

# Roadway and Erosion Control

### <u>Item 209 – Linear Grading, As Per Plan</u>

This item of work shall consist of grading along the outside edge of the paved shoulder to eliminate high spots and provide positive sheet flow off the pavement and shoulder into roadside ditches or drainage structures. This item is not intended to be used to excavate a uniform depth to place Item 617 – Compacted Aggregate, As Per Plan.

Any debris collected shall be removed and disposed of as specified in Section 105.16 & 105.17 of the Construction and Material Specifications.

Payment for the above work shall be made at the unit bid price for Item 209, Station, Linear Grading, As Per Plan and shall include all labor, tools, equipment and materials necessary to perform this item of work.

# Drainage

## Castings Adjusted to Grade, As Per Plan

All castings, within the asphalt overlay section, shall be adjusted to the finished roadway elevation by the Contractor. The time between adjusting the castings and resurfacing shall be kept to an absolute minimum. No adjusting rings shall be permitted.

The following estimated quantities have been carried to the General Summary:

Item 611 – Catch Basin Adjusted to Grade, As Per Plan	<u>_</u>	<u> 1 Each</u>
Item 611 - Manhole Adjusted to Grade, As Per Plan	<u> </u>	6 Each
Item 638 – Valve Box Adjusted to Grade, As Per Plan	<u>3</u>	<u>Each</u>

### **Pavement**

### **Profile and Alignment**

Place the proposed pavement to follow the alignment of the existing pavement. Place the proposed asphalt concrete with a uniform thickness as shown on the typical sections.

### **Planing Requirements**

The duration of time between planing the asphalt and placing the surface asphalt overlay shall be kept to a minimum. In no instance shall this time exceed 14 calendar days. The time limit shall begin on the first day of planing and shall continue based on calendar days, minus any weather days, until completion of the asphalt concrete surface course. This is to ensure that the potential degradation of the exposed pavement due to traffic is kept to a minimum.

In the event that the time between exposing the existing pavement and placing the intermediate asphalt course exceeds 14 calendar days, liquidated damages as per 108.07 of the C&MS shall be assessed.

The contractor shall coordinate with the Parks District to deposit asphalt millings at either the Disc Golf Parking Area or along the Access Rd to Ravenna Rd (SR-44) at the direction of the Engineer. Contact Josie Mckenna at 1-330-637-2856 or josie.mckenna@dnr.ohio.gov.

#### **Asphalt Concrete Surface Course Sealing Requirements**

In addition to the gutter sealing requirements specified in SCD BP-3.1 and C&MS 401.15, after completion of the surface course, the contractor shall use a certified 702.01 PG binder to seal the following locations:

- All castings including but not limited to monuments, manholes, water valves, catch basins, curb inlets.
- Butt joints and feather joints including bridge approaches.
- Forward joint for driveway asphalt and trailing joint when butting to existing asphalt drive.
- Perimeter of all pavement repairs or other asphalt inlays when pavement repairs/inlays are not overlaid with an asphalt concrete surface course.
- All cold longitudinal joints between paved shoulders and guardrail

The material used shall be a certified 702.01 PG binder. The width of the sealer shall be 2-3 inches.

Any additional costs associated with the work identified in this note shall be included in the appropriate asphalt concrete surface course item of work.

# <u>Item 251 – Partial Depth Pavement Repair (441)</u>

This item shall be used to repair unsound, cold patch, or pop-out areas of longitudinal and transverse joints as directed by the Engineer. This work shall be performed prior to the planing operation. The depth of the repair shall be 3" below the top of the planed surface. The width of the repair shall be 24" centered over the existing joint.

Use replacement materials conforming to the requirements of Item 441, Type 2.

The following estimated quantity has been carried to the General Summary:

Item 251 – Partial De	pth Pavement Re	oair <b>150 SY</b>	4
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### <u>Item 251 – Partial Depth Pavement Repair (441), As Per Plan</u>

This item shall be used to repair pavement areas affected by culvert replacements along W Cleveland Dr., Pennywort Dr., Old Interurban Dr., Camping Area Rd. 1 Camping Area Rd. 4, Camping Area Rd. 5, and the Equipment Storage Road. Three of these culvert pavement repair areas are located outside of the work limits along the Equipment Storage Rd. and S Pennywort Dr. (see callouts in the Schematic Plans). The depth of these repairs shall be 4" below the top of the pavement surface. The contractor shall remove 4" in depth of existing gravel and compact this material prior to paving. The width of these repairs shall be 36".

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Use replacement materials conforming to the requirements of Item 441, Type 2. This work includes the removal of aggregate displaced from repair areas.

The following estimated quantity has been carried to the General Summary:

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### <u>Item 253 – Pavement Repair</u>

This work item is for use as directed by the Engineer for the purpose of pavement repair. All labor and material necessary to perform this work and section 250 of the CMS shall be included for payment under Item 253.

Depth of pavement repair removal shall typically be 10" measured after the pavement has been planed. The depth of repair shall be as directed by the Engineer if unsound material is encountered after the removal of the 10".

Use replacement materials conforming to the requirements of Item 301.

The following estimated quantity has been carried to the General Summary:

# <u>Item 304 – Aggregate Base, As Per Plan</u>

This item shall be used as directed by the Engineer in pavement repair areas where the Engineer deems the subgrade material unsuitable.

Place 6" of material conforming to the requirements of Item 304.

The following estimated quantity has been carried to the General Summary for use as directed by the Engineer:

# <u>Item 617 – Compacted Aggregate, As Per Plan</u>

This item shall be used along the shoulders. Material shall be limited to reclaimed asphalt concrete pavement.

The actual depth of compacted aggregate placed will vary depending upon existing conditions. For estimating purposes, an average depth of one inch (1") has been used. Water, if needed, shall be applied according to 617.05 and shall be included with Item 617 – Compacted Aggregate, As Per Plan.

This item shall be used, as directed by the Engineer to fill any remaining low areas after Item 209 – Linear Grading, As Per Pan is completed.

### <u>Item 897 – Pavement Planing, Asphalt Concrete, Class A</u>

Pavement planing shall be performed at an average depth of 1" as specified in the plans. All equipment, materials and labor required to perform the pavement repairs as detailed in these plans shall be included for payment under Item 897 -Pavement Planing, Asphalt Concrete, Class A.

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### Work Zone Markings

The following estimated quantities have been carried to the General Summary for use at locations identified by the Engineer for work zone pavement markings per the requirements of CMS 614.04 and 614.11. Place temporary markings at the same locations as the proposed permanent markings.

After the planing is completed, use the following temporary markings:

Item 614 – Work Zone Center Line, Class I, 642 Paint	. 2.20 Miles
Item 614 – Work Zone Edge Line, Class I, 6", 642 Paint	9.21 Miles
Item 614 – Work Zone Channelizing Line, Class I, 12", 642 Paint	962 FT
Item 614 – Work Zone Stop Line, Class I, 642 Paint	283 FT
Item 614 – Work Zone Transverse/Diagnol Line, Class I, 642 Pain	t 1132 FT
Item 614 – Work Zone Crosswalk Line, Class I, 24", 642 Paint	<u>253 FT</u>

After the surface course is placed, use the following temporary markings:

Item 614 – Work Zone Center Line, Class III, 642 Paint	2.20 Miles
Item 614 – Work Zone Edge Line, Class III, 6", 642 Paint	9.21 Miles
Item 614 - Work Zone Channelizing Line, Class III, 12", 642 Paint.	962 Ft
Item 614 – Work Zone Stop Line, Class III, 642 Paint	283 Ft
Item 614 – Work Zone Transverse/Diagonal Line, Class III, 642	
Paint	<u>1132 Ft</u>
Item 614 – Work Zone Crosswalk Line, Class III, 24", 642 Paint	253 Ft

## **Work Zone Marking Signs**

After planing or paving, the Contractor may place these signs instead of placing work zone edge lines, which shall be non-performed, as directed by the Engineer. These signs shall be removed when painted edge lines are present. The following estimated quantity has been carried to the General Summary:

### **Major Work Items**

The following major work items will require traffic maintenance which shall be incorporated into the Contractor's sequence of operations.

- A. Planing of asphalt concrete
- Completion of pavement repairs
- Adjustment/reconstruction of existing castings and detectors.
- Placing of asphalt surface course
- Placing proposed pavement markings

### **Sequence of Construction**

The Contactor shall coordinate with the Park's District and onsite Engineer to complete work at priority locations in the following order:

- 1. Culvert Full Depth Repairs
- 2. Camping Area Rd 2
- 3. Camping Area Rd 3
- 4. Camping Area Rd 4
- 5. Camping Area Rd 1 6. Camping Area Rd 5
- Access Rd Section
- 8. All other areas
- Culvert Full Depth Repair work shall be completed during one night-time full road closure period from 6:00 pm to 6:00 am and must be completed prior to May 23<sup>rd</sup>, 2025. Weekend (Friday thru Sunday) night-closures will not be permitted.

Due to scheduled work at the Wastewater Treatment Facility along the Campground Area Access Road in June of 2025, the contractor shall coordinate with Valerie Wollet (valerie.wollet@dnr.ohio.gov and/or 614-265-6728) on when paving operations for Camping Area Road 1, Camping Area Road 5, and the Access Rd can begin. Until this time, the contractor shall continue paving operations throughout the rest of the park. Once this work is completed, the contractor shall resume adherence to the Sequence of Construction.

## **Short-Term Hourly Closure Window Contract**

The following table shall be used in conjunction with Proposal Note 140 for the night-time road closure along Old Interurban Dr for full-depth pavement repairs over an existing culvert.

Description of Work	Hours to Complete	Disincentive \$ per minute
Old Interurban Dr. (Sta 20+71.00 to 20+93.00): Complete all culvert full depth repair work (excluding surface course) between the hours of 6:00pm and 6:00am on one week-day night prior to May 23 <sup>rd</sup> , 2025. Weekend (Friday thru Sunday) night-closures will not be permitted.	12	\$15

## **Continuous Access**

The Contractor shall maintain safe and adequate driveways and walkways in order to provide continuous access for pedestrians, passenger vehicles, trucks, and safety equipment to all adjoining properties

The cost for all materials, equipment, and labor necessary to provide continuous access shall be included in the lump sum price for Item 614 - Maintaining Traffic.

# **Permanent Pavement Marking**

After placing the surface course, the Contractor may place permanent pavement markings instead of placing work zone pavement markings, which shall be nonperformed at these locations.

# **Maintaining Traffic and Sequence of Operations**

All asphalt concrete operations shall be conducted in a manner that will assure minimum danger and inconvenience to highway users. The procedure for the removal or placement of any existing or proposed asphalt course shall be such that no greater than 1-1/2" discontinuity in the elevation of the travelled surface shall be exposed to traffic.

Traffic shall not be permitted to cross any partial-width removal or resurfacing joint during the actual removal or paving operation except as necessary. Any partialwidth longitudinal joints which must be exposed to traffic shall be ramped using Item 614 – Asphalt Concrete for Maintaining Traffic at a rate not steeper than 6:1.

Temporary transverse removal or paving joints which must be exposed to traffic shall be ramped using Item 614 - Asphalt Concrete for Maintaining Traffic as a rate not to exceed 1" in 10'.

For removal of existing overlays, a transition may be planed into the existing overlay and may be substituted for the asphalt ramps previously described, provided the transition is removed in a subsequent operation within 24 hours.

Whenever traffic is subject to partial width removals or overlays prior to full width completion, the Contractor shall provide W8-11-48 "UNEVEN LANES" signs (dual sign installation). Placement shall be as directed by the Engineer and included in the lump sum payment for Item 614 – Maintaining Traffic.

Whenever any part of the traveled surface is closed, the motorists shall be warned and diverted by the Contractor through the use of a flashing arrow, in addition to those provisions set forth in the OMUTCD, the Traffic Engineering Manual and the applicable Standard Construction Drawings.

## <u>Item 614 – Asphalt Concrete for Maintaining Traffic</u>

This item shall be used to install and remove temporary asphalt ramps at butt joints, and drainage/utility castings, where required. Material shall be removed prior to the placement of the next course of asphalt. The following estimated quantity has been carried to the general summary to accomplish this item of work.

### **Covering of Ground-Mounted Signs – General**

When required by other items or incidentally to Item 614 – Maintaining Traffic, cover existing ground-mounted signs with plywood or OSB blanks (1/2" minimum thickness) covering 80% of the sign area and all of the sign legend. The use of low quality materials such as duct tape and black plastic is not permitted.

## <u>Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by</u> the Engineer

When additional signing is needed to maintain traffic, the Contractor shall furnish the sign or signs as directed by the Engineer. These signs shall be ground mounted and meet all the specifications of the plan, proposal and current year CMS.

Payment for this item shall include, but not be limited to, the cost to furnish and erect the sign, including driving posts or other approved methods of sign support, maintaining the sign and removal of the sign.

This item of work shall be used to provide signs that are beyond the requirements of the signage detailed in the Standard Construction Drawings and the OMUTCD.

The following estimated quantity has been carried to the General Summary to be used as directed by the Engineer:

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by the Engineer ...... .. 300 Sq Ft



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