax: (918) 581-7467

In Reply Refer To:

June 22, 2022

Project code: 2022-0007566

Project Name: Sh-412B Pavement Rehab Mayes County JP 33821(04)

Subject: Concurrence verification letter for the 'Sh-412B Pavement Rehab Mayes County JP 33821(04)' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated June 22, 2022 to verify that the **Sh-412B Pavement Rehab Mayes County JP 33821(04)** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

**For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:** If your initial bridge/culvert or structure assessments failed to detect Indiana bats, but you later detect bats prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- American Burying Beetle *Nicrophorus americanus* Threatened
  - Gray Bat *Myotis grisescens* Endangered
  - Monarch Butterfly *Danaus plexippus* Candidate
  - Piping Plover *Charadrius melodus* Threatened
  - Red Knot *Calidris canutus rufa* Threatened
-

## **Project Description**

The following project name and description was collected in IPaC as part of the endangered species review process.

### ***Name***

Sh-412B Pavement Rehab Mayes County JP 33821(04)

### ***Description***

Pavement Rehabilitation SH-412B: from SH-69A to US-412

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## Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

## Qualification Interview

1. Is the project within the range of the Indiana bat<sup>[1]</sup>?

[1] See [Indiana bat species profile](#)

**Automatically answered**

No

2. Is the project within the range of the Northern long-eared bat<sup>[1]</sup>?

[1] See [Northern long-eared bat species profile](#)

**Automatically answered**

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction<sup>[1]</sup> activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces<sup>[1]</sup>?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum<sup>[1]</sup>?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

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8. Is there *any* suitable<sup>[1]</sup> summer habitat for Indiana Bat or NLEB **within** the project action area<sup>[2]</sup>? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

*Yes*

9. Will the project remove *any* suitable summer habitat<sup>[1]</sup> and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

*No*

10. Have presence/probable absence (P/A) summer surveys<sup>[1][2]</sup> been conducted<sup>[3][4]</sup> **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

*No*

11. Does the project include activities **within documented NLEB habitat**<sup>[1][2]</sup>?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

*No*

12. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?  
*No*
13. Does the project include slash pile burning?  
*No*
14. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?  
*No*
15. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)  
*No*
16. Will the project involve the use of **temporary** lighting *during* the active season?  
*Yes*
17. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?  
*Yes*
18. Will the project install new or replace existing **permanent** lighting?  
*Yes*
19. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting will be installed or replaced?  
*Yes*
20. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?  
*Yes*
21. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season<sup>[1]</sup>?  
[1] Coordinate with the local Service Field Office for appropriate dates.  
*Yes*
22. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season<sup>[1]</sup>?  
[1] Coordinate with the local Service Field Office for appropriate dates.  
*Yes*
-

23. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

24. Will the project raise the road profile **above the tree canopy**?

No

25. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.*

26. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

**Automatically answered**

*Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season*

27. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

28. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

29. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society<sup>[1]</sup> to rate the amount of light emitted in unwanted directions?

[1] Refer to [The BUG System—A New Way To Control Stray Light](#)

No

30. **Lighting AMM 2**

Will *all* **permanent** lighting use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting)?

Yes

31. **Lighting AMM 2**

Will *all* **permanent** lighting be directed away from *all* areas with suitable habitat?

Yes

## Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

No

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

Yes

## Avoidance And Minimization Measures (AMMs)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

### LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

### LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

### GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

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## **Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat**

This key was last updated in IPaC on April 28, 2022. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

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## **IPaC User Contact Information**

Agency: Oklahoma Department of Transportation  
Name: Elizabeth Nichols  
Address: 111 E. Chesapeake St.  
Address Line 2: ODOT Highway Program at Oklahoma Biologist Survey  
City: Norman  
State: OK  
Zip: 73019  
Email: enichols@odot.org  
Phone: 4053256802

## **Lead Agency Contact Information**

Lead Agency: Federal Highway Administration

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August 2015



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Division of Ecological Services  
9014 East 21<sup>st</sup> Street  
Tulsa, Oklahoma 74129  
918/581-7458 / (FAX) 918/581-7467



### Online Project Review Concurrence Letter

To:

Project Name:

'Eqpuwncvkqp'Eqf g<

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Oklahoma Ecological Services Field Office (ESFO) online project review process. By providing this letter in conjunction with your complete project review package, you are certifying that you have accurately completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. Concurrence with “not likely to adversely affect” determinations does not provide any exemption for violations of section 9 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA) or “take” of federally-listed species. The Federal action agency is ultimately responsible for ensuring compliance with the ESA and any take that occurs due to your proposed action would be considered a violation under section 9 of the ESA.

This letter and the enclosed project review package complete the review of your project in accordance with the ESA. This letter also provides information for your project review under the National Environmental Policy Act (National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C.4321-4347, 83 Stat. 852), as amended.

A copy of this letter and the project review package must be emailed to **okprojectreview@fws.gov** for this certification to be valid. This letter and the project review package will be maintained in Service records. **Please allow the Oklahoma ESFO 60 days to review your information. If the Oklahoma ESFO determines that the package is not complete, or that additional coordination is necessary, we will contact your office. If, after 60 days from the date of your email submittal of your project review package, the Oklahoma ESFO has not contacted your office, consider your section 7 consultation complete.**

The proposed action consists of:

Project start and completion dates:

Federal agency or federal program providing a permit, funding, grant, authorization, loan, etc. associated with the proposed project and how that agency is associated with your project:

Federal Agency/Program Point of contact (Name, phone, and email address):

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in “not likely to adversely affect/modify” determinations for listed species and critical habitat in relation to potential effects of your proposed project. We certify that the use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with determinations of “not likely to adversely affect” for listed species and critical habitat reached by proper use of this process. For projects where this particular determination is reached, additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages efforts to avoid or minimize adverse impacts to them from project effects. Some federal agencies have standing policies that grant limited protections to candidate species. Conservation of candidate species now may preclude future needs to federally list them as endangered or threatened, at which point their legal protection would become required. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of listed species or critical habitat becomes available, this determination may be reconsidered. You should re-visit the Service's Information, Planning, and Conservation (IPaC) website at <http://ecos/fws.gov/ipac/> within 90 days of project initiation to ensure species information is correct. If new species or critical habitat is identified, this letter is no longer valid and a new project package should be submitted to the Oklahoma ESFO.



Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Oklahoma is available at our website: <<http://www.fws.gov/southwest/es/oklahoma/>>. If you have any questions, please call 918-581-7458 or send an email message to [OKProjectReview@fws.gov](mailto:OKProjectReview@fws.gov).

Sincerely,  
/s/ Jonna Polk  
Field Supervisor  
Oklahoma Ecological Services Field Office

Enclosures:

- 1) ENTIRE PROJECT REVIEW  
PACKAGE: Species Conclusion Table  
IPaC Species List and Action Area map  
This letter (Online Concurrence Letter)  
(Optional) Additional maps
- 2) Other relevant project data/documents

**ENDANGERED, THREATENED AND CANDIDATE SPECIES, DESIGNATED  
CRITICAL HABITAT, BALD EAGLE AND MIGRATORY BIRD ASSESSMENTS**

**For**

|                                                  |         |                                                              |                      |                |         |
|--------------------------------------------------|---------|--------------------------------------------------------------|----------------------|----------------|---------|
| <b>USFWS TAILS #</b>                             |         | <b>2022-0007566</b>                                          |                      |                |         |
| Email used to request IPaC official species list |         |                                                              | jwhitaker@olsson.com |                |         |
| County                                           | Mayes   | JP Number                                                    | 33821(04)            | Project Number |         |
| Road Number                                      | SH-412B | Water Body Name                                              |                      | NA             |         |
| ROW Date                                         |         | Let Date                                                     | 11/2023              | Project Length | 6 miles |
| Project General Location                         |         | 3.5 mi east of Chouteau, along SH-412B from US-412 to SH-69A |                      |                |         |
| Project Description & Statement from Oracle      |         | Pavement Rehabilitation: SH-412B from SH-69A to US-412       |                      |                |         |

Prepared for:  
Oklahoma Department of Transportation  
Environmental Programs Division  
200 NE 21<sup>st</sup> Street  
Oklahoma City, OK 73105

Prepared by:

|                     |                               |
|---------------------|-------------------------------|
| Biologist Name      | Nathan Hillis                 |
| Company/Agency Name | Olsson                        |
| Address             | 11600 Broadway Ext #300       |
| City, State Zip     | Oklahoma City, Oklahoma 73114 |

|                           |                              |
|---------------------------|------------------------------|
| Report Date:              | 5/18/2022; Revised 6/22/2022 |
| Field Survey Date         | 4/18/2022                    |
| Field Survey Biologist(s) | Nathan Hillis                |

Form Date: October 2021

## 1. PROJECT OVERVIEW

### 1.1 Federal Nexus

This biological assessment, prepared by the above named Company/Agency for the Oklahoma Department of Transportation (ODOT), addresses the above named project in compliance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended. Section 7 of the ESA requires that, through consultation with the U.S. Fish and Wildlife Service (Service), federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. This assessment evaluates the potential effects of the proposed transportation project on species that are federally listed under the ESA. Specific project design elements are identified that avoid or minimize adverse effects of the proposed project on listed species and designated critical habitat.

### 1.2. Project Description

Pavement Reconstruction or Rehabilitation

#### Description of the **existing** bridge/roadway facility and reason for proposed project

The existing SH-412B roadway has two 12 ft. wide asphalt paved driving lanes and 8 to 10 ft. wide asphalt paved shoulders. The pavement is in poor condition and there are sight distance deficiencies. The current Annual Average Daily Traffic (AADT) is 3,900 vehicles per day (vpd) with a future 20-year AADT still being analyzed. The purpose & need of the project are to correct pavement deficiencies and improve safety.

#### Description of **proposed** improvements

The proposed improvement consists of pavement rehabilitation of the existing 12 ft. wide asphalt paved driving lanes and 8 to 10 ft. wide asphalt paved shoulders. All the work will be within the existing pavement lines, with the exception of slight widening for an acceleration lane will occur on the south end of the project, where US-412 ties into the project to allow for turning vehicles from SH-412B going west onto US-412. No roadway size drainage structure or culverts will be extended. The roads will remain open during construction and no new rights-of-way are required.

#### Check if any of the following is expected s part of the proposed action

- Work within OHWM is expected
- Project is OFF-SET alignment  or NEW alignment
- Project involves **NO OFF EXISTING PAVEMENT** work
- Project requires new ROW (permanent &/or temporary)

**1.3. Project Area and Setting**

| Project Location                     |                                                                            | Environmental Study Footprint                                 |         | Ecoregion & Game Type                  |                                                    |
|--------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------|---------|----------------------------------------|----------------------------------------------------|
| Section Range & Township             | Lat/Long NAD 83)                                                           | Dimensions                                                    | Acreage | Level IV Ecoregion (Woods et al. 2005) | Game Type (Duck and Fletcher 1943)                 |
| S3, 4, 9, 10, 16, 21, 28, T20N, R19E | -95.2792606 36.1765756 on the south to -95.2791377 36.2493868 on the north | 235 ft x 2050 ft along SH-412, and 90 ft x 6 mi along SH-412B | 69.9    | Osage Cuestas                          | Tallgrass Prairie and Postoak Blackjack Oak Forest |

**Action Area:**

1 mile surrounding the NEPA Environmental Study Footprint

**2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT**

**Species Range and Occurrence Evaluation (Check  all that apply)**

| Species                  | IPaC <sup>1</sup>                   | Watershed <sup>2</sup>   | Water Body <sup>3</sup>  | Records <sup>4</sup>     |
|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|                          | Check if Yes                        | Check if YES             | Check if Yes             | Check if Yes             |
| Red-cockaded Woodpecker  | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Whooping Crane           | <input type="checkbox"/>            | <input type="checkbox"/> |                          | <input type="checkbox"/> |
| Gray Bat                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          | <input type="checkbox"/> |
| Indiana Bat              | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Ozark Big-eared Bat      | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Neosho Mucket            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Rock Pocketbook | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Scaleshell Mussel        | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Winged Mapleleaf         | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Harperella               | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| American Burying Beetle  | <input checked="" type="checkbox"/> |                          |                          | <input type="checkbox"/> |
| Eastern Black Rail       | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Piping Plover            | <input checked="" type="checkbox"/> |                          |                          | <input type="checkbox"/> |
| Red Knot                 | <input checked="" type="checkbox"/> |                          |                          | <input type="checkbox"/> |
| Northern Long-eared Bat  | <input checked="" type="checkbox"/> |                          |                          | <input type="checkbox"/> |
| Arkansas River Shiner    | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Leopard Darter           | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Neosho Madtom            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ozark Cavefish           | <input type="checkbox"/>            | <input type="checkbox"/> |                          | <input type="checkbox"/> |

| Species                       | IPaC <sup>1</sup>                   | Watershed <sup>2</sup>   | Water Body <sup>3</sup>  | Records <sup>4</sup>     |
|-------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|                               | Check if Yes                        | Check if YES             | Check if Yes             | Check if Yes             |
| American Alligator            | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Rabbitsfoot Mussel            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Monarch Butterfly             | <input checked="" type="checkbox"/> |                          |                          | <input type="checkbox"/> |
| Rattlesnake-master Borer Moth | <input type="checkbox"/>            |                          |                          | <input type="checkbox"/> |
| Peppered Chub                 | <input type="checkbox"/>            | <input type="checkbox"/> |                          | <input type="checkbox"/> |

<sup>1</sup>Species is on the Proposed Project's IPaC List

<sup>2</sup>Action Area is within a watershed associated with occupied water bodies

<sup>3</sup>Action Area includes an occupied water body

<sup>4</sup>Project site within 5 miles of known records

| Designated or Proposed Critical Habitat | Action Area includes Designated Critical Habitat (Check <input checked="" type="checkbox"/> if Yes) |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------|
| Whooping Crane                          | <input type="checkbox"/>                                                                            |
| Arkansas River Shiner                   | <input type="checkbox"/>                                                                            |
| Leopard Darter                          | <input type="checkbox"/>                                                                            |
| Neosho Mucket                           | <input type="checkbox"/>                                                                            |
| Rabbitsfoot                             | <input type="checkbox"/>                                                                            |
| Peppered Chub                           | <input type="checkbox"/>                                                                            |

Action area is adjacent to McAlester Army Ammunition Plant or Camp Gruber/Cherokee WMA

All of part of the action area is within the 10 mile **gray bat** priority area (ODOT will check)

All of part of the action area is within the 2 mile **gray bat** priority area (ODOT will check)

Action area is within what percentage **Whooping Crane** migratory corridor  
 Choose an item.

Action area is within 15 miles of Salt Plains NWR, Hackberry Flat, or Foss Reservoir.

Action area is within the historic range of the **Red-cockaded Woodpecker**

Action area is within 10 miles of the McCurtain County Wilderness Area

Action area is within 10 miles of the Pushmataha Wildlife Management Area

### 3. ENVIRONMENTAL BASELINE

#### 3.1. Ecological Processes and Conditions

Soils (Use Soil Map of Oklahoma by Carter and Gregory 2008)

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Soil Class           | CHEROKEE PRAIRIES, BOSTON MOUNTAINS                        |
| Soil Name            | Dennis-Bates-Taloka-Parsons, Hector-Linker                 |
| Soil Type            | Mollisols and Alfisols, Inceptisols and Entisols           |
| Soil Characteristics | clayey and loamy soils on very gentle slopes (3%), shallow |

Climate (Use Woods et al. 2005)

|                   |                    |         |
|-------------------|--------------------|---------|
| Precipitation     | Mean annual inches | 44-45   |
| Growing Season    | Number of days     | 200-205 |
| Mean Temperatures | Summer min/max     | 68/91   |
|                   | Winter min/max     | 22/45   |

River System

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Three unnamed mapped perennial tributaries to Pryor Creek, and one unnamed mapped perennial tributary to Chouteau Creek occur within the environmental study footprint. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Land Use and Land Ownership

|                          |                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| From Woods et al. 2005   | Mosaic of rangeland, grassland, cropland, and especially in more rugged areas, woodland. Wooded riparian corridors occur on wettest bottomlands. Wheat, soybeans, grain sorghum, and alfalfa hay are major crops. Livestock (especially cattle) farming is important. Strip mining for coal and oil production have degraded water quality in a few streams. |
| From Field investigation | The land use was predominantly developed, industrial along the northern half of the Environmental Study Footprint. The southern half was developed, industrial and woodlands.                                                                                                                                                                                |

Terrestrial and Aquatic Community Descriptions (based on field site visit)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The environmental study footprint largely consists of rights-of-way (ROW), grasslands and upland woodlands. The ROW was maintained and included, eastern redbud (<i>Cercis canadensis</i>), henbit deadnettle (<i>Lamium amplexicaule</i>), American elm (<i>Ulmus americana</i>), Johnsongrass (<i>Sorghum halepense</i>), elm (<i>Ulmus americana</i>), and Bermuda grass (<i>Cynodon dactylon</i>). The upland forests consisted of American elm, greenbrier (<i>Smilax sp.</i>), eastern cottonwood (<i>Populus deltoides</i>), and rough cocklebur (<i>Xanthium strumarium</i>). The grassland consisted of sugar hackberry (<i>Celtis laevigata</i>), switchgrass (<i>Panicum virgatum</i>), common ragweed (<i>Ambrosia artemisiifolia</i>), Johnsongrass and Bermuda grass.</p> <p>Three tributaries to Pryor Creek and one tributary to Chouteau Creek were located within the Environmental Study Footprint. These streams flowed west to east and north to south. The stream beds consisted of predominantly gravel and sand. The streams were fed by runoff. Stream widths varied from 1 ft to 5 ft and stream depths varied from 0.5 ft to 2 ft. Common</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

vegetation along these streams includes American Elm, Johnsongrass, Bermuda grass, eastern redbud, and eastern red cedar.

### 3.2 Species Habitat Analysis

- Pedestrian survey of entire NEPA study footprint (including 300-foot work zone buffer in karst areas)
- Bridge/Structure inspected for bat use (Complete the Bridge Inspection Form)

| SPECIES                 | HABITAT                                                                                                                                                                                                                                                         |                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Gray Bat                | Limestone karst features occur within <b>0.5 mile of the NEPA Environmental Study Footprint.</b>                                                                                                                                                                | <input type="checkbox"/>            |
|                         | Riparian forest near streams, rivers and associated wetlands occurs within <b>0.5 mile of the NEPA Environmental Study Footprint.</b>                                                                                                                           | <input checked="" type="checkbox"/> |
|                         | If within a cave buffer, total linear feet along ALL riparian zones within the <b>NEPA Environmental Study Footprint.</b>                                                                                                                                       | 0                                   |
| American Burying Beetle | Number of acres of native perennial plant vegetation (where native perennial vegetation is the dominant vegetation) within the <b>NEPA Environmental Study Footprint</b> (include shapefiles).                                                                  | 0                                   |
| Piping Plover           | Sparsely vegetated sandy or gravelly shorelines and islands associated with the major river systems occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>                                                                               | <input type="checkbox"/>            |
|                         | Salt flats or mudflats associated with reservoirs occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>                                                                                                                                 | <input type="checkbox"/>            |
| Red Knot                | Mudflats associated with reservoirs occur within the <b>0.25 miles of the NEPA Environmental Study Footprint.</b>                                                                                                                                               | <input type="checkbox"/>            |
| Northern Long-eared Bat | Limestone karsts features occur within <b>0.5 mile of the NEPA Environmental Study Footprint.</b>                                                                                                                                                               | <input type="checkbox"/>            |
|                         | Live or dead trees/and or snags with a DBH of $\geq 3$ inches occur within the <b>NEPA Environmental Study Footprint.</b>                                                                                                                                       | <input type="checkbox"/>            |
|                         | 10 trees or less with DBH of $\geq 3$ inches                                                                                                                                                                                                                    | <input type="checkbox"/>            |
|                         | Barns or sheds occur within the <b>NEPA Environmental Study Footprint.</b>                                                                                                                                                                                      | <input type="checkbox"/>            |
|                         | Linear treed features such as fencerows, riparian forests, and other wooded corridors occur within <b>1 mile of the NEPA Environmental Study Footprint.</b> Wooded corridors may be dense or loose aggregates of trees with variable amounts of canopy closure. | <input checked="" type="checkbox"/> |

| SPECIES           | HABITAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|                   | Number of acres of forested/wooded area within the <b>NEPA Environmental Study Footprint</b> (include shapefiles). Include forests and woodlots, as well as linear features such as fencerows, riparian forests, and other wooded corridors. Wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1000 feet of other forested/wooded habitat. | 0                                   |
| Monarch Butterfly | Presence of milkweed ( <i>Asclepias sp.</i> ) species within the <b>NEPA Environmental Study Footprint</b> .                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>            |
|                   | Presence of flowering or potentially flowering nectar plants ( <i>defined as forbs that can provide nectar for monarchs at some point in the growing season</i> ) within the <b>NEPA Environmental Study Footprint</b> .                                                                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> |
|                   | Presence of additional native habitat within the <b>NEPA Environmental Study Footprint</b> .                                                                                                                                                                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> |

**NEPA Bridge, Culvert & Structure Assessment Form for All Listed Bat Species**

If all bridge, culverts and structures are 1,000 feet or more from suitable bat habitat (e.g. an urban or agricultural area without suitable foraging habitat or corridors linking the bridge, culvert or structure to suitable foraging habitat), check this box and **STOP HERE. Fill out p.1 of Appendix D Assessment.**

**BRIDGE INSPECTION:** Identify ALL Bridges by NBI # (include RCB bridges)

**CULVERT INSPECTION:** Identify ALL Culverts ≥4 feet in diameter within the Study Area

**BARN/SHED INSPECTION:** Identify ALL structures within the Study Area that potentially could be removed

**Method of Inspection (check all that apply)**  Visual  Ladder  Snooper  Thermal  
 Acoustic Survey  Emergence Survey (30 minutes at dusk and 1 hour after dark)

Fill out p.2 of Appendix D Assessment for each bridge/culvert/structure

1. **Page where located in appendix: D-1**

| Road Number /Name                                                                                                                                                                                                                                                                   | NBI Number              | Water Body (or road if over road) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------|
| Highway 412B – Culvert 1                                                                                                                                                                                                                                                            | 36.1877129, -95.2806588 | Tributary to Chouteau Creek       |
| <b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/><br>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes. |                         |                                   |
| <b>NOTES:</b> Culvert was fully inspected, and no evidence of bat use was observed.                                                                                                                                                                                                 |                         |                                   |



2. Page where located in appendix: **D-2**

| Road Number /Name                                                                                                                                                                                                                                                                   | NBI Number              | Water Body (or road if over road) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------|
| Highway 412B – Culvert 2                                                                                                                                                                                                                                                            | 36.2115583, -95.2878803 | Tributary to Pryor Creek          |
| <b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/><br>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes. |                         |                                   |
| <b>NOTES:</b> Culvert was fully inspected, and no evidence of bat use was observed.                                                                                                                                                                                                 |                         |                                   |

3. Page where located in appendix: **D-3**

| Road Number /Name                                                                                                                                                                                                                                                                   | NBI Number              | Water Body (or road if over road) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------|
| Highway 412B – Culvert 3                                                                                                                                                                                                                                                            | 36.2234096, -95.2792216 | Tributary to Pryor Creek          |
| <b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/><br>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes. |                         |                                   |
| <b>NOTES:</b> Culvert was fully inspected, and no evidence of bat use was observed.                                                                                                                                                                                                 |                         |                                   |

4. Page where located in appendix: **D-4**

| Road Number /Name                                                                                                                                                                                                                                                                   | NBI Number               | Water Body (or road if over road) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|
| Highway 412B – Culvert 4                                                                                                                                                                                                                                                            | 36.2388164, - 95.2791609 | Tributary to Pryor Creek          |
| <b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/><br>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes. |                          |                                   |
| <b>NOTES:</b> Culvert was fully inspected, and no evidence of bat use was observed.                                                                                                                                                                                                 |                          |                                   |

5. Page where located in appendix: **D-5**

| Road Number /Name                                                                                                                                                                                                                                                                   | NBI Number              | Water Body (or road if over road) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------|
| Highway 412B – Culvert 5                                                                                                                                                                                                                                                            | 36.2448817, -95.2792573 | Roadside ditch                    |
| <b>BRIDGE/CULVERT/STRUCTURE COULD NOT BE FULLY INSPECTED</b> <input type="checkbox"/><br>due to height, traffic, or other conditions limiting access to thoroughly inspect all parts of bridge due to inundation or other conditions limiting access. Explain reasons in the Notes. |                         |                                   |
| <b>NOTES:</b> Culvert was fully inspected, and no evidence of bat use was observed.                                                                                                                                                                                                 |                         |                                   |

**4. ANALYSIS OF EFFECTS**

**4.1 Direct Effects**

| Species/ Resource       | Habitat impacts expected from project activities | <u>Describe specific ACTIONS of the project and the results of those actions on species habitats, including indirect impacts to prey or drinking water, as well as improvements to habitat as a result of specific actions.</u><br><u>If habitat within the action area identified above will not be impacted, describe why.</u>                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gray Bat                | <input type="checkbox"/>                         | This project consists of pavement rehabilitation of an existing roadway and shoulders on existing paved surfaces within existing maintained ROW. The only off-pavement work will occur at the intersection of US-412 and SH-412B within the existing maintained mowed R/W. No roadway drainage structures, or culverts will be extended or modified and no impacts to water quality expected. Additionally, bat use of these structures was not observed. Impacts to bats, however, could result from vibration to these structures from pavement rehabilitation activities and construction lighting if bats use these areas during the construction activities. |
| Northern Long-eared Bat | <input type="checkbox"/>                         | Although there are treed areas immediately adjacent to the study footprint (originating on the other side of the R/W fence), no treed areas occur within the study footprint and no wooded or forested habitat will be impacted by the proposed project. No roadway drainage structures, or culverts will be extended or modified. Additionally, bat use of these structures was not observed. Impacts to bats, however, could result from vibration to these structures from pavement rehabilitation activities and construction lighting if bats use these areas during the future construction activities.                                                     |
| American Burying Beetle | <input type="checkbox"/>                         | The only off-pavement work will occur at the junction of US-412 and SH-412B within areas of existing maintained mowed R/W. No areas of native perennial plant vegetation (where native perennial vegetation is the dominant vegetation) occur within the study footprint, and no areas of this habitat within the action area will be impacted by project activities. Impacts to the American burying beetle from construction lighting could result in attracting the beetle to the construction area.                                                                                                                                                           |
| Monarch Butterfly       | <input type="checkbox"/>                         | The only off-pavement work will occur at the intersection of US-412 and SH-412B within areas of existing maintained mowed R/W. Although the presence of flowering or potentially flowering nectar plants and additional native vegetation occurs within the study footprint (none where those species are the dominant vegetation), no impacts will occur to these habitat areas from the proposed project.                                                                                                                                                                                                                                                       |

#### 4.2 Indirect Effects

##### Long-term habitat alterations

| Species/ Resource | <u>Identify long-term, permanent changes in habitat</u> |
|-------------------|---------------------------------------------------------|
| NA                | No indirect effects to species of concern are expected. |

##### Indirect land use impacts

Although development is continuing to grow within the industrial park, no changes to current land use are anticipated as a result of this pavement rehabilitation project.

#### 4.3 Interrelated and Interdependent Actions and Activities

This project has no capacity expansion and will not impact current land use, therefore, no interrelated and interdependent actions are expected.

|                                |                     |
|--------------------------------|---------------------|
| <b>USFWS TAILS Number:</b>     | <b>2022-0007566</b> |
| <b>ODOT Project JP Number:</b> | <b>33821(04)</b>    |

| SPECIES /<br>DESIGNATED<br>CRITICAL HABIT | CONCLUSION                                           |                                                        | ESA SECTION 7                       |                                                     |                                                                                    | NOTES AND DOCUMENTATION<br>Check <input checked="" type="checkbox"/> all that apply |                                     |                                                     |                                            |
|-------------------------------------------|------------------------------------------------------|--------------------------------------------------------|-------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------|--------------------------------------------|
|                                           | Species Habitat<br>present within<br>the action area | Project<br>Activities<br>expected to<br>impact habitat | No<br>Effect                        | May affect,<br>not likely to<br>adversely<br>affect | May affect,<br>Likely to<br>adversely<br>affect                                    | Field<br>Studies                                                                    | ONHI<br>database /<br>ABB           | USFWS<br>occupied<br>waterbodies<br>&<br>watersheds | Whooping<br>Crane<br>Migration<br>Corridor |
| American Burying<br>Beetle                | <input checked="" type="checkbox"/>                  | <input type="checkbox"/>                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/>                 | Project uses the BO for<br>the final 4(d) rule                                     | <input checked="" type="checkbox"/>                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>                            | <input type="checkbox"/>                   |
| Northern long-eared<br>bat                | <input checked="" type="checkbox"/>                  | <input type="checkbox"/>                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/>                 | Final Effect Analysis and<br>Determination covered in<br>the Programmatic<br>BA&BO | <input checked="" type="checkbox"/>                                                 | <input type="checkbox"/>            | <input type="checkbox"/>                            | <input type="checkbox"/>                   |
|                                           |                                                      |                                                        |                                     | <input type="checkbox"/>                            | Project uses the BO for<br>the final 4(d) rule                                     |                                                                                     |                                     |                                                     |                                            |
| Gray Bat                                  | <input checked="" type="checkbox"/>                  | <input type="checkbox"/>                               | <input type="checkbox"/>            | <input checked="" type="checkbox"/>                 | <input type="checkbox"/>                                                           | <input checked="" type="checkbox"/>                                                 | <input type="checkbox"/>            | <input type="checkbox"/>                            | <input type="checkbox"/>                   |
| Piping Plover                             | <input type="checkbox"/>                             | <input type="checkbox"/>                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>                            | <input type="checkbox"/>                                                           | <input checked="" type="checkbox"/>                                                 | <input type="checkbox"/>            | <input type="checkbox"/>                            | <input type="checkbox"/>                   |
| Red Knot                                  | <input type="checkbox"/>                             | <input type="checkbox"/>                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>                            | <input type="checkbox"/>                                                           | <input checked="" type="checkbox"/>                                                 | <input type="checkbox"/>            | <input type="checkbox"/>                            | <input type="checkbox"/>                   |
| Monarch Butterfly                         | <input checked="" type="checkbox"/>                  | <input type="checkbox"/>                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>                            | <input type="checkbox"/>                                                           | <input checked="" type="checkbox"/>                                                 | <input type="checkbox"/>            | <input type="checkbox"/>                            | <input type="checkbox"/>                   |

**CONCLUSIONS**

|                                                                                              |                                            |
|----------------------------------------------------------------------------------------------|--------------------------------------------|
| No Effect                                                                                    | Piping Plover, Red Knot, Monarch Butterfly |
| May affect                                                                                   | American Burying Beetle                    |
| May affect, not likely to adversely affect                                                   | Gray bat, Northern long-eared bat          |
| May affect, likely to adversely affect                                                       |                                            |
| Not likely to jeopardize the continued existence of the species – Candidate species only     |                                            |
| Appropriate Effect Determination for ABB has been made under the BO for the final 4(d) rule  | <input checked="" type="checkbox"/>        |
| Appropriate Effect Determination has been made under the FHWA NLEB/Ibat Programmatic BA & BO | <input checked="" type="checkbox"/>        |
| Appropriate Effect Determination for NLEB has been made under the BO for the final 4(d) rule | <input type="checkbox"/>                   |

**RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES**

Because the project occurs within **American Burying Beetle** range, but no suitable habitat occurs within the project’s study area, impacts to the species would be insignificant and discountable.

- a) Use of artificial lighting will be minimized. If night construction is necessary, direct light will be shielded to the work area and prevent light from projecting upwards. A special provision will be included in the project contract which outlines approved lighting for use during night work.
- b) Carcasses and all food trash will continuously be removed from the permanent right of way and temporary right of way throughout the duration of the project activities.
- c) Pollution Prevention Requirements as specified by the Oklahoma Department of Environmental Quality General Permit OKR10 for Storm Water Discharges shall be implemented. Additionally, all equipment will be fueled, and all fuel and motor vehicle oil will be stored outside ABB habitat.

Because the project occurs within suitable habitat for listed bats, but does not involve removal of trees or the removal or modification of suitable bridge or culvert roosting structures, impacts to the species would be insignificant. All **temporary lighting**, if used, will be directed away from suitable habitat during the active season for bats (April 1 – November 15). If any **permanent lighting** is installed or replaced, downward-facing full cut-off lens lights shall be installed and directed away from suitable bat habitat. Additional consultation with USFWS will be necessary if habitat will be impacted by any change in project activities.

Potential impacts to water quality affecting the prey species of foraging **gray bats**, has been identified in the project’s action area. Hazardous materials, chemicals, fuels, lubricating oils, and other such substances shall be stored at least 100 feet outside of the ordinary high water mark (OHWM). Refueling of construction equipment shall also be conducted outside of the OHWM. Sediment and erosion controls shall be installed around these staging areas to prohibit discharge of materials from these sites. Construction waste materials and debris shall be stockpiled at least 25 feet outside of the OHWM, and these materials shall be removed and disposed of properly following completion of the project. Appropriate Best Management Practices to minimize impacts from storm water discharges, as established by the Oklahoma Department of Environmental Quality, shall be conscientiously implemented throughout the proposed construction periods. The effectiveness of erosion controls shall be maintained for the duration of construction activities.

**5. BALD AND GOLDEN EAGLE PROTECTION ACT ASESMENT**

**5.1. Bald Eagle Assessment**

The Bald Eagle (*Haliaeetus leucocephalus*) is a large predatory bird protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Activities that would disturb eagles are prohibited under the Bald and Golden Eagle Protection Act. “Disturb” means to agitate an eagle to the degree that causes or is likely to (1) cause injury, (2) interfere with breeding, feeding or sheltering behavior, or (3) nest abandonment.

| Potential Bald Eagle Habitat Present                                                                                                                                                                                                                                                                      | w/in NEPA Footprint                                                                                                                                                                                                                                                                  | w/in 660 ft Buffer of NEPA Footprint | DO NOT LEAVE BLANK                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Presence of Cottonwood, Sycamore, Pecan or Pine                                                                                                                                                                                                                                                           | <input type="checkbox"/>                                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/>  | The woodlands near this project are primarily along the southern portion of the NEPA Environmental Study Footprint. Cottonwoods and pecans are present in the wooded areas.                   |
| Open foraging areas with large trees                                                                                                                                                                                                                                                                      | <input type="checkbox"/>                                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/>  | The open areas for foraging are along the Neosho River ~700ft southeast of the southern boundary of the project. Near the middle portion of the project, a large pond is located 150 ft east. |
| Distance to closest perennial water body                                                                                                                                                                                                                                                                  | River or Lake                                                                                                                                                                                                                                                                        | 700 ft                               | The Neosho River is located 700 ft east of the Environmental Study Footprint. Three ponds are located along the southern portion of the Environmental Study Footprint.                        |
|                                                                                                                                                                                                                                                                                                           | Stream or Pond                                                                                                                                                                                                                                                                       | 150 ft                               |                                                                                                                                                                                               |
| Potential Bald Eagle Nests Observed                                                                                                                                                                                                                                                                       | <input type="checkbox"/>                                                                                                                                                                                                                                                             | <input type="checkbox"/>             | No nests were observed within the footprint or 660 feet from the footprint. There is a nest, however, along US-412, but it is ~850 feet from the proposed project area.                       |
| Bald Eagles Observed in the general vicinity                                                                                                                                                                                                                                                              | <input type="checkbox"/>                                                                                                                                                                                                                                                             | <input type="checkbox"/>             | No Bald Eagles were observed in vicinity during the field study                                                                                                                               |
| General Description of Bald Eagle Nesting Habitat and Impact Determination, within the NEPA Footprint and within 660-ft of the NEPA Footprint                                                                                                                                                             | Areas suitable of Bald Eagles can be found along the southern portion of the NEPA Environmental Study Footprint. Large trees suitable for nesting and perching are found along the Neosho River, southeast of the project. This area would also provide high quality foraging areas. |                                      |                                                                                                                                                                                               |
| Station #s for Buffered Bald Eagle Habitat                                                                                                                                                                                                                                                                | Station 100+53.00 to 119+62.48                                                                                                                                                                                                                                                       |                                      |                                                                                                                                                                                               |
| In order to avoid impacts to Bald Eagles, if Bald Eagles or their habitat are observed during the biological assessment, a survey for eagles and their nests will be conducted within 660 feet of the work zone, during the winter prior to, and within one year of, the start of construction. If a nest |                                                                                                                                                                                                                                                                                      |                                      |                                                                                                                                                                                               |

is found, appropriate conservation measures based on the National Bald Eagle Management Guidelines will be implemented.

**6. MIGRATORY BIRD TREATY ACT (MBTA) ASSESSMENT**

**6.1 Structure Assessment**

Cliff Swallows (*Petrochelidon pyrrhonota*) and Barn Swallows (*Hirundo rustica*) are small colonial and semi-colonial nesting birds protected by the federal Migratory Bird Treaty Act. Barn Swallows use man-made structures for nesting and live in close association with humans. Both species commonly use bridges and culverts in Oklahoma for nesting. Other migratory birds can also nest on transportation structures.

| Identify <u>ALL</u> structures including pipe culverts and whether positive or negative for migratory birds (identify named streams where possible rather than just FS#). Provide shapefiles and map of structures identifying pos/neg swallow structures. | Approx. Number of Cliff Swallow Nests   | Approx. Number of Barn Swallow Nests | Approx. Number of Eastern Phoebe Nests |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------|----------------------------------------|
| Highway 412B – Culvert 1, 36.1877129, -95.2806588                                                                                                                                                                                                          | 0                                       | 0                                    | 0                                      |
| Highway 412B – Culvert 2, 36.2115583, -95.2878803                                                                                                                                                                                                          | 0                                       | 0                                    | 0                                      |
| Highway 412B – Culvert 3, 36.2234096, -95.2792216                                                                                                                                                                                                          | 0                                       | 0                                    | 0                                      |
| Highway 412B – Culvert 4, 36.2388164, -95.2791609                                                                                                                                                                                                          | 0                                       | 0                                    | 0                                      |
| Highway 412B – Culvert 5, 36.2448817, -95.2792573                                                                                                                                                                                                          | 0                                       | 0                                    | 0                                      |
| Other MB and Nests Observed                                                                                                                                                                                                                                | No other migratory bird nests observed. |                                      |                                        |
| Based on existing plans, no work on suitable drainage structures will occur                                                                                                                                                                                |                                         |                                      | <input checked="" type="checkbox"/>    |

**6.2 Birds of Conservation Concern**

| <u>Species Identified on IPaC list</u>                                                                                                                                   | <u>Breeding Season</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Prothonotary Warbler                                                                                                                                                     | April 1 – July 31      |
| Red-headed Woodpecker                                                                                                                                                    | May 10 – September 10  |
| Rusty Blackbird                                                                                                                                                          | Breeds Elsewhere       |
| This project is a resurfacing of an existing road with no tree clearing, and therefore is unlikely to have any direct impacts on these species or their nesting habitat. |                        |

**6.3 Interior Least Tern**

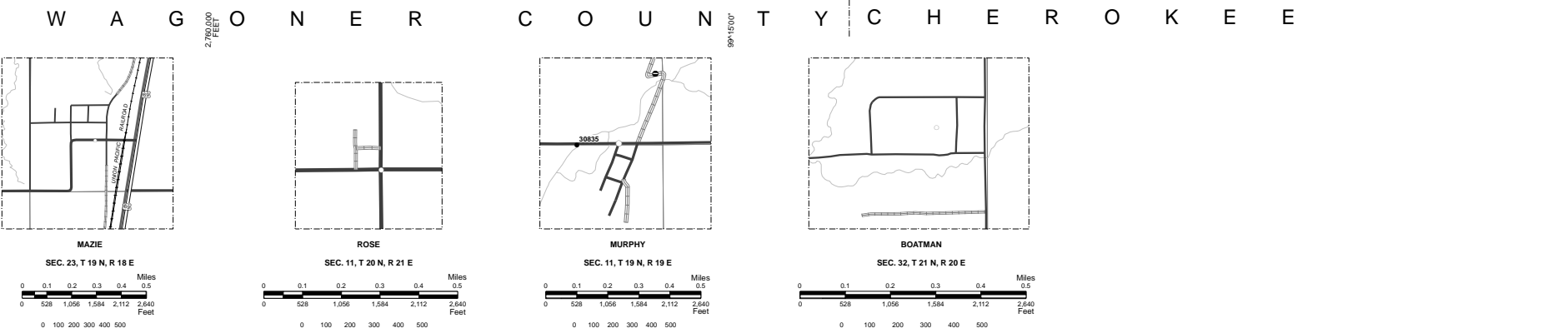
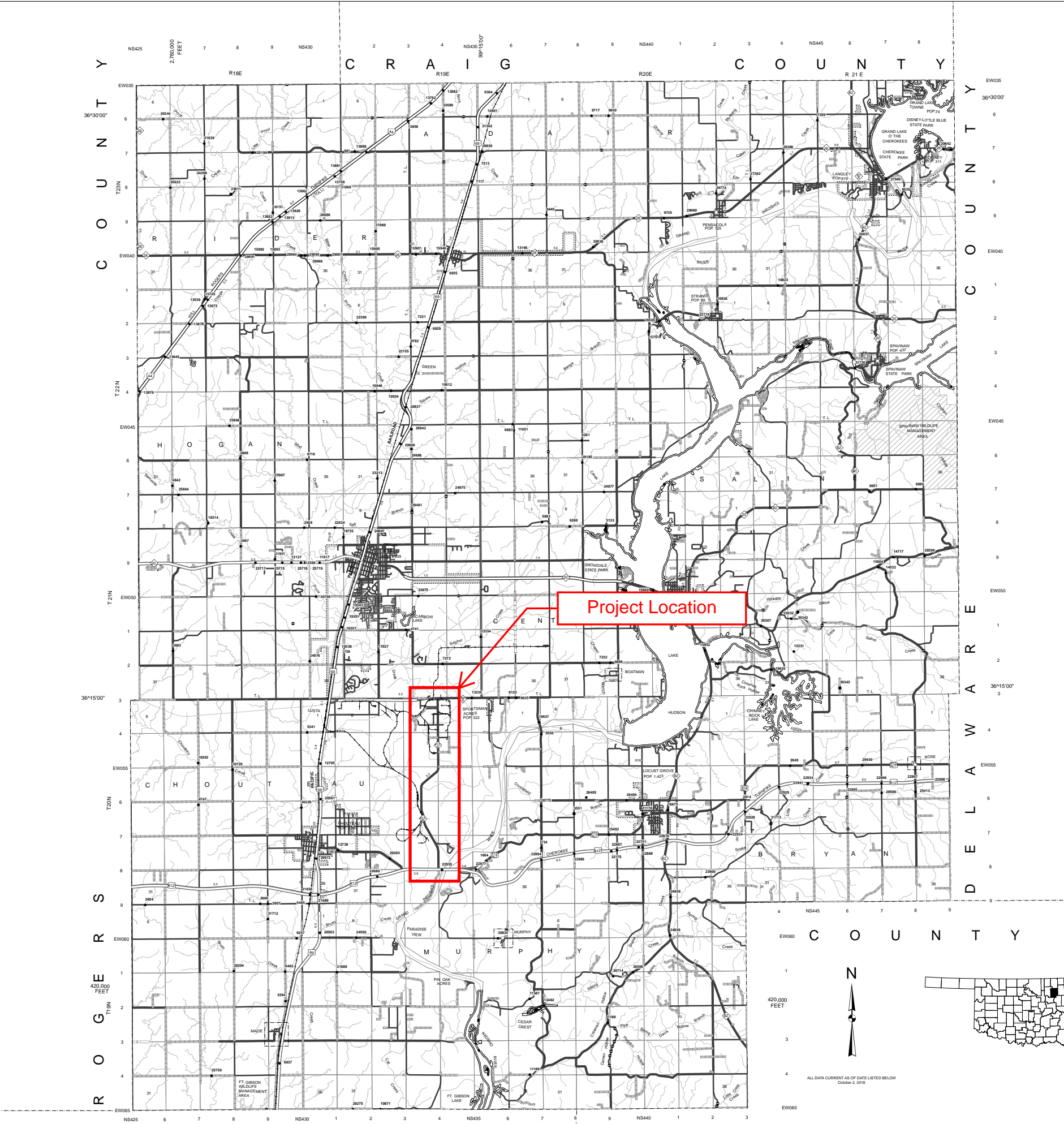
|                                                                                                                                                                        |                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Sparingly vegetated islands or sandbars along large rivers, with nearby areas of shallow water, occur within the 0.25 miles of the NEPA Environmental Study Footprint. | <input type="checkbox"/> |
| Not Interior Least Tern habitat within or near the NEPA Environmental Footprint.                                                                                       |                          |

## 7. REFERENCES:

- Carter, B. J. and Gregory M.S., 2008, Soil Map of Oklahoma. Department of Plant and Soil Sciences, Oklahoma State University.
- IPaC – Information for Planning and Consultation. Accessed 02/15/2022. Online. <https://ecos.fws.gov/ipac/>
- United States Fish and Wildlife Service. Publication date May 2021. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands/>
- United States Geological Survey. *Chouteau Quadrangle, Mayes County, Oklahoma*. 1:24,000. 7.5 Minute Series. Reston, VA: United States Department of the Interior, USGS, 2019.
- Woods, A.J., Omernik, J.M., Butler, D.R., Ford, J.G., Henley, J.E., Hoagland, B.W., Arndt, D.S., and Moran, B.C., 2005, Ecoregions of Oklahoma (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,250,000).

## 8. FIGURES





- Legend**
- Interstate Highway
  - US Highway
  - State Highway
  - Divided Highway - Asphalt
  - Divided Highway - Concrete
  - Asphalt
  - Concrete
  - Gravel
  - Grade & Drain
  - Unimproved
  - Railroad
  - State Line
  - County Line
  - Section Line
  - Corporate Limit
  - Wildlife Management Area
  - Wildlife Refuge
  - River or Stream
  - Lake or Reservoir
  - Bridges
  - Low Water Crossing
  - Natural Elevation Point
  - Natural Elevation Point

**Mayes County JP 33821(04)**  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
**Project Location**

**GENERAL HIGHWAY MAP  
 MAYES COUNTY  
 OKLAHOMA**  
 PREPARED BY THE  
 OKLAHOMA DEPARTMENT OF TRANSPORTATION  
 STRATEGIC ASSET AND PERFORMANCE  
 MANAGEMENT DIVISION  
 IN COOPERATION WITH THE  
 U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION

SCALE IN MILES  
 0 1 2 3 4 5 Miles  
 SCALE IN KILOMETERS  
 0 1 2 3 4 5 Kilometers

LAMBERT CONFORMAL CONIC PROJECTION U.S. & GEODETIC SURVEY DATA  
 20,000 FOOT GRID, OKLAHOMA PLANE COORDINATE SYSTEM NORTH PROJECTION ZONE  
 POPULATION FIGURES BASED ON 2010 U.S. CENSUS  
 CO. POP. 41,259

**Figure 1.**

Copies of this map are available for public use at nominal cost.  
 Address: OKLAHOMA DEPARTMENT OF TRANSPORTATION  
 PUBLIC INFORMATION DIVISION  
 200 N. E. 21st STREET  
 OKLAHOMA CITY, OKLAHOMA 73105-5284

This map indicates those roads known to the Department to be open to public travel. Placement of a road on the map has no relationship to maintenance responsibility by any level of government.

ECOPYRIGHT 2018  
 PRINTED AT STATE EXPENSE

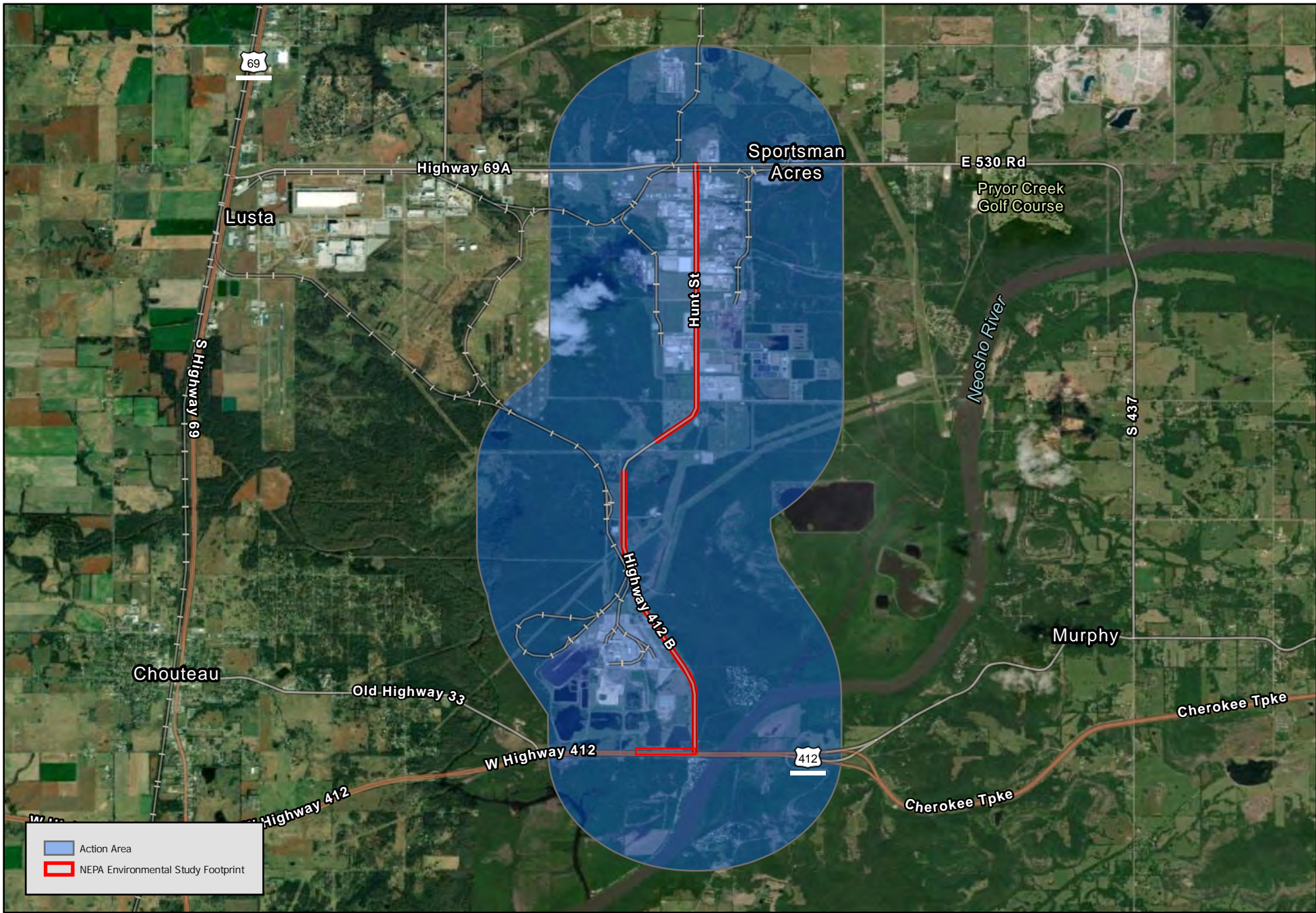
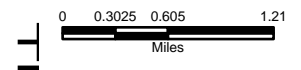


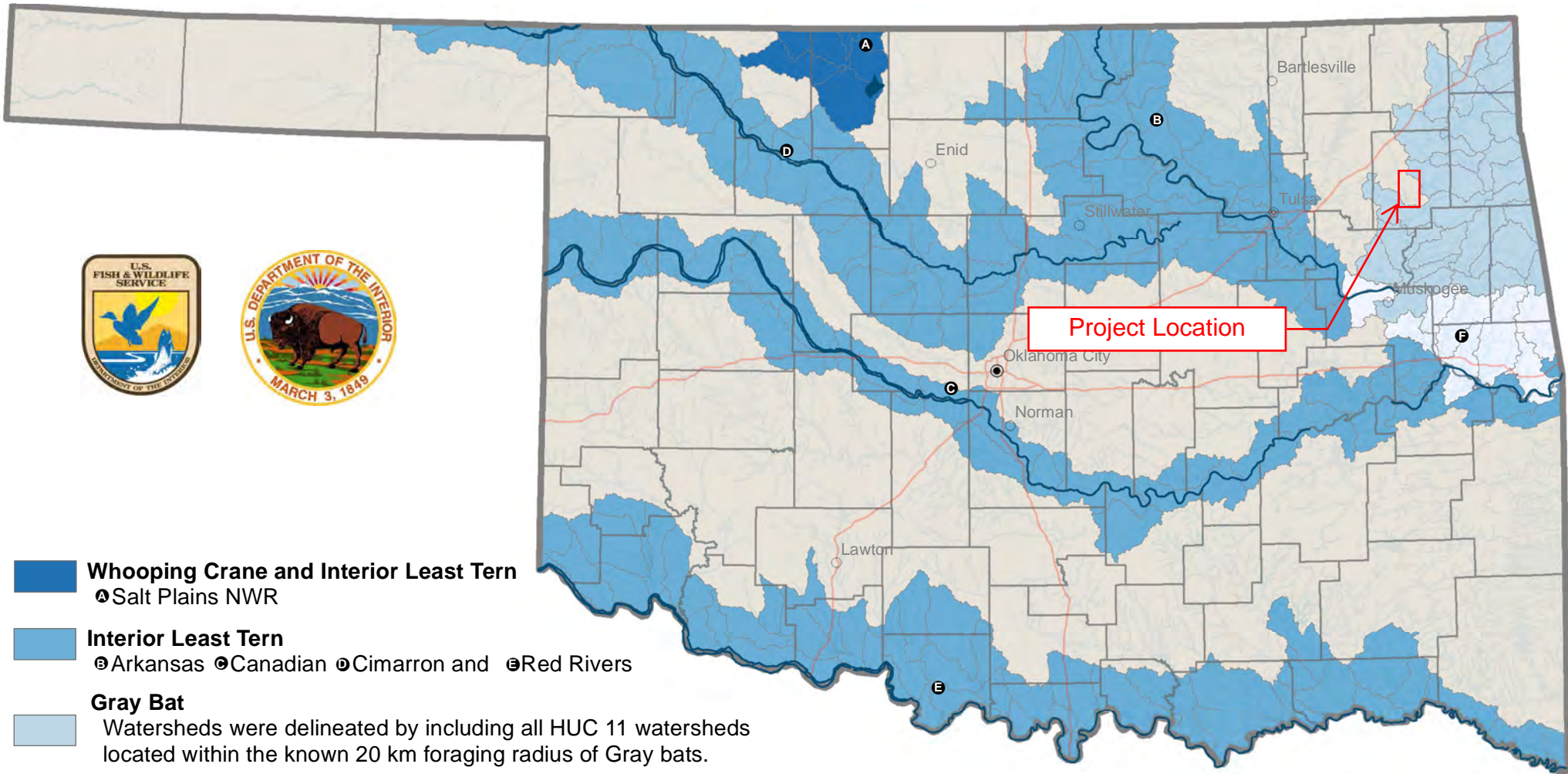
Figure 2.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Environmental Study Footprint and Action Area



# Federally-Listed Aquatic Dependent Species Watersheds of Oklahoma

These watersheds were delineated using 11 digit Hydrologic Unit Code (HUC) watersheds. All watersheds adjacent to water bodies occupied by federally-listed species are included in the delineation, as well as those 11 digit HUC watersheds within 10 miles of the occupied water body. Please note that not all 11 digit HUC watersheds that feed into sensitive occupied water bodies are included in this delineation and effects to those watersheds outside of this delineation could impact sensitive water bodies.



- Whooping Crane and Interior Least Tern**  
▲ Salt Plains NWR
- Interior Least Tern**  
⊖ Arkansas ⊖ Canadian ⊖ Cimarron and ⊖ Red Rivers
- Gray Bat**  
 Watersheds were delineated by including all HUC 11 watersheds located within the known 20 km foraging radius of Gray bats.
- Interior Least Tern and Gray Bat**  
⊖ Canadian River (ILT) and HUC 11 Watersheds (GB)
- N **Water Bodies Occupied by Federally-Listed Species**

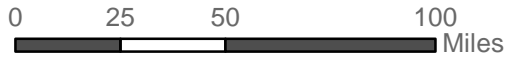


Figure 3. Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Environmental Study Footprint in Relation to Gray Bat Watersheds

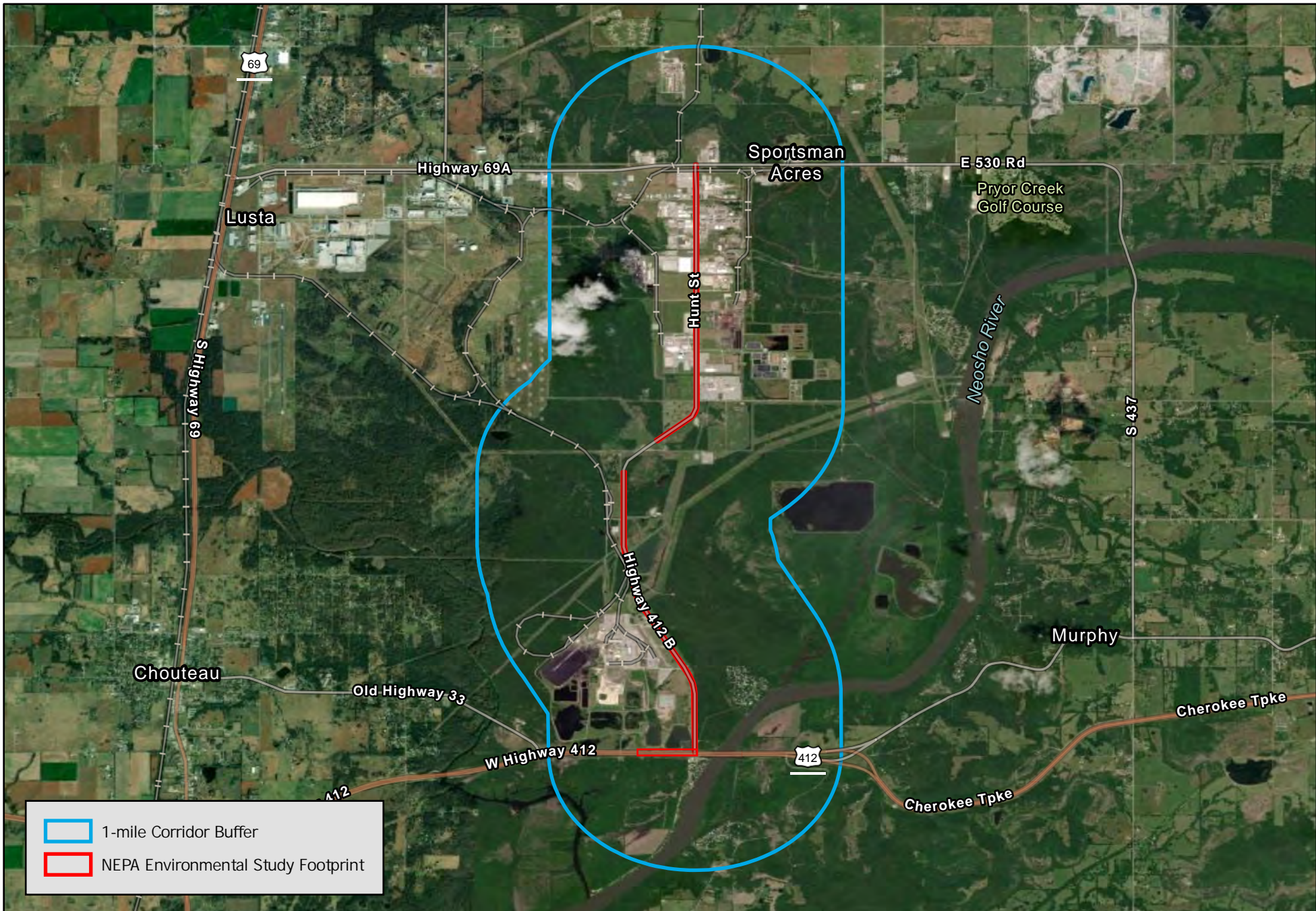


Figure 4.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 BatTravel Corridor Map

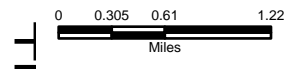




Figure 5.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Bridge and Culvert Structures

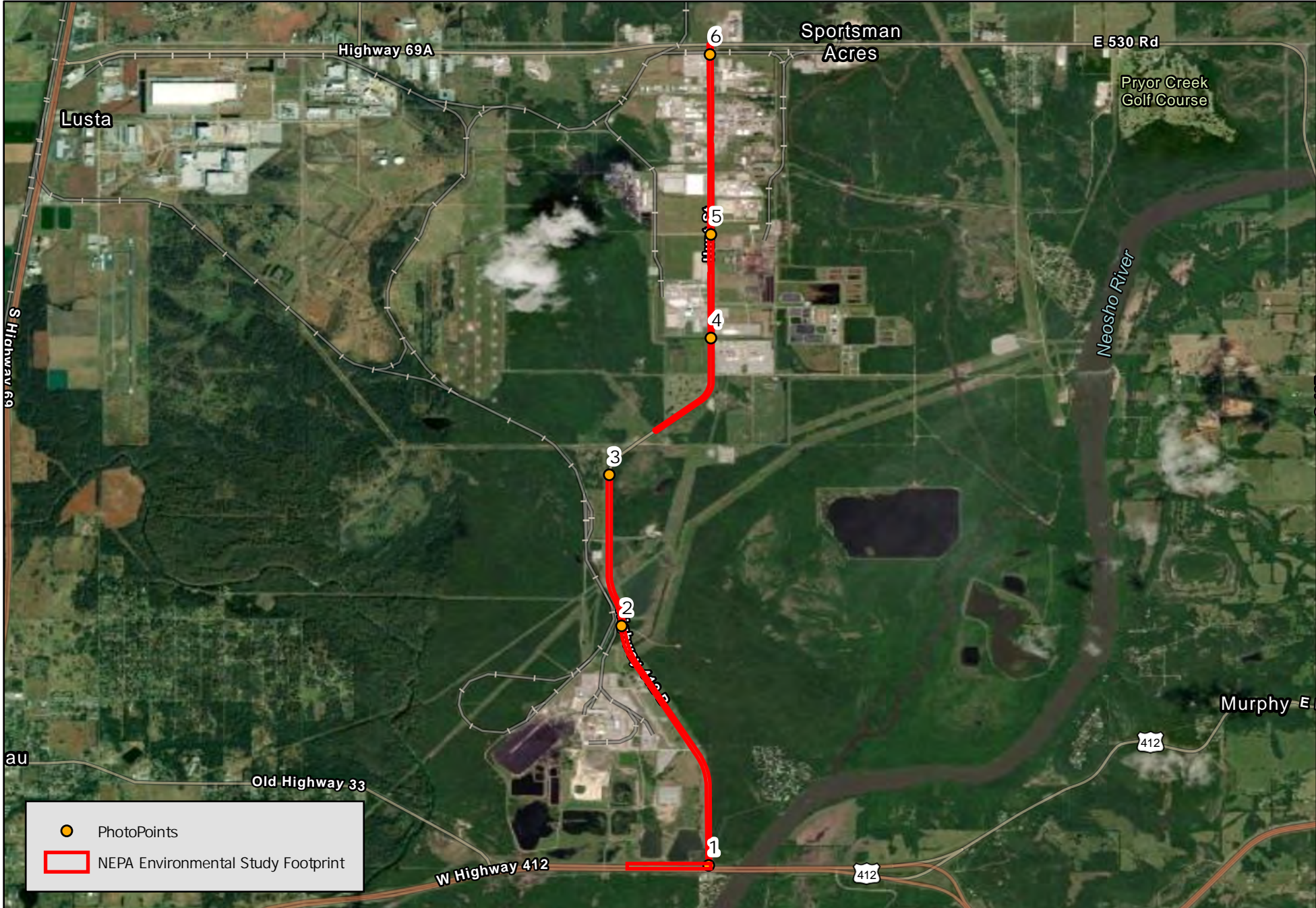
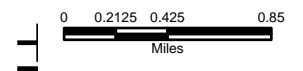


Figure 6.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Photo Location Map





1. P1 Looking east



2. P2 looking west



3. P1 looking south.



4. P2 looking north



5. P2 Looking east



6. P2 looking south



7. P2 Looking west



8. P3 looking east



9. P3 looking south



10. P3 looking north



11. P4 looking north



12. P4 looking east





13. P4 looking west



14. P4 looking south



15. P5 looking north



16. P5 looking east



17. P5 looking south



18. P5 looking west



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Oklahoma Ecological Services Field Office  
9014 East 21st Street  
Tulsa, OK 74129-1428  
Phone: (918) 581-7458 Fax: (918) 581-7467  
<http://www.fws.gov/southwest/es/Oklahoma/>

In Reply Refer To:

May 18, 2022

Project Code: 2022-0007566

Project Name: Sh-412B Pavement Rehab Mayes County JP 33821(04)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

---

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
  - Wetlands
-

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Oklahoma Ecological Services Field Office**

9014 East 21st Street

Tulsa, OK 74129-1428

(918) 581-7458

---

## Project Summary

Project Code: 2022-0007566

Event Code: None

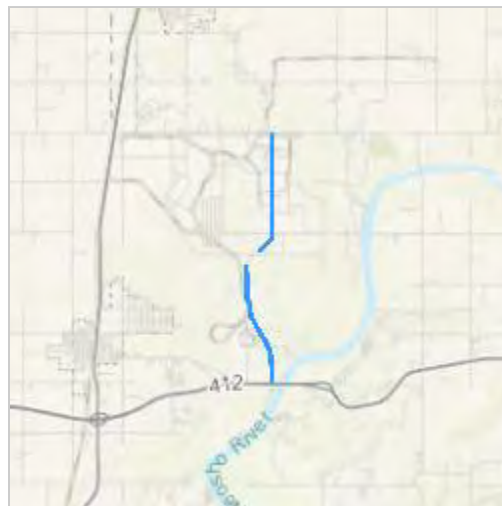
Project Name: Sh-412B Pavement Rehab Mayes County JP 33821(04)

Project Type: Road/Hwy - Maintenance/Modification

Project Description: Pavement Rehabilitation SH-412B: from SH-69A to US-412

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.193770099999995,-95.28494009577389,14z>



Counties: Mayes County, Oklahoma

---

## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

| NAME                                                                                                                                                                                                                             | STATUS     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Gray Bat <i>Myotis grisescens</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/6329">https://ecos.fws.gov/ecp/species/6329</a>                     | Endangered |
| Northern Long-eared Bat <i>Myotis septentrionalis</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a> | Threatened |

### Birds

| NAME                                                                                                                                                                                                                                                                                                                                                                                                            | STATUS     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Piping Plover <i>Charadrius melodus</i><br>Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.<br>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a> | Threatened |
| Red Knot <i>Calidris canutus rufa</i><br>There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>                                                                                                                                       | Threatened |

## Insects

| NAME                                                                                                                                                                                                                                                                                                                    | STATUS     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p>American Burying Beetle <i>Nicrophorus americanus</i><br/>Population: Wherever found, except where listed as an experimental population<br/>No critical habitat has been designated for this species.<br/>Species profile: <a href="https://ecos.fws.gov/ecp/species/66">https://ecos.fws.gov/ecp/species/66</a></p> | Threatened |
| <p>Monarch Butterfly <i>Danaus plexippus</i><br/>No critical habitat has been designated for this species.<br/>Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a></p>                                                                                           | Candidate  |

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---



# **USFWS National Wildlife Refuge Lands And Fish Hatcheries**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

---

## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME                                                                                                                                                                                                                                                                                                                                                           | BREEDING SEASON         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i><br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br><a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a> | Breeds Oct 15 to Aug 31 |
| Prothonotary Warbler <i>Protonotaria citrea</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.                                                                                                                                                                                                        | Breeds Apr 1 to Jul 31  |

| NAME                                                                                                                                                                        | BREEDING SEASON         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.      | Breeds May 10 to Sep 10 |
| <b>Rusty Blackbird <i>Euphagus carolinus</i></b><br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds elsewhere        |

## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

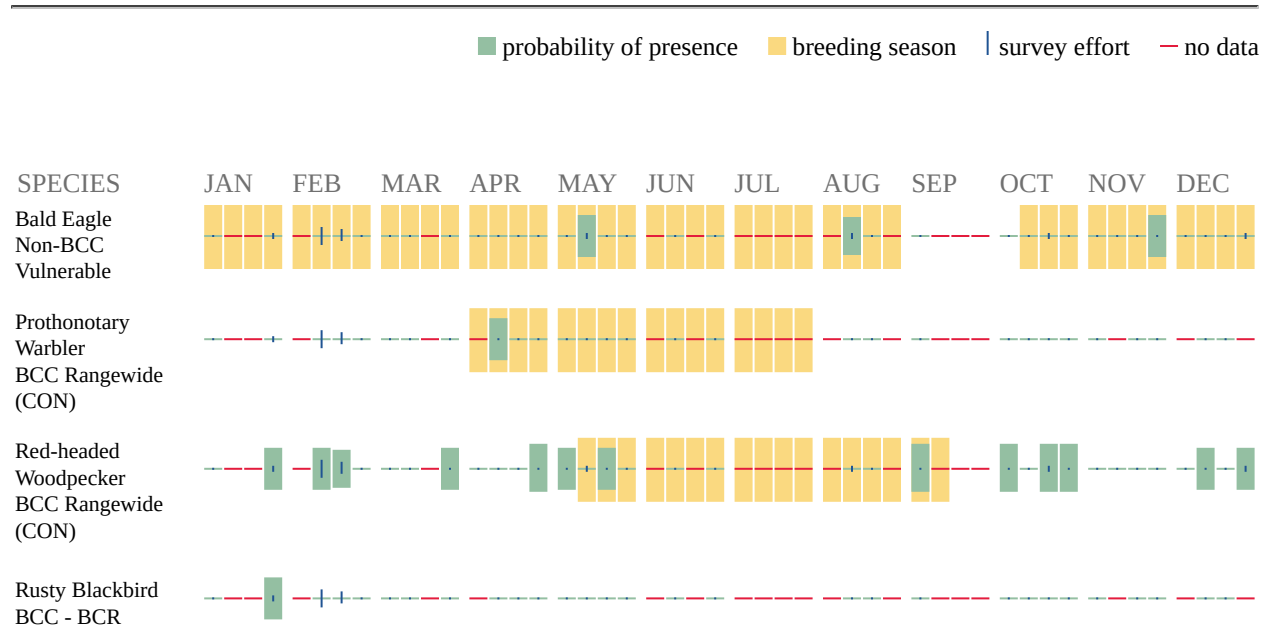
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in

the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### **What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

---

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

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certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- [Riverine](#)
-



## **IPaC User Contact Information**

Agency: Oklahoma Department of Transportation  
Name: Julianne Whitaker  
Address: 11600 Broadway Extension, Suite 300  
City: Oklahoma City  
State: OK  
Zip: 73114  
Email: [jwhitaker@olsson.com](mailto:jwhitaker@olsson.com)  
Phone: 4057408912

## **Lead Agency Contact Information**

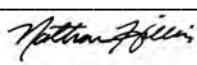
Lead Agency: Federal Highway Administration

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## APPENDIX D: Bridge/Structure Bat Assessment Form

### Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat<sup>1</sup> (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**

| Date & Time of Assessment | DOT Project #                                  | Route/Facility Carried                                                                                                                                                                                                              | County |
|---------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Federal Structure ID      | Structure Coordinates (latitude and longitude) | <input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat <sup>2</sup><br>Name: _____<br>Signature:  _____ |        |

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

<sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

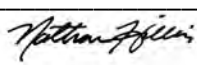
<sup>2</sup> This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

|                                                                                                                                                                               |  |                                                       |  |                                                     |  |                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------|--|
| <b>Date &amp; Time of Assessment</b>                                                                                                                                          |  | <b>DOT Project Number</b>                             |  | <b>Route/Facility Carried</b>                       |  | <b>County</b>                                            |  |
| <b>Federal Structure ID</b>                                                                                                                                                   |  | <b>Structure Coordinates (latitude and longitude)</b> |  | <b>Structure Height (approximate)</b>               |  | <b>Structure Length</b>                                  |  |
| <b>Structure Type (check one)</b>                                                                                                                                             |  |                                                       |  | <b>Structure Material (check all that apply)</b>    |  |                                                          |  |
| <b>Bridge Construction Style</b>                                                                                                                                              |  |                                                       |  | <b>Deck Material</b>                                |  | <b>Beam Material</b>                                     |  |
| Cast-in-place                                                                                                                                                                 |  | Pre-stressed Girder                                   |  | Metal                                               |  | None                                                     |  |
| Flat Slab/Box                                                                                                                                                                 |  | Steel I-beam                                          |  | Concrete                                            |  | Concrete                                                 |  |
| Truss                                                                                                                                                                         |  | Covered                                               |  | Timber                                              |  | Steel                                                    |  |
| Parallel Box Beam                                                                                                                                                             |  | Other:                                                |  | Open grid                                           |  | Timber                                                   |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  | Other:                                                   |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | <b>Creosote Evidence</b>                                 |  |
|                                                                                                                                                                               |  |                                                       |  | <b>Culvert Material</b>                             |  | Yes <input type="checkbox"/> No <input type="checkbox"/> |  |
|                                                                                                                                                                               |  |                                                       |  | Metal                                               |  | Unknown                                                  |  |
|                                                                                                                                                                               |  |                                                       |  | Concrete                                            |  | <b>Notes:</b>                                            |  |
|                                                                                                                                                                               |  |                                                       |  | Plastic                                             |  |                                                          |  |
|                                                                                                                                                                               |  |                                                       |  | Stone/Masonry                                       |  |                                                          |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  |                                                          |  |
| <b>Culvert Type</b>                                                                                                                                                           |  |                                                       |  | <b>Other Structure</b>                              |  |                                                          |  |
| Box                                                                                                                                                                           |  |                                                       |  |                                                     |  |                                                          |  |
| Pipe/Round                                                                                                                                                                    |  |                                                       |  |                                                     |  |                                                          |  |
| Other:                                                                                                                                                                        |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Crossings Traversed (check all that apply)</b>                                                                                                                             |  |                                                       |  | <b>Surrounding Habitat (check all that apply)</b>   |  |                                                          |  |
| Bare ground                                                                                                                                                                   |  | Open vegetation                                       |  | Agricultural                                        |  | Grassland                                                |  |
| Rip-rap                                                                                                                                                                       |  | Closed vegetation                                     |  | Commercial                                          |  | Ranching                                                 |  |
| Flowing water                                                                                                                                                                 |  | Railroad                                              |  | Residential-urban                                   |  | Riparian/wetland                                         |  |
| Standing water                                                                                                                                                                |  | Road/trail - Type:                                    |  | Residential-rural                                   |  | Mixed use                                                |  |
| Seasonal water                                                                                                                                                                |  | Other:                                                |  | Woodland/forested                                   |  | Other:                                                   |  |
| <b>Areas Assessed (check all that apply)</b>                                                                                                                                  |  |                                                       |  |                                                     |  |                                                          |  |
| 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.                              |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Area (check if assessed)</b>                                                                                                                                               |  | <b>Assessment Notes</b>                               |  | <b>Evidence of Bats (include photos if present)</b> |  |                                                          |  |
| <input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Concrete surfaces (open roosting on concrete)                                                                                                        |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between concrete end walls and the bridge deck                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Crack between concrete railings on top of the bridge deck                                                                                            |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Vertical surfaces on concrete I-beams                                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between walls, ceiling joists                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes                                                                                                         |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All guiderails                                                                                                                                       |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All expansion joints                                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| Name:                                                                                                                                                                         |  |                                                       |  | Signature:                                          |  |                                                          |  |

## APPENDIX D: Bridge/Structure Bat Assessment Form

### Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat<sup>1</sup> (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**

| Date & Time of Assessment | DOT Project #                                  | Route/Facility Carried                                                                                                                                                                                                              | County |
|---------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Federal Structure ID      | Structure Coordinates (latitude and longitude) | <input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat <sup>2</sup><br>Name: _____<br>Signature:  _____ |        |

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

<sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

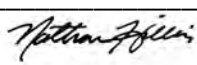
<sup>2</sup> This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

|                                                                                                                                                                               |  |                                                       |  |                                                     |  |                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------|--|
| <b>Date &amp; Time of Assessment</b>                                                                                                                                          |  | <b>DOT Project Number</b>                             |  | <b>Route/Facility Carried</b>                       |  | <b>County</b>                                            |  |
| <b>Federal Structure ID</b>                                                                                                                                                   |  | <b>Structure Coordinates (latitude and longitude)</b> |  | <b>Structure Height (approximate)</b>               |  | <b>Structure Length</b>                                  |  |
| <b>Structure Type (check one)</b>                                                                                                                                             |  |                                                       |  | <b>Structure Material (check all that apply)</b>    |  |                                                          |  |
| <b>Bridge Construction Style</b>                                                                                                                                              |  |                                                       |  | <b>Deck Material</b>                                |  | <b>Beam Material</b>                                     |  |
| Cast-in-place                                                                                                                                                                 |  | Pre-stressed Girder                                   |  | Metal                                               |  | None                                                     |  |
| Flat Slab/Box                                                                                                                                                                 |  | Steel I-beam                                          |  | Concrete                                            |  | Concrete                                                 |  |
| Truss                                                                                                                                                                         |  | Covered                                               |  | Timber                                              |  | Steel                                                    |  |
| Parallel Box Beam                                                                                                                                                             |  | Other:                                                |  | Open grid                                           |  | Timber                                                   |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  | Other:                                                   |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | <b>Creosote Evidence</b>                                 |  |
|                                                                                                                                                                               |  |                                                       |  | <b>Culvert Material</b>                             |  | Yes <input type="checkbox"/> No <input type="checkbox"/> |  |
|                                                                                                                                                                               |  |                                                       |  | Metal                                               |  | Unknown                                                  |  |
|                                                                                                                                                                               |  |                                                       |  | Concrete                                            |  | <b>Notes:</b>                                            |  |
| <b>Culvert Type</b>                                                                                                                                                           |  |                                                       |  | <b>Other Structure</b>                              |  |                                                          |  |
| Box                                                                                                                                                                           |  |                                                       |  |                                                     |  |                                                          |  |
| Pipe/Round                                                                                                                                                                    |  |                                                       |  |                                                     |  |                                                          |  |
| Other:                                                                                                                                                                        |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Crossings Traversed (check all that apply)</b>                                                                                                                             |  |                                                       |  | <b>Surrounding Habitat (check all that apply)</b>   |  |                                                          |  |
| Bare ground                                                                                                                                                                   |  | Open vegetation                                       |  | Agricultural                                        |  | Grassland                                                |  |
| Rip-rap                                                                                                                                                                       |  | Closed vegetation                                     |  | Commercial                                          |  | Ranching                                                 |  |
| Flowing water                                                                                                                                                                 |  | Railroad                                              |  | Residential-urban                                   |  | Riparian/wetland                                         |  |
| Standing water                                                                                                                                                                |  | Road/trail - Type:                                    |  | Residential-rural                                   |  | Mixed use                                                |  |
| Seasonal water                                                                                                                                                                |  | Other:                                                |  | Woodland/forested                                   |  | Other:                                                   |  |
| <b>Areas Assessed (check all that apply)</b>                                                                                                                                  |  |                                                       |  |                                                     |  |                                                          |  |
| 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.                              |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Area (check if assessed)</b>                                                                                                                                               |  | <b>Assessment Notes</b>                               |  | <b>Evidence of Bats (include photos if present)</b> |  |                                                          |  |
| <input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Concrete surfaces (open roosting on concrete)                                                                                                        |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between concrete end walls and the bridge deck                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Crack between concrete railings on top of the bridge deck                                                                                            |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Vertical surfaces on concrete I-beams                                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between walls, ceiling joists                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes                                                                                                         |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All guiderails                                                                                                                                       |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All expansion joints                                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| Name:                                                                                                                                                                         |  |                                                       |  | Signature:                                          |  |                                                          |  |

## APPENDIX D: Bridge/Structure Bat Assessment Form

### Bridge/Structure Bat Assessment Form Instructions

- This form will be completed to document bat occupancy or bat use of bridges, culverts, and other structures. This form shall be submitted to the appropriate personnel within the DOT and USFWS for recordkeeping (or uploaded into the Information, Planning, and Consultation (IPaC) Determination Key for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat) prior to conducting: any activities below the deck surface either from the underside or from above the deck surface that bore down to the underside; any activities that could impact expansion joints; any activities involving deck removal on bridges; or any activities involving structure demolition for bridges, culverts, and/or other structures.
- Assessments must be completed within two (2) years of conducting any work (see the above bullet), regardless of whether assessments have been conducted in the past. Assessments must be completed in appropriate weather conditions, suitable for the assessor to observe common signs of bat use.
- Evidence of bat use may include visual observation (live and/or dead), presence of guano, presence of staining, audible observation, and/or odor observation. Presence of one or more indicators is sufficient evidence that bats may be using the bridge, culvert, and/or other structure.
- If bat use of a bridge, culvert, and/or other structure is noted, additional studies may be undertaken during bat active season to identify the specific bat species utilizing the structure, or protected bat species presence can be assumed, in order to comply with threatened and endangered species regulations. Bat active season dates, typically between April and November, vary regionally and by species, so assessors should consult with their local USFWS Field Office for more specific active season dates.
- For use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat – If the bridge/structure is 1,000 feet or more from suitable bat habitat<sup>1</sup> (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check the appropriate box and fill out the table below. **No further assessment is required.**

| Date & Time of Assessment | DOT Project #                                  | Route/Facility Carried                                                                                                                                                                                                              | County |
|---------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Federal Structure ID      | Structure Coordinates (latitude and longitude) | <input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat <sup>2</sup><br>Name: _____<br>Signature:  _____ |        |

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

<sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

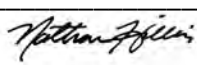
<sup>2</sup> This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

|                                                                                                                                                                               |  |                                                       |  |                                                     |  |                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------|--|
| <b>Date &amp; Time of Assessment</b>                                                                                                                                          |  | <b>DOT Project Number</b>                             |  | <b>Route/Facility Carried</b>                       |  | <b>County</b>                                            |  |
| <b>Federal Structure ID</b>                                                                                                                                                   |  | <b>Structure Coordinates (latitude and longitude)</b> |  | <b>Structure Height (approximate)</b>               |  | <b>Structure Length</b>                                  |  |
| <b>Structure Type (check one)</b>                                                                                                                                             |  |                                                       |  | <b>Structure Material (check all that apply)</b>    |  |                                                          |  |
| <b>Bridge Construction Style</b>                                                                                                                                              |  |                                                       |  | <b>Deck Material</b>                                |  | <b>Beam Material</b>                                     |  |
| Cast-in-place                                                                                                                                                                 |  | Pre-stressed Girder                                   |  | Metal                                               |  | None                                                     |  |
| Flat Slab/Box                                                                                                                                                                 |  | Steel I-beam                                          |  | Concrete                                            |  | Concrete                                                 |  |
| Truss                                                                                                                                                                         |  | Covered                                               |  | Timber                                              |  | Steel                                                    |  |
| Parallel Box Beam                                                                                                                                                             |  | Other:                                                |  | Open grid                                           |  | Timber                                                   |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  | Other:                                                   |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | <b>Creosote Evidence</b>                                 |  |
|                                                                                                                                                                               |  |                                                       |  | <b>Culvert Material</b>                             |  | Yes <input type="checkbox"/> No <input type="checkbox"/> |  |
|                                                                                                                                                                               |  |                                                       |  | Metal                                               |  | Unknown                                                  |  |
|                                                                                                                                                                               |  |                                                       |  | Concrete                                            |  | <b>Notes:</b>                                            |  |
| <b>Culvert Type</b>                                                                                                                                                           |  |                                                       |  | Other Structure                                     |  |                                                          |  |
| Box                                                                                                                                                                           |  |                                                       |  |                                                     |  |                                                          |  |
| Pipe/Round                                                                                                                                                                    |  |                                                       |  |                                                     |  |                                                          |  |
| Other:                                                                                                                                                                        |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Crossings Traversed (check all that apply)</b>                                                                                                                             |  |                                                       |  | <b>Surrounding Habitat (check all that apply)</b>   |  |                                                          |  |
| Bare ground                                                                                                                                                                   |  | Open vegetation                                       |  | Agricultural                                        |  | Grassland                                                |  |
| Rip-rap                                                                                                                                                                       |  | Closed vegetation                                     |  | Commercial                                          |  | Ranching                                                 |  |
| Flowing water                                                                                                                                                                 |  | Railroad                                              |  | Residential-urban                                   |  | Riparian/wetland                                         |  |
| Standing water                                                                                                                                                                |  | Road/trail - Type:                                    |  | Residential-rural                                   |  | Mixed use                                                |  |
| Seasonal water                                                                                                                                                                |  | Other:                                                |  | Woodland/forested                                   |  | Other:                                                   |  |
| <b>Areas Assessed (check all that apply)</b>                                                                                                                                  |  |                                                       |  |                                                     |  |                                                          |  |
| 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.                              |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Area (check if assessed)</b>                                                                                                                                               |  | <b>Assessment Notes</b>                               |  | <b>Evidence of Bats (include photos if present)</b> |  |                                                          |  |
| <input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Concrete surfaces (open roosting on concrete)                                                                                                        |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between concrete end walls and the bridge deck                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Crack between concrete railings on top of the bridge deck                                                                                            |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Vertical surfaces on concrete I-beams                                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between walls, ceiling joists                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes                                                                                                         |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All guiderails                                                                                                                                       |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All expansion joints                                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| Name:                                                                                                                                                                         |  |                                                       |  | Signature:                                          |  |                                                          |  |

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| Date & Time of Assessment | DOT Project #                                  | Route/Facility Carried                                                                                                                                                                                                              | County |
|---------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Federal Structure ID      | Structure Coordinates (latitude and longitude) | <input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat <sup>2</sup><br>Name: _____<br>Signature:  _____ |        |

- Any questions pertaining to assessments or this form should be directed to the local USFWS Field Office.

<sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

<sup>2</sup> This condition is only for use of the Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat

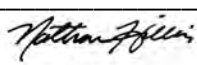


|                                                                                                                                                                               |  |                                                       |  |                                                     |  |                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------|--|
| <b>Date &amp; Time of Assessment</b>                                                                                                                                          |  | <b>DOT Project Number</b>                             |  | <b>Route/Facility Carried</b>                       |  | <b>County</b>                                            |  |
| <b>Federal Structure ID</b>                                                                                                                                                   |  | <b>Structure Coordinates (latitude and longitude)</b> |  | <b>Structure Height (approximate)</b>               |  | <b>Structure Length</b>                                  |  |
| <b>Structure Type (check one)</b>                                                                                                                                             |  |                                                       |  | <b>Structure Material (check all that apply)</b>    |  |                                                          |  |
| <b>Bridge Construction Style</b>                                                                                                                                              |  |                                                       |  | <b>Deck Material</b>                                |  | <b>Beam Material</b>                                     |  |
| Cast-in-place                                                                                                                                                                 |  | Pre-stressed Girder                                   |  | Metal                                               |  | None                                                     |  |
| Flat Slab/Box                                                                                                                                                                 |  | Steel I-beam                                          |  | Concrete                                            |  | Concrete                                                 |  |
| Truss                                                                                                                                                                         |  | Covered                                               |  | Timber                                              |  | Steel                                                    |  |
| Parallel Box Beam                                                                                                                                                             |  | Other:                                                |  | Open grid                                           |  | Timber                                                   |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  | Other:                                                   |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | <b>Creosote Evidence</b>                                 |  |
|                                                                                                                                                                               |  |                                                       |  | <b>Culvert Material</b>                             |  | Yes <input type="checkbox"/> No <input type="checkbox"/> |  |
| <b>Culvert Type</b>                                                                                                                                                           |  |                                                       |  | Metal                                               |  | Unknown                                                  |  |
| Box                                                                                                                                                                           |  | Other Structure                                       |  | Concrete                                            |  | <b>Notes:</b>                                            |  |
| Pipe/Round                                                                                                                                                                    |  |                                                       |  | Plastic                                             |  |                                                          |  |
| Other:                                                                                                                                                                        |  |                                                       |  | Stone/Masonry                                       |  |                                                          |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  |                                                          |  |
| <b>Crossings Traversed (check all that apply)</b>                                                                                                                             |  |                                                       |  | <b>Surrounding Habitat (check all that apply)</b>   |  |                                                          |  |
| Bare ground                                                                                                                                                                   |  | Open vegetation                                       |  | Agricultural                                        |  | Grassland                                                |  |
| Rip-rap                                                                                                                                                                       |  | Closed vegetation                                     |  | Commercial                                          |  | Ranching                                                 |  |
| Flowing water                                                                                                                                                                 |  | Railroad                                              |  | Residential-urban                                   |  | Riparian/wetland                                         |  |
| Standing water                                                                                                                                                                |  | Road/trail - Type:                                    |  | Residential-rural                                   |  | Mixed use                                                |  |
| Seasonal water                                                                                                                                                                |  | Other:                                                |  | Woodland/forested                                   |  | Other:                                                   |  |
| <b>Areas Assessed (check all that apply)</b>                                                                                                                                  |  |                                                       |  |                                                     |  |                                                          |  |
| 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.                              |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Area (check if assessed)</b>                                                                                                                                               |  | <b>Assessment Notes</b>                               |  | <b>Evidence of Bats (include photos if present)</b> |  |                                                          |  |
| <input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Concrete surfaces (open roosting on concrete)                                                                                                        |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between concrete end walls and the bridge deck                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Crack between concrete railings on top of the bridge deck                                                                                            |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Vertical surfaces on concrete I-beams                                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between walls, ceiling joists                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes                                                                                                         |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All guiderails                                                                                                                                       |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All expansion joints                                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| Name:                                                                                                                                                                         |  |                                                       |  | Signature:                                          |  |                                                          |  |

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| Date & Time of Assessment | DOT Project #                                  | Route/Facility Carried                                                                                                                                                                                                              | County |
|---------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Federal Structure ID      | Structure Coordinates (latitude and longitude) | <input type="checkbox"/> This bridge/structure is 1,000 feet or more from suitable bat habitat <sup>2</sup><br>Name: _____<br>Signature:  _____ |        |

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<sup>1</sup> Refer to the USFWS's summer survey guidance for the definition of suitable habitat (<http://www.fws.gov/midwest/endangered/mammals/inba/inbasummersurveyguidance.html>).

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|                                                                                                                                                                               |  |                                                       |  |                                                     |  |                                                          |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|-----------------------------------------------------|--|----------------------------------------------------------|--|
| <b>Date &amp; Time of Assessment</b>                                                                                                                                          |  | <b>DOT Project Number</b>                             |  | <b>Route/Facility Carried</b>                       |  | <b>County</b>                                            |  |
| <b>Federal Structure ID</b>                                                                                                                                                   |  | <b>Structure Coordinates (latitude and longitude)</b> |  | <b>Structure Height (approximate)</b>               |  | <b>Structure Length</b>                                  |  |
| <b>Structure Type (check one)</b>                                                                                                                                             |  |                                                       |  | <b>Structure Material (check all that apply)</b>    |  |                                                          |  |
| <b>Bridge Construction Style</b>                                                                                                                                              |  |                                                       |  | <b>Deck Material</b>                                |  | <b>Beam Material</b>                                     |  |
| Cast-in-place                                                                                                                                                                 |  | Pre-stressed Girder                                   |  | Metal                                               |  | None                                                     |  |
| Flat Slab/Box                                                                                                                                                                 |  | Steel I-beam                                          |  | Concrete                                            |  | Concrete                                                 |  |
| Truss                                                                                                                                                                         |  | Covered                                               |  | Timber                                              |  | Steel                                                    |  |
| Parallel Box Beam                                                                                                                                                             |  | Other:                                                |  | Open grid                                           |  | Timber                                                   |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  | Other:                                                   |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | <b>Creosote Evidence</b>                                 |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | Yes <input type="checkbox"/> No <input type="checkbox"/> |  |
|                                                                                                                                                                               |  |                                                       |  |                                                     |  | Unknown <input type="checkbox"/>                         |  |
| <b>Culvert Type</b>                                                                                                                                                           |  |                                                       |  | <b>Other Structure</b>                              |  | <b>Notes:</b>                                            |  |
| Box                                                                                                                                                                           |  |                                                       |  | Metal                                               |  |                                                          |  |
| Pipe/Round                                                                                                                                                                    |  |                                                       |  | Concrete                                            |  |                                                          |  |
| Other:                                                                                                                                                                        |  |                                                       |  | Plastic                                             |  |                                                          |  |
|                                                                                                                                                                               |  |                                                       |  | Stone/Masonry                                       |  |                                                          |  |
|                                                                                                                                                                               |  |                                                       |  | Other:                                              |  |                                                          |  |
| <b>Crossings Traversed (check all that apply)</b>                                                                                                                             |  |                                                       |  | <b>Surrounding Habitat (check all that apply)</b>   |  |                                                          |  |
| Bare ground                                                                                                                                                                   |  | Open vegetation                                       |  | Agricultural                                        |  | Grassland                                                |  |
| Rip-rap                                                                                                                                                                       |  | Closed vegetation                                     |  | Commercial                                          |  | Ranching                                                 |  |
| Flowing water                                                                                                                                                                 |  | Railroad                                              |  | Residential-urban                                   |  | Riparian/wetland                                         |  |
| Standing water                                                                                                                                                                |  | Road/trail - Type:                                    |  | Residential-rural                                   |  | Mixed use                                                |  |
| Seasonal water                                                                                                                                                                |  | Other:                                                |  | Woodland/forested                                   |  | Other:                                                   |  |
| <b>Areas Assessed (check all that apply)</b>                                                                                                                                  |  |                                                       |  |                                                     |  |                                                          |  |
| 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.                              |  |                                                       |  |                                                     |  |                                                          |  |
| <b>Area (check if assessed)</b>                                                                                                                                               |  | <b>Assessment Notes</b>                               |  | <b>Evidence of Bats (include photos if present)</b> |  |                                                          |  |
| <input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Concrete surfaces (open roosting on concrete)                                                                                                        |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between concrete end walls and the bridge deck                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Crack between concrete railings on top of the bridge deck                                                                                            |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Vertical surfaces on concrete I-beams                                                                                                                |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Spaces between walls, ceiling joists                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes                                                                                                         |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All guiderails                                                                                                                                       |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| <input type="checkbox"/> All expansion joints                                                                                                                                 |  | Not present                                           |  | Visual - live #      dead #                         |  | Audible <input type="checkbox"/> Species                 |  |
|                                                                                                                                                                               |  |                                                       |  | Guano                                               |  | Odor <input type="checkbox"/>                            |  |
|                                                                                                                                                                               |  |                                                       |  | Staining                                            |  | Photos <input type="checkbox"/>                          |  |
| Name:                                                                                                                                                                         |  |                                                       |  | Signature:                                          |  |                                                          |  |

## WATERS AND WETLANDS EVALUATION REPORT

### For

|                          |         |                                                              |           |                |         |
|--------------------------|---------|--------------------------------------------------------------|-----------|----------------|---------|
| County                   | Mayes   | JP Number                                                    | 33821(04) | Project Number |         |
| Road Number              | SH-412B | Water Body Name                                              |           | Pryor Creek    |         |
| ROW Date                 |         | Let Date                                                     | 11/2023   | Project Length | 6 miles |
| Project General Location |         | 3.5 mi east of Chouteau, along SH-412B from US-412 to SH-69A |           |                |         |
| Project Statement        |         | Pavement Rehabilitation: SH-412B from SH-69A to US-412       |           |                |         |

Prepared for:  
 Oklahoma Department of Transportation  
 Environmental Programs Division  
 200 NE 21<sup>st</sup> Street  
 Oklahoma City, OK 73105

#### Prepared by:

|                     |                               |
|---------------------|-------------------------------|
| Biologist Name      | Nathan Hillis                 |
| Company/Agency Name | Olsson                        |
| Address             | 11600 Broadway Ext.           |
| City, State Zip     | Oklahoma City, Oklahoma 73114 |
| Report Date:        | 5/18/2022; Revised 6/22/2022  |
| Field Date:         | 4/19/2022                     |

**PROJECT OVERVIEW**

| <b>Project Type (Choose one)</b>                             | <b>Check <input checked="" type="checkbox"/></b> |
|--------------------------------------------------------------|--------------------------------------------------|
| Bridge and Approaches or bridge widening/structure extension | <input type="checkbox"/>                         |
| Grade, Drain, Surface and Bridge                             | <input type="checkbox"/>                         |
| Grade, Drain and Surface                                     | <input type="checkbox"/>                         |
| Asphalt Overlay Resurfacing                                  | <input type="checkbox"/>                         |
| Widen and Resurface existing lanes                           | <input type="checkbox"/>                         |
| Pavement Reconstruction or rehabilitation                    | <input checked="" type="checkbox"/>              |
| Bridge Rehabilitation                                        | <input type="checkbox"/>                         |
| Safety Improvements (Cable Barrier, Guardrail, signage)      | <input type="checkbox"/>                         |
| Intersection Modifications                                   | <input type="checkbox"/>                         |
| Safe Routes to School (Describe)                             | <input type="checkbox"/>                         |
| Enhancements (Describe)                                      | <input type="checkbox"/>                         |
| Other (Describe)                                             | <input type="checkbox"/>                         |

Description of the **existing** bridge/roadway

The existing SH-412B roadway has two 12 ft. wide asphalt paved driving lanes and 8 to 10 ft. wide asphalt paved shoulders. The pavement is in poor condition and there are sight distance deficiencies. The current Annual Average Daily Traffic (AADT) is 3,900 vehicles per day (vpd) with a future 20-year AADT still being analyzed. The purpose & need of the project are to correct pavement deficiencies and improve safety.

Description of **proposed** improvements **SPECIFIC TO THIS PROJECT**

The proposed improvement consists of pavement rehabilitation of the existing 12 ft. wide asphalt paved driving lanes and 8 to 10 ft. wide asphalt paved shoulders. All the work will be within the existing pavement lines, with the exception of slight widening for an acceleration lane will occur on the south end of the project, where US-412 ties into the project to allow for turning vehicles from SH-412B going west onto US-412. No roadway size drainage structure or culverts will be extended. The roads will remain open during construction and no new rights-of-way are required.

### Project Environmental Study Footprint

| Project Location                     |                                                                                 | Environmental Study Footprint                                 |         |
|--------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------|---------|
| Section Range & Township             | Lat/Long (NAD 83)                                                               | Dimensions                                                    | Acreage |
| S3, 4, 9, 10, 16, 21, 28, T20N, R19E | -95.2792606, 36.1765756 on the south to<br>-95.2791377, 36.2493868 on the north | 235 ft x 2050 ft along SH-412, and 90 ft x 6 mi along SH-412B | 69.9    |

### Environmental Study Footprint Soils (NRCS Soil Survey Map)

| Map Unit Name | Percent Slope | Drainage Class               | Hydric Rating |    | Description                    |
|---------------|---------------|------------------------------|---------------|----|--------------------------------|
|               |               |                              | YES           | NO |                                |
| <b>BcC</b>    | 1 to 5        | Well Drained                 |               | X  | Bates-Collinsville Complex     |
| <b>CkD</b>    | 1 to 8        | Somewhat Excessively Drained |               | X  | Clarksville Gravelly Silt Loam |
| <b>CoE</b>    | 5 to 30       | Somewhat Excessively Drained |               | X  | Collinsville Loam              |
| <b>DnB</b>    | 1 to 3        | Somewhat Poorly Drained      |               | X  | Dennis Silt Loam               |
| <b>DnC2</b>   | 3 to 5        | Somewhat Poorly Drained      |               | X  | Dennis Silt Loam               |
| <b>HeE</b>    | 5 to 20       | Well Drained                 |               | X  | Hector-Enders Complex          |
| <b>PaA</b>    | 0 to 1        | Somewhat Poorly Drained      |               | X  | Parsons Silt Loam              |
| <b>SaB</b>    | 1 to 3        | Well Drained                 |               | X  | Britwater Silt Loam            |
| <b>TaA</b>    | 0 to 1        | Somewhat Poorly Drained      |               | X  | Taloka Silt Loam               |
| <b>URB</b>    | -             | -                            | -             | -  | Urban Land                     |

### Environmental Study Footprint General Description and Vegetation Present

The environmental study area largely consists of right-of-way, grasslands and upland woodlands. The ROW was maintained and included, eastern redbud (*Cercis canadensis*), henbit deadnettle (*Lamium amplexicaule*), American elm (*Ulmus americana*), Johnsongrass (*Sorghum halepense*), elm (*Ulmus americana*), and Bermuda grass (*Cynodon dactylon*). The upland forests consisted of American elm, greenbrier (*Smilax sp.*), eastern cottonwood (*Populus deltoides*), and rough cocklebur (*Xanthium strumarium*). The grassland consisted of sugar hackberry (*Celtis laevigata*), switchgrass (*Panicum virgatum*), common ragweed (*Ambrosia artemisiifolia*), Johnsongrass and Bermuda grass.

## WATERS AND WETLANDS EVALUATION

### Data Sources Reviewed (list)

| USGS 7.5 minute Quad | NWI Map           | USACE Wetland Regional Supplement | Additional Resources Reviewed |
|----------------------|-------------------|-----------------------------------|-------------------------------|
| Chouteau, OK 2019    | NWI Online Mapper | Great Plains                      | NHD 2019                      |

### Wetlands and Ponds Summary Table

| Field Sites | Type of Wetland or Pond | Cowardin Classification | Potential Jurisdictional Status | Acres within Environmental Study Footprint |
|-------------|-------------------------|-------------------------|---------------------------------|--------------------------------------------|
| NA          | NA                      | NA                      | NA                              | NA                                         |

### Streams and Drainages Summary Table

| Field Sites | Stream Name                  | USGS Mapped Status | Potential Jurisdictional Status | Acres within Environmental Study Footprint | Linear Feet within Environmental Study Footprint |
|-------------|------------------------------|--------------------|---------------------------------|--------------------------------------------|--------------------------------------------------|
| S1          | Tributary to Pryor Creek (1) | Perennial          | Likely                          | 0.05                                       | 95                                               |
| S2          | Tributary to Pryor Creek (2) | Perennial          | Likely                          | 0.12                                       | 97                                               |
| S3          | Tributary to Pryor Creek (3) | Perennial          | Likely                          | 0.10                                       | 103                                              |
| S4          | Tributary to Chouteau Creek  | Perennial          | Likely                          | 0.23                                       | 5010                                             |

S1 – Tributary to Pryor Creek is mapped as a perennial stream that flows east, perpendicular to the project area. The creek has a sandy, gravelly bottom and is between 1 and 3 feet wide and 1 foot deep. The banks are incised. The elevation of the OHWM at the bridge is 604 ft.

S2 – Tributary to Pryor Creek is mapped as a perennial stream that flows east, perpendicular to the project area. The creek has a sandy bottom and is 3 feet wide and 1 foot deep. The banks are incised. The elevation of the OHWM at the bridge is 605 ft.

S3 – Tributary to Pryor Creek is mapped as a perennial stream that flows east, perpendicular to the project area. The creek has a sandy, gravelly bottom and is between 2 and 3 feet wide and 1 foot deep. The banks are incised. The elevation of the OHWM at the bridge is 664ft.

S4 – Tributary to Chouteau Creek is mapped as a perennial stream that flows east, perpendicular to the project area. The creek has a sandy, gravelly bottom and is between 1 and 3 feet wide and 1 foot deep. The elevation of the OHWM at the bridge is 670 ft. The USGS Topographic map shows this stream flowing under Hwy 412B, however the stream appears to have been redirected and now runs along the east side of Hwy 412B.





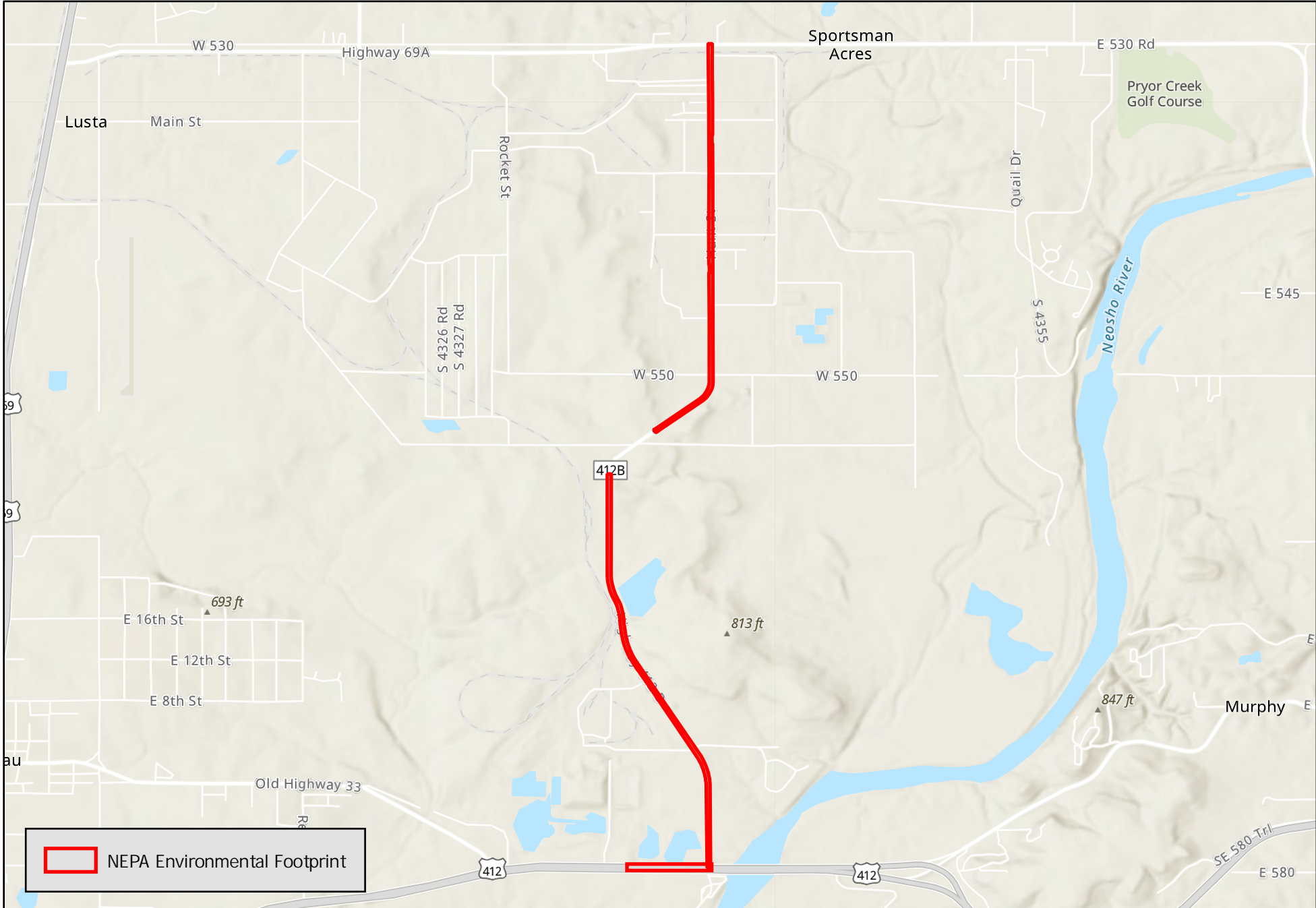
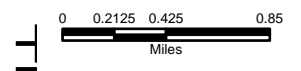
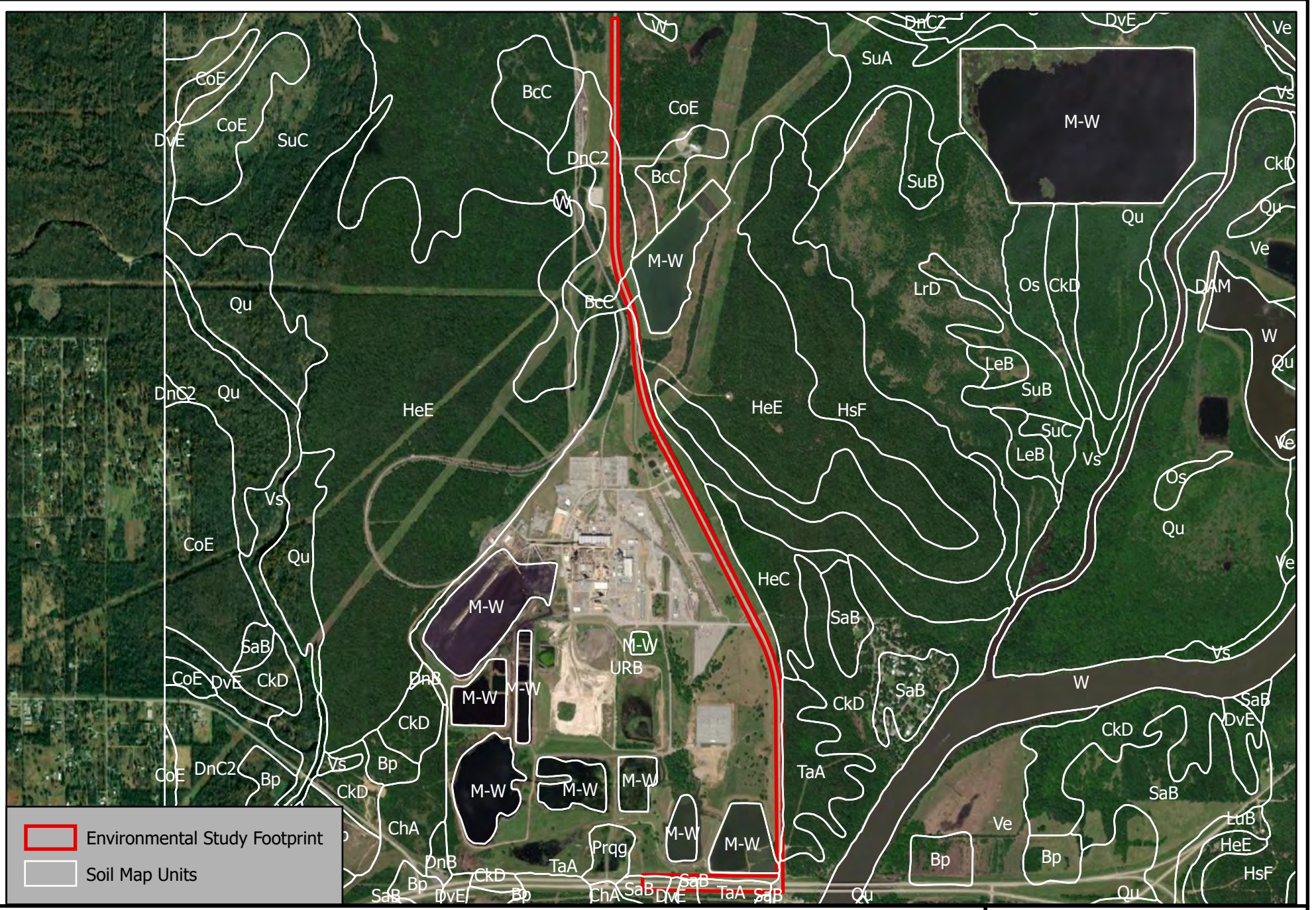


Figure 2.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 USGS Topographic Map





Environmental Study Footprint  
 Soil Map Units

Figure 3a

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B from SH-69A to US-412  
 Soil Map Units


N  
  
 0 470 940 1,880  
 Feet



Figure 3b

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B from SH-69A to US-412  
 Soil Map Units



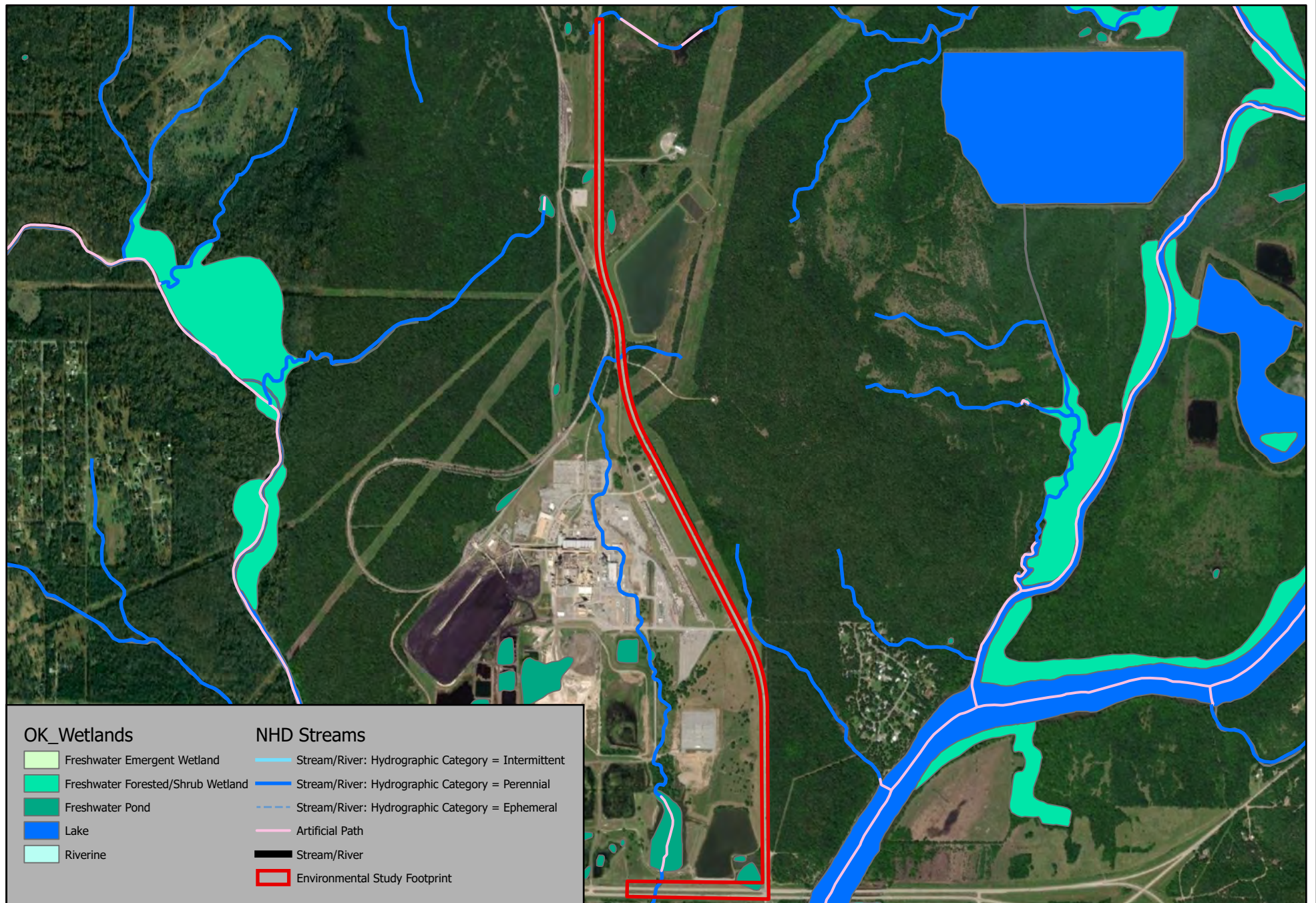
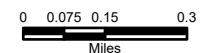


Figure 4a

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B from SH-69A to US-412  
 National Hydrography and National Wetland Inventory



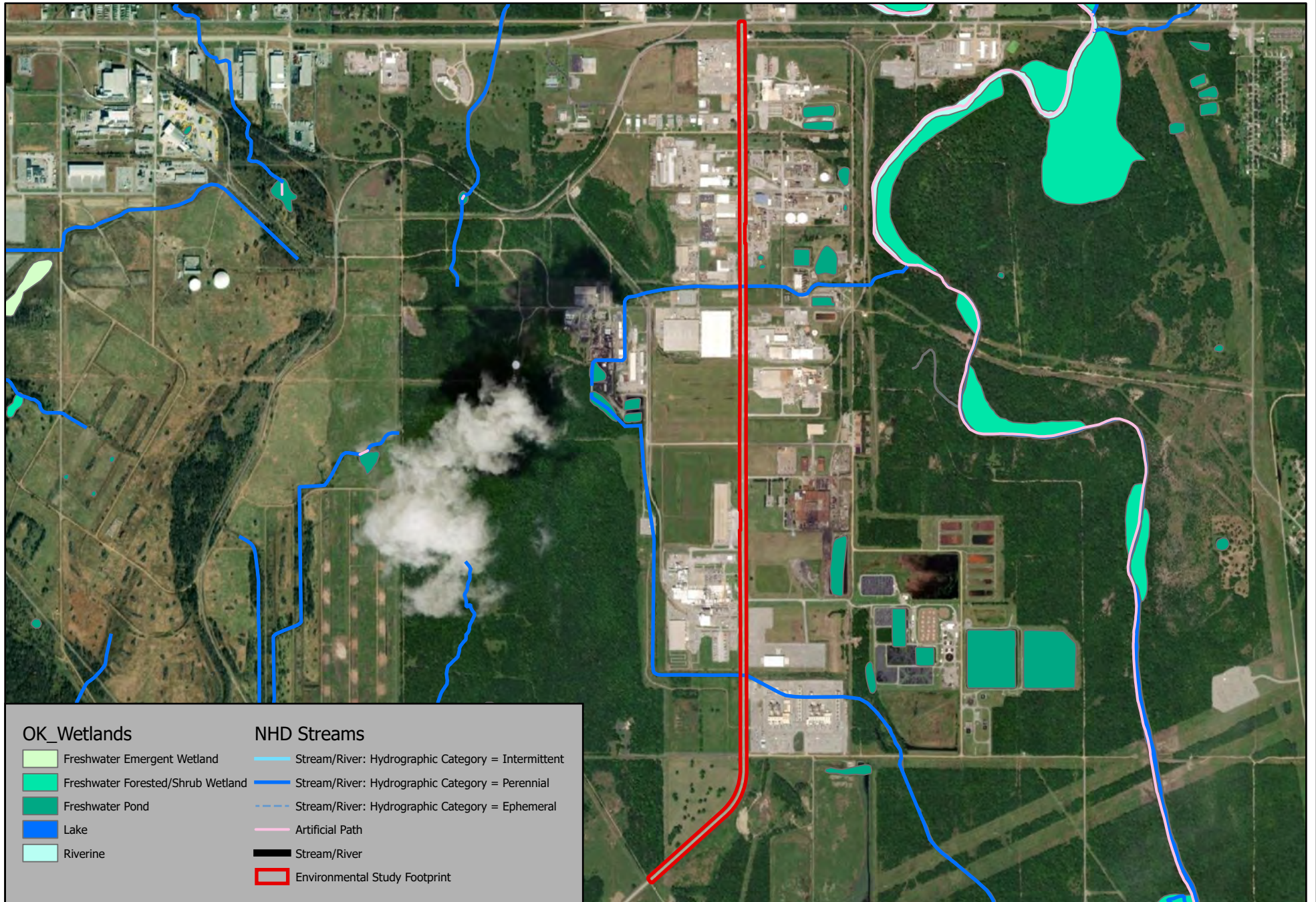


Figure 4b

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B from SH-69A to US-412  
 National Hydrography and National Wetland Inventory

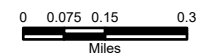
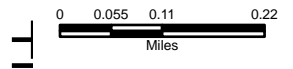




Figure 5a

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Aquatic Resource Map



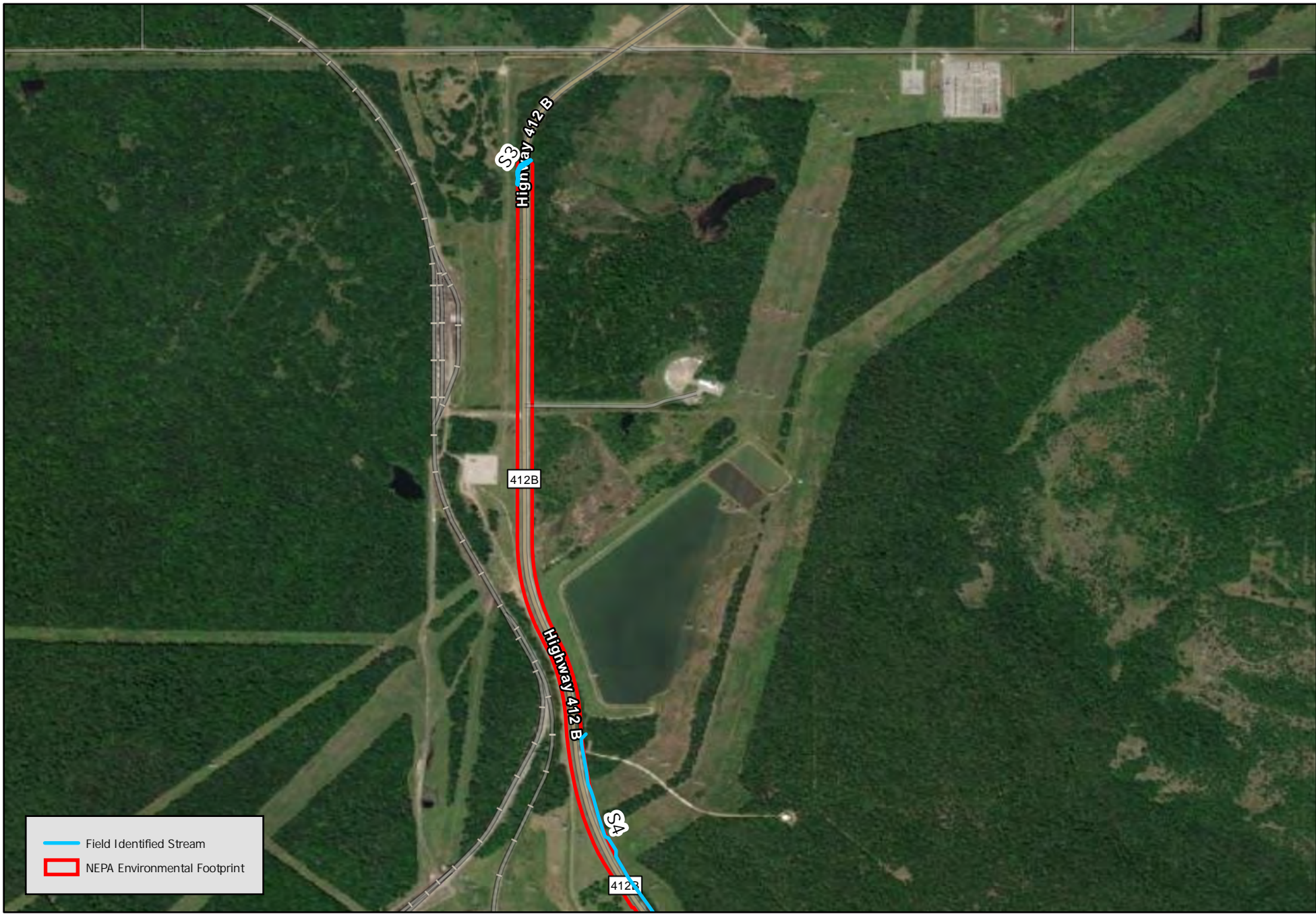


Figure 5b

Mayes County JP 33821(04)  
Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
Aquatic Resource Map

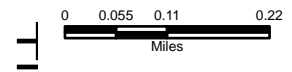
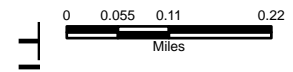


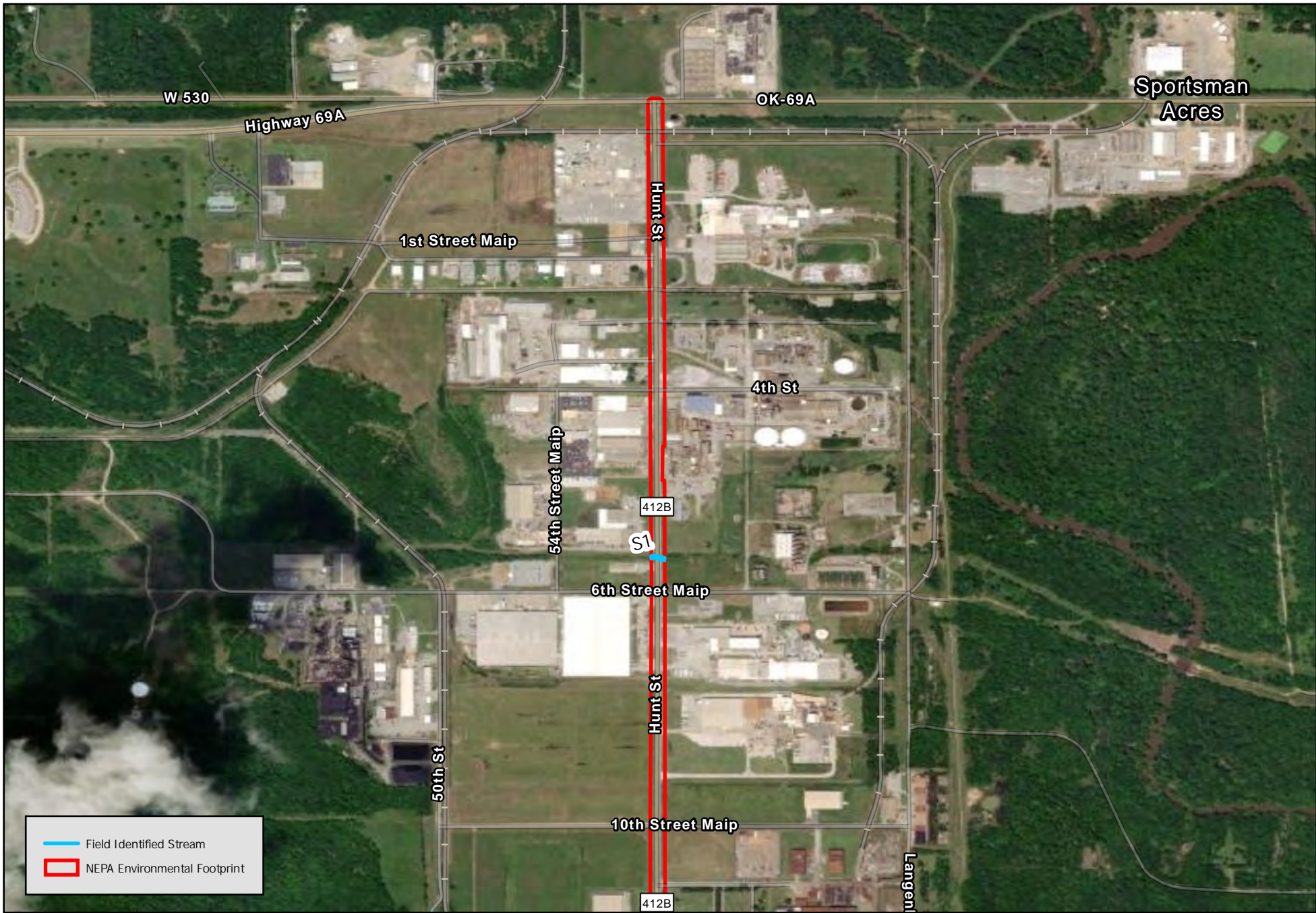




Figure 5c

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Aquatic Resource Map

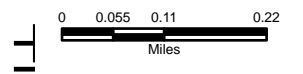




— Field Identified Stream  
 NEPA Environmental Footprint

Figure 5d

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Aquatic Resource Map



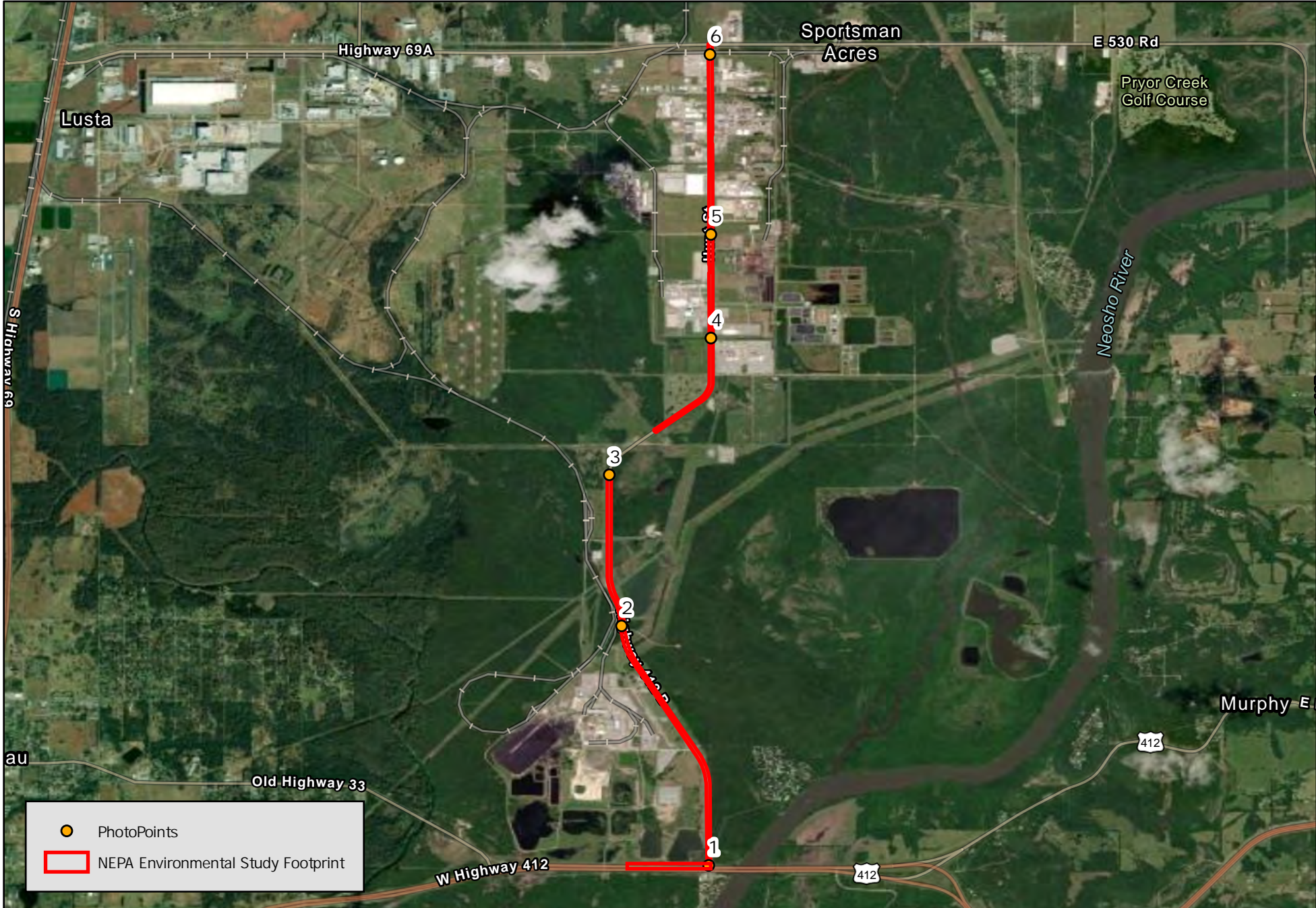
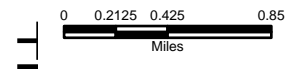


Figure 6.

Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Photo Location Map





1. P1 Looking east



2. P2 looking west



3. P1 looking south.



4. P2 looking north



5. P2 Looking east



6. P2 looking south



7. P2 Looking west



8. P3 looking east



9. P3 looking south



10. P3 looking north



11. P4 looking north



12. P4 looking east



13. P4 looking west



14. P4 looking south



15. P5 looking north



16. P5 looking east



17. P5 looking south



18. P5 looking west

# **N R C S COORDINATION**

**The action occurs within existing right-of-way or in an urban area. Hence, the project will not affect any farmlands and does not require coordination with NRCS.**



# **HAZARDOUS MATERIALS**

# OKLAHOMA DEPARTMENT OF TRANSPORTATION CONSULTANT REPORT REVIEW – HAZARDOUS WASTE

**Reviewed By:** Evan Mace  
**Review Date:** 7/26/2022  
**Consultant:** Olsson

**County:** Mayes  
**J/P Number:** 33821(04)

---

**1. PROJECT DESCRIPTION:** Pavement Rehabilitation: SH-412B from SH-69A to US-412

**2. LEVEL OF INVESTIGATION:**     Recon                       Assessment                       Sampling

### 3. SUMMARY OF INVESTIGATION

- A. Relative risk of contamination in study footprint:     Low     Moderate     High  
B. Potential for contamination, if present, to affect project:  Low     Moderate     High  
C. Did Consultant recommend additional work?     No     Yes (describe below):

### 4. RECOMMENDATIONS\*:

- Approval to Proceed (No Further Action)
- Approval to Proceed, Pending:
  - Avoidance of described site(s)
  - Plan Notes regarding described site(s) (See Section 5)
  - Additional investigation by ODOT
- Approval NOT Recommended

\* - If different from Consultant, explain in Section 6 General Comments

**5. PLAN NOTES:** None needed.

**6. GENERAL COMMENTS:** An ISA was performed by Olsson in June 2022 which identified numerous sites along the project corridor. All sites were determined not to be RECs to the project based on their distance from the project and the scope of work being performed (pavement rehab). The project corridor is located in an industrialized area; therefore, the possibility of encountering contamination exists. ODOT Standard Specification 107.15 is always in effect and describes procedures in case contamination is encountered.

**ATTACH EXCERPTS FROM REPORT, AS APPROPRIATE.\***

\*The full document is on file with ODOT's Environmental Programs Division. Please contact David Edwards at (405) 521-2673 or [daedwards@odot.org](mailto:daedwards@odot.org) for more information.

# INITIAL SITE ASSESSMENT

State Highway (SH) 412B: Pavement Rehabilitation  
Mayes County, Oklahoma

**Prepared for:**

Oklahoma Department of Transportation  
200 NE 21st Street  
Oklahoma City, Oklahoma 73105

**Prepared by:**

Olsson  
11600 Broadway Extension, Suite 300  
Oklahoma City, Oklahoma 73114

Author: Nathan Hillis

Phone: 405.242.6600

ODOT JP: 33821(04)

Olsson Project No 020-1030

June 2022



## SUMMARY

The Oklahoma Department of Transportation (ODOT) retained Olsson to perform an Initial Site Assessment (ISA) for SH-412B: Pavement Rehabilitation in Mayes County, Oklahoma (hereinafter referred to as the Project and shown on Figure 1 in Appendix A). Olsson performed this ISA in conformance with the scope and limitations of the ODOT Hazardous Waste Scope of Services. A summary of the ISA findings, which is based on a review of historical records, regulatory databases, site reconnaissance, and interviews, is as follows:

No recognized environmental conditions or de minimis conditions were identified during the ISA. This project has a low risk of encountering hazardous waste-related conditions.

This report must be read in its entirety to develop a comprehensive understanding of the ISA information process.

## 6. EVALUATION

The following paragraphs summarize the findings, opinions, and conclusions of the ISA. Olsson has evaluated the provided information for significant data gaps that, if present, are discussed in their respective report sections.

### **Subject Property Physical Setting**

The Subject Property includes a portion SH-412B between SH-412 and SH-69A and associated ROW adjacent to the roadways. The Subject Property slopes generally to the east along the northern half and to the west for the southern half.

### **Historical Resources Review**

Topographic maps, aerial photographs, city directories, and Sanborn Maps were reviewed to identify past uses of the Subject Property and adjoining properties and to identify conditions that could represent RECs in association with the Subject Property. No conditions that represent RECs were identified during the review.

### **Regulatory Database Review**

The regulatory database review identified seven database listings within the prescribed ASTM E1527-21 search radii. No RECs were identified. Database findings were identified in the previous sections.

### **Site Reconnaissance**

Olsson performed a site visit on April 21, 2022. No notable features were identified during Olsson's site reconnaissance.

### **Interviews**

Olsson did not conduct interviews with Subject Property owner representatives or the current Property owner. Olsson did contact the Pryor Fire Department May 23, 2022. Based on this interview, no REC or concerns were identified.

### **Conclusions**

No RECs were identified at the Project or on adjacent areas (Table 8, Appendix A Figure 3).

**Table 8. Potential Environmental Hazards**

| Map ID | Business | Address | Type of Operation | Active / Closed | Environmental Concerns | Potential Constituents | Comments | Position Relative to ROW | Relative Elevation | Expected GW Flow Dir. | Level of Concern |
|--------|----------|---------|-------------------|-----------------|------------------------|------------------------|----------|--------------------------|--------------------|-----------------------|------------------|
| 1      | NA       | NA      | NA                | NA              | NA                     | NA                     | NA       | NA                       | NA                 | NA                    | NA               |

Tier I screening for VECs, as defined by the U.S. Environmental Protection Agency (EPA), is based on the open presence (not contained) of volatile COCs within 0.33 mile of the Property, or the presence of petroleum products within 0.10 mile of the Property. The relationship of the VEC can be a direct source of the COC (a spill or release site), or a plume of the COC that has migrated into the area of the Property. If the Tier I screening indicates that a VEC is present or is likely present, or if a VEC cannot be ruled out, then a Tier II VEC assessment may be appropriate, including a non-invasive investigation of existing data sources of known contamination sources and/or plumes, and if necessary, subsurface sampling. If subsurface conditions are not conducive to vapor migration (a source has been cleaned up, the COC has a low vapor constant, a barrier exists, or the subsurface soil or fill material is impermeable, or nearly impermeable), or if a potential VEC is beyond a critical distance (typically 100 feet) down gradient of the Property, then the VEC can be ruled out.

No potential VECs were identified.

Olsson has performed this ISA in conformance with the consultant request for task order approval and the approved notice to proceed, dated August 23, 2021, and the ODOT Hazardous Waste Scope of Services for SH-412B: From SH-412 to SH-69A in Mayes County, Oklahoma. Olsson's opinions pertaining to the impact on the Subject Property of the conditions identified and our rationale for concluding whether a condition is or is not a REC is included in the sections of the report where those conditions were originally discussed.

## 7. SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

Olsson conducted this ISA and reviewed all appropriate records made available to Olsson within the performance period of this assessment, conducted Project inspection, and performed an analysis of current and historical information collected during the record search. The information contained within the ISA report, to the best of Olsson’s knowledge, is correct.

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional, as defined in Section 312.10 of 40 Code of Federal Regulations (CFR) 312; and I have the specific qualifications based on education, training, and experience to assess a Project of the nature, history, and setting of the Project. I have developed and performed all appropriate inquiries in conformance with the standards and practice set forth in 40 CFR Part 312.

\_\_\_\_\_  
Nathan Hillis

Environmental Professional

\_\_\_\_\_  
06/09/2022

Date

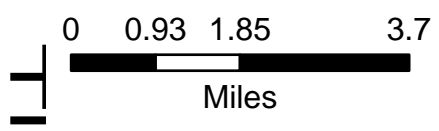


Project Location

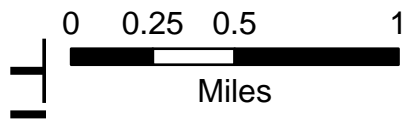
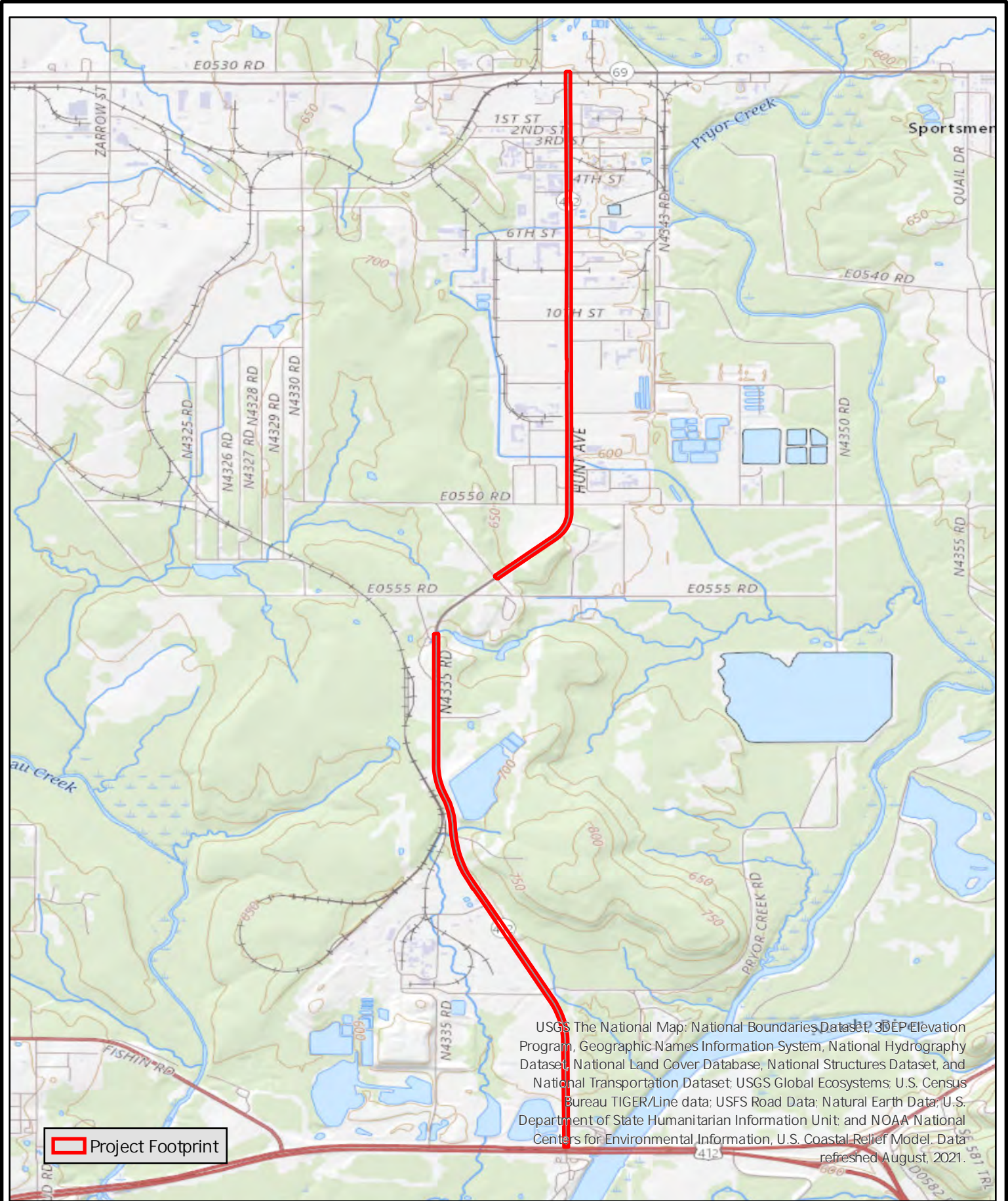


Project Footprint

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021.



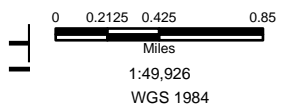
Mayes County JP 33821(04)  
Pavement Rehabilitation: SH-412B from SH-69A to US-412  
Project Location



SH-412B Pavement Rehabilitation  
 Mayes County  
 Topographic Map



PhotoPoints  
 NEPA Environmental Study Footprint



Mayes County JP 33821(04)  
 Pavement Rehabilitation: SH-412B: from SH-69A to US-412 (Phase II)  
 Photo Location Map

**MAIP Phase II**  
MAIP Phase II  
Pryor, OK 74361

Inquiry Number: 6865672.5s  
February 18, 2022

## EDR Area / Corridor Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

MAPPED SITES SUMMARY

Target Property:  
 MAIP PHASE II  
 PRYOR, OK 74361

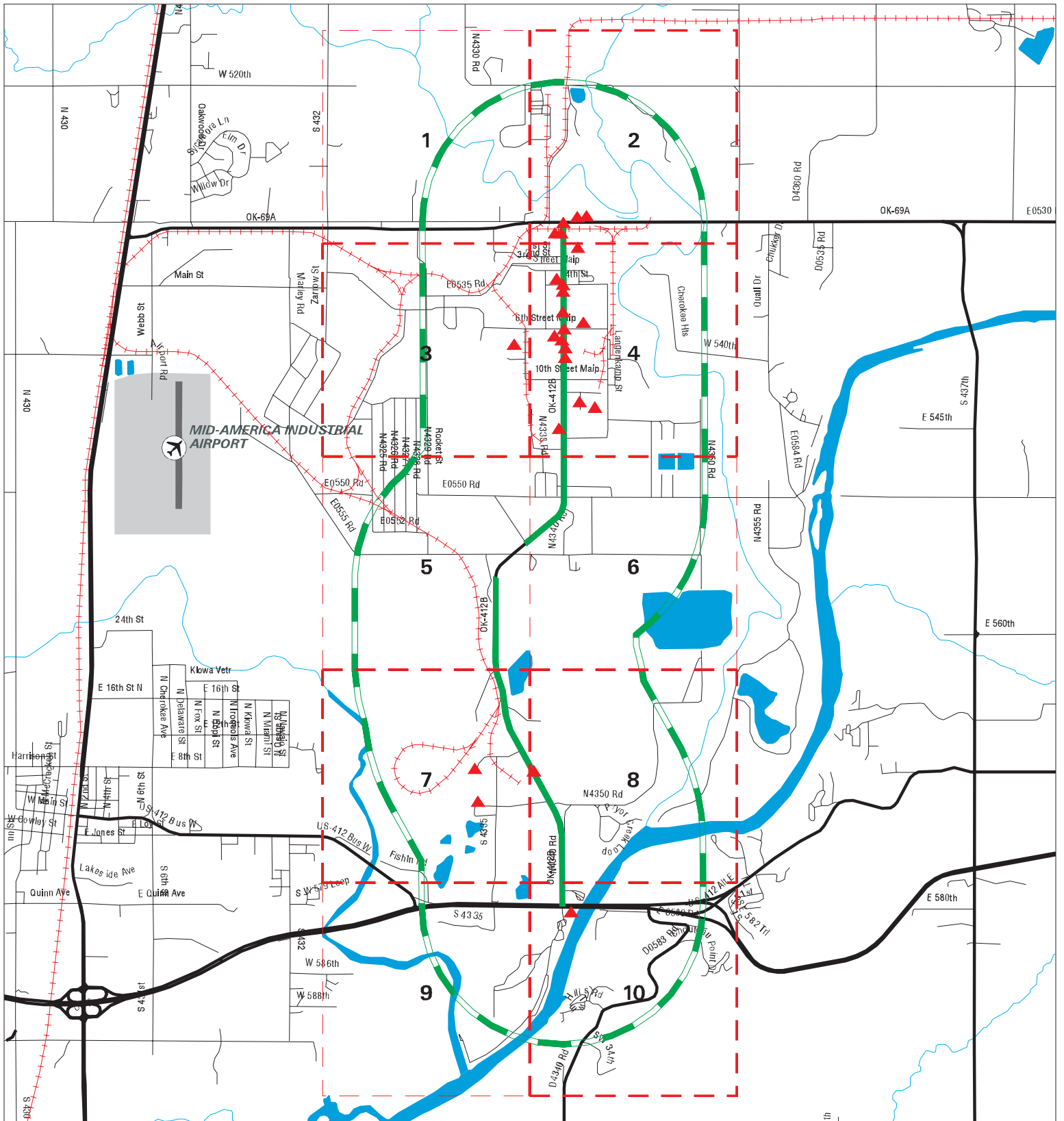
| MAP ID /<br>FOCUS MAP | SITE NAME            | ADDRESS              | DATABASE ACRONYMS                       | DIST (ft. & mi.)<br>DIRECTION |       |      |
|-----------------------|----------------------|----------------------|-----------------------------------------|-------------------------------|-------|------|
| 1 / 2                 | OKLAHOMA ORDNANCE WO | HWY69A & HUNT STREET | SEMS-ARCHIVE                            | TP                            |       |      |
| A2 / 4                | SATURATED FELT PLANT | 4444 HUNT STREET MAI | OK AIRS                                 | TP                            |       |      |
| A3 / 4                | G.A.P. ROOFING INC.  | 4444 HUNT ST. - MAIP | OK TIER 2                               | TP                            |       |      |
| A4 / 4                | APTUS MANUFACTURING  | 4444 HUNT STREET     | OK TIER 2                               | TP                            |       |      |
| A5 / 4                | GAP ROOFING INC      | 4444 HUNT ST         | TRIS                                    | TP                            |       |      |
| A6 / 4                | APTUS MANUFACTURING  | 4444 HUNT ST         | TRIS                                    | TP                            |       |      |
| A7 / 4                | G.A.P. ROOFING, INC. | 4444 HUNT STREET MAI | TX TIER 2                               | TP                            |       |      |
| A8 / 4                | APTUS MANUFACTURING  | 4444 HUNT ST         | ECHO                                    | TP                            |       |      |
| A9 / 4                | GAP ROOFING CO / SAT | 4444 HUNT STREET MAI | ICIS, US AIRS, FINDS, ECHO              | TP                            |       |      |
| A10 / 4               | EPIC MID-AMERICA     | 4TH & HUNT STREET    | OK UST                                  | TP                            |       |      |
| B11 / 4               | RAE CORP / PRYOR PLT | 3 MILES E OF 69 1 MI | RCRA-VSQQ, TRIS, ICIS, US AIRS          | TP                            |       |      |
| B12 / 4               | RAE CORPORATION      | 4492 HUNT STREET     | FINDS                                   | TP                            |       |      |
| B13 / 4               | RAE CORPORATION      | 4492 HUNT STREET     | OK TIER 2                               | TP                            |       |      |
| B14 / 4               | RAE CORPORATION      | 4492 HUNT STREET     | OK TIER 2                               | TP                            |       |      |
| C15 / 4               | HEM INDUSTRIAL COATI | 4644 HUNT ST         | RCRA-SQG                                | TP                            |       |      |
| C16 / 4               | HEM INDUSTRIAL COATI | 4644 HUNT ST         | ECHO                                    | TP                            |       |      |
| C17 / 4               | HEM INDUSTRIAL COATI | 4644 HUNT ST         | FINDS                                   | TP                            |       |      |
| C18 / 4               | HEM, INC. - EAST     | 4684 HUNT ST.        | OK TIER 2                               | TP                            |       |      |
| C19 / 4               | HEM, INC. - EAST     | 4684 HUNT ST.        | OK TIER 2                               | TP                            |       |      |
| C20 / 4               | HEM, INC. - EAST     | 4684 HUNT ST. (412B) | OK TIER 2                               | TP                            |       |      |
| D21 / 4               | RAE CORPORATION      | 5TH & HUNT           | ICIS                                    | TP                            |       |      |
| D22 / 4               | KENNECOTT CORP ACTIV | 6TH & HUNTS          | FINDS, ECHO                             | TP                            |       |      |
| D23 / 4               | CALPINE PRYOR INC    | 886 6TH ST           | RCRA NonGen / NLR                       | TP                            |       |      |
| E24 / 8               | NORDAM JET ENGINE TE | 7225 HIGHWAY 412B    | OK TIER 2                               | TP                            |       |      |
| E25 / 8               | NORDAM JET ENGINE TE | 7225 HIGHWAY 412B    | OK TIER 2                               | TP                            |       |      |
| E26 / 8               | NORDAM JET ENGINE TE | 7225 HWY 412B        | OK AST                                  | TP                            |       |      |
| E27 / 8               | NORDAM GROUP LLC / J | 7225 HWY 412B        | US AIRS, FINDS, ECHO                    | TP                            |       |      |
| F28 / 4               | INTERPLASTIC CORPORA | 5019 HUNT ST MID AME | OK UST, OK AST, OK HIST UST             | 10                            | 0.002 | East |
| F29 / 4               | INTERPLASTIC CORPORA | 5019 HUNT STREET     | RCRA-LQG, ICIS, US AIRS, FINDS, ECHO    | 10                            | 0.002 | East |
| F30 / 4               | INTERPLASTICS        | 5019 HUNT AVE, PRYOR | OK VCP                                  | 10                            | 0.002 | East |
| 31 / 4                | CASCADES TISSUE GROU | 4915 HUNT STREET     | RCRA-VSQQ                               | 12                            | 0.002 | East |
| B32 / 4               | PRYOR CHEMICAL RELEA | 4463 HUNT STREET     | SEMS                                    | 13                            | 0.002 | East |
| B33 / 4               | N-REN CORPORATION CH | MAID NEAR PRYOR P.O. | SEMS-ARCHIVE, RCRA-SQG                  | 13                            | 0.002 | East |
| 34 / 4                | ORCHID PAPER PRODUCT | 4826 HUNT ST         | OK SWRCY                                | 26                            | 0.005 | West |
| 35 / 2                | LIQUID AIR, PRYOR AC | MID AMERICA INDUSTRI | OK UST                                  | 29                            | 0.005 | West |
| 36 / 4                | SOLAE CO LLC/SOY ISO | 5532 HUNT ST         | TRIS, US AIRS, FINDS, ECHO, WI MANIFEST | 133                           | 0.025 | West |
| C37 / 4               | HE&M INC             | ZARRO STREET         | OK UST, OK HIST UST                     | 166                           | 0.031 | West |
| 38 / 4                | POLYGUARD PIPELINE P | 4TH ST               | SEMS-ARCHIVE                            | 219                           | 0.041 | West |
| 39 / 2                | AIR PRODUCTS-PRYOR F | 69 A & HUNT STR, M.A | OK UST, OK HIST UST                     | 265                           | 0.050 | West |

MAPPED SITES SUMMARY

Target Property:  
 MAIP PHASE II  
 PRYOR, OK 74361

| MAP ID /<br>FOCUS MAP | SITE NAME            | ADDRESS              | DATABASE ACRONYMS                           | DIST (ft. & mi.)<br>DIRECTION |
|-----------------------|----------------------|----------------------|---------------------------------------------|-------------------------------|
| G40 / 4               | ATOCHEM NORTH AMERIC | HWY 81 2.75M S       | RCRA NonGen / NLR                           | 316 0.060 West                |
| G41 / 4               | NORIT AMERICAS INC.  | NE/4 NE/4 NW/4 OF S9 | OK SWF/LF, OK Financial Assurance           | 316 0.060 West                |
| 42 / 10               | C & R OIL CO         | HWY 33 MARINA RT 1   | OK UST                                      | 401 0.076 SE                  |
| 43 / 4                | NATIONAL GYPSUM COMP | 4 MI S & 3 1/2 MI E  | SEMS-ARCHIVE                                | 510 0.097 East                |
| 44 / 2                | GEORGIA PACIFIC CORP | ROUTE 69-A           | OK UST, OK HIST UST                         | 535 0.101 ENE                 |
| 45 / 4                | PRYOR FOUNDRY INC.   | P.O. BOX 549; HUNT S | OK SWF/LF, OK UST, OK HIST UST, OK Finan... | 563 0.107 East                |
| H46 / 4               | MID-CONTINENT POWER  | 6TH HUNT STR         | OK HIST UST                                 | 714 0.135 East                |
| H47 / 4               | MID-CONTINENT POWER  | 6TH HUNT STR         | OK LUST, OK UST                             | 715 0.135 East                |
| H48 / 4               | CABOT NORIT AMERICAS | 1432 6TH ST MAIP     | CORRACTS, RCRA-VSQQ, 2020 COR ACTION, IC..  | 755 0.143 East                |
| 49 / 2                | GEORGIA-PACIFIC CORP | HWY 69A-MID-AMERICA  | SEMS-ARCHIVE, RCRA-VSQQ                     | 878 0.166 ENE                 |
| 50 / 4                | PRYOR FOUNDRY        | P.O. BOX 549         | SEMS-ARCHIVE, RCRA-SQG                      | 1152 0.218 East               |
| 51 / 7                | GRDA COAL FIRED COMP | 4 MI E CHOUTEAU & 1  | OK LUST, OK UST                             | 1858 0.352 SW                 |
| 52 / 3                | KENNECOTT CORP ACTIV | 6TH & HUNTS          | SEMS-ARCHIVE, RCRA NonGen / NLR             | 1865 0.353 West               |
| 53 / 7                | GRAND RIVER DAM LAND | SW/4 NE/4 & SE/4 NW/ | OK SWF/LF, OK Financial Assurance           | 2369 0.449 WSW                |

# Key Map - 6865672.5s



- ▲ Sites
- ▬ Target Property
- ▬ Search Buffer
- ▬ Focus Map - No Sites
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA



**SITE NAME:** MAIP Phase II  
**ADDRESS:** MAIP Phase II  
**CITY/STATE:** Pryor OK  
**ZIP:** 74361

**CLIENT:** Olsson  
**CONTACT:** Nathan Hillis  
**INQUIRY #:** 6865672.5s  
**DATE:** 02/18/22

2:22 PM

**OTHER**





200 N.E. 21<sup>st</sup> Street Oklahoma City, OK 73105-3204 [www.odot.org](http://www.odot.org)

**DATE:** November 30, 2021  
**TO:** File  
**FROM:** Sara Downard, District 8 Project Manager  
**SUBJECT:** ODOT / OKLAHOMA ORDNANCE WORKS AUTHORITY (OOWA)  
**Partnership Project Scope**

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Safety Improvement

J/P Number: 35353(04) SH-412B: Roundabout at Patrol Rd (Phase I) \$4,000,000

Pavement Rehabilitation

J/P Number: 33821(04) SH-412B: SH-412B: from SH-69A to US-412 (Phase II) \$9,600,000

County: Mayes

Highway: SH-412B

Division: 8

PS&E Date: 2022

R/W Date: N/A

Scoping Meeting Date: N/A

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**PROPOSED IMPROVEMENT**

**Project Intent:** Improve safety and pavement quality.

**Description of Proposed Improvements (Phase I):** Safety improvement to correct poor site distance at SH-412B and Patrol Rd., to include a 4-leg roundabout plus drive for future waste water treatment facility. To accommodate the roundabout an alignment modification will be made to SH-412B at the tie in location.

**Description of Proposed Improvements (Phase II):** Pavement rehabilitation including (2) 12' lanes with 8' shoulders to the south of Phase I and (2) 12' lanes with 10' shoulders to the north of Phase I. Geotech will be done to determine full depth pavement rehabilitation or patching.

Begin project at junction of SH-412B/69A. End project at SH-412B/US-412.

Design to be done by OOWA consultant.

RW / UT to be done by OOWA.

Construction to be done by ODOT.

Design Speed: 45 mph.

Limits of NEPA Survey Area: NEPA will consist of beginning and ending points of the project within RW limits.