

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Asphalt materials.
2. Aggregate materials.
3. Aggregate subbase.
4. Asphalt paving base course, binder course, and wearing course.
5. Asphalt paving overlay for existing paving.

B. Related Requirement:

1. Section 312323 - Fill: Compacted subbase for paving.
2. Section 321123 - Aggregate Base Courses: Compacted subbase for paving.

1.2 PRICE AND PAYMENT PROCEDURES

A. Asphalt Paving:

1. Basis of Measurement: By square yard.
2. Basis of Payment: Includes priming surfaces, tack coating surfaces, furnishing, placing, and compacting asphalt paving.

1.3 REFERENCE STANDARDS

- ##### A. Division 300, Section 304 of the City of Casper Standard Specifications for Public Works Construction and Infrastructure Improvements, 2006 Edition

1.4 SUBMITTALS

A. Product Data:

1. Submit product information for asphalt and aggregate materials.
2. Submit mix design with laboratory test results supporting design.

- ##### B. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- ##### A. Mixing Plant: Conform to City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.

- B. Obtain materials from same source throughout.
- C. Perform Work in accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.

1.6 QUALIFICATIONS

- A. Installer: Company specializing in performing work of this section with minimum 3 years' experience.

1.7 AMBIENT CONDITIONS

- A. Do not place asphalt mixture when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.
- B. Place asphalt mixture when temperature is not more than 25 degrees F less than initial mixing temperature.

PART 2 - PRODUCTS

2.1 ASPHALT PAVING

- A. Performance / Design Criteria:
 - 1. Paving: Paving section as indicated in drawings.
- B. Asphalt Materials:
 - 1. Asphalt Binder: AASHTO M320 performance grade PG 64-22.
 - 2. Tack Coat: In accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.
 - 3. Oil: In accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.
- C. Aggregate Materials:
 - 1. Coarse Aggregate: In accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements
 - 2. Fine Aggregate: In accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.

2.2 MIXES

- A. Use dry material to avoid foaming. Mix uniformly.

- A. Asphalt Paving Mixtures: Designed in accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements with maximum 10 percent by weight reclaimed asphalt pavement.
 - 1. Bottom lift shall be Grading A per City of Casper Specifications.
 - 2. Top lift shall be Grading C per City of Casper Specifications.

2.3 SOURCE QUALITY CONTROL

- A. Submit proposed mix design of each class of mix for review prior to beginning of Work.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify compacted base course is dry and ready to support paving and imposed loads.
 - 1. Remove soft base course and recompact as specified in Section 321123.00
- B. Verify gradients and elevations of base are correct.

3.2 PREPARATION

- A. Prepare base course in accordance with Section 321123.00

3.3 DEMOLITION

- A. Saw cut and notch existing paving as indicted on Drawings.
- B. Clean existing paving to remove foreign material, excess joint sealant and crack filler from paving surface.
- C. Repair surface defects in existing paving to provide uniform surface to receive new paving.

3.4 INSTALLATION

- A. Base Course:
 - 1. Aggregate base: Install as specified in Section 321123.
- B. Tack Coat:
 - 1. Apply tack coat in accordance with City of Casper Standard Specifications for Public Works Constructions and Infrastructure Improvements.
 - 2. Apply tack coat to contact surfaces of curbs, gutters, concrete pavement, and existing asphalt pavement.

C. Double Course Asphalt Paving:

1. Place asphalt bottom lift within 24 hours of applying primer or tack coat.
2. Place bottom lift to 2 inch compacted thickness.
3. Place top lift within 24 hours of placing and compacting top lift. When bottom lift is placed more than 24 hours before top lift, clean surface and apply tack coat before placing top lift.
4. Place top lift to 2 inch compacted thickness.
5. Compact each course by rolling to specified density. Do not displace or extrude paving from position. Hand compact in areas inaccessible to rolling equipment.
6. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.5 TOLERANCES

- A. Flatness: Maximum variation of $\frac{1}{4}$ inch measured with 10 foot straight edge.
- B. Scheduled Compacted Thickness: Within $\frac{1}{4}$ inch.
- C. Variation from Indicated Elevation: Within $\frac{1}{2}$ inch.

3.6 FIELD QUALITY CONTROL

- A. Testing of asphalt for edge patches will not be required.

3.7 PROTECTION

- A. Immediately after placement, protect paving from mechanical injury for 8 hours or until surface temperature is less than 140 degrees F.

END OF SECTION 321216