Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1175-21-71, Hurley, USH 51 Overhead Removal B-26-0006, Iron County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2021 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20200629)

2. Scope of Work.

The work under this contract shall consist of concrete pavement removals, grading, asphaltic surface milling, base aggregate dense, HMA pavement, storm sewer, concrete curb and gutter, concrete sidewalk, guardrail, sign structures, pavement markings, landscaping and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the approved start date.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridge. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure.

0074 (20090901)

Northern Long-eared Bat *(Myotis septentrionalis)*

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

In accordance to the final 4(d) rule issued for the NLEB, the department has determined that the proposed activity may affect, but will not result in prohibited take of the NLEB. The activity involves tree removal, but will not occur within 0.25 miles of a known hibernacula, nor will the activity remove a known maternity roost tree or any other tree within 150 feet of a known maternity roost tree.

If additional trees need to be removed, no Clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional Clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Submit a schedule and description of Clearing operations with the ECIP 14 days prior to any Clearing operations. The department will determine, based on schedule and scope of work, what additional erosion control measures shall be implemented prior to the start of Clearing operations, and list those additional measures in the ECIP.

Construction Operations

Where Concrete Barrier Temporary Precast is not specified in the plan, do not allow hazards to exist within 20 feet of travel lanes for more than 72 hours. Delineate exposed hazards with traffic control drums or other devices as shown in the traffic control plans. If proposed barrier system cannot be installed within 72 hours, protect the hazard with Concrete Barrier Temporary Precast, or other method approved by the engineer, at the contractor's expense.

ncr-108-005 (20170517)

Traffic is allowed to operate on a milled surface for up to 72 hours maximum or until the end of the work week with approval of the engineer.

4. Traffic.

Flagging operations will be allowed for the construction of the mill and overlay sections of USH 2 and connections for USH 51.

Maintaining Access

Maintain access on a minimum of base aggregate dense 1 ¼-Inch to businesses along USH 2 at all times unless otherwise approved by the engineer.

Keep appropriate emergency official informed of routes within the construction area to provide emergency services. Allow emergency vehicles access at all times to these areas during construction.

Construction Staging

Stage 1

Construct temporary roadway and widening along USH 51 and widening along USH 2 at the 4-lane to 2-lane merge. This work includes temporary extensions for existing culverts under the eastbound USH 2 off ramp. The existing interchange will remain open to traffic.

Stage 2

At the start of the stage, provide a full closure of the interchange ramps and westbound USH 2. Move USH 51 traffic onto the temporary roadway and move westbound USH 2 traffic to the inside eastbound lane, so the eastbound USH 2 lanes operates as a 2-lane bi-directional roadway. Remove the two north spans of structure B-26-0006 and construct the westbound bypass lane.

Stage 3

Shift USH 2 traffic from the eastbound lanes to the westbound lanes. Construct the remainder of the roundabout with the exception of the eastbound USH 2 to southbound USH 51 slip ramp. Reduce the USH 2 eastbound lanes west of the roundabout to a single lane and mill and overlay the USH 2 eastbound lanes west of the roundabout.

Stage 4

Move eastbound USH 2 traffic onto the new eastbound lane and open the roundabout. Under flagging operations complete construction of the eastbound USH 2 to southbound USH 51 slip ramp, reduce the USH 2 westbound lanes west of the roundabout to a single lane and mill and overlay the USH 2 westbound lanes west of the roundabout, and remove the temporary roadway and temporary widening not removed under previous stages.

Wisconsin Lane Closure System Advance Notification

Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	**MINIMUM NOTIFICATION**
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥ 16 feet)	**MINIMUM NOTIFICATION**
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 2 or USH 51 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 28, 2021 to 6:00 AM Tuesday, June 1, 2021 Memorial Day;
- From noon Friday, July 2, 2021 to 6:00 AM Tuesday, July 6, 2021 Independence Day;
- From noon Friday, September 3, 2021 to 6:00 AM Tuesday, September 7. 2021 Labor Day.

stp-107-005 (20181119)

6. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

stp-107-065 (20080501)

CenturyLink

Merit Network

Xcel Energy

The following utility companies have facilities within the project area; however, no adjustments are anticipated:

Northern Natural Gas Company

7. Work by Others.

USH 2 will be under construction from CTH B to the west project limits, under project number 1185-03-71. Project 1185-03-71 includes milling, HMA pavement, culvert pipe replacement, and other incidental items. Coordinate work zone traffic control, lane closures and other work items as required with adjacent contractor.

8. Public Convenience and Safety.

Replace standard spec 107.8 (4) with the following:

Notify the following organizations and departments at least 2 business days before road closures, lane closures, or detours are put into effect:

Replace standard spec 107.8 (4) with the following:

Notify the following organizations and departments at least 2 business days before road closures, lane closures, or detours are put into effect:

Iron County Sheriff's Department
Iron County Highway Department
Gogebic County, MI Sheriff's Department
Wisconsin State Patrol
Michigan State Patrol
Town of Kimball
City of Hurley, WI
Ironwood, MI
Hurley School District
Hurley Post Office

The Iron County Sheriff's Department 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor.

ncr-107-005 (20141015)

9. Property Marks – Protecting and Restoring.

Replace standard spec107.11.3 (1) with the following:

Protect and carefully preserve all known property and survey marks, land monuments, and right-of-way monuments and marker posts. Notify the engineer of the nature and location of these monuments and markers. Do not disturb or destroy monuments or markers until the engineer has arranged for their referencing or perpetuation.

Reset or replace, to the required standard, any property and survey marks, land monuments, and right-of-way monuments and marker posts that fall outside the construction limits that are shifted, lost or damaged by the contractor during construction operations, as determined by the engineer. If the contractor fails to restore the disturbed monuments or markers within a reasonable time, the department may, upon 48 hours written notice, restore the disturbed monuments or markers. The department will deduct restoration costs from payments due the contractor under the contract.

ncr-107-010 (20110531)

10. Protecting and Restoring Property – Preservation of Geodetic Control Stations.

A Geodetic Control Station is located within the project limits at the following location(s):

Station 208+12.10 WB, 118.57 feet ***Left***.

Protect and preserve the geodetic control station as shown on the plan. Maintain a minimum distance of 15-feet between all equipment and work operations and the geodetic control station unless allowed by the engineer. Any damage to a geodetic control station resulting from the contractors operations will be addressed as described in standard spec 107.11.1 (3).

ncr-107-020 (20141015)

11. Destroying Geodetic Survey Control Station.

Survey monument B 211, Federal Point ID RM0608, is a geodetic survey control station incorporated in the Wisconsin Geodetic Survey Control Network with a datasheet published in the National Spatial Reference System (NSRS) database managed by NOAA's National Geodetic Survey (NGS).

B 211 is a bronze NGS vertical control mark disk set vertically in the west face of the second of four piers in the median of the USH 2 overpass and USH 51 south.

The approximate location of B 211 is STA 222+39.76 EB, 30.61' LT.

The disk shall be removed from the pier, salvaged and stored in the field office for Wisconsin Department of Transportation (WisDOT) Central Office - Geodetic Surveys Unit staff to collect and deliver to the NGS Regional Geodetic Advisor.

The white guard post near B 211 shall be removed but not salvaged. Removal of the white guard post shall be paid under the appropriate contract item.

Notify Jacob Rockweiler, P.E., WisDOT Wisconsin Height Modernization Program Manager whose phone number is (608) 243-5992 and email is jacob.rockweiler@dot.wi.gov when the disk has been removed, salvaged and stored in the field office.

For additional information regarding geodetic survey control stations, please refer WisDOT Construction and Materials Manual (CMM) 7-85:

https://wisconsindot.gov/rdwy/cmm/cm-07-85.pdf

12. Destroying Geodetic Survey Control Station.

Survey monument HURLEY GPS AZ MK, Federal Point ID DO5992, is a geodetic survey control station incorporated in the Wisconsin Geodetic Survey Control Network with a datasheet published in the National Spatial Reference System (NSRS) database managed by NOAA's National Geodetic Survey (NGS).

HURLEY GPS AZ MK is a bronze NGS horizontal control mark disk set in the top of a concrete base.

The approximate location of HURLEY GPS AZ MK is STA 208+12.10 WB, 118.57' LT.

The disk shall be removed from the concrete base, salvaged and stored in the field office for Wisconsin Department of Transportation (WisDOT) Central Office - Geodetic Surveys Unit staff to collect and deliver to the NGS Regional Geodetic Advisor.

The white guard posts surrounding HURLEY GPS AZ MK shall be removed but not salvaged.

Removal of the concrete base and white guard posts shall be paid under the appropriate contract items.

Notify Jacob Rockweiler, P.E., WisDOT Wisconsin Height Modernization Program Manager whose phone number is (608) 243-5992 and email is jacob.rockweiler@dot.wi.gov when the disk has been removed, salvaged and stored in the field office.

For additional information regarding geodetic survey control stations, please refer WisDOT Construction and Materials Manual (CMM) 7-85:

https://wisconsindot.gov/rdwy/cmm/cm-07-85.pdf

13. Environmental Protection - Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice prior to discharge. Submit the proposed means and methods of dewatering for each required location for approval as part of the Erosion Control Implementation Plan (ECIP). Include details of how the intake will be managed to not cause an increase in the background level turbidity prior to treatment and any additional measures necessary to prevent sediments from reaching the project limits or wetlands and waterways.

Guidance on Dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061. This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material and removal of the dewatering system and is incidental to contract work.

ncr-107-025 (20160401)

14. Information to Bidders - US Army Corps of Engineers Section 404 Permit.

The department has obtained a US Army Corps of Engineers Section 404 Permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the region office by contacting Dan Erva at 715-365-5776. Methods of operations, including preparatory work, staging, site clean-up or storing materials, causing impacts to other wetlands or waters are not permitted.

If the contractor chooses a method of construction that is not covered by the department's 404 Permit, obtain the proper additional permits required from the US Army Corps of Engineers. It is the contractor's responsibility to determine if additional permits are required. Obtain the additional permits prior to beginning construction operations requiring the permits. No time extensions as discussed in standard

spec 108.10 will be granted for the time required to apply for and obtain the additional permits. The contractor must be aware that the US Army Corps of Engineers may not grant the additional permits.

ncr-107-035 (20141015)

15. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

http://dnr.wi.gov/topic/invasives/disinfection.html

Use the following inspection and removal procedures:

1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    - 4.1. Washing with ~212 F water (steam clean), or
    - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
    - 4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore, this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

16. Information to Bidders, WPDES General Construction Storm Water Discharge Permit.

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Dan Erval at 715-365-5776. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

17. Erosion Control.

Add the following to standard spec 107.20:

Perform construction operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil stripping operation through the subsequent grading and finishing to minimize the period of exposure to erosion.

Replace topsoil on disturbed areas, including spot locations such as cross drains, driveways, guardrail and terminals, and intersections, immediately after grading is completed within those areas. Complete finishing operations, which includes seed, fertilizer, erosion mat, mulch, and any other permanent erosion control measures required, within seven (7) calendar days after the placement of topsoil.

ncr-107-050 (20141015)

18. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

James Gondek, License Number All-108099, inspected Structure B-26-0006 for asbestos on May 26, 2014. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Dan Erva at 715-365-5776.

In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Dan Erva at 715-365-5776 and DOT BTS-ESS attn: Hazardous Materials Specialist, PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-26-0006, USH 51 over USH 2
- Site Address: 1.1M E JCT CTH D
- Ownership Information: WisDOT Transportation North Central Region, 510 Hanson Lake Rd., Rhinelander, Wisconsin, 54494
- Contact: Dan Erva
- Phone: 715-365-5776
- Age: 59 years old. This structure was constructed in 1962.
- Area: 10709 SF of deck

Insert the following paragraph in Section 6.g.:

> If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

stp-107-125 (20120615)

19. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and hold one meeting per month thereafter. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

20. Removing Concrete Pavement, Item 204.0100; Removing Asphaltic Surface, Item 204.0110

Replace standard spec 204.3.2.2.1(3) with the following:

(3) Under the Removing Asphaltic Surface bid item, remove all types of asphaltic pavement or surfacing not supported on rigid bases. Also, remove asphaltic overlays of existing concrete pavements, bases, or bridge decks designated to remain in place.

Replace standard spec 204.4(3) and 204.4(4) with the following:

(3) If removing curb, gutter, or curb & gutter is required in conjunction with removing concrete pavement, the department will measure removing these structures by the square yard acceptably completed, under the Removing Concrete Pavement bid item. If removing a rigid base with an asphaltic surface

extending beyond the lateral limits of the rigid base, as in a widened pavement, the department will measure only the area occupied by the rigid base under the Removing Concrete Pavement bid item. The department will measure the portion of the asphaltic surfacing beyond the rigid base removed under the Removing Asphaltic Surface bid item or the Obliterating Old Road bid item. The department will make no deductions for any opening in the removed pavement having an area of 3 square yards or less.

(4) The department will deduct pavements and other surfaces removed under the Removing Concrete Pavement and Removing Asphaltic Surface bid items from the volume measured under the respective excavation bid items under standard spec 205.4.1.

21. Removing Utility Cabinet, Item 204.9060.S.01

A Description

This special provision describes removing utility cabinet conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Utility Cabinet in Each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S	Removing Utility Cabinet	Each

stp-204-025 (20150630)

22. Hauling Excess Shoulder Material, Item 305.0504.S.

A Description

This special provision describes moving excess suitable shoulder material longitudinally along the roadway to areas of deficiency as the engineer directs.

B (Vacant)

C Construction

After the asphaltic removing or salvaging operation, move the suitable shoulder material, which is in excess after shaping the shoulders to the required cross section, to areas of deficiency as the engineer directs.

D Measurement

The department will measure Hauling Excess Shoulder Material in volume by the cubic yard in the vehicle.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
305.0504.S	Hauling Excess Shoulder Material	CY

Payment is full compensation for loading, hauling, placing, and for compacting the material.

stp-305-010 (20030820)

23. Concrete Pavement Joint Layout, Item 415.5110.S.

A Description

This special provision describes providing a concrete pavement or concrete base joint layout design for intersections and marking the location of joints in the field

B (Vacant)

C Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer at least 7 calendar days before paving each intersection. Do not lay out joints until the engineer has reviewed the joint layout design. Mark the location of concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
415.5110.S	Concrete Pavement Joint Layout	LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.

The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

stp-415-020 (20170615)

24. QMP HMA Pavement Nuclear Density.

A Description

Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

(1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 except as modified in this special provision.

(2) Provide and maintain a quality control program defined as all activities and documentation of the following:

1. Selection of test sites.
2. Testing.
3. Necessary adjustments in the process.
4. Process control inspection.

(3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures.

https://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

http://www.atwoodsystems.com/

B Materials

B.1 Personnel

(1) Nuclear gauge owners and personnel using nuclear gauges shall comply with WisDOT requirements according to 460.3.3 and CMM 8-15.

B.2 Testing

(1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Conform to CMM 8-15.10.4 for test duration and gauge placement.

B.3 Equipment

B.3.1 General

(1) Furnish nuclear gauges according to CMM 8-15.2.

(2) Furnish nuclear gauges from the department's approved product list at

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx

B.3.2 Comparison of Nuclear Gauges

B.3.2.1 Comparison of QC and QV Nuclear Gauges

(1) Compare QC and QV nuclear gauges according to CMM 8-15.7.

B.3.2.2 Comparison Monitoring

(1) Conduct reference site monitoring for both QC and QV gauges according to CMM 8-15.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

(1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.

(2) Determine required number of tests according to CMM 8-15.10.2.1.

(3) Determine random testing locations according to CMM 8-15.10.3.

B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.

(2) Determine required number of tests according to CMM 8-15.10.2.2.

(3) Determine random testing locations according to CMM 8-15.10.3.

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

(1) Calculate the average sublot densities using the individual test results in each sublot.

(2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.

(3) If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay as specified in standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.2.2 Width of 5 Feet or Less

(1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.

(2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.4 Documentation

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

(1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.

(2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot

increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.

(3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.

(4) Retesting and acceptance of replaced pavement will be as specified in standard spec 105.3.

(5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.

(6) If two consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

(1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.

(2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.

(3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.

(4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

(1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.

(2) The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.

(3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.

(4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

(1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives as specified in standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

(1) The department will administer density incentives as specified in standard spec 460.5.2.3.

stp-460-020 (20181119)

25. Pipe Culverts

Replace standard spec 520.3.3(5) with the following:

Provide joint ties at all joints of circular or horizontal elliptical concrete culvert pipes including endwalls.

ncr-520-005 (20180319)

26. Storm Sewer

Replace standard spec 608.3.3(5) with the following:

Provide joint ties at all joints on concrete storm sewer system infall and outfall pipes, including endwalls. Ties are not required on installations with concrete masonry endwalls unless the plans show otherwise.

ncr-520-005b (20180319)

27. Cover Plates Temporary, Item 611.8120.S.

A Description

This special provision describes providing and removing steel plates to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

B Materials

Provide a 0.25 inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

C (Vacant)

D Measurement

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

Payment is full compensation for furnishing, installing, and removing the cover plates.

The steel plates shall become the property of the contractor when no longer needed in the contract work.

stp-611-006 (20151210)

28. Landscape Planting Surveillance and Care Cycles.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of $200.00 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

stp-632-005 (20070510)

29. Blue Specific Service Signs.

Add the following to standard spec 638.3.4:

Do not remove or move blue specific service signs or their associated posts. Specific service signs are signs with logos that identify commercial entities providing gas, food, lodging, camping, or attractions. A separate contractor, Interstate Logos - Wisconsin, is responsible for these signs. Contact Interstate Logos - Wisconsin at (844) 496-9163 a minimum of 14 calendar days in advance to coordinate removing, moving, or re-installation of these signs.

The contractor is responsible for damage done to these signs due to contractor operations.

stp-638-010 (20150630)

30. Field Facilities.

Add the following to standard spec 642.3:

Set up the field office within seven days after notice from the project engineer.

Provide a parking area large enough to park a minimum of six cars directly adjacent to the field office. The parking area and approach to the field office shall be well drained and consist of a crushed base aggregate or an existing paved surface and shall be ready for use within seven days after the field office is set up.

ncr-642-005 (20160406)

31. Traffic Control.

Add the following to standard spec 643.3.1:

Lighting devices shall be covered or rendered inoperative when not in use.

Provide the engineer and law enforcement (police, sheriff and State Patrol) the current telephone number(s) that the contractor, or their representative, can be contacted at, at all times, in the event a safety hazard develops. Repair, replace, or restore the damaged or disturbed traffic control devices within two hours from the time notified or made aware of the damaged or disturbed traffic control devices.

Promptly replace all state-owned signs that are removed by the contractor due to interference with construction operations. At no time may stop signs be removed or moved without flag persons present.

Add the following to standard spec 104.6.1.2.2:

Provide a dedicated person or alternate method to guide traffic travelling alongside or near moving operations such as milling, paving, and shouldering.

ncr-643-005 (20190703)

32. Excavation Waste, Item SPV.0035.01

A Description

This special provision describes disposing of excavation waste outside of the project right-of-way. Conform to standard spec 205 as modified in this special provision.

B (Vacant)

C Construction

Under the Excavation Waste bid item dispose of surplus excavation materials from the excavation items under standard spec 205 that cannot be disposed of within the project right-of-way.

D Measurement

The department will measure Excavation Waste by the cubic yard acceptably completed, computed using the method of average end areas in its original position, with no correction for curvature and no adjustment for expansion or shrinkage. Waste will be measured only for surplus excavation from excavation bid items under standard spec 205.4.1 that cannot be disposed of within the project right-of-way.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Excavation Waste	CY

Payment for Excavation Waste is full compensation for all costs associated with locating disposal sites; for obtaining permits; and for hauling and disposing of waste excavation material at disposal sites outside of the project right-of-way.

Replace standard spec 205.5.2.3.1 with the following:

The department will only pay for engineer-approved EBS to correct problems beyond the contractor's control. EBS is eligible for payment under the Excavation Waste bid item if it cannot be disposed of within the project right-of-way. Subgrade correction work performed under standard spec 205.5.2.3.3 is not eligible for payment under the Excavation Waste bid item.

Delete standard spec 205.5.2.3.2.

33. Inlets 2x3-FT Temporary, Item SPV.0060.01.

A Description

This special provision describes furnishing, installing and removing Inlets 2x3-ft Temporary as shown on the plans and as hereinafter provided.

B Materials

Furnish materials conforming to section 611.2 of the standard specifications.

C Construction

Construct inlets as specified in section 611.3 of the standard specifications.

Remove inlets as specified in section 204 of the standard specifications.

D Measurement

The department will measure Inlet 2x3-FT Temporary by each individual.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Inlets 2x3-FT Temporary, Item	Each

Payment is full compensation for furnishing, installing and removing all materials when the inlet is no longer needed and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

34. Storm Sewer Plug 18-Inch SPV.0060.02.

A Description

This work describes installing a Storm Sewer Plug at locations specified in the plans.

B Materials

Provide a precast reinforced concrete plug or an engineer approved alternative, conforming to the inside diameter of the corresponding pipe as shown on the plan.

All materials, if concrete, must conform to section 501 and section 611 of the standard specifications.

C Construction

Place a watertight plug in the end of the storm sewer pipe in a manner that seals the pipe but allows for future removal of plug without damaging the storm sewer pipe.

D Measurement

The department will measure Storm Sewer Plug as each individual unit acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Storm Sewer Plug 18-Inch	Each

Payment is full compensation for providing materials, including masonry, and other fittings; for excavating, backfilling, disposing of surplus material, and for cleaning out and restoring the work site.

35. Apron Endwalls Temporary 18-Inch SPV.0060.03; Apron Endwalls Temporary 24-inch SPV.0060.04; Apron Endwalls Temporary 36-inch SPV.0060.05.

A Description

This special provision describes furnishing, installing and removing Apron Endwalls Temporary as shown on the plans and as hereinafter provided.

B Materials

Furnish new or salvaged materials conforming to section 520.2 of the standard specifications.

C Construction

Construct inlets as specified in section 520.3 of the standard specifications.

Remove apron endwalls as specified in section 204 of the standard specifications.

D Measurement

The department will measure Apron Endwalls Temporary by each individual unit acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Apron Endwalls Temporary 18-Inch	Each
SPV.0060.04	Apron Endwalls Temporary 24-Inch	Each
SPV.0060.05	Apron Endwalls Temporary 36-Inch	Each

Payment is full compensation for furnishing, installing and removing all materials when the apron endwall is no longer needed and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

36. INSTALL DEPARTMENT FURNISHED - CONTRACTOR INSTALLED CELLULAR CONNECTOR NODES (LLC7290), Item SPV.0060.10

A Description

This special provision describes the installation of Department furnished Cellular Connector Nodes (LLC7290) on luminaires.

B Materials

The Department will furnish and deliver the cellular connector nodes.

The Contractor shall notify the Department North Central Region Electrician, Timothy Knowles (715-401-0105), regarding delivery of Department furnished materials.

C Construction

Mount the cellular connector nodes and associated equipment as indicated on the manufacture’s installation instructions and plans.

The cellular connector nodes attach to the standard NEMA 7-Pin Socket on top of the luminaires in lieu of the standard photocell.

The Contractor shall notify the Department North Central Region Electrician, Timothy Knowles (715-401-0105), at least 7 Working Days prior to any necessary Electrical Inspections, regarding any proposed Electrical Adjustments, and for Final Inspection and Turn-On.

D Measurement

The department will measure Install Department Furnished – Contractor Installed Cellular Connector Nodes (LLC7290) as each individual unit acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Install Department Furnished – Contractor Installed Cellular Connector Nodes (LLC7290)	EACH

Payment is full compensation for installation and testing of the cellular connector nodes; furnishing and installing all necessary hardware; making all necessary connections; and for all labor, tools, equipment, and incidentals necessary to complete the contract work.

37. Perennial, Little Bluestem, Item SPV.0060.31; Perennial, Prairie Blazing Star, Item SPV.0060.32; Perennial, Prairie Dropseed, Item SPV.0060.33; and Perennial, Showy Goldenrod, Item SPV.0060.34.

A Description

This special provision describes the furnishing and planting of perennial and ornamental grass plant materials in accordance with the plans. Complete in place at the locations as designated on the plans, or as directed by the engineer conforming to standard spec Section 632 and as hereinafter provided.

B Materials

Per Section 632.1.

Mulch is incidental to this bid item.

C Construction

Install plants as detailed and according with pertinent provisions of section 632.

D Measurement

The department will measure Perennials as each individual plant acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.31	Perennial, Little Bluestem	EACH
SPV.0060.32	Perennial, Prairie Blazing tar	EACH
SPV.0060.33	Perennial, Prairie Dropseed	EACH
SPV.0060.34	Perennial, Showy Goldenrod	EACH

Payment is full compensation for providing, transporting, handling, storing, placing, and replacing plant materials; for excavating all plant holes, salvaging topsoil, mixing, and backfilling; for providing and applying all required fertilizer, water, herbicides, mulch, for disposing of all excess and waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work. Bid item 632.9101 covers landscape planting surveillance and care for perennial and ornamental grasses.

38. Salvage, Store and Reinstall Lighting Unit, Item SPV.0060.40.

A Description

This special provision describes salvaging, storing in a secure location and reinstalling existing lighting units as shown on the plans and as hereinafter provided.

B (Vacant)

C Construction

Salvage designated pole and arms, for reuse on this project in accordance with standard spec 204.

Replace any materials damaged by operations of the Contractor at no expense to the OWNER.

When existing materials cannot be reused and must be replaced, match existing components as closely as possible.

Reinstall pole, arms, and luminaires in accordance with standard spec 657.

D Measurement

The department will measure Salvage, Store and Reinstall Lighting Unit by each individual unit acceptably relocated.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.40	Salvage, Store and Reinstall Lighting Unit	Each

Payment is full compensation for salvaging, storing, furnishing miscellaneous hardware and reinstalling the lighting unit.

39. Concrete Curb Type G Modified, Item SPV.0090.01.

A Description

This special provision describes constructing concrete curb, concrete curb and gutter, and concrete gutter according to the details shown in the plans, the requirements of section 601 of the standard specifications.

B Materials

Provide materials that conform to the requirements of subsection 601.2.

C Construction

Construct according to the requirements of subsection 601.3.

D Measurement

The department will measure Concrete Curb Type G Modified in length by the linear foot acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb Type G Modified	LF

Payment will be made according to standard spec 601.5.

ncr-601-015 (20141015)

40. Stone Mulch Epoxied, Item SPV.0165.01.

A Description

This special provision describes furnishing, installing stone mulch and mixed with an

epoxy resin binder at the locations as indicated on the plans.

Work and materials shall be in accordance with the applicable provisions of section 604 of the standard specifications and these special provisions.

B Materials

Mulch shall be 1-1/2 - 2" stone, washed free of loam, sand, clay, and other foreign substances. Color range shall correspond to the industry standard for stone mulch labeled and sold as blue river rock. Provide the

Engineer with a representative sample of the stone mulch. Do not proceed with work until Engineer has approved the material.

The epoxy resin binder shall be a low modulus, medium-viscosity, 2-component epoxy resin.

Furnish evidence, to the satisfaction of the Engineer, that the proposed product has been successfully used in a similar application.

Epoxy resin binder shall be clear to light amber when fully cured.

The epoxy resin binder shall conform to ASTM C-881 and AASHTO M-235 Specifications and the following requirements:

Total water absorption, ASTM D-570
7 day, 1.3% (2 hour boil)
14 day, 0.232% (24 hour immersion)
Viscosity: 2,500 cps

C Construction

C1 Application

Mix epoxy resin binder in strict conformance with product manufacture requirements.

Mix epoxy resin binder under dry conditions only. Do not place if rain is expected within 8 hours following epoxy resin application to stone.

Air and surface temperature should be between 50 and 90 degrees Fahrenheit during and for 24 hours following application and mixing of the epoxy resin binder.

Protect installed stone mulch with epoxy resin binder from excessive dust exposure for the first 4 hours of curing.

Place the stone mulch 4 inches deep in such a manner as to not damage other materials already in place. The finished grade of the mulch material will be l-inch below the top of curb.

C2 Test Section

Prior to placing stone mulch, prepare a test section utilizing the proposed stone and epoxy resin binder so the engineer will be able to assess the adequacy of the product and the application and mixing methods to yield the desired results. Test section to be 3 feet x 3 feet and a minimum of 4-inches thick. Notify the Engineer no less than 24 hours in advance of preparing the test section to allow time to arrange for witnessing the epoxy resin binder application and mixing with the stone. Test section shall be allowed to cure according to product manufacturer requirements before the Engineer will accept the product for use on the final structures.

Test panel must be approved by the Engineer prior to installation.

D Measurement

The Department will measure Stone Mulch Epoxied by the square foot acceptably completed and in place.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Stone Mulch Epoxied	SF

Payment is full compensation for furnishing and installing all materials and cleanup of excess materials on any adjacent pavement.

41. Weed Barrier, Item SPV.0165.02.

A Description

This special provision describes the furnishing and installing weed barrier in accordance with the plans. Complete in place at the locations as designated on the plans, or as directed by the engineer and as hereinafter provided.

B Materials

Weed Barrier: Per Section 632.2.14.

C Construction

Weed Barrier: Per Section 632.3.17.

D Measurement

The department will measure Weed Barrier in units per square foot acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.02	Weed Barrier	SF

Payment is full compensation for providing, transporting, handling, and installing weed barrier, and for disposing of all excess and waste materials.