



REQUESTS FOR PROPOSALS
RFP 2024-0418-001 Asphalt Paving Projects

The Board of County Commissioners will receive sealed proposals for the 2024 Asphalt Paving Projects, until 4:00 p.m. MST, Wednesday, April 17, 2024 at the office of the County Commissioners, 218 West Kiowa Ave, Fort Morgan, Colorado. All responses will be publicly opened and read aloud 9:00 a.m. MST, Thursday, April 18, 2024. Location of proposal openings will be at 231 Ensign, Fort Morgan, Colorado, Assembly Room, basement of the Administration Building. Vendors and/or public will be able to view RFP opening via a Zoom meeting. Details will be posted on the county website at: <https://morgancounty.colorado.gov/bids-and-proposals>.

The RFP is on file in the office of Administrative Services Department at 218 West Kiowa Avenue, Fort Morgan, CO and also on the Morgan County Website at www.co.morgan.co.us.

All Proposals can be submitted as follows:

- **Email** – Proposals may be emailed to: bccadmin@co.morgan.co.us. Emailed proposals must include the following statement on the email: **“I hereby waive my right to a sealed proposal”**. An email confirmation will be sent when the County receives the proposal within 24 hours of normal business hours.
- **Hand delivery** - Two (2) copies of the proposal may be hand delivered to the Office of the Board of County Commissioners, 218 W. Kiowa Ave. Fort Morgan, CO 80701.
- **Mail** - All proposals must be clearly marked on the envelope **RFP 2024-0418-001**.

Please address as follows:

Morgan County
Attn: Mindi Cloyd, Administrative Services Manager
218 W Kiowa Ave
Fort Morgan, CO 80701

Mindi Cloyd
Administrative Services Manager
Morgan County, Colorado

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*Complete packet contains 26 pages of documents

GENERAL INSTRUCTIONS TO RESPONDERS

1. A “proposal” is a responsive, conforming, unconditional, complete, legible, and properly executed offer by a responder to provide the product/service specified in the Request for Proposal (RFP) for the compensation specified.
2. Responses shall be clearly marked with the **RFP 2024-0418-001**, Company Name, contact person, mailing address, telephone number of the responder, and contact email address.
3. It shall be the responsibility of the responder to ensure that the response is in proper form and in the County’s possession on or before the time and date designated in the RFP. Responses will not be accepted after the designated time and date. Any response received late will be returned to the responder unopened, if possible.
4. If a mistake is made or discovered during or after the County’s review of responses, the County reserves the right to determine which party made the mistake and whether the mistake is material and, after these determinations, the County, in its sole reasonable discretion, shall decide whether to accept or reject the proposal. No advantage shall be taken by any party of manifest clerical errors or omissions in any proposal. Responders shall notify the County immediately of any errors or omissions that are encountered.
5. Any item which does not meet all of the terms, conditions, or specifications of this package must be clearly indicated on the exceptions section of the Proposal Reply Form. It may also be on a separate sheet of paper and returned with the proposal.
6. The County shall not reimburse any responder for any cost incurred in preparing a proposal or attending equipment demonstrations, inspections, pre-proposal conferences, or interviews.
7. Any amplification, clarification, explanation, interpretation, or correction of a response shall be made only by written addendum, and a copy of the addendum shall be mailed or delivered to each person receiving a RFP. The County is not responsible for any amplification, clarification, explanation, or interpretation or correction of a proposal not contained in written addenda.
8. The County reserves the right to determine, in its sole reasonable discretion, whether any proposal meets the needs or purposes intended and is within the approved budget. The County does not base its award on prices alone. Also to be considered are: quality of product; past experience with the responder or any subcontractors, consultants, products or suppliers; qualifications of the responder and/or subcontractors or suppliers; services offered; warranties; maintenance considerations; long-range costs; delivery; and similar conditions.
9. The final award shall be made by the Board of County Commissioners in the best interests of Morgan County. **Morgan County may grant a 5% preference to local businesses. A local business shall be a business which maintains a physical place of business in Morgan County.**

10. The County reserves the right to conduct such investigations as it deems necessary to assist in the evaluation of any proposal to establish the experience, responsibility, reliability, references, reputation, qualifications, or financial ability of any responder, manufacturer or supplier. The purpose of such investigation is to satisfy the County that the responder has the ability to supply the specified product/service and to perform the necessary warranty and product support in accordance with the RFP in the prescribed manner and time.
11. The County reserves the right, if it deems such action to be in its best interests, to reject any and all responses or to waive any irregularities or informalities therein. Any incomplete, false, or misleading information provided by any responder shall be grounds for rejection of the proposal. If proposals are rejected, the County further reserves the right to investigate and accept the next best proposal in order of ranking, or to reject all proposals and re-solicit for additional proposals.
12. No proposal shall include federal excise taxes or state or local sales or use taxes.
13. Each proposal shall include a statement of standard warranty of the manufacturer if applicable.
14. Any response received as a result of this request is prepared at the responder's expense and becomes County property and is therefore a public record upon opening by the County.
15. If responder considers any of the information being submitted to be trade secrets, privileged information, or confidential commercial, financial, geological, or geophysical data, it is responder's responsibility to label the information as such. Otherwise, all information submitted shall be available as a public record for public inspection.
16. By submitting a proposal, the responder acknowledges that (a) the preparation of the proposal, and other quotations herein contained, does not obligate the County in any way; (b) the County assumes no obligation to enter into an agreement for the product; (c) all responsive documents are understood; and (d) the responder has the ability to deliver the product/equipment/service as specified herein in accordance with the RFP.
17. No proposal may be withdrawn for a period of sixty (60) days after the deadline for proposals.

Proposal Requirements

1. This RFP must be accompanied by a Bid Security made payable to the owner in an amount of five percent (5%) of the responders total proposed price, and in the form of a certified check, bank check, or a bid bond issued by a surety contingent upon award before the County can accept and consider any proposal. Upon award, such bid bonds shall be returned to the unsuccessful Responder(s). For the successful Responder, the bid bond will be returned upon receipt of the required payment and performance bond, in the full amount of the contract price.
2. It is the responsibility of the successful responder to obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
3. Successful responder is responsible for all traffic control, including traffic control plan, devices, personnel and implementation.
4. Mobilization and setup costs shall be included in per ton/lump sum pricing of laid material. No additional charges for mobilization and setup will be allowed.
5. All work to conform to Colorado Department of Transportation 2011 Standard Specifications or Current Revisions.
6. All asphalt materials to conform to CDOT Reclaimed Asphalt Pavement, May of 2013 Revised Section 401 (See Attachment C). "The use of recycled shingles (RAS) is not allowed. If shingles are detected in the mat, it is subject to removal and replacement and contract will terminate immediately.
7. The use of warm mix asphalt (WMA) is allowed as an alternative to Hot Mix Asphalt provided the following conditions are met:
 - A. All in-place specification requirements, compaction, binder requirements for Grade and percentages, and material volumetric properties are achieved.
 - B. The WMA technology proposed and the asphalt producer/contractor are approved as per CDOT Colorado Procedure (CP) 59, and are indicated on the current CDOT approved Contractors and HMA Materials list.

8. All leveling course materials must conform to CDOT Specifications or Current Revisions.
9. All Tack Coat materials must conform to CDOT Specifications or Current Revisions.
10. Successful responder shall be responsible for quality control and testing on this project. All testing and other required services must be included in the proposed price. Said testing shall be accompanied by county personnel. Any additional testing Morgan County deems necessary will be at Morgan County's expense, utilizing an independent firm of Morgan County's choosing.
11. Morgan County Government will be responsible for completion of all shoulder work.
12. All contract work must be completed on or before October 31, 2024.
13. With the exception of lump sum schedules, payments will be made based on certified weight tickets of actual asphalt used at a price per ton calculation of appropriate project schedule. Award tabulation will be based on Plan Quantities. Plan Quantities are estimates in all schedules.
14. An approved "Change Order" will be required before payment will be made in excess of the estimated Plan Quantities.
15. It is Morgan County's intent to complete all the projects listed in the schedules in the 2024 year, however; due to Budget constraints Morgan County reserves the right to adjust or remove any schedule from this RFP it deems necessary to meet budget guidelines.
16. All proposals submitted must include Two (2) copies of the following documents: "Completed Reply Form, All Completed Project Schedule documents, References Forms", and be Accompanied by a Bid Security made payable to owner in an amount of five percent (5%) of the responders total proposed price, and in the form of a certified check, bank check, or a bid bond issued by a surety contingent upon award.
17. Any "Warranty" of work performed for the finished product must be outlined in the reply form.
18. Vendor's may contact John Goodman, Morgan County Road Supervisor at 970-542-3561 with any questions or to set up an appointment to tour the work sites.

PROJECT SCHEDULE 1
"2024-0418-001 ASPHALT PAVING PROJECTS"

Project: County Road T.5 from State Highway 52 to County Road 24
Asphalt Type: Overlay, 3 Inches, Completed in Two Courses
Measurements: Road length 29,547 feet, Road Width 24 Feet, Pavement Thickness 3 Inches.

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Tie joints to all existing pavement shall be milled to a depth corresponding to the finished mat thickness listed on the project schedule. The taper shall span at least 15 feet in length from the joint for smooth transition.
Locations: At the intersection of State Highway 52
At the intersection of County Road 24
5. All asphalt laid at tie joints shall be feathered out to create smooth transitions.
6. All intersecting paved roads will have the new asphalt feathered into them and corresponding radius for smooth transition.
7. All intersecting gravel roads shall have the new asphalt feathered into them for the full width of the intersecting road and a length of at least 5 feet from the edge of the new asphalt.
8. All intersecting driveway accesses shall have new asphalt feathered into them as appropriate to allow accesses to pavement surface without causing damage to the pavement edge.
9. A tack coat shall be applied in between each new course of asphalt.
10. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
11. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
12. Use of a paper joint at the end of each day is required for clean start joint on following day for this schedule.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
3" Overlay – Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyration Must Meet Current CDOT Specifications	13,625
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

**Two Courses
3 Inches Grade SX**

Price per Ton: \$_____

Estimated Tons X_13,625_____

Total This Schedule Based on Plan Quantities: \$_____

Signature of Responder: _____ Date: _____

PROJECT SCHEDULE 2
“2024-0418-001 ASPHALT PAVING PROJECTS”

Project: MG5-0.5-Z.5 Bridge Deck and Approaches

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Successful Responder will complete all prep work including excavating 3 inches of material at each end of bridge between the abutment wall and an existing asphalt cut line for this location prior to patching and overlay.
5. An existing 65' x 28' cut at each abutment on the new bridge shall be patched with 3 inches of asphalt bringing level up to top edge of bridge deck prior to the overlay.
6. Approaches and bridge shall be overlaid with 3 inches of asphalt starting and ending with a butt joint at existing roadway asphalt.
7. Asphalt shall be tapered from existing roadway width to existing bridge width.
8. A tack coat shall be applied in between each new course of asphalt.
9. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
10. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
11. Lump Sum price shall include all the above detailed items. No additional costs may be added.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
3" Patch & 3" Overlay – Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyraton Must Meet Current CDOT Specifications	160
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

Lump Sum Proposal for this Project Schedule: \$_____

Signature of Responder: _____ **Date:** _____

PROJECT SCHEDULE 3
“2024-0418-001 ASPHALT PAVING PROJECTS”

Project: Patch a culvert cut on County Road 19 at the intersection of County Road O

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Successful Responder will complete all prep work including excavating 6 inches of material from the area between the asphalt cuts for this location prior to patching.
5. The existing 50' x 26' culvert cut shall be patched with 6 inches of asphalt laid in 2 courses bringing the level up to top edge of the existing pavement.
6. A tack coat shall be applied in between each new course of asphalt.
7. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
8. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
9. Lump Sum price shall include all the above detailed items. No additional costs may be added.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
6" Patch Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyration Must Meet Current CDOT Specifications	50
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

Lump Sum Proposal for this Project Schedule: \$ _____

Signature of Responder: _____ Date: _____

PROJECT SCHEDULE 4
“2024-0418-001 ASPHALT PAVING PROJECTS”

Project: Patch a culvert cut on County Road 19 at the intersection of County Road P

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Successful Responder will complete all prep work including excavating 6 inches of material from the area between the asphalt cuts for this location prior to patching.
5. The existing 35' x 26' culvert cut shall be patched with 6 inches of asphalt laid in 2 courses bringing the level up to top edge of the existing pavement.
6. Prep, repair and overlay the damaged intersection radius on the south east corner with 3" of asphalt.
7. A tack coat shall be applied in between each new course of asphalt.
8. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
9. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
10. Lump Sum price shall include all the above detailed items. No additional costs may be added.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
6" Patch Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyration Must Meet Current CDOT Specifications	54
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

Lump Sum Proposal for this Project Schedule: \$ _____

Signature of Responder: _____ **Date:** _____

PROJECT SCHEDULE 5
"2024-0418-001 ASPHALT PAVING PROJECTS"

Project: Patch a culvert cut on County Road 17 between County Road P and County Road Q.

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Successful Responder will complete all prep work including excavating 6 inches of material from the area between the asphalt cuts for this location prior to patching.
5. The existing 7' x 25' culvert cut shall be patched with 6 inches of asphalt laid in 2 courses bringing the level up to top edge of the existing pavement.
6. A tack coat shall be applied in between each new course of asphalt.
7. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
8. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
9. Lump Sum price shall include all the above detailed items. No additional costs may be added.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
6" Patch Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyrations Must Meet Current CDOT Specifications	7
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

Lump Sum Proposal for this Project Schedule: \$ _____

Signature of Responder: _____ **Date:** _____

PROJECT SCHEDULE 6
“2024-0418-001 ASPHALT PAVING PROJECTS”

Project: Patch a culvert cut on County Road W between County Road 31 and State Highway 6

Scope of Work

1. Obtain all the necessary permits, accesses and permissions required to complete all projects outlined in this RFP packet. (Examples: access/permits required for railroad right of ways, access/permits and traffic control requirements for state highway right of ways, permissions of landowners for access/staging/storing equipment, materials and supplies, etc.
2. Mobilization and setup
3. All traffic control, including traffic control plan, devices, personnel and implementation.
4. Successful Responder will complete all prep work including excavating 6 inches of material from the area between the asphalt cuts for this location prior to patching.
5. The existing 50' x 25' culvert cut shall be patched with 6 inches of asphalt laid in 2 courses bringing the level up to top edge of the existing pavement.
6. A tack coat shall be applied in between each new course of asphalt.
7. All asphalt material shall be compacted to the appropriate levels according to the Current CDOT Specifications.
8. Any other work required to complete asphalt paving must conform to Current CDOT Specifications.
9. Lump Sum price shall include all the above detailed items. No additional costs may be added.

Asphalt Specifications and Plan Quantities

Segment	Product	Estimate Quantity in Tons
6" Patch Completed in 2 Courses	Asphalt, Grade SX with a Maximum 23% binder replacement, PG 64-22 Binder, 75 Gyrations Must Meet Current CDOT Specifications	48
Tack Coat	Must Meet Current CDOT Specifications	No Estimate Required Before Each New Pavement Course

Proposal for this Schedule

Lump Sum Proposal for this Project Schedule: \$ _____

Signature of Responder: _____ **Date:** _____



REQUEST FOR PROPOSAL
"2024-0418-001 ASPHALT PAVING PROJECTS"

Reply Form

Name and Address of Responder:

Name of Company _____

Address of Company _____

City _____ State _____ Zip Code _____

Phone Number _____ Fax Number _____

Representative _____ Title _____

Signature _____

Email _____

Summary of Project Schedules:

Schedules	Schedule Total	Schedules	Schedule Total
Schedule 1	\$ _____	Schedule 4	\$ _____
Schedule 2	\$ _____	Schedule 5	\$ _____
Schedule 3	\$ _____	Schedule 6	\$ _____

Total All Schedules \$ _____

*Attach a separate sheet outlining any exceptions to this bid. *If Any*

**Attach a separate sheet outlining any "Warranty" for the work completed. *If Any*

References

Please provide a list of at least three references for work completed by your company over the last three years.

1. Contact Information

Company or Entity _____
Contact Person _____
Contact Address _____
Contact City/State/Zip _____
Contact Phone Number _____
Contact E-Mail Address _____

Year Work was performed _____

Type of Work Completed _____

Location of Completed Work _____

Size & Scope of Work:

Up to \$100,000 _____
\$100,000-\$250,000 _____
\$250,000-\$500,000 _____
\$500,000-\$1,000,000 _____
Over \$1,000,000 _____

2. Contact Information

Company or Entity _____
Contact Person _____
Contact Address _____
Contact City/State/Zip _____
Contact Phone Number _____
Contact E-Mail Address _____

Year Work was performed _____

Type of Work Completed _____

Location of Completed Work _____

Size & Scope of Work:

Up to \$100,000 _____
\$100,000-\$250,000 _____
\$250,000-\$500,000 _____
\$500,000-\$1,000,000 _____
Over \$1,000,000 _____

References II

3. Contact Information

Company or Entity _____

Contact Person _____

Contact Address _____

Contact City/State/Zip _____

Contact Phone Number _____

Contact E-Mail Address _____

Year Work was performed _____

Type of Work Completed _____

Location of Completed Work _____

Size & Scope of Work:

Up to \$100,000 _____

\$100,000-\$250,000 _____

\$250,000-\$500,000 _____

\$500,000-\$1,000,000 _____

Over \$1,000,000 _____

4. Contact Information

Company or Entity _____

Contact Person _____

Contact Address _____

Contact City/State/Zip _____

Contact Phone Number _____

Contact E-Mail Address _____

Year Work was performed _____

Type of Work Completed _____

Location of Completed Work _____

Size & Scope of Work:

Up to \$100,000 _____

\$100,000-\$250,000 _____

\$250,000-\$500,000 _____

\$500,000-\$1,000,000 _____

Over \$1,000,000 _____

Attachment A

Morgan County Government GPS Coordinates for Project Sites

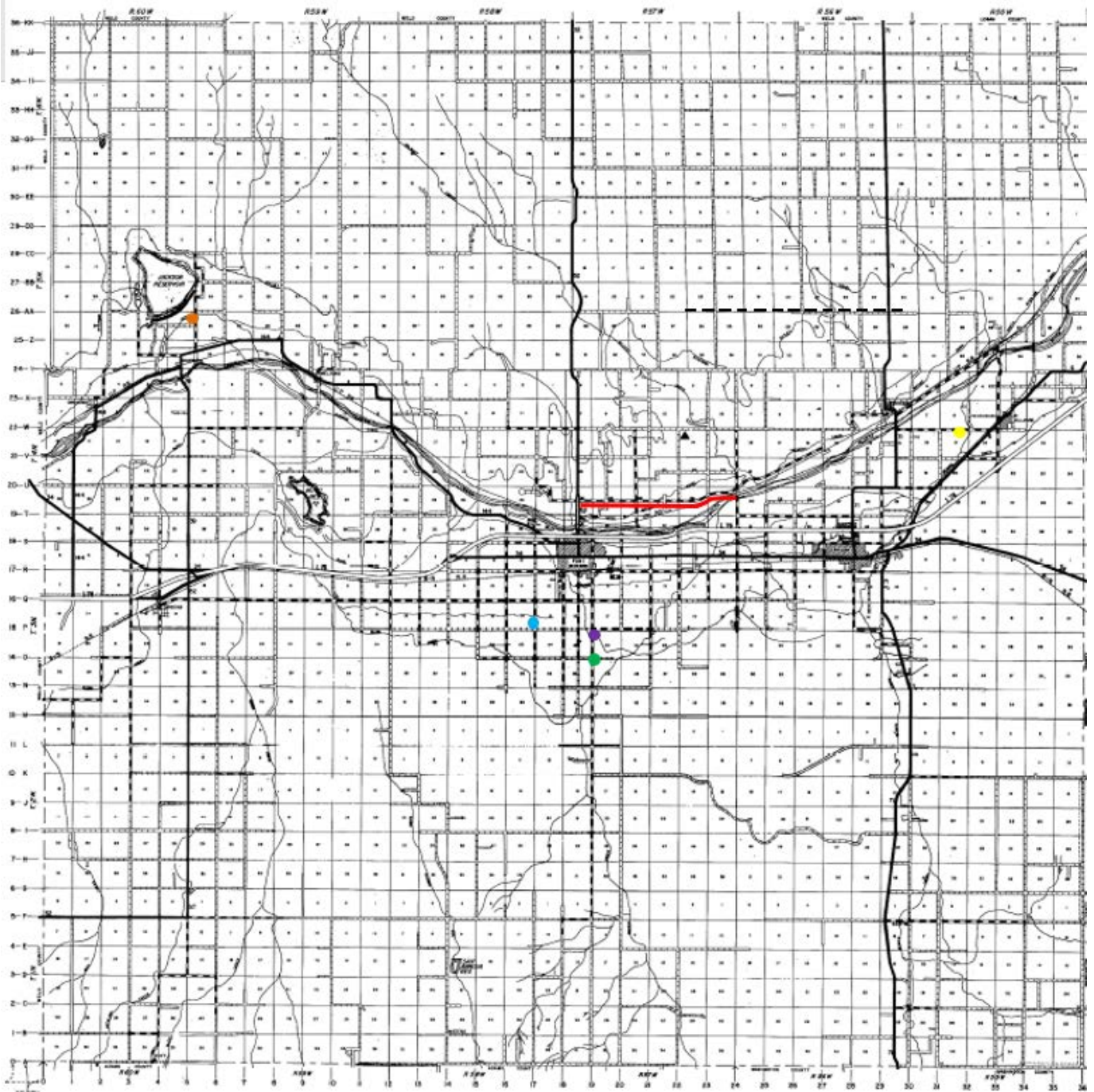
The following are the GPS Coordinates for each bid schedule.

The coordinates listed are not the actual start and stop points for the actual work, they are reference points to be used to take a virtual tour of the work sites and their locations.

All coordinates are in decimal degrees format.

Bid Schedule	Road		Latitude	Longitude
Bid Schedule 1	Overlay on County Road T.5 from State Highway 52 to County Road 24	Start At	40.283012	-103.800906
		End At	40.290045	-103.696792
Bid Schedule 2	Bridge Deck and Approaches on County Road 5 Between County Road Z.5 and County Road AA	Start At	40.377690	-104.051258
Bid Schedule 3	Culvert Cut on County Road 19 at the Intersection of County Road O	Start At	40.203122	-103.792178
Bid Schedule 4	Culvert Cut on County Road 19 at the Intersection of County Road P	Start At	40.217502	-103.792197
Bid Schedule 5	Culvert Cut on County Road 17 Between County Road P and County Road Q	Start At	40.224840	-103.830212
Bid Schedule 6	Culvert Cut on County Road W Between County Road 31 and State Highway 6.	Start At	40.320386	-103.555213

Attachment B



- Red – Bid Schedule 1 – Overlay County Road T.5 from Highway 52 to County Road 24
- Orange – Bid Schedule 2 – Bridge Deck and Approaches County Road 5 between Road Z.5 and Road AA
- Green – Bid Schedule 3 – Culvert Cut on Road 19 at the intersection of Road O
- Purple – Bid Schedule 4 – Culvert Cut on Road 19 at the intersection of Road P
- Blue – Bid Schedule 5 – Culvert Cut on Road 17 between Road P and Road Q
- Yellow – Bid Schedule 6 – Culvert Cut on Road W between Road 31 and State Highway 6

Attachment C

May 2, 2013

REVISION OF SECTION 401 RECLAIMED ASPHALT PAVEMENT

NOTICE

This is a standard special provision that revises or modifies CDOT's *Standard Specifications for Road and Bridge Construction*. It has gone through a formal review and approval process and has been issued by CDOT's Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT's Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

INSTRUCTIONS FOR USE ON CDOT CONSTRUCTION PROJECTS:

Use this standard special provision on projects with voids acceptance of hot mix asphalt.

This specification may also be used on other projects as determined by the Region

Materials Engineer.

Section 401 of the Standard Specifications is hereby revised for this project as follows:

Subsection 401.02(b) shall include the following:

Reclaimed Asphalt Pavement (RAP) is allowed in hot mix asphalt (HMA) up to a maximum binder replacement of 23 percent for all lifts, provided all specifications for HMA are met. Fine Aggregate Angularity requirements shall apply only to the virgin fraction of the fine aggregate. The RAP shall not contain clay balls, vegetable matter, or other deleterious substances, and must meet the uniformity requirements as outlined below.

HMA Project Verification Testing for asphalt content and gradation will be performed at the frequencies listed in the Field Materials Manual in accordance with CP-L 5120.

The Contractor shall have an approved mix design for the amount of RAP to be used. The AC content of the RAP utilized in the Contractor RAP mix design shall be the average AC content determined in accordance with 1B or 1C, below, or alternatively, a minimum of five samples of the Contractors RAP stockpile may be sampled and the average AC content of the RAP be determined using AASHTO T-164, Method A or B, or in accordance with 1C below. The Contractor shall determine the total binder replaced by the binder in the RAP pursuant to the following equation:

$$\text{Total Binder Replaced} = (A \times B) \times 100/E$$

Where:

A = RAP % Binder Content *

B = RAP % in Mix *

E = Total Effective Binder Content *

* in decimal format (i.e. 2% is 0.02)

The Total Binder Replaced by the binder in the RAP shall not exceed 23 percent of the effective binder content of either the mix design or the produced mix.

The use of RAP shall be controlled in accordance with subsections 105.05 and 106.05. If the Contractor elects to use RAP, the following additional conditions shall apply:

1. The Contractor shall have an approved Quality Control (QC) Plan that details how the RAP will be processed and controlled. The QC plan shall address the following:
 - A. RAP Processing Techniques. This requires a schematic diagram and narrative that explains the processing (crushing, screening, and rejecting) and stockpile operation for this specific project.
 - B. Control of RAP Asphalt Binder Content (AASHTO T-164, Method A or B). RAP Asphalt Binder Content may also be determined in accordance with CP-L 5120, provided an RAP AC content correction factor is determined through correlation testing with AASHTO T-164, Method A or B. The correction factor shall be determined by performing correlation testing on the first five samples of the RAP AC content, then at a frequency of one for every five AC content tests thereafter. The correction factor shall be determined by calculating the average difference in AC content between CP-L 5120 and AASHTO T-164, Method A or B, and applying the correction to the AC content determined in accordance with CP-L 5120 :
Frequency: 1/1000 tons of processed RAP material (minimum five tests)
 - C. (Alternate) The Contractor may propose a RAP asphalt content correction factor to be used in conjunction with CP-L 5120. The proposed CP-L 5120 RAP asphalt content correction factor shall be used with all RAP asphalt contents tested for the mixture design and quality control sampling and testing. The methodology of the proposed CP-L 5120 RAP asphalt content correction factor shall be outlined in detail

in the approved RAP QC Plan. At a minimum, the proposed CP-L 5120 correction factor shall identify the principal source locations of the RAP aggregate, gradation of the material tested, and specific ignition oven serial number used in all the RAP asphalt content testing. The RAP source locations, material gradation, and specific equipment used shall substantiate the CP-L 5120 asphalt content correction factor used for the testing. The substantiation must be from data gathered from historical information or specific asphalt content correction data obtained from tests performed on similar virgin aggregate sources, virgin material gradations, and the specific equipment used.

D. Control of RAP Gradation (CP31 or AASHTO T-30):

Frequency: 1/1000 tons of processed RAP material (minimum three tests)

E. Process Control Charts shall be maintained for binder content and each screen listed in subsection 401.02(b), during addition of any RAP material to the stockpile. The Contractor shall maintain separate control charts for each RAP stockpile. The control charts shall be displayed and shall be made available, along with RAP AC extraction testing laboratory reports to the Engineer upon request

2. The processed RAP must be 100 percent passing the 31.5 mm (1¼ inch) sieve. The aggregate obtained from the processed RAP shall be 100 percent passing the 25.0 mm (1 inch) sieve. The aggregate and binder obtained from the processed RAP shall be uniform in all the measured parameters in accordance with the following:

UNIFORMITY*

Parameter	Standard Deviation
Binder Content	0.5
Percent Passing 19 mm (¾")	4.0
Percent Passing 12.5 mm (½")	4.0
Percent Passing 9.5 mm (⅜")	4.0
Percent Passing 4.75 mm (#4)	4.0
Percent Passing 2.36 mm (#8)	4.0
Percent Passing 600 µm (#30)	3.0
Percent Passing 75 µm (#200)	1.5
*Uniformity is the Maximum allowable Standard Deviation of test results of processed RAP.	

3. If RAP millings generated are incorporated in the same project, in accordance with CPL 5145 the Contractor shall pave with a virgin mix design until sufficient amount of processed RAP has been stockpiled and tested to allow full production of a RAP HMA mix.