

INSTRUCTIONS FOR UNIQUE SPECIAL PROVISIONS

Designers should address questions about the use of unique special provisions to the Project Manager. Department personnel should direct questions to the Specifications Engineer in the Construction Management Division. *Indiana Design Manual* Chapter 19 contains additional information about unique special provisions (USPs).

USPs should be sent via email to the Specifications Engineer for review. Sufficient time for comments and revisions must be considered. For ease of review, each USP should be a separate Word file. All USPs should be combined into a single Word document and included with the Final Tracings package. The Unique Special Provision (USP) Menu should be completed and included with the Final Tracings package.

Standard Specifications Section ▾	Unique Special Provision Title ▾	Document Filename ▾

WHEN IS A USP NEEDED?

A USP is needed if the items of work, methods, materials, sequence of operations, or other restrictions or requirements necessary for completion of the project is not described completely by a recurring special provision, a recurring plan detail, the *Standard Drawings*, or the *Standard Specifications*.

WRITING A USP

A USP can define a portion of the work (constructive or restrictive), revise the *Standard Specifications*, or be a stand-alone specification. Example of each are included at the end of this document.

Defining a Portion of Work. This type of USP sets out specific restrictions or requirements that must be followed by the contractor. For example, “All borrow required for the project shall be taken from the Department’s stockpile at the southwest quadrant of the I-465 interchange with I-70.”

Revising the Standard Specifications. This type of USP revises the Standard Specifications and must identify the Section and Line for the revisions and indicate whether text is to be deleted or inserted or both. The existing text should be shown with the deletions shown by strikethrough and the insertions shown in italics.

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Stand-Alone. This type of USP does not directly revise the *Standard Specifications* and should consist of the “Big Five”: Description, Materials, Construction Requirements, Method of Measurement, and Basis of Payment.

1. **Description.** Briefly describe the scope of work to be performed, with references to specifications, plans, or other recurring special provisions that further define the work. Where necessary or desirable for clarity, describe the relationship of this work to other work or other phases of construction. Do not editorialize.
2. **Materials.** List the materials to be used in the work and indicate the criteria for acceptance of the materials. Define the specifications and properties of each material and the method of tests for acceptance. Use references to the *Standard Specifications’* materials section as much as possible. References may be made to AASHTO, ASTM, or other recognized specifications if the materials are not addressed in the *Standard Specifications*. Ensure that references to AASHTO, ASTM, or other specifications or test methods from agencies outside of INDOT are accurate and current. If a certification is required, ensure that the certification type fits the situation and that information required in the certification is defined.

A prime consideration in establishing materials requirements is whether the material will be tested by the Department and if the Department has the capability to perform the test. The Office of Materials Management can provide guidance for specifying materials testing and acceptance criteria.

3. **Construction Requirements.** The construction requirements should be written in the logical order in which field operations are anticipated to proceed. Define the requirements for general conditions, types of construction, and quality of workmanship. **The contractor’s responsibilities should be clearly stated.** Describe the sequence of construction operations (method specification) or the desired end result (performance-based specification). Where practical, a performance-based specification is preferred. The construction requirements should define tolerances, limits, restrictions, preparations, or other criteria related construction of the work that must be satisfied for an acceptable product. These requirements can include, but are not limited to, dimensions, on-site test criteria, weather conditions, traffic condition, or time limits.
4. **Method of Measurement.** Describe the components of the completed work that will be measured to determine the pay quantity for the pay item as it will be described in the Schedule of Pay Items. Define the units of measurement and whether the item will be measured in original position, in transporting vehicles, or in the completed work. Designate modifying factors or other requirements needed to establish a definitive, measurable unit. A prime consideration for method of measurement should be the degree of difficulty that field personnel will encounter in making measurements.
5. **Basis of Payment.** Define the measured units for which payment will be made. Include the pay item name as it will appear in the Schedule of Pay Items and define the scope of work included in payment. Determine and identify which work is to be paid for as an individual pay item, what work is to be included in the cost of that pay item and what work is to be included in the cost of other pay items. The Basis of Payment must identify to the contractor what work is and is not to be included in the unit cost of the pay item. For work that is not included in the pay item in the provision, the designer must then determine and state where the cost of such work is to be placed.

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WRITING TIPS

1. Voice. Use passive voice. “A rubbed finish shall be applied to the exposed surfaces.” instead of “Apply a rubbed finish to exposed surfaces.”
2. Sentences. Use simple language and words. Avoid the use of too many commas in a sentence. Keep sentences short, to 20 words or less, unless complexity is unavoidable. Limit paragraphs to three to four sentences if possible. Nonessential words and phrases should be omitted.
3. Terminology. Words should be used consistently with their exact meaning. The same word should be used throughout. Do not use synonyms. The use of specific terminology is discussed in the section below.
4. Pronouns. Avoid the use of pronouns, even if this results in frequent repetition of nouns.
5. Punctuation. Use the minimum number of punctuation marks consistent with the precise meaning of the language. Do not use a semicolon to separate related though distinct clauses. Instead, use a period to effect distinct sentences.
6. Capitalization. The only words which require an initial capital letter without regard to their location in the sentence are Department, Engineer, Contractor, titles of reference publications, traffic sign copy, or other proper nouns if their use is required.
7. Parentheses. Avoid the use of parentheses. Instead, use commas or rewrite the sentence.
8. Numbers. Do not write numbers both in words and figures, e.g., “Use four (4) bolts”. Each number, including 0 or 1, should be written numerically, unless it must be used to begin a sentence. In writing dimensions, numbers should be used, e.g., ¼ in., 10 ft, 3 gal. Do not write 2 in. x 4 in., but instead, 2 in. by 4 in. Times and dates should be written numerically. Decimals of less than one should be preceded by the zero, e.g., 0.02 ft. Do not begin a sentence with a numeral. Either write the number in words, or rewrite the sentence by placing the numeral within the sentence.
9. Units of Measure. Write out units of measure within a sentence where not accompanied by a quantity. Symbolize units of measure where used in a tabular form or where accompanied by a quantity.
10. Emphasis. Do not use all capitals, underlines, italics, bold type, larger pitch, different font, punctuation, or combinations of these, to emphasize words, sentences, pay items, or pay units. All parts of a specification are equally important contractually.
11. Percent. Where a percent is preceded by a number, the % symbol is used. Where percent is used in a sentence without a number preceding it, the word percent is spelled out.
12. Clarity. To ensure that the provision is clearly written, the designer should review the following.
 - a. Give directions, not suggestions.
 - b. Do not assume that the reader understands the writer’s intent.
 - c. Limit the use of phrases such as “as approved by the Engineer,” “at the discretion of the Engineer,” or “as directed by the Engineer” in place of definite workmanship requirements. Such phrases can lead to confusion or misunderstanding. The contractor may not know what the engineer is thinking.

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- d. Avoid conflicting or ambiguous requirements. Words that end in “ly” are usually ambiguous, e.g. thoroughly, every specification statement should have only one meaning.
- e. Disclose known difficulties or hazards.
- f. Use the standard abbreviations listed in *Standard Specifications*.

13. Conciseness. A Unique Special Provision should be as concise and specific.

- a. Avoid duplications between the Unique Special Provision and other contract documents, including the *Standard Specifications*.
- b. Do not provide reasons for a specification requirement.
- c. Do not provide additional information which is unnecessary for the preparation of bids and the accomplishment of the work.
- d. Once stated, do not repeat an instruction, requirement, direction, or piece of information provided elsewhere in the provision you are writing, or elsewhere in the contract documents.
- e. Do not repeat sections of the *Standard Specifications*. If necessary, refer to those sections.
- f. Write the specification in a positive form, e.g., use “shall” instead of “shall not”.
- g. Do not include instructions to the Department.
- h. Do not include design information that is not necessary for the performance of the work.

14. Correctness. To ensure that a Unique Special Provision is written correctly, the designer should consider the following.

- a. Check all references to the *Standard Specifications* or other contract documents to ensure that the references are correct.
- b. Where practical, independently cross-check every factual statement.
- c. Do not include conditions that cannot be required or enforced. The practical limits of workers, equipment, and materials must be known and recognized.
- d. Ensure that the provision does not punish the contractor or supplier. Penalties or liquidated damages may be included, but the conditions that will result in penalties or liquidated damages must be defined.
- e. Ensure that the provision does not unintentionally exclude an acceptable product, construction method, or equipment.

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TERMINOLOGY and FORMATTING TIPS

1. Amount, quantity. Use *amount* in writing about money only. If writing about measures of volume, e.g. ft³ and gal., use *quantity*.
2. And, or. Use *and* alone, or *or* alone. Do not use *and/or*.
3. Any, all. The word *any* implies a choice and may cause confusion. In place of *any*, the term *all* should be used. For example, “Correct all defects.”
4. As per. Do not use *as per*. Instead, use *as stated*, *as shown*, *in accordance with*, or another similar phrase.
5. As shown on the plans. Use *as shown on plans* instead of *as shown in the plans*, *as detailed on the plans*, *as shown on the detail sheets*, *as shown on the Standard Drawings*, or *as shown on sheet ___ of the plans*.
6. At the contractor’s expense. Instead of this phrase, use _____ *shall be included in the costs of* _____ or *no additional payment will be made for* _____.
7. Balance, remainder. *Balance* should be used if referring to money. *Remainder* should be used to describe something or material left over.
8. Broken, skip line. Use *broken line* rather than *skip line*.
9. Coarse, course. Use *coarse* to describe a texture. Use *course* for a layer.
10. Conform. Use *conform* to refer to dimensions, sizes, or fits that must be manufactured, e.g., “...cut bolt threads conforming to ASA Standards, Class 2 fit, coarse thread series”. Where a better product is acceptable, use the phrase *in accordance with...*, e.g., “...aggregates in accordance with the specification requirements if tested in accordance with AASHTO T 27.”
11. Contractor. Use *Contractor* in place of *Bidder*. *Bidder* should only be used in a proposal. *Contractor* is always capitalized, as it is a party to the contract. If referring to the contractor by means of a pronoun, use *it*, not capitalized, rather than *he*, as a contractor is an entity, rather than a single male person.
12. Department. Use *Department* in place of *Indiana Department of Transportation or INDOT*. The abbreviation *INDOT* should not be used.
13. Engineer. Use of *the Engineer* refers to the Chief Engineer of the Department acting directly or through a duly authorized representative. If used in this context, *Engineer* is always capitalized.
14. Ensure. Do not use *insure* or *assure*, but instead use *ensure*.
15. Guardrail. Spell *guardrail* as one word rather than as two.
16. In accordance with. Use *in accordance with* instead of *in conformance with* or *as per*.
17. i.e. and e.g. Don’t use these abbreviations ever.
18. May, can. Use *may* for contractor’s operations that are allowable. Use *can* for work or activities that the contractor is capable of.
19. Milling. Use the specific type of milling required, e.g. *asphalt milling (thickness)*, *surface milling*, or *profile milling*.
20. Numbers. Use the numeric value for dimensions, e.g. 9. Use the words for quantities, e.g. nine. Never use both, e.g. nine (9).

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21. Or equal. Do not use this phrase without defining what is equal. A minimum of three products must be listed when a product is mentioned by name. See Indiana Design Manual Chapter 17 for Proprietary Materials.
22. Pay item. Use this phrase instead of *bid item*, *item*, or *line item*.
23. Referencing Standard Specifications. Do not use *Section 605*. Use *shall be in accordance with 605*.
24. Resisting, resistant. Use *corrosion-resistant* instead of *corrosion-resisting*.
25. Said. Do not use *said pipe*, *said aggregates*, etc., but instead, use *this pipe*, *these aggregates*.
26. Same. Do not use *same* to replace a pronoun like *it* or *them* standing alone, e.g., *connected to same*, *specified for same*, *same will be given consideration*, *conforming to requirements for same*. The sentence should be rewritten to describe what is meant.
27. Schedule of Pay Items. Use *Schedule of Pay Items* instead of *Itemized Proposal* or *Proposal* in referring to the list of pay items.
28. Shall. Use *shall* to define what the contractor is required to do. Do not use *may* or *can* unless the contractor has a permission or capability as required by the specification. Do not use *must*, *should*, or *is to*. *Shall* or *will* in needed to identify who is responsible for the work.
29. State. The term *the State* is preferred over *the State of Indiana* or *Indiana*.
30. Such. Do not end a sentence with *such*. *Such* usually means of this or that kind, or similar to something stated. Instead, state that which is actually meant, name the work to be completed, or rephrase the sentence.
31. Symbols. Do not use the following symbols in writing a unique special provision.

Symbol	Write Instead
/	<i>per</i> , or <i>a</i>
F°	°F
+	plus
-	minus
x	by
“	in.
‘	ft

32. The. Do not eliminate *the* for brevity.
33. Thoroughly, Carefully, Clearly, etc. Avoid using these or other similar adverbs, e.g., *thoroughly wet*, *shall be carefully dried*, *shall be clearly shown*, etc., as they are unenforceable. Preferably, state the value of the intended requirements in percent, dimensions, number of passes, etc.
34. Unit Price. Use *contract unit price* instead of *contract unit price bid*.
35. Will. Use this term only in describing something the Department will do that affects the contractor’s performance, e.g., “The Engineer will respond in writing in 14 days” or “_____ will be accepted based on the Department’s test results.” Do not use *must*, *should*, or *is to*. *Shall* or *will* in needed to identify who is responsible for the work.

STOCKPILED BORROW MATERIAL FOR PROJECT

The Department has stockpiled sufficient borrow material for use in the project in the southwest quadrant of the I-465 interchange with I-70 on the eastside of Indianapolis.

All borrow required for the project shall be taken from this stockpile.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.
2. There are no referenced *Standard Specifications* sections and line numbers.
3. Specification text is Courier New font, 10-pt. pitch.
5. There are no deletions or insertions.

EXAMPLE OF A RESTRICTIVE TYPE UNIQUE SPECIAL PROVISION

Figure 19-3A

USE OF CONES IN LIEU OF DRUMS

SECTION 107, BEGIN LINE 416, DELETE AND INSERT AS FOLLOWS:

Pavements and shoulders having an edge drop of more than 3 in. (75 mm) shall be delineated with drums in accordance with 801.09. Delineation shall be at a maximum spacing of 200 ft (60 m). ~~The use of cones in accordance with 801.08 will be permitted during daylight hours in lieu of drums.~~

SECTION 801, BEGIN LINE 259, DELETE AND INSERT AS FOLLOWS:

Cones shall be made of a material to withstand impact without damage to striking vehicles. They shall have a substantial base to restrict overturning. Cones and tubular markers shall be as shown on the plans.

Cones shall be used only during temporary activities where portability is advantageous and they remain in place and do not create a hazard to traffic. The use of cones in lieu of drums will be permitted ~~during daylight hours unless otherwise directed~~ *as shown on the plans. However, cones shall not be used for Interstate-route lane restrictions.*

Tubular markers shall be used for separating two-lane two-way traffic as shown on the plans or as directed.

Cones and tubular markers shall be secured in place either by weighting or adhesives. The use of metal bases will not be permitted.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.
2. Referenced *Standard Specifications* section and line numbers are Courier New font, 10-pt. pitch, all capitals.
3. Specification text is Times New Roman font, 12-pt. pitch.
4. Deletions are shown by overstrike.
5. Insertions are shown in italics.

**EXAMPLE SPECIAL PROVISION WHICH
DIRECTLY REVISES THE *STANDARD SPECIFICATIONS***

Figure 19-3B

LIGHTWEIGHT AGGREGATE FOR EMBANKMENT

Description

This work shall consist of furnishing and placing lightweight aggregate fill for embankment construction in accordance with 105.03.

Materials

Materials shall be in accordance with the following:

The aggregate source shall submit independent laboratory test results for the quality parameters listed. The test report shall be dated not later than 18 months from the time it is submitted. Independent laboratory test results will not be required if the aggregate is supplied by a certified aggregate producer on the Department's approved Certified Aggregate Producer List.

The lightweight aggregate shall satisfy the requirements as follows:

1. Dry Rodded Unit Weight (Mass), Max... 58 pcf (929 kg/m³)
2. Gradation, AASHTO M 195..... 1/2 in. to No. 4
(12.7 mm to 4.75 mm)
3. Finer than No. 200, Max..... 8.0% by wet analysis
4. Wear, Max..... 50%
5. Soundness, Max..... 12% loss
6. Friable Particles, Max..... 10.0%
7. Deleterious Particles, Max..... 1.0%

The source of lightweight aggregate is subject to approval of the Engineer. Aggregate that is without suitable documentation of testing by an independent testing laboratory and is not approved or is not supplied by a certified aggregate producer, will not be accepted.

Recycled materials will not be allowed in an environmentally-sensitive area.

Construction Requirements

After placement, this material shall be lightly compacted. Density tests will not be required after placement.

Method of Measurement

Lightweight aggregate for embankment will be measured in accordance with 203.27(d).

Basis of Payment

Lightweight aggregate for embankment will be paid at the contract unit price per ton (megagram).

Payment will be made under:

Pay Item	Pay Unit Symbol
Lightweight Aggregate for Embankment.....	TON (Mg)

The costs of material, transportation, placement, and all incidentals shall be included in the cost of the pay item.

EXPLANATION

1. Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.
2. There are no referenced *Standard Specifications* sections and line numbers.
3. Provision subheadings are Courier New font, 10-pt. pitch, boldface.
4. Specification text is Courier New font, 10-pt. pitch.
5. There are no deletions or insertions.

**EXAMPLE SPECIAL PROVISION WHICH
DOES NOT DIRECTLY REVISE THE *STANDARD SPECIFICATIONS*****Figure 19-3C**