Contract Special Provisions

Principles of Writing
Construction Specifications
and Special Provisions

Scott Trammell, P.E.
Construction Specifications Engineer

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Two (not so) Hidden Truths about Specifications and Special Provisions:

Nobody likes to write them

Nobody likes to read them!

Well,almost nobody......



Standard Specifications

- 1. Use good stuff.
- 2. Do good work.



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Questions to ask concerning Unique Special Provisions

- 1. **Why?** Do you **really** need it? Is it necessary? Is it covered in the Standard Specifications? If so, do you still need a USP?
- Does it conflict with the current Standard Specifications?
 The USP should *complement*, not conflict with, the Standard Specs.
- 3. Do we have an existing special provision, recurring or unique, that addresses the same matter? Can you use that instead?
- Does it define a unique pay item? (more on this in a few minutes)
 If so, make sure the five basics (the Big 5) are covered.
 - Description
 - Materials
 - Construction Requirements
 - Method of Measurement
 - Basis of Payment

The **Big 5** follows the standard AASHTO Specification Format.





Questions to ask concerning Unique Special Provisions

- 5. Does it specify a proprietary item, material or process? If so, is that necessary? Do you have permission?
- 6. Do we have access to cited standards? (ASTM, AASHTO, LPA standards) If not, can the cited standard be revised to one we do have access to? If not, the standard needs to be included in the USP.
- 7. Does it involve Department testing?

 If so, have you checked with our folks at Materials and Testing?

 (they may have something to say about it)

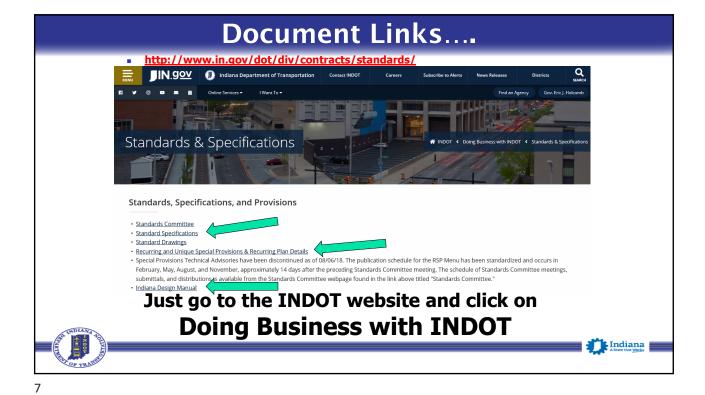
 If not the Department, who does the testing?
- 8. Is it *ready* for the **USP Review Process**?





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Contract Special Provisions!

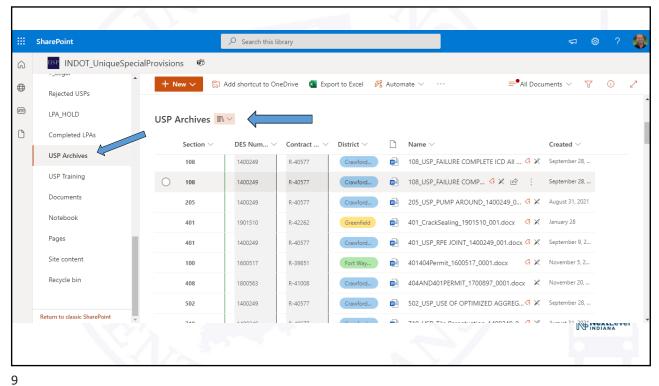
Resources:

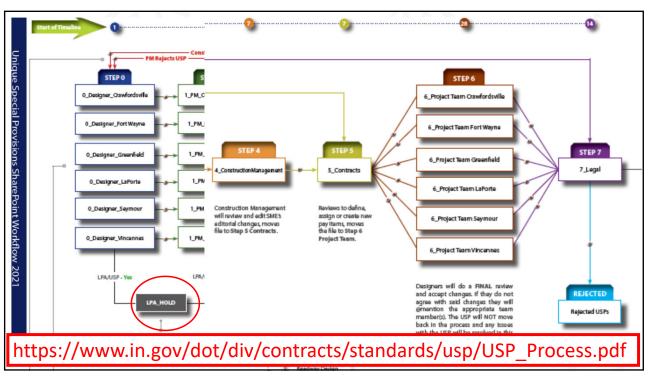
1. Website:

https://www.in.gov/dot/div/contracts/standards/rsp/index.html

- 2. Scroll down to "Unique Special Provisions"
 - Unique Special Provision Process (flowchart)
 - List of Unique Provisions (sample list)
 - Instructions for Use Unique Special Provisions (ch. 19 of IDM)
 - USP Menu (initial presentation form)
- 3. Contact information for Scott Trammell and Lana Podorvanova







Different Types of USPs

Restrictive Type USP

Simple, concise language for clarification.

Constructive Types of USPs Directly Revises Standard Specifications

- Reference Spec sections and line numbers
- Line out existing, italicize new

Defines a Unique Pay Item

- Needs the "Big 5"
- Could be one that directly revises the standard specifications (not as common)



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Restrictive Type USP

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.

Provision title is centered and is Courier New font, 10-pt. pitch, all capitals.

There are no referenced Standard Specifications sections and line numbers.

Specification text is Courier New font, 10-pt. pitch.

There are no deletions or insertions.

EXAMPLE OF A RESTRICTIVE TYPE UNIQUE SPECIAL PROVISION

Figure 19-3A



Constructive Type USPs

Directly Revises Standard Specifications

PERMANENT BUZZ STRIPS

The Standard Specifications are revised as follows:

SECTION 801, BEGIN LINE 636, DELETE AND INSERT AS FOLLOWS: 4. Temporary Permanent Buzz Strips

TemporaryPermanent buzz strips shall be a set of transverse markings constructed of removable or durable marking material. Durable marking material shall be used in accordance with 808.07(b).

SECTION 801, BEGIN LINE 1034, DELETE AND INSERT AS FOLLOWS: TemporaryPermanent Buzz Strips.....LFT

> Title is centered – Courier New, 10 pt. Referenced Spec section and line numbers - Courier New, 10 pt. Spec text is Times New Roman, 12 pt See Chapter 19 - Figure 19-3B





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Defines a unique pay item – needs the "Big 5"

Description

This work shall consist of hand digging guardrail post holes in accordance with 105.03. An undistributed quantity has been included in the contract for this work.

Materials

Materials shall be in accordance with 601.02.

Construction Requirements

Construction Requirements
When the posts are located within the Tolerance Zone of a utility
in accordance with IC-8-1-26-2, 12 in. diameter holes shall be bored in
accordance with 601.03 to the required embedment depth by use of hand
tools or vacuum excavation. If there are 10 or more hand dug holes
adjacent to each other, the hole shall be backfilled with removable
flowable fill and the guardrail posts shall be placed immediately into the backfilled hole and braced until the flowable fill cures.

Method of Measurement
The guardrail post holes will be measured per each hand dug post

Basis of Payment
The guardrail post holes will be paid for at the contract unit price per each hand dug post hole, complete in place.

Payment will be made under:

Hand Dig Guardrail Post Hole

The cost of the B-borrow or removable flowable fill shall be included in the cost of Hand Dig Guardrail Post Hole.

- 1. Title is centered, Courier New, 10 pt.
- 2. No referenced spec section or line numbers.
- 3. Text is Courier New, 10 pt.
- 4. Headings are **Bold**.
- 5. See Figure 19-3C.

This USP does not directly revise the Standard Specs,

But it **does** define a unique pay item.



About those Pay Items......

Only items listed in the Standard Specifications are Standard Items.

Each existing pay item shown in the list of pay items is identified by:

- **S** = Standard
- **M** = Maintenance
- **R** = Recurring (tied to one or more **R**ecurring **S**pecial **P**rovisions)
- **U** = Unique

This means you need a USP with the **Big 5**.

- Check the **examples** of USP's on our website to see if we already have something that you can **revise to fit** your "unique" project.
- Please also note that adding the word "modified" to a standard pay item does not necessarily make it Unique that requires the "Big 5".
- Can you use the standard spec section the way it is written and show your "modification" on the plans? Could you use a Restrictive Type USP to clarify your intentions?

Do NOT address measurement and payment on the plans!





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About those Pay Items......

UNDISTRIBUTED QUANTITIES

The schedule of pay items contains the following undistributed quantities in addition to known plan quantities: \mid

303-08210 Comp Ag No. 53, Temp for Driveways100 TON

The Contractor shall inform, and obtain approval from, the Engineer prior to placement of an undistributed quantity.

Undistributed Quantities is unacceptable as a supplemental description for your unique pay item.

Another question:

Do you really need it? Could you simply use 104.03, or 109.05?





About those Pay Items......

- Changing the UNITS of a standard pay item may not be necessary. Can you use the standard pay item?
- Changing the name of a standard pay item does not make it unique.
 Can you use the standard pay item?
- And remember: In accordance with 105.04,

Instruction to Bidders and description of pay items listed

in the Schedule of Pay Items hold over:

Unique Special Provisions, (101.71) hold over:

Plans, (101.36) hold over:

Recurring Special Provisions, (101.44) hold over:

Standard Specifications. (101.55)





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Did we mention Pay Items.....?

CCTV EQUIPMENT, REMOVE AND DISPOSE

Description

This work shall consist of removing and disposing of all non-salvageable items associated with the CCTV equipment located in the infield of the I-65 and Lafayette Ave interchange, in accordance with 105.03.

Materials

Materials shall be in accordance with 805.02, if required.

Construction Requirements

Construction requirements shall be in accordance with 202 and 805.

Method of Measurement

Removal and disposal of said equipmen will not be measured.

Basis of Payment

All items necessary to remove and dispose of this equipment shall be included in the cost of the pay item.





Just because it *LOOKS* okay...

TYPE I-A JOINT SEALANT REPLACEMENT

The Contractor shall remove and replace the existing type I-A joint seal in accordance with 609.05.

Replacement of the existing type I-A joint seal shall be included in the cost of other items.

Type I-A joints is found in 609.05, not in 724.

And it is used in Reinforced Concrete Bridge Approaches.

Trying to define a unique pay item is not necessary.





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Proofreading can be a good thing....

NEXT LEVEL ROAD SIGNS

Next Level Road Signs will be furnished by the Department. The Contractor shall pick up the signs at the Greenfield district office at:

32 South Broadway St.

Greenfield, IN 46140

The Contractor shall return the signs to the Vincennes district office upon project completion. The travel cost for this effort shall be included in the cost of other items.

Make sure your intentions are clear.

(take the time to make it yours)





Notice anything?

DRIVE ACCESS

The Contractor shall coordinate with adjacent property owners with drives located inside of the extents of the portable signal layout to determine locations where access needs to be maintained.

Coordination with property owners shall be included in the cost of maintaining traffic.

Pay attention to proper formatting.

Standard pay items do not belong in a USP.



A State that Works

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How about this one?

CORED HOLE IN CONCRETE

As part of the operation to predrill pilot holes to bedrock depth, the Contractor shall core through the existing retaining wall footing in accordance with 701.09, as shown on the plans. The diameter of this hole shall match the diameter of the predrilled pilot holes and cored hole in rock. Once the footing has been cored, predrilling shall continue to bedrock depth in accordance with $701.09\,(a)\,2$.

Once the piles have been driven and the fill beneath the footing is in place, the prebored holes shall be filled as shown on the plans.

The cost of fill materials and all other incidentals shall be included in the cost of the prebored hole.

Defining a Unique Pay Item is not necessary.

A Restrictive Type USP will suffice, utilizing the Standard 701 Pay Item for Prebored holes.



Indiana

Who are we writing these for?

➤ The Contractor

➤to bid the work

>to perform the work

Department personnel involved with the contractto enforce those standards.

And since we are writing these special provisions for the contract.....

Get to the point

and **keep it simple**.

here are some guidelines to follow:

www.in.gov/indot/design_manual/files/Ch19_2013.pdf





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Write the Unique Special Provision....

Voice - Use passive voice. (the work... shall be...performed)

Sentences - Use simple language and words. Keep sentences short,

20 words or less (please).

Paragraphs – Limit to three or four sentences if possible.

Terminology – Be consistent. Avoid words with more than one meaning.

Pronouns - Avoid them. (Seriously, just don't)

Capitalization - Only the title can be all caps. Capitalized words may

only be Department, Engineer, Contractor, headings or

proper nouns.

Punctuation - Minimum. The meaning of a sentence should be clear.











Please be <u>Clear</u> and <u>Concise</u>:

Commonly used terms to AVOID:

- per, shall conform to, shall comply with.
 Instead, use shall be in accordance with Section 605.
- > as per. Instead, use as specified, as shown, in accordance with.
- as shown in the plans, as detailed on the plans, as indicated in the plans, as shown on the standard drawings.
 Instead, use

as shown on the plans.

- > shop drawings. Use, working drawings.
- > <u>and/or</u>. Use either **and** alone, or **or** alone. Choose the one most appropriate for your unique situation. (if in doubt, use **or**)





Make sure the language is Correct. >at the Contractor's expense. Instead, use ____shall be included in the cost of ____,at no additional cost....., or with no additional payment. And, (parenthetically speaking), do not use parentheses, use a comma, or two.



Make sure the language is <u>Clear</u> and <u>Correct</u>:

DRY CONSTRUCTION RESTRICTION

All construction work on the Site shall occur in dry conditions, with no water present in the stream. No work shall be performed on the channel during a rain event or until such a time as the channel is dry.

If work is desired to be performed following rain events when the channel is still wet the Contractor shall implement dewatering and pump around operations sufficient to ensure continuous, uninterrupted flow as well as dry working conditions in the channel. Pump around and dewatering operations shall be performed at no additional cost to the Department.

Please make sure that your intentions are <u>easily</u> understood!





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Please be (specologically) <u>Correct</u>:

AVOID saying:

►<u>INDOT</u>. Instead, use

the Department.

▶or approved equal. Do not use this phrase, but **define the equal,** or say **as approved**.

<u>>must</u>, <u>should</u>, or <u>is to</u>. Use

shall, or will.

Remember: the Engineer **will...**

the Contractor **shall...**

(see General Note 11, and 104.01)





Be Consistent.....

(and Correct)

For spans greater than 4 ft, a structural design shall be prepared by a Registered Civil Engineer and shall be as approved by the City Engineer.

- A rough road sign (W8-8) with black lettering on an orange background shall be used in advance of steel plate bridging.
- The Contractor shall be responsible for the maintenance of the steel plates, shoring and asphalt concrete ramps.

Method of Measurement:

Steel road plates will not be measured for payment.

Basis of Payment:

Steel toad plates will not be paid for directly but shall be included in the cost of maintaining traffic.





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Please make sure to use the Correct words:

NOTIFICATION OF TRAFFIC CONTROL CHANGES

The Contractor shall provide notification of all changes in traffic control, including road closures, to the following agencies at least five calendar days prior to implanting the revised traffic pattern:

 Monroe County Community School Corporation
 812-330-7700

 Bloomington Transit
 812-336-7433

 Monroe County Sherriff
 812-349-2534

 Bloomington Police Department
 812-339-4477

 Bloomington Fire Department
 812-332-9763

 US Post Office
 812-334-7013

The Contractor shall provide notification to the following property owners of all changes in detour routes impacting access to their properties at least seven calendar days prior to implanting the revised traffic pattern:

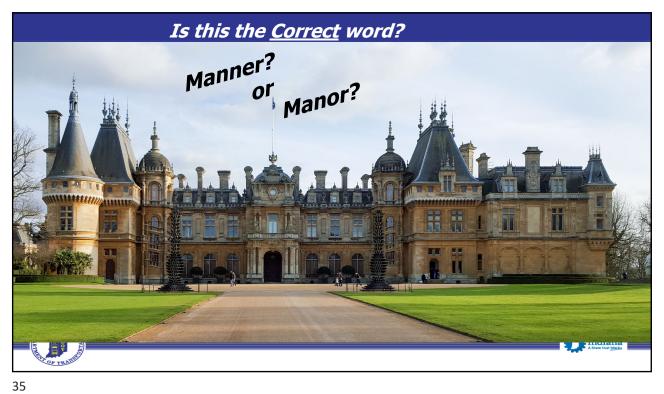
Unity of Bloomington, 4001 S. Rogers Street 812-333-2484
John & Martha Newlin, 420 W. Gordon Pike 812-336-1149

The cost of providing notifications shall be included in the cost of maintaining traffic.



I think they meant to say "implementing".





Sometimes Spellcheck does NOT help:		
Did you mean?	or	did you mean?
implanting	or	implementing
insure	or	ensure
manor	or	manner
Make sure your intentions are clear.		

Sometimes Spellcheck does NOT help:

PIPE ABANDON AND GROUNT FILL

The Contractor shall remove a portion of the pipe within the widening limits and abandon and fill with grout the existing portion of the structure within the resurface limits as shown on the plans.

This work shall be included in the cost of clearing of right-of-way.

Proofreading is important.





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Be <u>Consistent</u> with proper spec language:

>permit or permitted,

unless you are actually going to require them to obtain a permit.

Use allow, or allowed.

➤Do not use " for inches.

Use in.

>Do not use for feet or foot.

Use **ft** (no period after **ft**)

For measurements, instead of using 9" x 9", write

9 in. by 9 in.

do the same for ft





Please be <u>Clear</u> and <u>Consistent</u>:

- For numbers, use 9 for dimensions, and nine for quantities, and by all means – do NOT say nine (9). That is not necessary.
- Also, numbers **nine** or less are spelled out, numbers **10** or above are written numerically.

Don't place a number at the beginning of a sentence. If you have to, spell it out!

- And please, don't ever, I mean never, use "i.e." or "etc." (Seriously. Don't try it. I know people!)
- If at all possible --->avoid using any "-ly" words. Seriously.

Absolutely.

TOP TEMPER

Usually.





Are you sure you want to say it that way?

- 4. The Contractor shall notify Indiana American Water immediately of a chemical spill or leak onto the ground or into a waterway using the emergency number of 317-300-4779.
- 5. Due to concerns regarding East Fork White Lick Creek, fertilizers pesticides, or herbicides shall not be applied within the five year Time of Travel Zone. Portable toilets and the use of explosives is also prohibited in this zone.
- 6. Due the presence of E. coli, workers who are working in or near White Lick Creek, East Fork White Lick Creek, or a UNT1 to East Fork White Lick Creek





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Be **Correct** (and legal)

Materials shall be in accordance with 619.02 and as follows:

All steel components shall receive a <u>powdercoat</u> paint finish in <u>black</u>, Federal Standard 595B Color 17038. Any equivalent coating system shall be as approved by the <u>Engineer</u>. All hardware shall be painted black, Federal Standard 595B Color 17038.

Construction Requirements

Construction of the powdercoat finish shall be in accordance with 619 and the manufacturer's recommendations.

Without this, the Engineer didn't have a choice!





Proofreading! It's a thing. Really!

PIPE ROADWAY DRAIN CASTING EXTENSION

The Standard Specifications are revised as follows:

SECTION 715, BEGIN LINE 168, INSERT AS FOLLOWS:

The Contractor shall cut the existing roadway drain extension as shown on the plans. The Contractor shall use a coupler to connect the new roadway drain extension to the existing bridge deck drain system. The coupler shall be in accordance with 907.28 or 908.10.

SECTION 715, BEGIN LINE 484, INSERT AS FOLLOWS:

Couplers and all necessary accessories will not be measured.

SECTION 715, BEGIN LINE 547, INSERT AS FOLLOWS: price per each. Couplers and all necessary accessories shall be included in the cost of the roadway drain casting extension pipe.



The importance of Proofreading......

compaction following installation. Trees shall not be planted in rows, rather installed haphazardly to imitate a more natural pattern. Trees shall be planted so the root collar is even with the ground surface. The roots shall be extended downward into a hole or topsoil. Roots shall not be forced into improper planting holes which would restrict their ability to grow and support the seedling to permit survival. Failure to comply with these procedures shall require replanting of trees with no additional payment. Outside temperature and storage requirements shall be in accordance with INDOT design manual standards found in 622.03. All other provisions of planting, backfilling, and watering shall be in accordance with 622.08.

All trees shall be marked with wire flags $\frac{immediately}{immediately}$ adjacent to their stems.

Haphazardly.

An LY word.

Was it a good idea?





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Did we mention **Proofreading....?**

Labeling and Tagging:

The Electrical Contractor shall label all electrical equipment by one of these methods described below:

- Printed card labels may be used on items of equipment furnished with plastic windows. Labeling of the cards shall be nearly printed using a lettering device such as Leroy Instrument.
- Directories on the inside of panelboards shall be typewritten and shall show a list of circuits and points, equipment, or areas supplied.

Did they mean NEATLY?

Or is it okay if the Contractor just thought about it?

"Well, we *nearly* printed those......"



Adverbs are not your friend.



