



FDM 19-40 Exhibit 1.1 PS&E Pre-Submittal Review Guide

May 16, 2023

This guide is an outline of the actions taken during a project plan specification and estimate (PS&E) review. It helps ensure that a PS&E is complete, concise and consistent at the time of submittal to Central Office. Central Office plan examiners will complete a bidability review using this guide to ensure that the proposal package is ready for bidding when advertised.

General

A. Plan letter (refer to [FDM 19-10-15](#)). The plan letter should state:

1. Type of work (as defined for each project and/or contract).
2. Non-standard construction or bidding practices and explain reasons.
3. That the PS&E has been reviewed by the various central office units listed in [FDM 19-1 Attachment 1.2](#), that their comments have been received, and appropriate revisions have been made with a date supplied by the reviewer for the appropriate slot in the matrix at the end of the plan letter.
 - a. Bureau of Project Development (BPD), Design Project Oversight Unit. The specific region's oversight liaison engineer needs to review STH, USH, & IH plans, specification and estimates for accurate roadway design, conformance to the design standards, and to ensure it conforms to the design study report (DSR). Designer must obtain an acceptance date for the plan letter matrix from this section.
 - b. Bureau of Structures (BOS). Submit final bridge plans, box culvert plans, retaining wall plans, and sign bridge plans to BOS for review a minimum of two months before the PS&E date.
 - c. Bureau of Traffic Operations (BTO), Traffic Engineering Section, Traffic Design Unit reviews all signing plans, bid items, and special provisions (Matt Rauch, 608-266-0150 HFSTB or 608-246-5305 Sign Shop). This unit creates the sign layout sheet PDF files or supplies the required hard copy sign plate drawings for each plan set that requires them. This section also reviews work zone traffic control and pavement marking plan sheets, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.

BTO, Traffic Engineering Section, Traffic Operations Unit reviews all traffic signals plans, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.

BTO, Systems Operations and Electrical Engineering Section, Electrical Engineering and Electronics Unit will review all roadway overhead lighting plans, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.

BTO, Systems Operations and Electrical Engineering Section, State Traffic Operations Unit reviews all intelligent transportation system (ITS) plans, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.
 - d. Bureau of Highway Maintenance, Highway Maintenance and Roadside Management Section reviews all landscape planting plan details, items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.
 - e. Bureau of Technical Services (BTS), Environmental Service Section reviews all hazardous material, asbestos, erosion control, and storm water discharge related information, plan details, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.

BTS, Environmental Process and Documentation Section reviews all wetland, endangered resources, archeological, historical, air, and noise related information, plan details, bid items, and special provisions. Designer must obtain an acceptance date for the plan letter matrix from this section.
4. Information to be included in the advertisement, such as: date/time/location and brief agenda of pre-bid meeting if one is being held, requesting that prequalification be waived (this requires approval from Proposal Management Chief).
5. Project design number.

6. Provide project contact information for WisDOT and the consultant (if applicable).
 7. If a project is federally funded, and ASP-1 is required, indicate the number of Graduate and Apprentice hours, and slots required per Project I.D. When required, also ensure the ASP1.T0A and ASP1.T0G items are included in AASHTOWare Project (AWP) and that a \$5.00 item price has been properly pre-established for each item. See [FDM 19-15-90](#) for Pre-Established price item guidance.
- B. Special Provisions (refer to [FDM 19-15](#)). Review special provisions to ensure:
1. Formatting is up-to-date and correct (for questions contact Rielly O'Donnell at 608-261-6116).
 2. The latest STSP template and articles are being used.
 3. Every "S" article and "SPV" article has corresponding bid items in the completed AWP estimate and are included in the Miscellaneous Quantities.
- C. Check plan sheets for proper order (see [FDM 15-1-1](#) for guidance).
- D. Has all the railroad coordination been performed and approvals been received from the DTIM Bureau of Transit, Local Roads, Rails and Harbors?
- E. Does the contract have Status 1 for all the ROW acquisition at PS&E? If not, contact the region project manager regarding viability of submittal of this PS&E.
- F. Are all the Utility interests clear at PS&E? If not, the viability of submittal of this PS&E should be discussed with the district or within the district.

Plans

- A. Is all information shown inside printing margins?
- B. Lettering size:
1. Minimum lettering height on required 11"x17" originals shall be 0.06 inches. (except right of way plat)
 2. Titles should be approximately 0.10 inch lettering height on required 11"x17" plan originals.
 3. If lettering sizes are too small, correction will be necessary to make plan notes readable in the required 11"x17" plans.
- C. Notes:
- Check that notes referring to standard detail drawings refer to the name of the drawing, not the number.
 - Check that construction notes are solid line notes; not screened line notes, etc
 - Check for notes with blank spaces (data fields) and either fill in the data field with appropriate information or remove the note completely.
- D. Plan details check that:
- Special details pertain to the contract and all required special details are in the plan (no more, no less)
 - Details are not crammed together - add lines for separation if appropriate
 - Details are correct, clear and easy to read.

Title Sheet (FDM 15-1-10)

- A. Project location map check for:
- North Arrow
 - Town and Range
 - Correct Project(s) location
 - Begin and End Project notes
 - Begin and End notes for construction work outside project limits
 - Equations
 - Highway designations shown
 - Road or street names if referred to in special provisions
 - County names, if more than one
 - Graphic Scale
 - Structure Numbers (on which work is being done)
- B. Design Designation - is it filled in?
- C. Net centerline length (listed to three decimal places to right of decimal point). Refer to [FDM 15-1-10.8](#):
- Project breakdown (if more than one Project I.D. is part of a plan set, give a separate "Net Length of

Centerline” for each Project I.D., even if the length is 0.000 for the Project I.D.)

- Total.

D. Titles check that:

- Correct format is used: (refer to [FDM 15-1-10](#), “Project Title.”)
 - Each project title and sub-title should match FIIPS exactly

E. Signature Block:

- Ensure that all required signatures have been obtained. Signature lines for required signatures only - remove any not needed.
- Include a consultant block with professional engineer stamp, signature, and date when appropriate.
- Include names of Surveyor, Designer, Region Examiner, and Region Supervisor.

F. Conventional Symbols

- Commonly used symbols are preprinted on the title sheet. Additional symbols should be added below the preprinted symbols on the title sheet when appropriate.

G. State map:

- The county in which the project is located should be cross-hatched and the project location shown.

H. “Order of Sheets” block:

- Is it the latest standard format?

I. Check State Project numbers:

- In blocks near center of title sheet
- Upper right hand corner (one project number per line)

J. Margin information: (See [FDM 15-1-10.3](#) “Margin Information”, [FDM 15-1 Attachment 5.1](#) example, and the appropriate [FDM 15-5 Attachment 5.1](#) “Title Sheet” plan sheet vehicle.)

- Project information should be in left binding margin, oriented to be read when facing the title sheet from the left edge (see procedures referenced above for orientation clarification).

Written Material, Typical Section and Detail Sheet

A. Preferred order of Section 2 sheets: ([FDM 15-1-1](#))

1. Written material.
2. Project Overview.
3. Typical sections.
4. Construction details.
5. Layout details:
 - a. Non-typical sections
 - b. Intersections
 - c. Interchanges
 - d. Contour Maps
 - e. Cross Section Match line
 - f. Erosion Control and Drainage
 - g. Storm Sewer and Utilities
 - h. Planting
 - i. Signing
 - j. Lighting
 - k. Traffic Signals
 - l. Pavement Marking
 - m. Traffic Control and Construction Staging
 - n. Fencing
 - o. Alignment

B. First Section 2 Sheet: ([FDM 15-1-15](#))

1. The first Section 2 sheet should include:

- a. Utility list and contact persons
- b. DNR contact person (if plan has erosion control plan)
- c. Plan-specific customized list of unusual or non-standard abbreviations
- d. Surface boring log when salvaging Asphaltic Pavement or Pulverizing & Relaying Asphaltic and include lab tests when Salvaged Asphaltic Pavement is bid.
- e. General notes. Notes should not duplicate standard specifications or special provisions.

C. Typical Sections: ([FDM 15-1-15](#))

- 1. All portions of the mainline
- 2. Major side roads
- 3. Minor side roads
- 4. Ramps and tapers
- 5. Existing sections when appropriate
- 6. Commercial and residential driveways
- 7. Temporary construction
- 8. Check that typical sections include widths, thicknesses, slopes, station to station, right or left, traffic lanes,
 - a. Show Tie Bars and Dowel Bars, where required. Bars placed in wet concrete are incidental. Bars to be drilled in are paid under item 416.0610 Drilled Tie Bars and 416.0620 Drilled Dowel Bars
 - b. Tined (when appropriate), include with the Concrete Pavement item label when "tining" is required (see [FDM 15-1-15](#)).
 - c. Curb and gutter, sidewalk, topsoil or salvaged topsoil, underdrains, geotextile fabrics, removals, islands, barriers, etc.
- 9. Check that typical section labels match current bid item titles.
- 10. The pavement structure of short sections of side roads, frontage roads, private drives and ramp tapers may be shown by note on plan or detail sheets.

Construction Details ([FDM 15-1-20](#))

A. Examples of items of construction requiring details.

- 1. Riprap, retaining walls, special inlets**, special covers*, pipe railing, steps, driveways, transitions, planting charts, etc.

* Is approximate weight listed on special covers?

** Minimum embedment required; ultimate soil bearing capacity required; engineering properties of retained and foundation soils required.

B. Check for:

- 1. Special details which conflict with standard practices.
- 2. Special details, which conflict with SDDs, called for in the plan.
- 3. Layouts and dimensions as appropriate.

C. Frequently used special details and CADD cell special details:

- 1. Are they correct for this plan?
- 2. Are dimensions filled in or corrected?
- 3. Unnecessary information or options included? If so, remove.
- 4. Are they updated to current spec book terminology (e.g., upper layer/lower layer for asphalt pavement and crushed aggregate base course now is base aggregate dense)?

D. Bid Items:

- 1. Are there bid items to cover the work shown?
- 2. Are the bid item titles correctly shown on the special detail (must match special provisions and estimate exactly)?

E. Check "Brand Name" labels (proprietary item titles) which are correct only if:

- 1. The list includes three names as approved equals.
- 2. The name is on the Product Selection List. ([FDM 19-1-5](#))

3. On a project-by-project basis, approval has been received from the specific region's CO Project Development Liaison engineer. This approval is acquired via an email letter justification for each proprietary item explained and approval requested. The approval is granted when the region's CO Project Development Liaison engineer replies to the email letter with an approval statement for which items per project have been approved.

F. If special provisions or standard specifications say "as shown" or "detailed on plans", check for the detail.

G. Check for appropriate use of:

1. Items marked "by others", "in place", or "existing"
2. The term "State furnished, contractor installed".
3. The term "required", when necessary to understand the detail

H. Include a customized (plan-set specific) "Order of Section 2 Sheets" list on the first Section 2 sheet for projects that have many construction details and could benefit from this list.

Layout Details (FDM 15-1-20)

A. Non-typical sections, Intersections, and Interchanges:

1. Concrete pavement grades and curb and gutter grades shown for non-typical sections
2. Intersections and interchanges shall be shown on detail sheets
3. Islands; check for dimensions & type (asphalt, concrete, etc.)
4. Are radii, taper lengths, turning lanes and passing lanes clearly dimensioned for field layout?

B. Erosion Control and Drainage:

1. Shall be shown on detail sheets or included on plan and profile sheets.

C. Storm Sewer and Utilities:

1. Shall be shown on detail sheets.

D. Permanent Sign Details

1. Check that the BTO, Traffic Design Section has created the sign layout sheets PDF file or supplied to the BPD, Proposal Management Section the required hard copy sign plate drawings.

E. Pavement Marking Details:

1. Shall be shown on detail sheets.
2. Check for conflict with SDD's.
3. Check for correct bid item titles or correct marking "type" labels which match SDD terminology defined by detail (such as "Centerline," "No Passing," "Laneline," "Edgeline," etc.) on construction details.
4. Curb Ramp Detectable Warning Fields must be labeled on plan.

F. Traffic Control and Construction Staging:

1. Check and identify items typically bid separately from the item of Traffic Control, such as:
 - Temporary delineators and posts
 - Removing pavement marking
 - Temporary pavement marking, stop lines, removable tape

G. Alignment Diagrams:

1. Either separate detail sheets or alignment shown on plan sheets.

Miscellaneous Quantities Sheets (FDM 15-1-30)

A. General layout:

1. Lettering should be at least 0.06 inch height on required 11"x17" plans.
2. Check that MQ listings start with the lowest item number item at the top left of each sheet and that MQ sheets are organized numerically based on the item numbers included on each MQ sheet.
3. Check for use of line-work to separate tables or entries in tables.
4. Check that quantities shown on various tables on detail sheets are summarized on miscellaneous quantities sheet.
5. On plans with multiple projects or multiple categories, check that quantities are split accordingly and labeled. Quantity breakdowns by project and/or category are required, and each breakdown category must have a subtotal.
6. Ensure that multiple columns of lists for a single item have a SUB-TOTAL for each column and that

each single item has a TOTAL clearly shown.

7. Check to ensure non-participating items and quantities are labeled. (This may be accomplished by designating the proper estimate category under which the non-participating item is included.)
8. Check for proper unit of measure.
9. Follow through to the engineer estimate with any changes.
10. Quantity totals on miscellaneous quantity sheets must agree with project totals in engineers estimate.

B. Check for the following special information:

1. Ensure SAME DAY PAVEMENT MARKING POLICY is used on ALL rural type resurfacing contracts constructed under traffic.
2. Ensure that for the item "Removing Small Pipe Culverts," all pipes from 12" diameter, but smaller than a 60" diameter, are listed for payment. Also ensure a DESCRIPTION column is included giving the diameter, length, and type of pipe to be removed at each location. (See example in [FDM 15-1 Attachment 5.21](#))
3. Ensure all bridges to be removed with a span length of 20' or greater, all bridge-like structures to be removed with a span less than 20', all rectangular culvert structures to be removed of any size, and all non-rectangular culverts to be removed which are 60" diameter or larger, are paid for under "Removing Old Structure, (Station)"
4. Whenever possible all removal items (other than those standard "204." items which have a removal title already designated) should use the appropriate standard "204.9xxx" items, based on the correct Unit of Measure intended, not an SPV item.

C. Earthwork Summary:

1. An earthwork summary shall be included for all grading projects

D. Drainage Table:

1. For the culvert pipe items, metal thickness(es) and concrete pipe class(es) are required to be shown.
2. Are class IV or V culverts or storm sewer specified without any apparent reason? (See [FDM 13-1-25](#))

E. "Each" bid items:

1. Are quantity breakdowns given so the contractor can bid the item?
2. Is the amount of work reasonably non-variable for the "Each" bid items?

F. Quantity Accuracy:

1. Check miscellaneous quantity breakdown of items for completeness of work within the various construction locations.
2. Spot check items for correct totals on miscellaneous quantity sheets and ensure that all item totals match the engineer estimate.

ROW Sheets ([FDM 12-15-1](#))

- If new ROW is required, has a right-of-way plat been included in the plan set?
- Does ROW plat cover entire construction limits?
- Are slope intercept lines shown? Note - not applicable to transportation project plats.

Plan and Profile Sheets ([FDM 15-1-35](#))

A. Do plan sheets cover all construction areas?

B. Begin and End Project notation is required.

C. All equations should be shown.

D. Are slope intercept lines shown?

E. Structure notes are required for:

1. Removing Old Structure, Station _____" items (include old bridge number, length and type).
2. New structures including retaining walls, noise walls and sign bridges.
3. Structure repairs (deck overlays and deck replacements).

F. ROW:

1. Are right of way, easement and permit limits shown?
2. Is all work, including private entrance, drainage, culverts and riprap, shown inside right-of-way or permit limits?
3. If plan sheets are also used as ROW plat, then requirements of [FDM 12-15-5](#) must be met.

G. Culvert notes are required.

H. Removal of miscellaneous items should be noted.

1. Culvert removal note should indicate type and size.

I. North arrows, curve notes, stations, road names, etc. should be shown.

J. Profiles are required for all grading areas, including long driveways and side roads.

K. Are types of intersection and curb ramp types shown? (Unless correctly covered by a general note.)

L. New work distinguished from existing facility by legend, note or screening.

M. If rock excavation is bid, the top of rock lines should be shown and labeled on the profiles.

N. If marsh excavation is bid, a line showing the bottom of marsh should be shown and labeled on the profile.

Cross Sections (FDM 15-1-45)

A. Are cross sections included for grading areas?

B. Are earthwork tables required and if so, are they filled in?

C. Have special earthwork listings been supplied if required?

- Miscellaneous quantities station-to-station earthwork sheets or earthwork data sheets.
- Are computer earthwork data sheets supplied in proper format for use in plans?

D. Is all information within printing margins?

E. If rock or marsh lines are shown, are the Excavation Rock, Excavation Marsh, and Excavation Common items bid? (Note Unclassified Excavation is no longer a bid item.)

AASTHOWare Project (AWP) Estimate

General:

A. Have all the applicable EACH items been included. Refer to items:

- 213.0100, Finishing Roadway (Project)
- 618.0100, Maintenance and Repair of Haul Roads (Project) for all STH, USH, & IH projects but not used for local road projects or those STH, USH, IH projects within a city that has an on-going street maintenance program and where it would be impossible to determine damage from the state project's construction vehicles over others using the same roadways.
- 619.0100 Mobilization
- 642.5xxx, Field Office Type _
- 643.5000 Traffic Control

B. Have the Prepare Foundation items (211. xxxx) been considered for performing necessary foundation preparations that resulted from construction outside the contractor's control, especially for asphaltic resurfacing projects or for resurfacing sections of rehabilitation projects? (see [FDM 19-5-3](#) for guidance on when to use these items and how to address them appropriately in the plan and MQ listing.)

C. Some standard bid items require STSPs. See information under the [Special Provisions Guidelines](#).

AASHTOWare Project Knowledge Base (AWPKB)

A. Review [PSE Pre-submittal Tasks for Designers](#)

B. Engineer Estimate Bid Items (General):

1. Check that all the contract work is either covered by a bid item, is specified to be included in pay for other items or is to be done by others.
2. Review all item numbers, descriptions, supplemental descriptions, and units of measure for reasonableness. (Cursory Review)
3. Check that correct asphaltic item(s) is (are) bid.
4. Check that all Asphaltic Incentive items required by WisDOT Standard Specifications have been bid correctly: See item:
 - 460.2000, Incentive Density HMA Pavement (must be used in all projects with any quantity of HMA Pavement)
5. Check that all other desired Incentive items are bid appropriately. See items:
 -
 - 715.0502, Incentive Strength Concrete Structures
 - 715.0603, Incentive Strength Concrete Barrier
 - 715.0715, Incentive Flexural Strength Concrete Pavement
 - 715.0720, Incentive Compressive Strength Concrete Pavement
 - 740.0440, Incentive IRI Ride
6. Check that all desired Construction Staking items are bid appropriately. Note that in the same area where "Construction Staking Concrete Pavement" is bid, the items "Construction Staking Base" & "Construction Staking Curb Gutter and Curb and Gutter" are not to be bid separately. See [Standard Spec 650.4](#).
7. Has the plan modified the work under a standard bid item such that additional contract language is required to perform the work? If so, write a special provision modifying the standard bid item. Only define an "SPV" item if the cost is so different that it would be outside of the range of costs typical for that item.

C. "SPV." (Non-standard) Bid Items (General):

1. Is each item's Supplemental Description title duplicated exactly from category to category as well as for multiple projects in the same contract? Check that each item appears only once. If not, then make appropriate item Supplemental Description corrections to the Project estimates.
2. Is a description format similar to that of a similar standard bid item format being used where appropriate? If not, it should be. Is the unit of measure standard and appropriate?
3. Do the special provisions include an appropriate article for each non-standard "SPV." item and each "S" item in the contract? Does the unit of measure for each non-standard "SPV." item in the Special Provisions match that of the item in the Proposal Estimate?

D. STSP "S" items:

1. Check that correct item numbers have been used in the project estimates and that there is a special provision article for each of them.
2. Check that the unit of measure for each item in the Proposal Estimate is the correct unit of measure for that item in the Special Provisions.

E. Quantity Accuracy

1. Rough check quantities of major items.
2. Check that quantities appear reasonable for the Unit of Measure used and for the type and size of project.

Special Provisions Guidelines

The Special Provisions are an important document. It overrides the standard specifications and controls some of the project's work. Use these guidelines to prepare special provisions.

A. Ordering of Special Provisions:

Article	Description
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- 1.* General
 - 2.* Scope of Work
 3. Pre-Bid Meeting
 - 4.* Prosecution and Progress
 5. Lane Rental Fee Assessment
 6. Traffic
 7. Holiday Work Restrictions
 8. Utilities
 9. Other Contracts
Work by Others
 10. Relations with Railroads
 11. Hauling Restrictions
 12. Information to Bidders (STSPs 107-056 and 107-054 listed first)
Environmental Protection and Erosion Control
Notice to Contractor Items
Archaeological Sites
Navigable Waterways
Other
 13. Coordination with Businesses and Residents
 14. Public Convenience and Safety
 15. Modifications to Standard Specifications; and Standard Special Provisions (STSP) (###.####.S.01-###.####.S.02,03,04,...) arranged in numerical order in accordance with the Standard Specifications
 16. Non-Standard Bid Items; (SPV.####.01 – SPV.####.02, .03, .04, .05....), arranged in numerical order

*NOTE: These 3 articles are in EVERY set of Special Provisions. Other articles may or may not be included.

B. Consistency between Prosecution and Progress article and Project Completion Date provided in the AWP Proposal in the “Time” tab. Also, keep the project consistent with respect to working days vs. calendar days. Do not redefine working days or calendar days. Other guidelines for this article:

1. Include information that may affect a contractor’s schedule of operations, such as migratory birds’ nests, fish spawning dates, any special arrangements with railroads or utilities that may affect when a contractor can do work, or areas where a contractor cannot do work.
2. If the contract is a completion date contract, do not provide the completion date within this article.
3. Ensure that the Contract Time for Completion (DT1923) is consistent with the other PS&E documents and AWP Proposal “Time” tab.
4. For further guidance on writing a Prosecution and Progress article, refer to [FDM 19-15-15](#).

Once the time frame for the work is determined, consider the following:

1. If it is likely that there will be HMA placed outside of the timeframes in [FDM 19-5-3.2](#), include the HMA Cold Weather Paving bid item.
2. If it is likely that there will be pavement marking placed late in the construction season, include the Pavement Marking Late Season STSP. Refer to [FDM 19-5.3.2](#).

C. Enhanced liquidated damages: Prior approval needed from the appropriate BPD Project Development Liaison Engineer (see [FDM 19-1 Attachment 1.2](#)) for using enhanced liquidated damages or interim liquidated damages greater than the standard liquidated damages provided in the standard specifications. See [FDM 11-2](#) for guidance on determining the dollar amount of Interim Liquidated Damages. For additional information regarding interim liquidated damages in contracts, refer to [FDM 19-15-2.5](#).

D. Real Estate issues:

1. If a real estate issue affects a contractor’s ability to do work at a particular time, it needs to be addressed in Prosecution and Progress article.
2. If the contractor needs to perform any razing and removals, the special provisions need to address how asbestos will be removed, and who will remove it.

E. Proprietary Items: Specifying sole-source proprietary products requires a Region approved Proprietary Product Justification. Refer to [FDM 19-1-5](#). Unless Proprietary Product Justification has been approved by the Region PDS Chief, three or more product choices must be listed within the Special Provisions.

F. Include all necessary items in the contract. For example, if the plan letter states that plant surveillance will be required for two years, make sure that the item of Plant Surveillance is included in the proposal.

G. Item titles in the estimate match the item titles in the special provisions. The word "Special" is not needed after the description/title of an SPV item. The fact that it is an SPV item makes it a special item. In addition, the word "Special" is automatically placed at the beginning of the item description by AWP.

H. Avoid repetition. Even if you believe emphasis is needed, avoid repetition in contract documents. Do not repeat language in the special provisions that is already stated elsewhere in the special provisions. Do not repeat language already included in the standard specifications. If the wording or punctuation is different between the references, and the intent is inadvertently changed, the contractor may be confused and interpret the contract differently from the designer's intent. If the contractor files a claim, courts will typically rule against the drafter of ambiguous or contradictory language, in this case against the department.

I. Check references used in specials against the Standard Specifications book.

J. Lane Rental Fee Assessment: Lane rental language shall be included as an article. Do not use a bid item for lane rental. Lane Rental will be assessed using the administrative item "Failing to Open Road to Traffic".

K. Check all articles for consistency. For example, one article may state that a minimum 48-hour notice is required for a particular action whereas another article may state that only a 24-hour notice is necessary. This often happens in articles addressing traffic control or erosion control items. Refer to #8 above.

L. Any bid item that has an "S" suffix or an SPV prefix requires an article in the special provisions. If writing an article for a standard bid item include the bid item number in the title. For example, "Grouted Riprap Heavy, Item 606.0700". Some standard bid items also need an article in the special provisions. The following table summarizes the standard bid items that may require an STSP in the Special Provisions:

Bid Item Number	Bid Item Name	STSP Number	Information Needed
208.1100	Select Borrow	208-005	Gradation requirements
405.0200	Coloring Concrete Custom	405-020	Coloring specifications
405.1000	Stamping Colored Concrete	405-100	Coloring and stamping specifications
502.3101	Expansion Device	502-020	Materials and manufacturer specifications
611.8110	Adjusting Manhole Cover	611-005	Measurement tolerances
632.9109	Landscape Planting Surveillance and Care Cycles	632-005	Daily damage amount assessed
645.0115	Geotextile Type ES	645-040	Fabric properties
645.0125	Geotextile Type MS	645-030	Fabric properties
645.0135	Geotextile Type SR	645-035	Fabric properties
645.0240	Geogrid Type MR	645-024	Fabric properties
645.0260	Geogrid Type SSR	645-026	Fabric properties
648.0100	Locating No-Passing Zones	648-005	Spotting sight distance for 55 mph
715.0710	Optimized Aggregate Gradation Incentive	715-005	Requirements for slip form concrete paving

M. Numbering .S items and SPV items.

1. Use numbers for sequential ordering instead of letters. For example, suppose the bid item 651.2000.S "Install Traffic Signal Controller & Cabinet (location)" is needed at three locations: Apple Street, Berry Street and Cherry Street. The items should appear on the estimate as:

651.2000.S Install Traffic Signal Controller & Cabinet

01. Apple Street

651.2000.S Install Traffic Signal Controller & Cabinet

02. Berry Street

651.2000.S Install Traffic Signal Controller & Cabinet

03. Cherry Street

2. The title of the article written for the specials should be - Install Traffic Signal Controller & Cabinet, Apple Street, Item 651.2000.S.01; Berry Street, Item 651.2000.S.02; Cherry Street, Item 651.2000.S.03. Number and title articles for SPV bid items in the same manner. For example, Inlet Screen Type M, Item SPV.0060.01; Type H, Item SPV.0060.02; Type W, Item SPV.0060.03.

N. SPV items: Refer to [FDM 19-15-80](#) for guidance on writing articles for SPV items.

O. STSP Changes:

1. Do not change an STSP unless there is a legitimate reason to do so. Contractors are familiar with the STSP's and have expectations regarding their content.
2. Explain changes made to STSP's in the plan letter.
3. If an STSP is changed and that STSP has a corresponding bid item:
 - Change the title of the bid item and the title of the revised STSP – for example, add “Special” to the end of the item name.
 - Change the “S” item number to an SPV item number.
 - Eliminate the date and parentheses found at the end of the STSP document.
4. STSP's are “living” documents. Changes are frequently made to these documents, that is, one of the reasons why many STSP items are not standard bid items. For this reason, insert the latest STSP in the special provisions.
5. When using STSP's, include all necessary information, such as flagging rates for the railroad. STSP's and daily damage amounts for Landscape Planting Surveillance and Care Cycles.
6. For guidance on STSPs, refer to [FDM 19-15-85](#).

P. Abbreviations: Refer to [Standard Spec 101](#) and [FDM 19-1 Attachment 1.1](#) for some WisDOT abbreviations. When using other abbreviations within articles, use standard protocol in introducing the abbreviation.

Q. Word-Processing Issues:

1. Use people who have been trained in how to create special provisions to type the specials. They know how to properly use the template that has been prepared for developing special provisions.
2. Do not use formatting such as bold or underlined text for emphasis; all contract language is equally important.

R. Geotechnical Issues:

1. Walls: Minimum embedment depths of 1'-6" or greater (dependent on wall type) required. Also, provide ultimate soil bearing capacity values on the plan. The engineering properties of the foundation and retained soils must also be shown, usually in a table. Refer to the department's [Bridge Manual Chapter 14](#) for more information.
2. Geotextile/Geogrid:
 - If DF Fabric: Schedule A, B, or C? (For structure work, usually A.) These items will have separate item numbers.
 - Geotextile Types ES, MS, and SR and Geogrid Types MR and SSR require special provisions. Fabric properties are usually provided in the project's geotextile report.
3. Pre-drilling piling into rock: Measure from the bottom of the hole to the bottom of footing, not just the distance into the rock.
4. Pile Points: Generally, not needed unless driving into soils with cobbles and boulders, or into weathered bedrock.
5. Pile Lengths: Soil drillers should have taken the borings to at least the anticipated depth of the pile tips.

S. Contract Time for Completions. The contract completion time provided on the time completion chart, i.e. the number of working days, the number of calendar days, or a completion date, must be consistent with what is conveyed in the Prosecution and Progress article as well as AWP in the “Time” tab. For further guidance, refer to [FDM 19-10-30](#).

T. Inserts:

1. After submittal of the PS&E all changes to the special provisions shall be made with an insert. Do not resubmit a revised set of special provisions without prior approval
2. If changes are needed in say one paragraph of an article, just send in the paragraph as an insert in which there are changes. If minor changes are needed throughout the entire article, send in the entire article as an insert and highlight the changes needed.
3. If an insert includes adding an STSP, simply give direction to add the STPS. Do not paste the entire STSP in the insert. If a portion of the STSP is being modified, indicate the modification only in the insert.
4. If an insert consists of a new or resubmitted article, make sure the proper Special Provision formatting guidelines are followed.
5. For further guidance on e-submitting inserts, refer to [FDM 19-10-1.2.4](#).

Questions? Contact the Special Provisions Engineer at 608-261-6116.

Also refer to [FDM 19-40 Exhibit 1.2](#) Standard Detail Drawings (Examiner's List).