PAVEMENT PRESERVATION (ODG) "BOOK JOB" STANDARDS

INTRODUCTION

This document provides the standards for Pavement Preservation project deliverables and subsequent submittals to the Overlay Design Group (ODG) in the Highway Program for review. These standards apply to all Pavement Preservation projects.

TITLE SHEET DEVELOPMENT

- Each project WIN gets its own Title Sheet.
- Always show stationing from left to right.
- Show North Arrow in (any) correct direction.
- Place the small Location Map.dgn (See <u>Location Map Creation for Title Sheets</u>).
- Emphasize and label the project road.
- The Title Sheet needs a PE review, signature, and stamp. Utilize the PE closest to the design (Designer, PM, or Region Engineer).
- See <u>Title Sheet for Book Jobs</u> for Title Sheet development instructions.
- Use the Federal or State Project Number on the Title Sheet. See <u>Sample Title Sheets</u> for Book Jobs for examples.

LOCATION MAP FOR BOOK JOBS

- Use a separate sheet for 8½" x 11" Location Map(s) for each WIN, starting with "1 of X."
- See <u>Location Map for Book Jobs</u> for instructions and <u>Sample Location Map for Book Jobs</u> for an example.

TYPICAL SECTION DEVELOPMENT

- See <u>Typical Section Creation for Book Jobs</u> for Typical Section development instructions.
- Use Federal or State Project Number on the Typical Section.
- Don't overcrowd. Use <u>one</u> drawing per Typical Section.

- Only use slope tolerances when shimming to slope.
- Use decimal feet for widths to 0.1 feet.
- Use fractions of inches for depths and thicknesses (use \(\frac{1}{4} \) not \(\frac{1}{4} \)).
- Do not include item numbers on the Typical Sections or specific mix type. The item numbers for HMA are found only in the SP 403 Bituminous Box this helps for making accurate and quick fixes on last minute corrections.
- Use one of the following notes:
 - o "MATCH EXISTING" If <u>not</u> shimming to slope (<u>requires a discussion</u>)
 - O When shimming to slope reference to the superelevations table by noting "SEE CROSS SLOPE SHEET"
- See <u>Typical Section Examples for Book Jobs</u> for examples of completed Typical Sections.

BID BOOK PAGE STANDARDS

HEADERS/FOOTERS

- Use WIN numbers (Example: 20882.00)
- Formatting:
 - o Use Times New Roman font, 12-point size
 - o The header shall be bolded font and right aligned
 - o The footer shall be regular font and center aligned
 - o Insert Page Number in footer, use Auto Text, Page X of Y
 - o Do not bold
 - The body of text shall be regular font (except for the item number & name in Construction Notes)
- Header for a **single** WIN:
 - o Town(s)
 - o WIN Number 45678.00 (Do not use federal or state project numbers.)
 - o Use full road name US Route 202, Bangor Street, Hogan Road. No abbreviations.
 - O Date of last revision, no matter how small. (Note: Do <u>not</u> use Insert Auto Text for the date, which changes each time the document is opened)

Example:

- Header for **multiple** WINs:
 - o Towns Listed in WIN numeric order
 - WINs Lowest number to highest (Do not use Federal or State Project numbers.)
 - o Separate the last two WINs with "&".
 - O Date of last revision, no matter how small (Note: Do <u>not</u> use "Insert Auto Text" for the date, which changes each time the document is opened.)

Example:

Augusta, Sidney, & Waterville 20567.00, 20854.00, & 20882.00 US Route 1 & Route 127 December 20, 2018

STATIONING SHEET

- If available, use As-Built stationing which is required for Interstate work
- If As-Built stationing is not available, use a starting station of 10+00. Usually stationing runs west to east or south to north.
- Stationing shall be to the nearest foot.
- The project stationing begins at the bottom of the first page and goes up the page.
- The project stationing ends at top of the last page.
- Include side roads, town lines, signage, utility poles, etc.
- Use stationing intervals of at least 1000' (may be closer on small projects).
- Follow Bid Book Page Standards for headers/footers.

CROSS SLOPE SHEET (PROJECT SUPERELEVATIONS)

- Either Excel or Word may be used to produce the document.
- Beginning of Project starts at the bottom of the first page and goes up with three columns of stationing on a page. See Sample Cross Slope Sheet.
- Show 50' stationing increments with "LT%" on the left and "RT%" on the right of the page.
- Use **bold** type from end of station to beginning of next station where sloping is consistent between the listed stations in **bold**.

- Do not include all stations. Use only those stations where the slope changes.
- The Cross Slopes Sheet(s) will be included in any overlay or mill project where cross slope is being corrected.
- When completed, place the Cross Slopes Sheet(s) into the project folder in the ODG folder and send an e-mail to Brian Luce, Timothy Kelley and Nico Trebouet for review at least 3 weeks prior to PS&E. Note: The necessary files should be available in the 403 folder on the ODG.
- If design exceptions (DE) on cross slope and/or superelevation are sought, the Cross Slopes Sheet(s) is also sent to Scott Bickford. One DE submittal is adequate for the entire project. Submittal will have the existing cross slopes/superelevations, the proposed cross slopes/superelevations, and the necessary cross slopes/superelevations to comply with policy (See EI C4 Cross Slope, EI C6 Superelevation Rate). Areas where a deviation from the policy is requested should be highlighted and include comments. Also, the shim tonnage should be computed for each case, drag shim of 0.5" to match existing, the proposed shim with proposed slopes, and the tonnage to bring up to standard. The Excel sheet in the ODG folder gives examples of the format the submittal and the meeting request.
- Use -1.0% to -4.0% on tangent sections and +/- 1.5% in superelevated sections.
 Request DE if required by current policy (See <u>EI C4 Cross Slope</u>, <u>EI C6 Superelevation Rate</u>).
- Use a 2.0% maximum change in 50' unless the As-Builts state otherwise.
- Use 0.5% increments in tangent and full superelevation sections.
- Maintain a consistent stretch for as long as practical. Do not vary every few stations.
- Shim a minimum of 4' into shoulder or the entire shoulder width if the shoulder is 4' wide or less.
- Follow Bid Book Page Standards for headers/footers.

CONSTRUCTION NOTES

- Use Word documents only. Do not use Excel spreadsheets.
- Do not insert pictures, tables, or copied Excel cells.
- Item Number & Name bolded, spelled out, and underlined. Example: 203.20 – Common Excavation
- Do not repeat words such as Item, STA., sta., Station, or the # symbol for every location.
- Only include information for an Item if it adds to the understanding of the project.

Example:

- "Equipment Rental items will be used as directed by the Resident" (does <u>not</u> add understanding)
- "Equipment Rental items will be used to flatten the slope to 4:1 at station 42+16 and as directed by the Resident" (does add understanding)
- Specify number of "Road Work Next 'X' Miles" signs expected. State the number of miles in whole miles.
- Follow Bid Book Page Standards for headers/footers

Other Tips:

- When adjusting guardrail (not replace or new install), add note to pay for HMA under a machine placed surface item (such as 403.210).
- Include estimated quantity for spot shims or other non-production HMA areas.
- Traffic Control is incidental to crack seal and fog seal. Add a note if not included in Special Provision.
- For Paving Bridges within project limits:
 - o If milling bridge decks, add the note "The Contractor may be required to cut cores to verify pavement depth prior to milling."
 - o Default treatment will be a full width mill & fill. If the bridge shoulders are in good shape, e-mail Scott Bickford to get an exception. If the bridge shoulders are not paved with the project, they will be fog sealed.
 - Extraordinary bridge paving will be funded by the Bridge Program (typically 500'+). Notify Scott Bickford if this situation exists
 - Overpass bridges that are accessible from preservation projects (off ramps) may be paved with the project, but funded by the Bridge Program.
 The Bridge Program will determine if that work shall be included.
- For common notes see Common Construction Notes

GENERAL NOTES

- Use Word documents only. Do not use Excel spreadsheets.
- See <u>General Notes</u> for the latest set of notes, also located on the <u>Highway Program Website</u> under General =>Pavement Preservation (ODG).
- Start each contract with the latest version of General Notes (see above).

- Only pick the Notes needed for the contract.
- Do not modify the General Notes. Use Construction Notes or a Special Provision for customized language.
- On a multi-WIN project, if the note only applies to some of the WINs, list the applicable WINs in the note.
- Follow Bid Book Page Standards for headers/footers.

SPECIAL PROVISION 104 – UTILITIES

- Include in the ODG project folder.
- Use Word to create.
- Include Utility Certification in the ODG project folder.
- All federally funded and most state funded projects (LCP can be the exception) need to have a utility special provision and certification.
- Agreements for municipal or utility work need to be placed in the folder.
- Follow Bid Book Page Standards for headers/footers.

<u>SPECIAL PROVISION 105 – LIMITATIONS OF OPERATIONS (Updated 1/21/20)</u>

The following information should be included:

- Health and safety information
- Traffic Control (For example 1000' lane closure maximum from 8 AM to 6 PM)
- Project specific limitations (be clear and explain)
- Environmental considerations
- Drawings and submittals
- Limitations of Operations not related to contract time, work times, or schedule. (For example: 48-hour notice for schedule changes)
- Follow Bid Book Page Standards for headers/footers.

SPECIAL PROVISION 107 – TIME

The following information should be included:

- Working Days
- Allowable work times
- Night Work
- Schedule of Work and Schedule Requirements
- Liquidated Damages and Supplemental Liquidated Damages
- Closeout Documentation, Project Closeout, and Warranties
- Work hour restrictions including shutdown periods (only absolutely necessary shutdowns should be included)
- Only include holidays if additional days are required prior to or after a holiday
- Projects shall use the new SP 107 that allows flexible dates by default. Region need to defend reason for using specific dates, such as commitments to stakeholders, events, etc.
- Figure working days required to complete contract. Be realistic/conservative on production rates.
- Follow Bid Book Page Standards for headers/footers.

PROJECT SPECIFIC SPECIAL PROVISIONS

- Utilize existing "general" Special Provisions whenever possible. Special Provisions can be found on the **DOT-COMMON** drive under **Region 0**\Contracts\Public \Contract Documents.
- If item is not in the Standard Specifications or covered by an existing general Special Provision, a project specific Special Provision must be created by the Region.
- Any project specific Special Provision must be reviewed by the ODG.
- Do not modify the header to make it project specific.
- Do not modify existing general Special Provisions without prior approval.

See the <u>MaineDOT Guide for Preparing Supplemental Specifications & Special Provisions for Construction Contracts for more information.</u>

SPECIAL PROVISION 403 – BITUMINOUS BOX (*Updated 1/30/20*)

- Complete and finalize the SP 403 Request Form, Title Sheet, and Typical Sections.
- Create a subfolder within the Project folder in the ODG folder and name it "SP 403."
 The completed SP 403 Request Forms along with the Title Sheet, pavement related
 Typical Sections, Traffic Data and pavement related Construction Notes should be
 placed in this folder. Separate mill/fill areas from overlay areas when submitting the
 forms.
- Once the SP 403 items have been put on the drive, the Region should send an e-mail to the Pavement Design Group (Brian Luce, Timothy Kelley and Nico Trebouet) stating which WINS have been uploaded. (No files should be attached.) Any comments will be uploaded to a marked-up file. A notification will be sent the submitter of the SP 403 Request Form. If the information is acceptable, a SP 403 draft or final version will be uploaded and the Region will be notified.
- Send the request forms to the Pavement Design Group at least <u>3</u> weeks prior to PS&E.
- Note how shim is estimated (i.e. shimming over shoulders, 4' into shoulder, etc.).
- If 20-year ESAL data exceeds 4.0 million or slow-moving traffic area, expect the use of polymer to be considered for surface course. The Department will consider polymer if ESAL data is 3.0 million or greater.
- Note if there is bridge paving on the project.
- Contact the Pavement Design Group if you have questions on whether your project is a candidate for polymer or other HMA-related items.
- It is the Region's responsibility to procure the SP 403, not the ODG.
- The assembly of the proposal book is more affected by this document than any other.

SPECIAL PROVISION 656 - ENVIRONMENTAL PACKAGE

- Include SP 656 in the ODG project folder.
- All projects will have a SP 656 pay item, except for crack seal and fog seal contracts.

PROJECT STRIPING

- Layouts are not to be included with the ODG documents. These diagrams stay with the Engineer's Estimate.
- Current specifications allow for sand-blasting or high-pressure water and may allow for micro-milling on a case by case basis.

- See the Common Construction Notes for common striping notes.
- The Region Traffic Engineer will review existing pattern in the field before final striping.

APPLICABLE ORDER OF CONTRACT DOCUMENTS

- Special Provisions override Construction Notes, General Notes, and Typical Sections.
- Construction Notes and General Notes override Typical Sections.

"Say it once clearly in the appropriate place"

- Duplication in multiple locations confuses the issue and one of the areas can be missed if changes are made.
- If ambiguity arises from being stated differently, the contractor gets to pick the interpretation they want to use.

PLANS, SPECIFICATIONS AND ESTIMATE (PS&E) PACKAGE

- The Region will place the PS&E submittal information into a PS&E folder.
- At least 3 weeks before advertise, the Project Manager or ODG Coordinator from the Region will inform Michael Lenko, Neil Luce, or Matt Sullivan as assigned by email when final information is placed in the appropriate ODG folder
- The person assembling the bid documents will review the submittal and set up a meeting if necessary
- PS&E Submittal Package Checklist:

The following should be part of the PS&E submittal package:

- o Completed PS&E Form (See Instructions)
- Utility Certification
- o Right-of-Way Certification (if required)
- o Completed Construction Authorization Form (federally funded)
- o TAMEing certification
- o Environmental Package
- o Calendar Day calculations
- One of the Region's Project Managers should inform Scott Bickford via e-mail when the PS&E submittal is complete and in the appropriate ODG folder. Scott Bickford will send the package to Contracts
- If changes need to be made after final submittal, only work with the submitted files in the ODG folder and coordinate with the person assembling the bid documents to make sure that the ODG is aware of the changes

ESTIMATOR

- Save as 8 digits in the Estimator folder on the network drive (*Do not save on the Region common drive, nor on your computer*)
- Do not vary from using 8 digits and the conventional numbering system or the files may be lost
- In the uppermost box, the information needs to be in the following format for the next steps of the process to operate correctly: 012345.00
- Save the file as 01234500. It will automatically place the ".est" at the end of the file name.

Example: Save the files as 01234500, not 1234500.est. 12345.00.est, 001234500.est, or 01234500a.est.

The "." is a key component in Estimator and the first "0" is necessary for Estimator to function properly.

- Each Item price given is a starting point and it may need to be adjusted to be specific to the application for the project.
- Each Lump Sum has a quantity of 1.0 for each WIN.
- Prorate each item among the WINs.
- There should be a separate Estimator file for each WIN.
- Duplicated Items in multiple WIN projects must have the same price.
- Combined files are not required and not used to advertise. If a combined file is on the network drive, there is a possibility of it being removed at any time.
- Design to budget. do not estimate to budget. Estimates will become public at award in the near future and need to be defendable.
- Once information is placed into the ODG folder and the proposal is being reviewed, any subsequent changes made to Estimator will <u>not</u> be incorporated into the Schedule of Items. All changes need to be coordinated between the ODG and the Region.

ODG FOLDER NAMING CONVENTION

Each construction project WIN Folder includes:

- PS&E folder (All PS&E information)
- SP 403 folder (All SP 403 information)

All remaining finalized documentation for the contract bid book

In past years, there have been numerous issues in naming files. Windows will only allow a file path to be 255 characters in length. Once exceeded, the file cannot be opened until the path is below 255 characters. Although that seems very large, it is exceeded each year. Along with the file name, each folder adds to the file path.

EXAMPLE: R:\Construction\Cons Public\\$Common-Cons\~O D G the New

Millennium\Projects\2018\\
uses 81 characters for a path to the main folder. Now add the project folder: 23296 23306 Guilford Newport-Corinna for another 36 characters, for a total of 117. If the file happened to be "403sp Guilford, Newport-Corinna, & Stetson

Area 023296.00, 023306, 022110.75 Route 6, 7, 222 - UTBWC & ADA Upgrades", that now adds another 115 characters, so the total file path is now 232 characters - compliments of Special Provisions from other sources.

For consistency and brevity, <u>files will mostly likely be renamed</u> after they are placed into to the Project folder. Since the ODG is constantly switching from one project to another, each document needs the WIN number in the file name. Multiple WIN projects only need the lowest WIN indicated in the file name.

Files will follow the structure as indicated below:

Stationing Sheets
Construction Notes
Cross Slope Sheets
General Notes
Special Provision 105
Special Provision 107
Special Provision XXX
12345.00 SP 107
12345.00 SP XXX
12345.00 SP XXX

OVERVIEW

- For source information and additional detail see the <u>Highway Program Website</u> under General =>Pavement Preservation (ODG).
- Title Sheets and Typicals are not included in the contract bid books if they are part of any Plans.
- Typical ODG Bid Documents include:
 - Title Sheet usually 1 of 1
 - Location Map Must start with 1 of X
 - Typical Sections Must start with 1 of X
 - Stationing Sheets
 - Construction Notes
 - Drainage Sheet (if used) (Typically used when many items are included)
 - Guardrail Sheet (if used) (Typically used when many items are included)
 - Cross Slope Sheets (if used)
 - General Notes
 - Individual Special Provisions in numerical order