### This Document is for informational purposes only.

"Standard and Supplemental Specifications for Road and Bridge Construction 2020 V2.2 Edition" can be found at the following link:

 $\underline{https://www.mdt.mt.gov/other/webdata/external/const/specifications/2020/SPEC-BOOK/2020-SPEC-BOOK-V2.2.pdf}$ 

### Specification Revisions July 15, 2021

The Department has revisions to 24 Standard Specifications.

1.	101.03 DEFINITIONS	3
2.	107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED	8
3.	108.07 CONTRACT TIME AND DETERMINATION OF COMPENSATION AND EXTENSION OF CONTRACT TIME FOR EXCUSABLE, NONCOMPENSABLE, AND COMPENSABLE DELAYS	9
4.	108.08 FAILURE TO COMPLETE ON TIME	10
5.	109.12 TRAINING PROGRAM	11
6.	210.03.7 Camera System	15
7.	210.04.3 Camera System	16
8.	210.05 BASIS OF PAYMENT	16
9.	401.03.23 Surface Tolerance for Flexible Pavement	17
10.	407.02.1 Bituminous Material	18
11.	409.04.6 Sweeping and Brooming	19
12.	602.02 MATERIALS	20
13.	602.03.4 Fill and Abandon Pipe	20
14.	602.04.3 Fill and Abandon Pipe	20
15.	602.05 BASIS OF PAYMENT	20
16.	605.02.3 Linear Delineation System	21
17.	605.03.13 Linear Delineation Systems	21
18.	606.03.14 Optional Terminal Sections	22
19.	612.02.1 Paint Coating Systems	23
20.	619.02.1 Delineator Panel.	24
21.	619.03.8 Delineators	24

22.	620.03.10 Marking Removal	. 25
	<del>-</del>	
23.	701.06 RIPRAP	. 26
24.	704.04 LINEAR DELINEATION SYSTEMS	. 28

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#### **101.03 DEFINITIONS**

<u>Liquidated Damages</u> A specific sum (or a sum readily determinable) of money stipulated by the Department as the amount to be recovered for each day of delay in delivery of the completion of the contract.

REASON: Add Definition

### THE PROPOSED DRAFT WAS NOT IMPLEMENTED AT THIS TIME.

#### **102.07 BIDDING REQUIREMENTS**

**B.** Bidding Requirements EBS Requirements. Ensure bids submitted using the EBS format contain a Proposal guarantee, an EBS generated Proposal, Schedule of Items, and DBE requirements when applicable.

Ensure the EBS Schedule of Items is a single continuous printout for each individual bid, evidenced by all Schedule of Items sheets having the same check number. Written changes to the Schedule of Items, or a bidder's non-submission of every page from the AASHTOWare Project Bids™ EBS file, (including all Schedule of Items pages and all DBE pages), automatically renders the bid non-responsive, and the bid will not be read or considered.

Acknowledge addenda using the amended EBS project file to generate the Proposal, Schedule of Items and DBE requirements. The printout indicates acknowledgment of receipt of addenda when the correct project file is used. Return an electronic storage device containing the complete project files for all projects bid with the bid package. It is the bidder's responsibility to ensure that they acquire and apply addenda files when applicable.

- C. DBE Quotes. The Department has a quick and easy way for you to request quotes from Montana DBE-certified companies. The information goes to the DBE companies that same day. The on-line form is located at web site: https://app.mdt.mt.gov/dbeqt/.
  Call the Department DBE Supportive Services, 1-800-883-5811, for further assistance. Using this online request form will be considered for good faith efforts, but it does not constitute meeting all requirements of good faith efforts
- D. Certified Payroll Submission. The Contractor and all subcontractors must use AASHTOWare Project Civil Rights & Labor™ (CRL) to submit Certified Payrolls (CPRs). Ensure that all subcontractors have submitted their Vendor Access Form which can be found on the following page: https://www.mdt.mt.gov/business/contracting/prevailingwage.shtml to the Department and have received their login IDs prior to work.

Request the contract number and project ID(s) from the Project Manager. Provide the information to all subcontractors subject to the FHWA 1273 requirements. This information is also available using the Search Awarded Contracts located at: <a href="https://app.mdt.mt.gov/project-search/project/search">https://app.mdt.mt.gov/project-search/project/search</a>.

<u>Provide assistance and ensure all subcontractors submit CPRs electronically into CRL within the required timeframe.</u>

- **E. C. Determination of Bid Responsiveness.** Bids are opened at the designated time and inspected to determine if the following requirements are met:
  - 1. Schedule of Items. Unit Prices are provided for all required bid items. A complete and verifiable Schedule of Items is provided. Each sheet of the Schedule of Items must contain the same check number, to ensure that the unit bid prices correspond with the total. There are no written changes to the Schedule of Items.

2. Proposal Guarantee. The bid bond is on the most current version of MDT-CTP-102-07-1; is signed and sealed in the proper places; a copy of the agent's Power of Attorney for the insurance company is attached; and contains the correct and complete project number; all signatures are original (stamped signatures are unacceptable). A qualified third-party surety agency must verify the proposal guarantee. Electronic bid bond verification must be submitted through AASHTOWare Project Bids and Bid ExpressTM. Contact Bid Express for more information on electronic bid bond verification.

If an error occurs with electronic bid bond verification through AASHTOWare Project Bids and Bid Express, submit the Electronic Bid Bond Form MDT-CTP-102-07-2 in Adobe PDF format via email to mdtcntplns@mt.gov prior to the bid opening. Hard copy or paper bid bonds submitted to the Department will not be accepted. Bids that include submission of a bid bond without electronic verification or Electronic Bid Bond Form CPB 102 07 will be deemed non-responsive.

The bid bond is on the most current version of the Department furnished form; is signed and sealed in the proper places; a copy of the agent's Power of Attorney for the insurance company is attached; and contains the correct and complete project number; all signatures are original (stamped signatures are unacceptable). If using Bid Submission via Internet and Bid Express<sup>TM</sup>, a qualified Surety Company must verify the Contractor bond.

An electronic bid bond may be filed in lieu of completing the paper Bid Bond area of the Proposal Bid form. Submit on the most current Department-provided hard copy Electronic Bid Bond form CPB 102 07.

**REASON:** Currently a Standard Special Provision.

**COMMENTS**: Not ready to be implemented

### THE PROPOSED DRAFT WAS NOT IMPLEMENTED AT THIS TIME.

#### 102.10 DELIVERY AND PUBLIC OPENING OF PROPOSALS

Bid Proposals are opened publicly at the place, time, and date specified in the "Invitation for Bids."

Deliver Submit by the date and hour set for the opening of bid Proposals to the Department officials conducting the bid opening. Bid Proposals received after the specified time are returned to the bidder unopened.

The clock designated by the Department bid opening officials determines the bid opening time.

Bid Proposals will be deemed non-responsive for the following reasons:

- Received after the specified time.
- Submitted by facsimile machines.
- Submitted by sealed Envelope.

<u>Submit bids by</u> <u>B.</u> Internet Bid Submission Via the Internet and Bid Express<sup>™</sup>. (Optional Bid Submission Procedure)

Do not submit bid Proposals by facsimile machines.

A Proposal not properly addressed and identified is returned to the bidder after it is opened.

A. Bid Submission by Sealed Envelope. Place the bid Proposal in a sealed envelope plainly marked to indicate the contents. Proposals must be received by the Department's official conducting the bid opening before the bid opening time. Bids may be delivered to:

Montana Department of Transportation, Engineering Construction Contracting Bureau, 2701 Prospect Avenue, Helena, Montana.

If mailed, the Department's mailing address is: Montana Department of Transportation, Engineering Construction Contracting Bureau, P.O. Box 201001, Helena, Montana 59620-1001.

The Contractor is solely responsible for the Proposal's delivery to the Department's official conducting the bid, prior to bid opening.

REASON: Currently a Standard Special Provision.

**COMMENTS:** Not ready to be implemented

### THE PROPOSED DRAFT WAS NOT IMPLEMENTED AT THIS TIME.

#### 103.07 EXECUTION AND APPROVAL OF CONTRACT

- **A. General**. Return to the Engineering Construction Contracting Bureau in Helena no later than 5:00 p.m. on the 20th calendar day after award, not counting the date of receipt of the contract documents:
  - 1. The signed contract;
  - 2. The contract bond; and
  - 3. Evidence of the required insurance.

A contract is not binding unless all the above requirements have been satisfied.

Use DocuSign to sign the contract in accordance with Subsection 103.07.

No later than 5 calendar days after the date of bid-opening (the date of bid opening to count as the first full day), the apparent low bidder must submit to ECCB, during its regular work hours, a fully completed Contract Recipients Form documenting names and emails of authorized agents of the Contract and Surety to sign the contract. If the 5th day is a holiday, turn the documentation in earlier. The Contract Recipients Form is available at the following web page: https://www.mdt.mt.gov/publications/forms/contract-recipients.shtml.

The bid proposal may be considered non-responsive and rejected if the above form(s) are not submitted within the required time frame.

REASON: Currently a Standard Special Provision.

**COMMENTS**: Not ready to be implemented

#### PROPOSED DRAFT

#### 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED

Follow federal, statestate, and local laws, rules rules, and regulations regarding unlawful employment practices, and that define actions required for Affirmative Action and Disadvantaged Business programs. Hiring must be based on merit and qualification and there must be no discrimination on the basis of race, color, religion, creed, political ideas, sex, age, marital status, physical or mental handicap or national origin.

including race, religion, color, sex or national origin discrimination, and that define actions required for Affirmative Action and Disadvantaged Business programs.

Work within a state or national forest is under the regulations of the authority having jurisdiction governing the forest.

<u>2 CFR 200.216</u> has been added to the Code of Federal Regulations and became effective August 13, 2020. Ensure any telecommunications or video surveillance equipment, services, or systems used or installed on Federal-Aid Projects comply with 2 CFR 200.216.

Immediately notify the Project Manager in writing if any discrepancy or inconsistency is discovered between the contract and any law, ordinance, regulation, order or decree.

**REASON:** Currently a Standard Special Provision.

### **COMMENTS**:

#### FINAL ACCEPTANCE

#### 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED

Follow federal, state, and local laws, rules, and regulations regarding any illegal discriminatory practices. Follow federal, statestate, and local laws, rules rules, and regulations regarding unlawful employment practices, and that define actions required for Affirmative Action and Disadvantaged Business programs. Employment and access to all programs and services must be free from any form of illegal discrimination based on federal or state protected class as referenced in the Non-Discrimination Notice Attachment.

<u>Hiring must be based on merit and qualification and there must be no discrimination on the basis of race, color, religion, creed, political ideas, sex, age, marital status, physical or mental handicap or national origin.</u>

including race, religion, color, sex or national origin discrimination, and that define actions required for Affirmative Action and Disadvantaged Business programs.

Work within a state or national forest is under the regulations of the authority having jurisdiction governing the forest.

<u>2 CFR 200.216</u> has been added to the Code of Federal Regulations and became effective August 13, 2020. Ensure any telecommunications or video surveillance equipment, services, or systems used or installed on Federal-Aid Projects comply with 2 CFR 200.216.

Immediately notify the Project Manager in writing if any discrepancy or inconsistency is discovered between the contract and any law, ordinance, regulation, order or decree.

### 108.07 CONTRACT TIME AND DETERMINATION OF COMPENSATION AND EXTENSION OF CONTRACT TIME FOR EXCUSABLE, NONCOMPENSABLE, AND COMPENSABLE DELAYS

Meet the requirements in Table 108-3

#### **TABLE 108-3**

### HOLIDAY CONTRACT TIME ASSESSMENT

Holiday:	Stop Work by:	Return to Work:
Memorial Day	3:00pm on the Preceding Friday <sup>1</sup>	Tuesday
Labor Day	3:00pm on the Preceding Friday <sup>1</sup>	Tuesday
When July 4 Occurs On:	Stop Work by:	Return to Work <sup>2</sup> :
Monday	3:00pm on the Preceding Friday <sup>1</sup>	Tuesday
Tuesday	The end of day on the Preceding Friday	Wednesday
Wednesday	3:00pm on the Preceding Tuesday <sup>1</sup>	Thursday
Thursday	3:00pm on the Preceding Wednesday <sup>1</sup>	Monday
Friday	3:00pm on the Preceding Thursday <sup>1</sup>	Monday
Saturday	3:00pm on the Preceding Thursday <sup>1</sup>	Monday
Sunday	3:00pm on the Preceding Friday <sup>1</sup>	Tuesday

Note 1: If all work operations are stopped before 12:00pm (noon), contract time will not be assessed on this day for working day contracts.

Note 2: Contract time will not be assessed between the stop work by and return to workdays for working day contracts.

REASON: Clarification to spec.

#### 108.08 FAILURE TO COMPLETE ON TIME

If the contract time is exceeded, including approved adjustments, a daily charge will be made against the contract until final acceptance under Subsection 105.17.2. This daily charge, determined from Table 108-4, will be deducted from any money due the Contractor. This deduction is for liquidated damages-for added Department contract administration costs, etc. for failure to complete the work on time.

**REASON**: Spec update

#### PROPOSED DRAFT

#### **109.12 TRAINING PROGRAM**

Training and upgrading of minorities and women toward journeyperson status is the primary objective of the Training Program. Journeyperson status is considered achieved when an individual is recognized as a qualified and skilled person in a trade and is entitled to the wages and benefits associated with that trade. Make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Be responsible for demonstrating the steps taken to meet the primary objective. This training commitment is not intended, and is not to be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Establish a Training Program documenting the anticipated length and type of training for each classification. The Training Program and any subsequent changes must be approved by the Department's Civil Rights Bureau and the FHWA. The program will receive approval if it is reasonably calculated to meet the equal employment opportunity obligation of the Contractor and to qualify the trainee for journeyperson status. Apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts.

Submit a letter listing the number of trainees to be trained in each selected classification and the Training Program 15 calendar days prior to commencing any construction activities for approval. Specify the expected start date for training in each of the classifications. The Department will credit the Contractor for each trainee that becomes enrolled in an approved program and is employed on the project site covered by the contract.

Obtain approval or acceptance of the Training Program from the Department's Civil Rights Bureau prior to commencing work associated with the Training Program.

The Contractor may submit a written request to the Project Manager and the MDT OJT Program Manager requesting additional hours of training. The Department will evaluate the request based on the remaining activities providing training opportunities and the value of additional training towards further developing the trainees' skill level. Additional hours must be reflected and approved in an updated Training Program.

Each trainee must receive a minimum of 500 hours of on-the-job training aimed at developing full journeypersons in the type of trade or job classification involved, but hours are not to exceed those specified in the approved Training Program. No employee is to be employed as a trainee in any classification that has been successfully completed previously or in which the trainee has been employed as a journeyperson. Classifications such as clerk-typists or secretarial positions are not eligible for the Training Program. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is provided on the project site and is oriented toward construction

<u>applications.</u> Training in the Laborer classification may be permitted provided that significant and meaningful training is provided and approved by FHWA.

The trainee must begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until the Training Program is completed. It is not required that all trainees be employed for the entire length of the contract.

<u>Provide for the maintenance of records and furnish the Project Manager a copy of the monthly 7A reports documenting training performance under this provision.</u>

In the event the Contractor subcontracts a portion of the contract work, designate in writing which Subcontractors are to participate in the training obligation. Ensure this provision is physically attached to each subcontract, as appropriate. Retain the primary responsibility for meeting the training requirements.

<u>Trainee Payrolls. Trainees must be paid the following percentages of the appropriate</u> <u>minimum journeyperson's rate specified in the contract, or if no rate is specified in the contract, the percentages of the minimum rate paid journeypersons by the Contractor:</u>

- 60 percent for the first half of the training period.
- 75 percent for the third quarter of the training period.
- 90 percent for the last quarter of the training period.

In the event apprentices or trainees in an approved existing program are enrolled as trainees on this project, the appropriate rates approved by the Departments of Labor or Transportation apply to all trainees being trained for the same classification who are covered by this provision.

Furnish the trainee a copy of the program and explain to the trainee the intent of the specific training to be provided. Upon completion of the Training Program, provide each trainee with a certification showing the type and length of training satisfactorily completed.

All hours of onsite training as outlined in the approved program and as shown on project payrolls and monthly 7A Training Reports will be measured for payment, up to the total established by the approved Training Program.

Payment at the contract unit price bid per hour of Training Program is considered full reimbursement for the extra cost involved in providing the training as outlined in the approved Training Program.

No additional reimbursements will be made for trainee or trainer wages. No reimbursement for off-site training will occur, unless otherwise stated in the contract. No payment will be made to the Contractor if failure to provide the required training occurs or if the Contractor fails to meet the primary objective and is unable to provide evidence indicating good faith efforts to meet it. Failure to furnish required documents and reports in the manner and time specified may result in forfeiture of all or a portion of the amounts due the Contractor for training reimbursement.

REASON: Currently a Standard Special Provision.

#### FINAL ACCEPTANCE

#### **109.12 TRAINING PROGRAM**

Training and upgrading of minorities and women toward journeyperson status is the primary objective of the Training Program. Journeyperson status is considered achieved when an individual is recognized as a qualified and skilled person in a trade and is entitled to the wages and benefits associated with that trade. Make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Be responsible for demonstrating the steps taken to meet the primary objective. This training commitment is not intended, and is not to be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Establish a Training Program documenting the anticipated length and type of training for each classification. The Training Program and any subsequent changes must be approved by the Department's Office of Civil Rights and the FHWA. The program will receive approval if it is reasonably calculated to meet the equal employment opportunity obligation of the Contractor and to qualify the trainee for journeyperson status. Apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts.

Submit a Training Program 15 calendar days prior to commencing any training-related construction activities for approval. Specify the number of trainees per classification and expected start dates for training. The Department will credit the Contractor for each trainee that becomes enrolled in an approved program and is employed on the project site covered by the contract.

Obtain approval or acceptance of the Training Program from the Department's Office of Civil Rights prior to commencing work associated with the Training Program.

The Contractor may submit a written request to the Project Manager and the MDT OJT Program Manager requesting additional hours of training. The Department will evaluate the request based on the remaining activities providing training opportunities and the value of additional training towards further developing the trainees' skill level. Additional hours must be reflected and approved in an updated Training Program.

Each trainee must receive a minimum of 500 hours of on-the-job training aimed at developing full journeypersons in the type of trade or job classification involved, but hours are not to exceed those specified in the approved Training Program. No employee is to be employed as a trainee in any classification that has been successfully completed previously or in which the trainee has been employed as a journeyperson. Classifications such as clerk-typists or secretarial positions are not eligible for the Training Program. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is provided on the project site and is oriented toward construction

<u>applications.</u> Training in the Laborer classification may be permitted provided that significant and meaningful training is provided and approved by FHWA.

The trainee must begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until the Training Program is completed. It is not required that all trainees be employed for the entire length of the contract.

Provide for the maintenance of records and furnish the Project Manager a copy of the monthly 7A reports by the 10<sup>th</sup> of each month documenting training performance under this provision.

In the event the Contractor subcontracts a portion of the contract work, designate in writing which Subcontractors are to participate in the training obligation. Ensure this provision is physically attached to each subcontract, as appropriate. Contractor maintains the primary responsibility for meeting the training requirements.

<u>Trainee Payrolls. Trainees must be paid at least the following percentages of the appropriate minimum journeyperson's rate specified in the contract, or if no rate is specified in the contract, the percentages of the minimum rate paid journeypersons by the Contractor:</u>

- 60 percent for the first half of the training period.
- 75 percent for the third quarter of the training period.
- 90 percent for the last quarter of the training period.

In the event apprentices or trainees in an approved existing program are enrolled as trainees on this project, the appropriate rates approved by the Departments of Labor or Transportation apply to all trainees being trained for the same classification who are covered by this provision.

Furnish the trainee a copy of the program and explain to the trainee the intent of the specific training to be provided. Upon completion of the Training Program, provide each trainee with a certification showing the type and length of training satisfactorily completed.

All hours of onsite training as outlined in the approved program and as shown on project payrolls and monthly 7A Training Reports will be measured for payment, up to the total established by the approved Training Program.

Payment at the contract unit price bid per hour of Training Program is considered full reimbursement for the extra cost involved in providing the training as outlined in the approved Training Program.

No additional reimbursements will be made for trainee or trainer wages. No reimbursement for off-site training will occur, unless otherwise stated in the contract. No payment will be made to the Contractor if failure to provide the required training occurs or if the Contractor fails to meet the primary objective and is unable to provide evidence indicating good faith efforts to meet it. Failure to furnish required documents and reports in the manner and time specified may result in forfeiture of all or a portion of the amounts due the Contractor for training reimbursement.

#### 210.03.7 Camera System

Install, maintain, remove, and repack a Department-owned solar powered, remote camera system. The Department owned system is not prohibited under 2 CFR 200.216. Additional information about the webcam may be accessed at the following link: ftp://ftp.mdt.mt.gov/contract/contractors/WEBCAMERA\_INFO/

Furnish a 40-foot (12 m) machine peeled wood mounting pole with a minimum diameter of 10 inches, in good condition. Furnish a 5⁄8-inch by 8-foot (16 mm by 2.4 m) copper clad grounding rod, 45 feet (13.7 m) of #8 AWG solid copper ground wire and clamps. Furnish cable ties or clamps for securing cables and wire to the mounting pole.

1. Delivery. The Department will furnish the camera system. The camera system includes the camera housing and contents, solar panel, battery, battery box, mounting brackets, cables, and associated hardware, except as noted under Materials.

The Project Manager will deliver the camera system to the project site. Coordinate delivery of the system with the Project Manager. Provide for secure storage of the camera system unless it is immediately installed. After installation, return the original packing and shipping materials in good condition to the Project Manager for storage.

2. Installation. Unless otherwise approved by the Project Manager, install the camera system prior to performing any other work on the project. Install according to the diagram found at the link above.

Erect the mounting pole at the location specified by the Project Manager. Embed the pole 6 feet (1.8 m) into the ground. Seat, backfill and compact around the pole. Compact the backfill in 9-inch (225 mm) lifts. Ensure the pole is installed plumb. After erection, install the camera system on the pole in accordance with the drawings and instructions.

- 3. Service and Maintenance. Provide the Project Manager access to the camera as necessary for adjustments. Clean the camera lens and solar panels as directed by the Project Manager. The camera system components are covered under warranty by the manufacturer. In the event a component or a part of a component requires replacement, hire a qualified technician to remove and replace the part(s). Coordinate all shipping of components or parts necessary for the repair(s).
- 4. Insurance. Provide insurance for the camera system to cover repair or replacement if it is damaged in any way for any reason. The minimum insured value of the camera system is \$10,000.
- 4.5. Removal. Upon notification from the Project Manager, remove the camera system and repackage it in the original packing materials. After removal, retain responsibility for the camera system. Provide up to 14 days of secure storage for the camera system until it is transferred back to the Project Manager. The Department will retain ownership of the camera system. Remove the mounting pole, backfill, and re-grade to the original conditions, or as specified elsewhere in the contract. The pole, grounding rod and ground wire will become property of the Contractor upon completion of the project.

<u>REASON:</u> Currently a Standard Special Provision.

#### 210.04.3 Camera System

Measurement will be made at 50% of one unit upon completion of the installation and 50% of one unit upon the transfer of the system back to the Project Manager. Camera service or maintenance requirements will be measured in accordance with Subsection 109.04.2.

When the Contractor is directed to move a camera system to a new location, measurement will be made at 50% of one unit upon complete removal from the first installation and 50% of one unit upon completion of the installation at the new location.

#### 210.05 BASIS OF PAYMENT

Payment for the completed and accepted quantities is made under the following:

Pay Item	<u>Pay Unit</u>	
Install, Remove Camera System	<u>Each</u>	
Dozer	Hour	
Motor Grader	Hour	
Test Trailer Transport/Setup	Mile (km)	

REASON: Currently a Standard Special Provision.

#### 401.03.23 Surface Tolerance for Flexible Pavement

#### 2.1. Category I projects:

Target IRI values - 45 to 55 inches per mile

- a. Projects with 2 or more opportunities for improving the ride.
- b. Single lift overlays with a pre-paving IRI value less than 110 in/mi

#### 3.2. Category II projects:

Target IRI values - 55 to 60 inches per mile

a. Single lift overlays with a pre-paving IRI greater than or equal to 110 in/mi and less than 190 in/mi

#### 4.3. Category III projects:

Target IRI values - 55 to 70 inches per mile

a. Urban projects with a posted speed limit of 55 MPH or less and curb and gutter controlling 1 or more edges of the paving.

Actual IRI values will be determined on all mainline travel lanes, including-climbing lanes, passing lanes, and ramps that are 0.2 miles (0.30 km) have 1000 feet (0.30 km) of (cumulative) ridable length or longer. Ridable length is defined as the total (cumulative) length of the lane minus any section lengths identified as not to be evaluated below. Bridge decks will be included only if they are paved as part of the projection.

Smoothness IRI data will not be evaluated for the following roadway sections:

- **1.** Climbing lanes, and passing lanes, and ramps less than 0.2 miles 1000 feet (0.30 km) long;
  - 2. Turning lanes;
  - 3. Acceleration and deceleration lanes less than 0.2 miles 1000 feet (0.30 km) long;
  - **4.** Shoulders and gore areas;
  - **5.** Road approaches;
  - **6.** Horizontal curves 900 feet (275 m) or less in centerline radius, and pavement within the super-elevation transitions of these short radius curves; or
  - 7. <u>Bridge decks with a concrete riding surface, Pavement pavement</u> within 50 feet (15 m) of bridge decks <u>with a concrete riding surface, concrete</u> approach slabs, concrete roundabouts, and the terminal paving points of the project.

*REASON:* Clarify the intent.

#### 407.02.1 Bituminous Material

Furnish emulsified asphalt in accordance with Table 402-3 and meeting Section 702 requirements. for the type and grade specified.

The Project Manager may change or substitute the type and grade of emulsified asphalt to be used in accordance with Subsection 402.03.7.

A one step change in grade will not change the contract unit price.

The Contractor may substitute CSS-1 emulsified asphalt for SS-1 emulsified asphalt for tack coat.

<u>REASON:</u> Spec 402.03.9 Fog Seal and Tack Coat Residual was updated in V1.1 and this spec should have been updated at the same time.

#### 409.04.6 Sweeping and Brooming

Initial sweeping and brooming and the disposal of excess material necessary for traffic control operations as outlined in accordance with Subsection  $\underline{409.03.10(A)}$  are not measured for payment.

Final sweeping and brooming operation is measured by the course mile (CR km). A course mile (CR km) is defined as a roadway portion consisting of 2 travel lanes, and adjacent shoulders, or and turn lanes (if applicable) for a 1 mile (km) length. Roadways with additional travel lanes or that require less than full width sweeping will be prorated. Traffic control from an approved plan necessary for final sweeping and brooming is measured in accordance with Section 618.

**REASON:** Clarify the intent.

#### **602.02 MATERIALS**

- Replacement Pipe. Replacement pipe for existing pipe not re-usable is specified in the contract.
- Fill and Abandon Pipe. Use blown sand, pea gravel, or excavatable CLSM for fill material.
  - **a.** Blown sand must be clean, free draining, and free from organic or deleterious materials.
  - <u>b.</u> Pea gravel must be clean, uniformly graded, free from organic or deleterious materials, and 100% passing the 3/8-inch (9.5 mm) sieve.
  - **a.c.** Furnish excavatable CLSM in accordance with Subsection 551.03.2(F)(1).

#### 602.03.4 Fill and Abandon Pipe

Place fill material the entire length of the existing pipe to be abandoned so it is completely filled. Ensure that no obstruction or segment of collapsed pipe inhibits placement of fill material. Cap the ends of pipes to prevent material from escaping. Crushing the ends is an acceptable means of capping pipes composed of ductile materials.

#### 602.04.3 Fill and Abandon Pipe

This work will be measured based on the volume of material required to fill existing pipes.

The volume will be determined based on the nominal diameter and effective length of the pipe to calculate the cubic yards (cubic meters) of material required.

#### 602.05 BASIS OF PAYMENT

Payment for the completed and accepted quantities is made under the following:

Pay Item	<u>Pay Unit</u>	
Fill and Abandon Pipe	Cubic Yard (m³)	
Relay Pipe Culvert	Foot (m)	
Remove Pipe Culvert	Foot (m)	

<u>REASON:</u> Currently a Standard Special Provision.

#### **605.02.3 Linear Delineation System**

Furnish panels in accordance with Subsection 704.04.

#### **605.03.13 Linear Delineation Systems**

Install 2 panels per section of concrete barrier rail. Equally space the panels on the barrier rail. Prepare the concrete barrier to ensure proper fastening prior to installation. Install linear delineation in accordance with the manufacturer installation procedures and requirements.

Mount maximum distance of 2 inches from the top edge of the standard concrete median barrier. Mount the panels at the same height above the roadway on both standard and tall barrier rail.

**REASON:** Currently a Standard Special Provision.

#### 606.03.14 Optional Terminal Sections

Supply the optional terminal section(s) as listed in the contract meeting the requirements for the specified item. <u>Furnish MASH tested W-Beam terminal sections listed on the QPL.</u> The items include but are not limited to metal guardrail terminal sections and box beam terminal sections. When new terminal sections tie into existing rail, it may be necessary to raise the existing rail to match the new terminal section height. Transition a minimum of 50 feet (15.2 m).

<u>REASON:</u> Currently a Standard Special Provision.

#### 612.02.1 Paint Coating Systems

**G. Other Paint Systems.** Other paint systems will be considered if they are recommended for the purpose intended.

REASON: Spec Update

#### 619.02.1 Delineator Panel.

Furnish U-channel post materials in accordance with Detailed Drawings. Furnish 3-inch x 36-inch (75 mm x 915 mm) Type IV sheet aluminum retroreflective delineation panels. Furnish panels matching the colors and orientation of the reflectors based on the corresponding Design Usage. Use bolts, nuts, washers and other mounting hardware in accordance with the Detailed Drawings and Section 704.

#### 619.03.8 Delineators

Furnish and install new delineators at the locations specified and marked by the Project Manager. Remove delineators conflicting with new construction as specified. Furnish and install snow poles, if required, in accordance with the <u>Detailed Drawings</u>.

Removed delineators are the Contractor's property.

A. Delineator Panel. Affix delineation panels to U-channels at a minimum of 3 locations with attachment points within 3 inches (75 mm) of the top, middle and bottom of each panel. Affix panels so the top of the panel is within 1-inch (25 mm) of the top of the U-Channel.

**REASON:** Currently a Standard Special Provision.

#### 620.03.10 Marking Removal

Remove existing, temporary, and final pavement markings using <u>water blasting.any of the following:</u>

Furnish a self-contained, truck mounted ultra-high-pressure removal system capable of controlling water pressure to ensure full line removal with minimal surface damage. Provide a vacuum recovery system capable of containing wastewater and debris without a secondary cleanup operation and to provide a clean, damp-dry surface.

- Sand blasting with air or water;
- High-pressure water;
- Steam or super-heated water; or
- Mechanically grinding, sanding, scraping, brushing.

Submit the method or methods to be used. The Contractor may submit written proposals for other removal methods. An approved method may be subsequently disapproved if it damages the marking surface or inadequately removes existing markings.

Remove all pavement markings that would conflict with newly applied striping or markings at contractor expense. Remove conflicting pavement markings the same day new markings are applied.

Remove sand or other material on the surface left by the removal as the work progresses. Satisfactorily repair surfaces damaged by marking removal at Contractor expense.

#### PROPOSED DRAFT

#### **701.06 RIPRAP**

Furnish stone that is hard, durable, and angular in shape, resistant to weathering and water action, free from overburden, spoil, shale, structural defects, and organic material.

Each stone must have its greatest dimension not greater than 3 times its least dimension.

Do not use rounded stone or boulders from a streambed source as riprap. Do not use shale or stone with shale seams.

The stone will be accepted based on visual analysis, the Department's riprap evaluation form, and optical granulometry software to determine gradation. Make samples available for testing before placing the riprap in its final location. Notify the Project Manager within 7 calendar days of stockpiling the stone for testing. Material placed in its final location not meeting the riprap gradation listed in Table 701-21 is unacceptable, unless determined acceptable under subsection 105.03. or both. Submit samples before placing the riprap.

REASON: Currently a Special Provision.

<u>COMMENTS:</u> The spec doesn't address how the riprap placed in its final location will be evaluated for gradation.

The spec will reduce the number of suppliers and the bid price will go up.

#### FINAL ACCEPTANCE

#### **701.06 RIPRAP**

Furnish stone that is hard, durable, and angular in shape, resistant to weathering and water action, free from overburden, spoil, shale, structural defects, and organic material.

Each stone must have its greatest dimension not greater than 3 times its least dimension.

Do not use rounded stone or boulders from a streambed source as riprap. Do not use shale or stone with shale seams.

The stone will be accepted based on visual analysis, the Department's riprap evaluation form, and optical granulometry software to determine gradation. Prior to covering or revegetating the riprap notify the Project Manager. Material placed in its final location not meeting the riprap gradation listed in Table 701-21 is unacceptable. or both. Submit samples before placing the riprap

#### PROPOSED DRAFT

#### **704.04 LINEAR DELINEATION SYSTEMS**

Furnish a product that is yellow in color and produces retro-reflection and high visibility across a very wide range of entrance and observation angles Furnish panels that are a minimum 31 inches long and 6 inches high. Furnish a product that meets one of the following:

- Fabricate the panels from Diamond Grade Reflective Sheeting, laminated onto a thin gauge of aluminum and formed to a unique shape, or
- Bond an angular retro-reflective coating onto a structural substrate.

**REASON:** Currently a Standard Special Provision.

<u>COMMENTS:</u> The color may be yellow or white depending on where its installed

### FINAL ACCEPTANCE

#### **704.04 LINEAR DELINEATION SYSTEMS**

<u>Furnish a product that produces retro-reflection and high visibility across a very wide range of entrance and observation angles. Furnish panels that are a minimum 31 inches long and 6 inches high. Furnish a product that meets one of the following:</u>

- Fabricate the panels from Diamond Grade Reflective Sheeting, laminated onto a thin gauge of aluminum and formed to a unique shape, or
- Bond an angular retro-reflective coating onto a structural substrate.