

Chapter Sixty-six  
**CONTRACT PROCESSING**

BUREAU OF DESIGN AND ENVIRONMENT MANUAL



**Chapter Sixty-six**  
**CONTRACT PROCESSING**

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## Chapter Sixty-six

# CONTRACT PROCESSING

### 66-1 SPECIFICATIONS, SPECIAL PROVISIONS, AND HIGHWAY STANDARDS

#### 66-1.01 General

The *Standard Specifications for Road and Bridge Construction* (Standard Specifications), Supplemental Specifications, Recurring Special Provisions, Contract Special Provisions, and plans all are essential parts of the contract. They should complement each other and provide complete instructions for the work to be accomplished. If a discrepancy does exist among these documents, the relationships as described in Article 105.05 of the *Standard Specifications* will apply.

The *Standard Specifications* and Supplemental Specifications are included in the contract documents by the designer by referencing the applicable editions in the first paragraph of the special provision portion of the contract. Recurring Special Provisions are included through the use of a check sheet. Contract Special Provisions are included with the contract documents provided to the contractor.

The *Standard Specifications* and Supplemental Specifications are reviewed by the Specifications Committee which acts in an advisory capacity to the Director of Highways. The Specifications Committee includes permanent representatives from the Bureaus of Bridges and Structures, Design and Environment, Construction, Materials and Physical Research, Operations, and Local Roads, District One, FHWA, and Illinois State Toll Highway Authority. Three seats are also held by the other eight downstate districts on a three-year rotating basis. The chairperson is chosen by the Director of Highways for a four-year term. The Standards and Specifications Engineer in the Bureau of Design and Environment is the recording secretary.

#### 66-1.02 Specifications

##### 66-1.02(a) Standard Specifications

The *Standard Specifications for Road and Bridge Construction* (*Standard Specifications*) are the requirements adopted by the Department for work methods, materials, and basis of payment used in construction. The *Standard Specifications* are intended for general and repetitive use. They provide Department criteria for:

- the scope of work,
- control of work,
- control of materials,
- legal regulations and responsibilities to the public,

- contract prosecution and progress, and
- measurement and payment of contract items.

The *Standard Specifications* are published in book form and are updated every three to four years. Copies of the *Standard Specifications* can be obtained from the Department's website.

### **66-1.02(b) Supplemental Specifications**

Supplemental Specifications are additions, deletions, and/or revisions to the *Standard Specifications*, which have been adopted by the Department since the last printing of the *Standard Specifications*. They are automatically considered part of the *Standard Specifications*.

Supplemental Specifications are printed in book form and are revised each year. Copies of the latest editions can be obtained from the Department's website.

### **66-1.03 Special Provisions**

#### **66-1.03(a) General**

Special provisions are additions or revisions to the *Standard Specifications* and the Supplemental Specifications documenting conditions and requirements for special situations. Special provisions are either included in the contract documents or referenced through a check sheet.

#### **66-1.03(b) Recurring Special Provisions**

Recurring Special Provisions are special provisions that are commonly used on many projects. Unlike *Standard Specifications* and Supplemental Specifications, Recurring Special Provisions do not require the approval of the Specifications Committee. Recurring Special Provisions are printed with the Supplemental Specifications and inserted into a project by reference (i.e., check sheet). Each district is provided a copy of the check sheet, which contains a list of all the latest Recurring Special Provisions, by the BDE. The designer can obtain the check sheet from the district Program Development Engineer. The designer is responsible for checking the appropriate Recurring Special Provisions for the project and including the check sheet with the contract documents.

#### **66-1.03(c) Contract Special Provisions**

Contract Special Provisions are the special provisions the designer includes with the proposal submitted with the plans to BDE. They may include one or more of the following:

1. BDE Special Provisions. BDE Special Provisions are Contract Special Provisions issued for Statewide use. These special provisions are fill-in-the-blank specifications or specifications that are issued between publications of the Recurring Special Provisions.

They are issued through BDE effective beginning with a specific letting. All special provisions effective for a letting are transferred to the districts through the LAN and via email. The designer is responsible for marking the appropriate BDE Special Provisions on the BDE Check Sheet and BDE will insert the paper copy into the proposal for each project.

2. Bridge Special Provisions. Bridge Special Provisions are Contract Special Provisions issued by the Bureau of Bridges and Structures that may have changes from letting to letting. These special provisions may become BDE Special Provisions when no revisions have been made for at least a year. The Bureau of Bridges and Structures is responsible for including the appropriate Bridge Special Provisions into the contract documents for each project.
3. District Special Provisions. District Special Provisions are Contract Special Provisions addressing concerns unique to a district (e.g., material shortages, labor agreements). These special provisions are approved by BDE prior to their repetitive use. The district may also recommend these special provisions for consideration as BDE Special Provisions. The designer is responsible for including the appropriate District Special Provisions into the proposal for each project.
4. Project Specific Special Provisions. Project Specific Special Provisions are Contract Special Provisions written by the designer to address a unique situation on a project. These special provisions should not be used in more than one project. Project Specific Special Provisions are required wherever a project contains work, material, unique sequence of operations, or any other requirements that are necessary for the completion of the project but are not included in the *Standard Specifications*, Supplemental Specifications, Recurring Special Provisions, BDE Special Provisions, or Bridge Special Provisions. These special provisions should not be prepared to personalize the work to the ideas of the designer or to place emphasis on certain aspects of a project. The practice of emphasizing particular procedures and requirements already stated in the *Standard Specifications* is more properly accomplished at the preconstruction conference. The district may recommend these special provisions for consideration as District Special Provisions or BDE Special Provisions. The designer is responsible for writing and including the appropriate Project Specific Special Provisions into the proposal for each project.

#### **66-1.04 Special Provisions Preparation**

##### **66-1.04(a) Preparation Steps**

The designer should use the following steps when preparing a special provision:

1. Define Need. The designer should review the existing specifications, standards, details, special provisions, and plans to ensure that there is a need for the special provision. If the topic is not adequately covered in one of the other documents, only then should a special provision be prepared.

2. Research. The designer should research the topic so that complete and detailed information is available before writing the special provision. If the designer determines this special provision will be applicable in more than one project, the special provision should be submitted to BDE for consideration as a District Special Provision or BDE Special Provision.
3. Format. Prepare special provisions in the same manner as the *Standard Specifications*. Section 66-1.04(b) presents the format that should be used.
4. Writing the Special Provision. Once all research has been completed, the first draft can then be prepared. The designer may want to review existing special provisions for guidance. The following are several grammatical recommendations for preparing special provisions:
  - a. Wording. Write in the passive voice.
  - b. Sentences. Prepare the special provision using simple language and words. Keep words and sentences short (20 words or less), unless complexity is unavoidable.
  - c. Paragraphs. Limit paragraphs to three or four sentences.
  - d. Terminology. Words should be used consistent with their exact meaning. Use the same word throughout; do not use synonyms. Avoid any words that have a dual meaning. Section 66-1.04(d) presents the recommended terminology that should be used. Omit extraneous words and phrases.
  - e. Pronouns. Avoid the use of pronouns, even if this results in frequent repetition of nouns.
  - f. Punctuation. Carefully consider the punctuation using the minimum number of punctuation marks consistent with the precise meaning of the language. Ensure that the meaning of any sentence is not in doubt.
  - g. Parentheses. Avoid the use of parentheses ( ). Instead, use commas or rewrite the sentence.
  - h. Numbers. Write all numbers numerically. It is unnecessary to write numbers both in words and figures. Show times and dates numerically. Write fractions as decimals. Decimals less than one should be preceded by the zero.
5. Reviewing. Review the previously completed paragraphs as succeeding ones develop. Where necessary, redraft preceding paragraphs to reflect later thoughts.
6. Submissions. The designer should prepare and distribute the preliminary draft of the special provisions within the district for review and comment as soon as practical. The designer will be responsible for incorporating the reviewers' comments into the final draft.

**66-1.04(b) Format**

Prepare special provisions in the same format as the *Standard Specifications*. The sections of the special provision that should be addressed, when needed, include:

1. Description. Provide a brief narration of the work to be performed with references to specifications, plans, or other special provisions that further define the work. The description usually begins with "This work shall consist of...". Only mention the major aspects of the work.
2. Materials. Designate the materials to be used in the work and establish their requirements. Delineate complete specifications of the properties of each material and the test method. References may be made to AASHTO, ASTM, or other recognized specifications. Where a material is already specified in the *Standard Specifications*, reference the appropriate article or section with any necessary changes stated. Do not reproduce a standard specification in its entirety to revise one or two elements.

The use of proprietary specifications is generally prohibited by the Illinois General Statutes. However, the Statutes do allow, under certain conditions, proprietary items to be used. Where the designer has a need for a proprietary specification, contact the Policy and Procedures Section in the Bureau of Design and Environment for guidance.

3. Equipment. Designate the equipment to be used in the work and establish its requirements. Where a piece of equipment is already specified in the *Standard Specifications*, reference the appropriate article or section with any necessary changes stated. Do not reproduce a standard specification in its entirety to revise one or two requirements.
4. Construction Requirements. Describe the sequence of construction operations or the desired end product. Only use the presentation for the sequence of construction operations if it is critical to achieve the desired result.
5. Method of Measurement. Describe the units of measurement for each pay item and where the item will be measured (e.g., in place, in truck, at plant). Designate any modifying factors and other requirements needed to establish a definite measured unit.
6. Basis of Payment. Describe the units and the pay item name for which payment will be made. Note the entire pay item name in upper-case letters. Do not include a listing of all elements of the work.

**66-1.04(c) Guidelines**

In addition to the above sections, the following presents several guidelines the designer should consider when developing special provisions:

1. Completeness. The designer should ensure that the essentials have been included, each requirement is definitive and complete, and the *Standard Specifications* have not been duplicated. The special provision should not be vague.
2. Clarity. To ensure clarity, the designer should:
  - Clearly delineate the method of measurement and basis of payment.
  - Make a clear, concise analysis of the job requirements for general conditions, types of construction, and quality of workmanship. Do not leave the contractor in doubt on what they will be required to do.
  - Give directions, never suggestions.
  - Never assume the contractor knows what is meant.
  - Avoid conflicting or ambiguous requirements. Every specification should have only one meaning.
  - Never conceal difficulties or hazards from the contractor.
3. Conciseness. Each special provision should be as concise as practical. When reviewing the special provision, the designer should consider the following suggestions:
  - Where practical, refer to an existing specification and delineate only the portion changed.
  - Avoid duplications between different special provisions and any related contract documents.
  - Do not give reasons for a specification requirement.
  - Do not provide additional information that is unnecessary for the preparation of bids and the accomplishment of the work.
  - Once stated, do not repeat any instruction, requirement, direction, or information.
  - Use cross references, wherever practical.
  - Write the specification in the positive form (e.g., use “will” instead of “will not”).
  - Do not include instructions to the Department in the specification.
4. Correctness. To ensure that the special provision is written correctly, the designer should review the following:
  - Do not include items that cannot be required or enforced.
  - Ensure that the specification does not punish the contractor or supplier.

- Ensure that the specification does not unintentionally exclude an acceptable product, construction method, or any equipment.
- Ensure that the provision does not change the basic design of the item.
- Do not specify impossibilities. The practical limits of workers and materials must be known and recognized.
- Specify standard sizes and patterns wherever practical.
- Avoid personal whims and pet requirements.
- Ensure that the contractor will not be held responsible for the possible inaccuracy of information furnished by the Department.
- Ensure sufficient attention has been provided to assessing the durability or reliability of the material or procedure discussed. The use of recognized standards should be referenced to ensure that the specified performance or characteristics are achieved. If not, define the testing criteria completely and accurately.
- Make a careful, critical examination of manufacturers' or trade associations' recommendations, and require supporting evidence.
- Requirements should be stringent. A strong requirement can be relaxed more economically, when the need arises. Weak specifications cannot be strengthened without increasing cost and generating claims.
- Ensure that the provision gives directions that are consistent with the standard practice currently used by the Department.

#### **66-1.04(d) Terminology**

Phraseology and terminology used in the *Standard Specifications* also should be used in the special provisions. In addition, the designer should consider the following:

1. Abbreviations. Generally, avoid abbreviations. However, they may be used if they are defined and the definitions are consistent with the accepted meanings. Always use the abbreviations for the terms listed in Article 101.01 of the *Standard Specifications*.
2. Amount, quantity. Use "amount" when writing about money only. When writing about measures of volume, use "quantity."
3. Any, all. The word "any" implies a choice and may cause confusion. In place of "any," the term "all" should be used.
4. Article. Capitalize "Article" when referring to an article of the *Standard Specifications*.

5. As per. Do not use “as per”; instead, use “according to.”
6. As shown on the plans. Use “as shown on the plans” instead of “as shown in the plans,” “as detailed on the plans,” “as shown on the detail sheets,” “as shown on the highway standards,” or “as shown on sheet \_\_\_\_\_ of the plans.”
7. Contractor. Use the word “Contractor” in place of the word “bidder” when writing special provisions for construction. “Bidder” should only be used for proposals. Contractor should always be capitalized.
8. Course. Use “course” for layers, not for “lifts.”
9. Day. Define the type of day to be used (e.g., calendar day, work day).
10. Department. Use “Department” in place of “Illinois Department of Transportation.” Department should always be capitalized. IDOT should not be used in the contract documents.
11. Included In. Use “included in the cost” instead of “incidental to.” The price of all work will be factored somewhere into the contract. Bid prices are generally lower when the contractor knows where to include costs.
12. Pay item. Use “pay item” instead of “bid item.”
13. Proposal. Do not use the word “proposal” when the word “contract” is intended. The term “proposal” only should be used to describe requirements during the bidding process.
14. Said. Do not use “said pipe,” “said aggregates” but, instead, use “the pipe,” “the specified aggregates.”
15. Same. Do not use “same” to replace a pronoun like “it” or “them” standing alone, such as “connected to same,” “specified for same,” or “same will be given consideration.” Rewrite the sentence to clearly describe what is meant.
16. Section. Capitalize “Section” when referring to a section in the *Standard Specifications*.
17. Shall, will. Use the word “shall” when specifying the responsibilities of the contractor. Use the word “will” when specifying the responsibilities of the Department (“we will,” “they shall”).
18. State. The term “State” is preferred over the “State of Illinois” or “Illinois.”
19. Such. Do not end a sentence with the word “such.” “Such” usually means “of this or that kind,” or similar to something stated. Instead, state that which is actually meant, or name the work to be completed or rephrase the sentence.
20. The. Do not eliminate “the” for brevity.

21. Unless Otherwise Specified. Do not use the term “unless otherwise specified.” In special provisions, the designer should know if something will be “otherwise specified.” In the *Standard Specifications* everything can be “otherwise specified” in the plans or through Contract Special Provisions.
22. Unit Price. Use “contract unit price” instead of “contract unit price bid.”

#### **66-1.04(e) Unit Abbreviations**

Figure 66-1.A provides a list of unit abbreviations adopted for the Standard and Supplemental Specifications and the Recurring and BDE Special Provisions.

#### **66-1.04(f) Rules**

The following is a list of rules adopted for the Standard and Supplemental Specifications and the Recurring and BDE Special Provisions:

1. Do not use hyphens to combine units (e.g., foot pounds would be ft lb not ft-lb). Do not use hyphens between the number and the unit (i.e., use 10 ft versus 10-ft).
2. Use the “/” symbol instead of the word “per” to combine units (e.g., inch per foot would be in./ft).
3. Always write out and do not abbreviate units used within Method of Measurement and Basis of Payment Articles.
4. Write out the words “percent” and “degrees” (i.e., angles) within text, but they may be abbreviated within charts and tables.
5. Write out the words “hour(s)” and “minute(s)” within the text, but they may be abbreviated within charts and tables (except: they will be abbreviated when used in combination with other unit abbreviations (e.g., m/min or ft/min))
6. Numbers within charts and tables are always written as numbers. Numbers associated with an abbreviated unit will also be written as numbers (e.g., 2 m, 8 mph, 32 kPa).

<b>Unit Metric (US Customary)</b>	<b>Abbreviations</b>
<b><u>Length</u></b>	
nanometer (thousands of an inch)	nm (mils)
micrometer (thousands of an inch)	$\mu\text{m}$ (mils) or $\mu\text{m}$ (in.)
millimeter (inch)	mm (in.)
meter (foot)	m (ft)
kilometer (mile)	km (mile)
<b><u>Area</u></b>	
square meter (square foot)	sq m (sq ft)
square meter (square yard)	sq m (sq yd)
hectare (acre)	ha (acre)
<b><u>Volume</u></b>	
liter (gallon)	L (gal)
cubic meter (cubic yard)	cu m (cu yd)
<b><u>Weight</u></b>	
gram (ounce)	g (oz)
kilogram (pound)	kg (lb)
metric ton (ton)	metric ton (ton)
<b><u>Force</u></b>	
Newton (pound)	N (lb)
kiloNewton (pound)	kN (lb)
<b><u>Pressure, Stress</u></b>	
kilopascal (pounds per square inch)	kPa (psi)
<b><u>Energy, Work</u></b>	
Joule (foot pound)	J (ft lb)
<b><u>Torque</u></b>	
Newton meter (foot pound)	N m (ft lb)
kiloNewton meter (foot pound)	kN m (ft lb)
<b><u>Speed</u></b>	
meter per minute (feet per minute)	m/min (ft/min)
kilometer per hour (miles per hour)	km/hr (mph)

**UNIT ABBREVIATIONS****Figure 66-1.A**

Unit Metric (US Customary)	Abbreviations
<u>Temperature</u>	
degrees Celsius (Fahrenheit)	°C (°F)
<u>Electrical</u>	
millivolt	mV
volt	V
kilovolt	kV
kilovoltampere	kVA
millampere	mA
ampere	A
hertz	Hz
watt	W
kilowatt	kW
ohm	ohm

### UNIT ABBREVIATIONS

**Figure 66-1.A**  
(Continued)

7. For numbers not associated with an abbreviated unit, use the following:
- numbers from zero to ten will be spelled out (e.g., ten hours, two-way radio, seven tires);
  - numbers greater than ten will always be written as numbers (e.g., 12 hours, 50 cycles, 11 percent); and
  - numbers less than one will be written as decimal numbers except inches will be written as fractions (e.g., 0.2 acre, 3/4 in.).

#### **66-1.05 IDOT Highway Standards**

The *IDOT Highway Standards* provide details on various design elements that are consistent from project to project. They provide information on how to lay out or construct the various design elements. Design data and/or specifications are not included on the *IDOT Highway Standards*. The designer is responsible for providing the standard number, including revision number, in the Standard Index included in the plans; see Chapter 63.

*IDOT Highway Standards* are developed by the Bureau of Design and Environment and are approved for general use by the Engineer of Design and Environment. *IDOT Highway*

*Standards* are developed in collaboration with other bureaus. Districts may submit ideas and details for the *IDOT Highway Standards* to BDE.

Copies of the *IDOT Highway Standards* are available on the Department's website.

## 66-2 PLAN SUBMISSION

### 66-2.01 District Schedule

To consider all improvements that are available for letting, the district will submit to the Engineer of Design and Environment a list of recommended improvements for each scheduled letting in the calendar year. This list will be submitted at least 10 weeks in advance of the scheduled letting date. Identify the improvements by route, section, and county. It is desirable that improvements that are included in the published program be available for letting as early in the calendar year as practical, especially those that will require less than 100 working days and include bituminous work. Letting improvements early also gives the prospective bidders better opportunities to schedule their work and may result in more competitive bidding.

### 66-2.02 Designer's Responsibilities

Once the plans are complete, including the Contract Special Provisions, quantities, time estimates, etc., the designer must submit these items to the Program Support Unit within the Bureau of Design and Environment. When submitting the construction documents to the Program Support Unit, the designer will need to include the following:

1. CA/Project Status Form. Complete the Department's CA/Project Status Form (Form BD-488). Copies of the form may be obtained from BDE. Use this form to ensure that all applicable design issues have been addressed (e.g., right-of-way, utilities, railroads). This form must be signed by both the designer and the Regional Engineer. Include copies or originals of all Regional Engineer executed agreements and 404 permits with the submittal to the Bureau of Design and Environment (e.g., utility agreements, environmental permits, soils report).
2. Signature Sheets. The Regional Engineer is required to sign the plan cover sheet indicating the Regional Engineer's approval of the plans. Each district has its own internal process for forwarding the plans to the Regional Engineer. The designer should contact the project engineer to determine the district's procedures. Typically, a memorandum is forwarded from the project engineer to the Regional Engineer and all individuals responsible for the project are required to sign off on the project.
3. Plan Sheets. The designer is required to provide one complete set of full-size plans on reproducible paper, mylar, or vellum to the Central Office. For 8.5 in x 11 in size plans, the designer provides the originals and a copy of the plans to the Central Office. This includes the cross sections, but does not include the listed *IDOT Highway Standards*. The *IDOT Highway Standards* will be incorporated into the plans by the Bureau of Design and Environment. Chapter 63 provides the Department's guidelines for preparing plan sheets.
4. Contract Special Provisions. Include one copy of each special provision required for the project with the submittal package. Also, provide a copy of the electronic file in the

Microsoft Word format. Section 66-1.04 discusses the procedures for developing special provisions.

5. Recurring Special Provisions. Include a completed Recurring Special Provision check sheet with the submittal package. Copies of the latest version of the check sheet can be obtained from the Project Development and Implementation Section.
6. Quantities Estimate. Include the project quantities on Form BD-213 or Bureau of Design and Environment approved equal. The unit prices are provided to the Central Office by the district estimating engineer under a separate submittal. Copies of form may be obtained from the Department's website. Chapter 64 provides the procedures for determining plan quantities.
7. Estimate of Time. Determine the expected construction time for the project. Section 66-2.03 provides the Department's guidelines for determining the expected construction time.
8. Project File. Provide copies or originals of all applicable project information including the project commitment file, a listing of any design exceptions, special design considerations, permits, agreements, etc.
9. Phase I Report. It is essential that the character and termini of the work as stated in the Phase I report agree with the plans. The designer should cite variations between the Phase I report and plans to BDE at the time the plans are submitted for approval.
10. Submittal Timing. To place an improvement on any specific letting, it is imperative that the plans and supporting documents be submitted in accordance with the schedules established in Figure 66-2.A which indicates the minimum number of weeks prior to the letting date for the submittal or completion of a particular phase of work.

<b>Submittal</b>	<b>Minimum Time in Advance of Letting</b>
List of Projects Recommend for Letting (by district)	12 Weeks
Plans to Bureau of Design and Environment (by district)	11 Weeks

### DISTRICT PLANNING SCHEDULE

Figure 66-2.A

### **66-2.03 Construction Time Estimates**

The contract duration is a very important part of the design data that accompanies plan submittals. It is essential that care be exercised in the determination of the working days or completion date. It must be remembered that a severe time requirement imposed upon a contractor will very probably be reflected in the bid prices, and the Department will pay a premium for that particular job when it may not be absolutely necessary. Also, with a provision for liquidated damages, it is extremely important that the designer arrive at a reasonable time limit to alleviate differences between the contractor and the Department.

To determine a feasible time limit, the designer must devote special attention to the sequence of construction operations to determine the order in which the work will progress. Also, sound engineering judgment is necessary to determine which construction operations will overlap to ascertain the days not affecting the total working days. The magnitude of the job is significant; i.e., the contractor for a small resurfacing job will use a much smaller work force than a contractor engaged in a large freeway project. Therefore, it is not probable that the contractor for the small job will be engaged in numerous operations at one time. Another consideration for the designer is the delivery of materials to the job site; e.g., in the case of a grade separation structure, it may be necessary to allow slack time between the completion of the substructure and initiating work on the superstructure due to the time required for fabrication and delivery of the structural steel. Although such determinations cannot always be made with absolute certainty, an estimate must be made to determine a reasonable time limit. If the contract will be placed on a completion date basis, the designer must devote special attention to construction operations that are limited by the *Standard Specifications*.

To determine the contract duration, the number of working days must be estimated. The "Estimate of Time Required," Form BD 220, is used to determine working days and should accompany the plan submittal. Copies of the form may be obtained from the Department's website. The number of days required for each item is obtained by dividing each quantity by its respective production rate. Figure 66-2.B provides the production rates for major items. The production rates shown in Figure 66-2.B apply to an average eight-hour work day. Construction production rates in Figure 66-2.B should be reviewed periodically and revisions made for any advancement in equipment output or construction techniques. Use the low rates on small projects and the higher rates on larger projects. For expedited contracts, it will be necessary to adjust the rates for longer working days. For items not contained in Figure 66-2.B, the district may supplement rates from their own design or construction files. The production rates of a single improvement are not conclusive in establishing these rates. Extremely high rates are often reached on a particular project or on any given day in the normal highway improvement but using these rates for the entire project would materially affect the accuracy of the time estimate.

The designer determines the "total days required" and "days not affecting time limit" on Form BD 220. These can be ascertained more readily by using a bar diagram, particularly when it is anticipated that many operations will be performed simultaneously or intermittently therefore making them difficult to schedule. In assigning work days, the minimum number used is 15 days and the total number of days assigned is in multiples of five. The number of working days

required must also be calculated for contracts that will be completion date contracts. This will ensure that the completion date is realistic and allow the estimator to make allowances in the unit costs for anticipated overtime and extra crews the contractor may need to meet the completion date. Completion date contracts must be approved by BDE.

Where the major contract items require a tight completion date and it is not necessary for the minor items (e.g., seeding, clean-up) to be included in that date, the designer may use a completion date plus working days. The number of working days allowed after the completion date should be kept to a minimum and only allow minor work to be completed. The designer must clearly state in the Project Specific Special Provisions which items must be completed by the completion date and which items are involved in the working days. Completion date contracts with working days must be approved by BDE.

Major Worktype	Sub Worktype	Description	Unit	Low	High
Bridge	Bridge	Bearing Assembly	each	5	10
Bridge	Bridge	Bridge Deck Concrete Overlay	square yard	200	500
Bridge	Bridge	Bridge Deck Grooving	square yard	500	800
Bridge	Bridge	Bridge Deck Scarification (Cold Milling)	square yard	350	1000
Bridge	Bridge	Bridge Deck Scarification (Hydroblasting)	square yard	175	500
Bridge	Bridge	Concrete Structures	cubic yard	10	25
Bridge	Bridge	Concrete Superstructure	cubic yard	10	30
Bridge	Bridge	Clean & Paint Steel Bridge - SP 10	square foot	1000	2100
Bridge	Bridge	Clean & Paint Steel Bridge - SP 6	square foot	800	1600
Bridge	Bridge	Clean & Paint Steel Bridge - SP 3	square foot	250	550
Bridge	Bridge	Cofferdam (Doesn't apply for major river bridges)	each	0.20	0.50
Bridge	Bridge	Concrete Removal	cubic yard	5	20
Bridge	Bridge	Deck Slab Repair (Full Depth)	square yard	10	25
Bridge	Bridge	Deck Slab Repair (Partial Depth)	square yard	25	50
Bridge	Bridge	Driving Piles	foot	250	500
Bridge	Bridge	Cofferdam Excavation	cubic yard	75	150
Bridge	Bridge	Formed Concrete Repair	square foot	50	100
Bridge	Bridge	Jacking & Cribbing (per beam)	each	5	10
Bridge	Bridge	Precast Concrete Beam Erection	foot	150	325
Bridge	Bridge	Precast Concrete Beams (Fabricate & Furnish)	calendar day	30	120
Bridge	Bridge	Precast Concrete Bridge Deck	square foot	500	800
Bridge	Bridge	Precast Deck Beams	square foot	1000	3000
Bridge	Bridge	Protective Shield	square yard	160	250
Bridge	Bridge	Reinforcement Bars (Substructure)	pounds	4000	6000
Bridge	Bridge	Reinforcement Bars (Superstructure)	pounds	10 000	15 000
Bridge	Bridge	Removal of Existing Concrete Deck	square yard	150	300
Bridge	Bridge	Removal of Existing Substructure	cubic yard	20	40
Bridge	Bridge	Removal of Existing Superstructure	square yard	100	250
Bridge	Bridge	Slope Wall	square yard	25	75
Bridge	Bridge	Structural Steel Erection	foot	150	250
Bridge	Bridge	Structural Steel (Fabricate & Furnish)	calendar day	60	270
Bridge	Bridge	Stud Shear Connectors	each	1000	2500
Bridge	Bridge	Temporary Sheet Piling	square foot	300	1000
Bridge	Bridge	Test Pile	Each	0.5	1
Bridge	Bridge	Waterproofing Membrane System	square yard	100	250
Electrical	Electrical	Conduit in Trench	foot	75	325
Electrical	Electrical	Conduit (Pushed)	foot	30	75
Electrical	Electrical	Controller	each	0.5	1
Electrical	Electrical	Detector Loop	foot	150	300
Electrical	Electrical	Electric Cable	foot	1500	3000
Electrical	Electrical	Electrical Conductors in Conduit	foot	750	1300
Electrical	Electrical	Foundations — Controller, Signal	foot	2	5
Electrical	Electrical	Foundations — Light Poles	foot	10	20
Electrical	Electrical	Foundations — Light Towers	foot	20	25
Electrical	Electrical	Handholes	each	2	4
Electrical	Electrical	Junction Box	each	2	5
Electrical	Electrical	Light Pole	each	4	6
Electrical	Electrical	Light Tower	each	1	2
Electrical	Electrical	Luminaire	each	5	10
Electrical	Electrical	Mast Arm Assembly & Pole	each	2	4
Electrical	Electrical	Raceway for Magnetic Detectors	foot	100	200
Electrical	Electrical	Relocate Existing Traffic Signal Posts	each	2	4
Electrical	Electrical	Service Installation	each	0.5	1

**CONSTRUCTION DAILY PRODUCTION RATES — US CUSTOMARY**

**Figure 66-2.B**

Major Worktype	Sub Worktype	Description	Unit	Low	High
Electrical	Electrical	Signal Head	each	5	10
Electrical	Electrical	Signal Post (wood or metal)	each	4	8
Electrical	Electrical	Trench & Backfill	foot	75	350
Electrical	Electrical	Unit Duct	foot	550	700
Electrical	Electrical	Unit Duct/without Cable	foot	150	350
Landscape	Landscape	Evergreens	each	20	40
Landscape	Landscape	Excelsior Blanket	square yard	1000	4000
Landscape	Landscape	Intermediate Trees	each	20	40
Landscape	Landscape	Seeding	acre	5	10
Landscape	Landscape	Seedling Trees	each	2000	3000
Landscape	Landscape	Shade Trees	each	20	40
Landscape	Landscape	Shrubs	each	200	400
Landscape	Landscape	Sodding	square yard	1000	1500
Landscape	Landscape	Straw Mulch	ton	10	20
Landscape	Landscape	Vines	each	1000	2000
Landscape	Landscape	Weed Control Spraying	acre	50	100
Roadway	Aggregate	Granular Backfill	cubic yard	300	600
Roadway	Aggregate	Granular Embankment Special	ton	800	1500
Roadway	Aggregate	Gravel or Crushed Stone Base Course	ton	700	1200
Roadway	Aggregate	Gravel or Crushed Stone Shoulders	ton	500	1200
Roadway	Aggregate	Gravel or Crushed Stone Surface Course	ton	700	1200
Roadway	Aggregate	Porous Granular Embankment	cubic yard	400	1000
Roadway	Aggregate	Subbase Granular Materials	ton	700	2000
Roadway	Drainage	Adjust Frames & Grates	each	5	10
Roadway	Drainage	Catch Basins	each	2	5
Roadway	Drainage	Concrete Box Culverts	cubic yard	8	15
Roadway	Drainage	Concrete Headwalls	cubic yard	3	8
Roadway	Drainage	Concrete Gutter	foot	400	1400
Roadway	Drainage	Curb & Gutter	foot	300	1200
Roadway	Drainage	End Sections (Pipe Culvert & Storm Sewer)	each	5	10
Roadway	Drainage	Inlets	each	2	5
Roadway	Drainage	Manholes	each	2	4
Roadway	Drainage	Paved Ditch	foot	200	400
Roadway	Drainage	Pipe Culverts (Depending on size and depth)	foot	100	300
Roadway	Drainage	Pipe Underdrains	foot	1500	7500
Roadway	Drainage	Precast Box Culverts	foot	75	250
Roadway	Drainage	Reinforcement Bars (Culverts)	pound	3000	5000
Roadway	Drainage	Riprap	square yard	100	200
Roadway	Drainage	Storm Sewers (Dependent on size and depth)	foot	75	300
Roadway	Drainage	Trench Backfill	cubic yard	100	200
Roadway	Drainage	Exploration Trench	foot	250	1000
Roadway	Excavation	Embankment	cubic yard	500	10 000
Roadway	Excavation	Borrow Excavation	cubic yard	1000	10 000
Roadway	Excavation	Channel Excavation	cubic yard	200	500
Roadway	Excavation	Earth Excavation (Shoulders & Widening)	cubic yard	500	1000
Roadway	Excavation	Earth Excavation	cubic yard	750	10 000
Roadway	Excavation	Rock Excavation (Ripping or Blasting)	cubic yard	500	2000
Roadway	Excavation	Excavation (Special)	cubic yard	500	1000
Roadway	Excavation	Excavation (Topsoil)	cubic yard	500	1000
Roadway	Excavation	Grading and Shaping Roadway	unit	10	50
Roadway	Excavation	Process Lime Modified Soil	square yard	2000	6500
Roadway	Excavation	Process Lime Stabilized Soil	square yard	2000	6500
Roadway	Excavation	Topsoil Placement	square yard	5000	25 000

**CONSTRUCTION DAILY PRODUCTION RATES — US CUSTOMARY**

**Figure 66-2.B**  
(Continued)

Major Worktype	Sub Worktype	Description	Unit	Low	High
Roadway	Miscellaneous	Chain Link Fence	foot	300	500
Roadway	Miscellaneous	Concrete Barrier	foot	200	400
Roadway	Miscellaneous	Delineators	each	75	150
Roadway	Miscellaneous	Furnishing and Erecting Row Markers	each	10	30
Roadway	Miscellaneous	Noise Abatement Wall	square foot	800	1000
Roadway	Miscellaneous	Steel Plate Beam Guardrail	foot	300	600
Roadway	Miscellaneous	Steel Plate Beam Guardrail Removal	foot	500	800
Roadway	Miscellaneous	Temporary Concrete Barrier Wall	foot	500	1500
Roadway	Miscellaneous	Woven Wire Fence	foot	500	1000
Roadway	Patching	Class A	square yard	50	100
Roadway	Patching	Class B	square yard	50	100
Roadway	Patching	Class C & D	square yard	100	150
Roadway	Patching	Partial Depth Patches	square yard	200	400
Roadway	Paving	Bituminous Concrete Base Course Widening	square yard	500	2000
Roadway	Paving	Bituminous Concrete Binder & Surface Course SuperPave	ton	500	1600
Roadway	Paving	Bituminous Materials	gallon	3000	10 000
Roadway	Paving	Bituminous Pavement Removal & Replacement	square yard	50	100
Roadway	Paving	Bituminous Shoulders	square yard	1500	4500
Roadway	Paving	Bridge Approach Pavement	square yard	50	100
Roadway	Paving	Continuously Reinforced Concrete Pavement	square yard	2000	7000
Roadway	Paving	Bituminous Concrete Pavement (Full depth)	square yard	1000	3500
Roadway	Paving	Bituminous Concrete Surface Removal (1.5 in)	square yard	10 000	60 000
Roadway	Paving	Cracking and Sealing Pavement	square yard	5000	15 000
Roadway	Paving	Level Binder	ton	50	1600
Roadway	Paving	Median Surface (Concrete)	square foot	750	2000
Roadway	Paving	Micro-Surfacing/Lane	mile	1	3
Roadway	Paving	Pavement Fabric	square yard	1200	6000
Roadway	Paving	Pavement Reinforcement	square yard	1500	5000
Roadway	Paving	PC Concrete Base Course	square yard	1500	6000
Roadway	Paving	PC Concrete Base Course Widening	square yard	750	2500
Roadway	Paving	PC Concrete Driveways	square yard	100	150
Roadway	Paving	PC Concrete Pavement	square yard	1500	6000
Roadway	Paving	PC Concrete Pavement (Hinge Joint)	square foot	1500	6000
Roadway	Paving	PC Concrete Sidewalks	square yard	1000	1500
Roadway	Paving	PCC Shoulders	square yard	1200	6000
Roadway	Paving	Protective Coat	square yard	3000	7000
Roadway	Paving	Stabilized Subbase 4"	square yard	3000	10 000
Roadway	Paving	Strip Reflective Crack Control	foot	10 000	20 000
Roadway	Pvt Mk	Paint Pavement Marking (Hand)	foot	500	1000
Roadway	Pvt Mk	Paint Pavement Marking (Truck)	foot	10 000	20 000
Roadway	Pvt Mk	Raised Reflective Pavement Markers	each	100	200
Roadway	Pvt Mk	Thermoplastic Pavement Marking Symbol	square foot	450	900
Roadway	Pvt Mk	Thermoplastic Pavement Marking (Hand)	foot	500	1000
Roadway	Pvt Mk	Thermoplastic Pavement Marking (Truck)	foot	60 000	180 000
Roadway	Removal	Bituminous Surface Removal	square yard	2000	10 000
Roadway	Removal	Curb & Gutter Removal	foot	600	1400
Roadway	Removal	Pavement Grinding	square yard	1000	2000
Roadway	Removal	Pavement Removal	square yard	1000	2000
Roadway	Removal	Sidewalk Removal	square foot	1500	2500
Roadway	Removal	Tree Removal	acre	2	4
Roadway	Removal	Tree Removal (6 to 15 Units Diameter)	units	150	400
Roadway	Removal	Tree Removal (Over 15 Units Diameter)	units	100	300
Signing	Signing	Metal Post	foot	250	400
Signing	Signing	Overhead Sign Foundation	cubic yard	5	16
Signing	Signing	Overhead Sign Structure	foot	25	50
Signing	Signing	Sign Panel	square foot	500	2000
Signing	Signing	Structural Steel Sign Support Non-Breakaway	pound	1000	15 000

**CONSTRUCTION DAILY PRODUCTION RATES — US CUSTOMARY**

**Figure 66-2.B**  
(Continued)

Major Worktype	Sub Worktype	Description	Unit	Low	High
Bridge	Bridge	Bearing Assembly	each	5	10
Bridge	Bridge	Bridge Deck Concrete Overlay	square meter	175	425
Bridge	Bridge	Bridge Deck Grooving	square meter	425	675
Bridge	Bridge	Bridge Deck Scarification (Cold Milling)	square meter	300	850
Bridge	Bridge	Bridge Deck Scarification (Hydroblasting)	square meter	150	425
Bridge	Bridge	Concrete Structures	cubic meter	5	20
Bridge	Bridge	Concrete Superstructure	cubic meter	5	25
Bridge	Bridge	Clean & Paint Steel Bridge - SP 10	square meter	100	200
Bridge	Bridge	Clean & Paint Steel Bridge - SP 6	square meter	75	150
Bridge	Bridge	Clean & Paint Steel Bridge - SP 3	square meter	25	50
Bridge	Bridge	Cofferdam (Doesn't apply for major river bridges)	each	0.20	0.50
Bridge	Bridge	Concrete Removal	cubic meter	4	15
Bridge	Bridge	Deck Slab Repair (Full Depth)	square meter	8	20
Bridge	Bridge	Deck Slab Repair (Partial Depth)	square meter	20	40
Bridge	Bridge	Driving Piles	meter	75	150
Bridge	Bridge	Cofferdam Excavation	cubic meter	60	115
Bridge	Bridge	Formed Concrete Repair	square meter	5	10
Bridge	Bridge	Jacking & Cribbing (per beam)	each	5	10
Bridge	Bridge	Precast Concrete Beam Erection	meter	50	100
Bridge	Bridge	Precast Concrete Beams (Fabricate & Furnish)	calendar day	30	120
Bridge	Bridge	Precast Concrete Bridge Deck	square meter	50	75
Bridge	Bridge	Precast Deck Beams	square meter	90	275
Bridge	Bridge	Protective Shield	square meter	125	200
Bridge	Bridge	Reinforcement Bars (Substructure)	kilograms	1800	2700
Bridge	Bridge	Reinforcement Bars (Superstructure)	kilograms	4500	7000
Bridge	Bridge	Removal of Existing Concrete Deck	square meter	125	250
Bridge	Bridge	Removal of Existing Substructure	cubic meter	15	30
Bridge	Bridge	Removal of Existing Superstructure	square meter	80	200
Bridge	Bridge	Slope Wall	square meter	20	65
Bridge	Bridge	Structural Steel Erection	meter	45	75
Bridge	Bridge	Structural Steel (Fabricate & Furnish)	calendar day	60	270
Bridge	Bridge	Stud Shear Connectors	each	1000	2500
Bridge	Bridge	Temporary Sheet Piling	square meter	25	90
Bridge	Bridge	Test Pile	each	0.5	1
Bridge	Bridge	Waterproofing Membrane System	square meter	80	210
Electrical	Electrical	Conduit in Trench	meter	20	100
Electrical	Electrical	Conduit (Pushed)	meter	10	25
Electrical	Electrical	Controller	each	0.5	1
Electrical	Electrical	Detector Loop	meter	45	90
Electrical	Electrical	Electric Cable	meter	450	900
Electrical	Electrical	Electrical Conductors in Conduit	meter	225	450
Electrical	Electrical	Foundations — Controller, Signal	meter	0.5	1.5
Electrical	Electrical	Foundations — Light Poles	meter	3	6
Electrical	Electrical	Foundations — Light Towers	meter	6	8
Electrical	Electrical	Handholes	each	2	4
Electrical	Electrical	Junction Box	each	2	5
Electrical	Electrical	Light Pole	each	4	6
Electrical	Electrical	Light Tower	each	1	2
Electrical	Electrical	Luminaire	each	5	10
Electrical	Electrical	Mast Arm Assembly & Pole	each	2	4
Electrical	Electrical	Raceway for Magnetic Detectors	meter	30	60
Electrical	Electrical	Relocate Existing Traffic Signal Posts	each	2	4
Electrical	Electrical	Service Installation	each	0.5	1

### CONSTRUCTION DAILY PRODUCTION RATES — METRIC

Figure 66-2.B

Major Worktype	Sub Worktype	Description	Unit	Low	High
Electrical	Electrical	Signal Head	each	5	10
Electrical	Electrical	Signal Post (wood or metal)	each	4	8
Electrical	Electrical	Trench & Backfill	meter	25	105
Electrical	Electrical	Unit Duct	meter	165	210
Electrical	Electrical	Unit Duct/without Cable	meter	45	105
Landscape	Landscape	Evergreens	each	20	40
Landscape	Landscape	Excelsior Blanket	square meter	825	3350
Landscape	Landscape	Intermediate Trees	each	20	40
Landscape	Landscape	Seeding	hectare	2	4
Landscape	Landscape	Seedling Trees	each	2000	3000
Landscape	Landscape	Shade Trees	each	20	40
Landscape	Landscape	Shrubs	each	200	400
Landscape	Landscape	Sodding	square meter	825	1250
Landscape	Landscape	Straw Mulch	ton	9	18
Landscape	Landscape	Vines	each	1000	2000
Landscape	Landscape	Weed Control Spraying	hectare	20	40
Roadway	Aggregate	Granular Backfill	cubic meter	230	460
Roadway	Aggregate	Granular Embankment Special	ton	725	1360
Roadway	Aggregate	Gravel or Crushed Stone Base Course	ton	635	1100
Roadway	Aggregate	Gravel or Crushed Stone Shoulders	ton	450	1100
Roadway	Aggregate	Gravel or Crushed Stone Surface Course	ton	635	1100
Roadway	Aggregate	Porous Granular Embankment	cubic meter	305	765
Roadway	Aggregate	Subbase Granular Materials	ton	635	1800
Roadway	Drainage	Adjust Frames & Grates	each	5	10
Roadway	Drainage	Catch Basins	each	2	5
Roadway	Drainage	Concrete Box Culverts	cubic meter	6	12
Roadway	Drainage	Concrete Headwalls	cubic meter	2	6
Roadway	Drainage	Concrete Gutter	meter	120	425
Roadway	Drainage	Curb & Gutter	meter	90	365
Roadway	Drainage	End Sections (Pipe Culvert & Storm Sewer)	each	5	10
Roadway	Drainage	Inlets	each	2	5
Roadway	Drainage	Manholes	each	2	4
Roadway	Drainage	Paved Ditch	meter	60	120
Roadway	Drainage	Pipe Culverts (Depending on size and depth)	meter	30	90
Roadway	Drainage	Pipe Underdrains	meter	450	2250
Roadway	Drainage	Precast Box Culverts	meter	20	75
Roadway	Drainage	Reinforcement Bars (Culverts)	kilogram	1350	2275
Roadway	Drainage	Riprap	square meter	80	170
Roadway	Drainage	Storm Sewers (Dependent on size and depth)	meter	20	90
Roadway	Drainage	Trench Backfill	cubic meter	75	150
Roadway	Drainage	Exploration Trench	meter	75	300
Roadway	Excavation	Embankment	cubic meter	375	7650
Roadway	Excavation	Borrow Excavation	cubic meter	750	7650
Roadway	Excavation	Channel Excavation	cubic meter	150	375
Roadway	Excavation	Earth Excavation (Shoulders & Widening)	cubic meter	375	750
Roadway	Excavation	Earth Excavation	cubic meter	575	7650
Roadway	Excavation	Rock Excavation (Ripping or Blasting)	cubic meter	375	1500
Roadway	Excavation	Excavation (Special)	cubic meter	375	750
Roadway	Excavation	Excavation (Topsoil)	cubic meter	375	750
Roadway	Excavation	Grading and Shaping Roadway	unit	10	50
Roadway	Excavation	Process Lime Modified Soil	square meter	1675	5400
Roadway	Excavation	Process Lime Stabilized Soil	square meter	1675	5400
Roadway	Excavation	Topsoil Placement	square meter	4000	21 000

### CONSTRUCTION DAILY PRODUCTION RATES — METRIC

Figure 66-2.B  
(Continued)

Major Worktype	Sub Worktype	Description	Unit	Low	High
Roadway	Miscellaneous	Chain Link Fence	meter	90	150
Roadway	Miscellaneous	Concrete Barrier	meter	60	120
Roadway	Miscellaneous	Delineators	each	75	150
Roadway	Miscellaneous	Furnishing and Erecting Row Markers	each	10	30
Roadway	Miscellaneous	Noise Abatement Wall	square meter	75	100
Roadway	Miscellaneous	Steel Plate Beam Guardrail	meter	90	180
Roadway	Miscellaneous	Steel Plate Beam Guardrail Removal	meter	150	250
Roadway	Miscellaneous	Temporary Concrete Barrier Wall	meter	150	450
Roadway	Miscellaneous	Woven Wire Fence	meter	150	300
Roadway	Patching	Class A	square meter	40	80
Roadway	Patching	Class B	square meter	40	80
Roadway	Patching	Class C & D	square meter	80	125
Roadway	Patching	Partial Depth Patches	square meter	165	335
Roadway	Paving	Bituminous Concrete Base Course Widening	square meter	400	1675
Roadway	Paving	Bituminous Concrete Binder & Surface Course SuperPave	ton	450	1450
Roadway	Paving	Bituminous Materials	liter	13 600	37 850
Roadway	Paving	Bituminous Pavement Removal & Replacement	square meter	40	80
Roadway	Paving	Bituminous Shoulders	square meter	1250	3750
Roadway	Paving	Bridge Approach Pavement	square meter	40	80
Roadway	Paving	Continuously Reinforced Concrete Pavement	square meter	1675	5850
Roadway	Paving	Bituminous Concrete Pavement (Full depth)	square meter	825	2925
Roadway	Paving	Bituminous Concrete Surface Removal (40 mm)	square meter	8350	50 175
Roadway	Paving	Cracking and Sealing Pavement	square meter	4175	12 550
Roadway	Paving	Level Binder	ton	45	1450
Roadway	Paving	Median Surface (Concrete)	square meter	70	185
Roadway	Paving	Micro-Surfacing/Lane	kilometer	1.6	3.2
Roadway	Paving	Pavement Fabric	square meter	1000	5000
Roadway	Paving	Pavement Reinforcement	square meter	1250	4200
Roadway	Paving	PC Concrete Base Course	square meter	1250	5000
Roadway	Paving	PC Concrete Base Course Widening	square meter	625	2000
Roadway	Paving	PC Concrete Driveways	square meter	80	125
Roadway	Paving	PC Concrete Pavement	square meter	1250	5000
Roadway	Paving	PC Concrete Pavement (Hinge Joint)	square meter	1250	5000
Roadway	Paving	PC Concrete Sidewalks	square meter	90	140
Roadway	Paving	PCC Shoulders	square meter	1000	5000
Roadway	Paving	Protective Coat	square meter	2500	5850
Roadway	Paving	Stabilized Subbase 100 mm	square meter	2500	8400
Roadway	Paving	Strip Reflective Crack Control	meter	3000	6000
Roadway	Pvt Mk	Paint Pavement Marking (Hand)	meter	150	300
Roadway	Pvt Mk	Paint Pavement Marking (Truck)	meter	3000	6000
Roadway	Pvt Mk	Raised Reflective Pavement Markers	each	100	200
Roadway	Pvt Mk	Thermoplastic Pavement Marking Symbol	square meter	40	80
Roadway	Pvt Mk	Thermoplastic Pavement Marking (Hand)	meter	150	300
Roadway	Pvt Mk	Thermoplastic Pavement Marking (Truck)	meter	18 300	54 850
Roadway	Removal	Bituminous Surface Removal	square meter	1675	8400
Roadway	Removal	Curb & Gutter Removal	meter	180	425
Roadway	Removal	Pavement Grinding	square meter	835	1675
Roadway	Removal	Pavement Removal	square meter	835	1675
Roadway	Removal	Sidewalk Removal	square meter	140	230
Roadway	Removal	Tree Removal	hectare	0.8	1.6
Roadway	Removal	Tree Removal (6 to 15 Units Diameter)	units	150	400
Roadway	Removal	Tree Removal (Over 15 Units Diameter)	units	100	300
Signing	Signing	Metal Post	meter	75	120
Signing	Signing	Overhead Sign Foundation	cubic meter	4	12
Signing	Signing	Overhead Sign Structure	meter	8	15
Signing	Signing	Sign Panel	square meter	45	185
Signing	Signing	Structural Steel Sign Support Non-Breakaway	kilogram	450	6800

**CONSTRUCTION DAILY PRODUCTION RATES — METRIC**

**Figure 66-2.B**  
(Continued)

**66-2.04 Selecting Contract Time and Project Letting Dates****66-2.04(a) Guidance for Selecting Project Letting Dates**

A major Department goal is the delivery of the Highway Improvement Program. Proposed projects should go to letting as soon as practicable within the fiscal year as specified in the annual program. To determine what is practical, the designer must consider the type of work involved, the estimated time of completion, the availability of critical materials, other work in the area, and commitments. Typically, letting dates are chosen to prevent projects from being active through the winter months (December, January, February, and March). Winter construction is usually less productive, more expensive, and more disruptive to the traveling public.

The designer should become familiar with public activities and traffic patterns in the project area early in the Phase I engineering and recommend the best letting date for the project to the district programming engineer that will minimize delays and impacts to the traveling public and adjacent property owners. The designer should have a good idea how long the construction will take from the general scope and size of the project. The majority of projects are estimated to take less than 112 working days or approximately seven months to complete.

If a project (e.g., an eight mile, two-lane, resurfacing job) is estimated to take less than 45 working days to complete, it will be practical to schedule the project for a June letting with a construction start date around the first of August, allowing 45 days for the award of the contract and a completion around the first of November. This assumes no public event clauses are included in the contract (e.g., no lane closures allowed during the Illinois State Fair). Indicate how many working days are anticipated to complete the project in the Estimate of Time Required. The designer should determine the anticipated contract duration knowing when work items can or cannot be completed by the critical schedule of work anticipated, factoring in the contract work time restrictions. If work cannot be completed by the first part of November, the designer should recommend that the project go to a September letting or later and restrict the start of work until the following spring.

Districts prefer to have very small resurfacing projects completed before winter weather and will try for a June or August letting. If the project is scheduled for an August letting, estimate the time to take less than 20 working days, assuming construction starts around the middle of September (allowing 45 days for the Award of the contract) and is completed around the first of November.

The designer should recommend that the project go to a September letting or later and restrict the start of work until the following spring for larger projects (e.g., bridge replacements, bridge rehabilitations) that are estimated to take more than 45 working days. This avoids winter lane closures and the fall letting allows the contractor more time to order and fabricate critical materials ahead before the start of construction. The Department ends up with lower bid prices and more work completed within budget by allowing the contractor more time to order materials and schedule work.

If the designer estimates a project will take between 75 and 112 working days, recommend a November or January letting (possibly with a specific start date) to allow for a full construction season. If the designer estimates a project will take between 45 and 75 working days, target a January, March, or April letting.

On very large projects (e.g., new construction, reconstruction, major bridges) with more than 112 estimated working days (over one year) to complete, the designer must understand the major phases of construction and determine the critical path in order to recommend the appropriate letting date.

For a new bridge on a new alignment, the designer may want to place the project on a June letting to allow the bridge cones to be built in late summer or early fall and bridge work to proceed throughout the winter. For a large urban project, target a November letting to allow for off pavement utility relocations and storm sewers to be completed during the winter without disrupting traffic.

#### **66-2.04(b) Selecting the Type of Contract Time**

After estimating the anticipated number of working days to complete a project, the next step is to determine the type of Contract Time for the Completion of Work.

The Department's goal is to use Contract Time for the Completion of Work in all contracts that will minimize inconveniences to the traveling public, but also foster reasonable contract unit bid prices for the proposed work from the contractors.

Figure 66-2.C shows working days per month based on a Working Days Contract versus that for Completion Date (Via Calendar Days) Contract.

WORKING DAYS PER MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
WORKING DAYS	0	0	0	0	15	17	17	17	16	16	14	0
CALENDAR DAYS	31	28	31	30	31	30	31	31	30	31	30	31

#### **WORKING DAYS PER MONTH**

**FIGURE 66-2.C**

The following explains general uses of each type of Contract Time for the Completion of Work:

1. Working Day Contract. A Working Day Contract is the preferred type of contract. The completion of the contract is set by the specified number of working days allowed in the contract. If the contractor exceeds the specified number of working days, liquidated damages, as specified in the *Standard Specifications*, will be charged until all contract work is completed.

This type of contract is used when work does not need to be completed by a certain date. It allows more flexibility in getting materials ordered and fabricated. The contractor is not dependent on work by others being completed within a reasonable time (e.g., utilities being relocated during construction). The contractor is not charged a working day unless work is performed on a controlling item of work.

2. Completion Date Contract. Use Completion Date Contracts selectively. The latest possible completion of the contract is set by the completion date specified in the contract. If the contractor exceeds the specified completion date, liquidated damages, as specified in the *Standard Specifications*, will be charged until all contract work is completed.

This type of contract does not guarantee the contractor a certain number of workable days; therefore, the contractor is more at risk. Use this type of contract when all project work must be completed by a specific date (e.g., State Fair, special events, farming operations, school start or end dates) or when coordination with other contracts requires work to be completed prior to start of next contract.

3. Completion Date Plus Working Day Contract. Use Completion Date Plus Working Day Contracts when a facility must be open to traffic by a specific date, but all work does not have to be completed by the completion date. The latest possible completion of specified work items in the contract is set by the completion date specified in the contract and it allows a number of working days in the contract to complete the remaining work. If the contractor exceeds the specified completion date or the number of working days allowed, liquidated damages will be assessed.

When this type of contract is specified, the designer must identify the work to be completed by the completion date. The work to be completed during the allowed working days that are weather sensitive and/or require performance or establishment periods (e.g., landscaping, pavement markings) must also be identified.

4. Completion Date (Via Calendar Day) Contract. Use Completion Date (Via Calendar Day) Contracts when the work must be completed in a specific timeframe, not by a specific date. A Completion Date (Via Calendar Day) Contract is a completion date contract with a floating start date. The specified number of calendar days sets a date of project completion at the time the contract is started; therefore, the contractor is not affected by a late award.

Use this type of contract when a specific completion date is not required, but a completion date is necessary to expedite the work once the contract is started.

5. Completion Date (Via Calendar Day) Plus Working Day Contract. Use Completion Date (Via Calendar Day) Plus Working Day Contracts when a facility must be open in a specific timeframe, not by a specific date, but all work does not have to be completed by the completion date. A date of completion is established by the specified number of calendar days in the contract at the time the contract is started and allows a number of working days to complete the remaining work. If the contractor exceeds the specified date of completion or the number of working days allowed, liquidated damages will be assessed.

When this type of contract is specified, the designer must identify the work to be completed by the completion date. The work to be completed during the allowed working days that are weather sensitive and/or require performance or establishment periods (e.g., landscaping, pavement markings) must also be specified.

Use this type of contract when a specific completion date is not required, but a completion date is necessary to expedite the work once the contract is started.

Figure 66-2.D is a matrix summarizing definitions, benefits, weaknesses, and applicability for each type of contract.

#### **66-2.04(c) Increased Use of Completion Date Contracts**

As traffic volumes increase, so do the impacts to the motoring public and businesses during construction. To lessen these impacts, the use of Completion Date Contracts is encouraged as well as the use of Incentive/Disincentive specifications.

The provisions for Completion Date Contracts and Completion Date Contracts with Incentive/Disincentive provisions are as follows:

- Use on all multi-lane roadway projects with more than 25, 000 ADT.
- Use on all routes in urban areas where construction has the potential to severely impact the adjacent businesses.
- Consider using on projects where there is a need to control the completion of the project. Projects where completion is anticipated in the fall of the year may require a completion date to help ensure the work is completed and does not extend over the winter period. Large projects that will be let in multiple contracts should contain provisions to keep the overall project on schedule. Use completion dates to avoid conflicts with special events.

	<b>Working Day</b>	<b>Completion Date</b>	<b>Completion Date plus Working Days</b>	<b>Completion Date (Via Calendar Days)</b>	<b>Completion Date (Via Calendar Days) plus Working Days</b>
<b>Definition</b>	Defined in Article 108.04. Contracts specify the number of working days, by Special Provision, it should take for the contractor to complete the work.	Defined in Article 108.05(a). Contracts specify a date, by Special Provision, when the work is to be completed.	Defined in Article 108.05(b). Contracts specify a date, by Special Provision, that major items of work must be completed and allows working days to complete miscellaneous work.	Defined in Article 101.06. Contracts specify the number of calendar days, by Special Provision, to establish the completion date based on when the contract is started.	Defined in Article 101.06. Contracts specify the number of calendar days, by Special Provision, to establish completion date based on when the contract is started and allows working days to complete misc. work.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>Allows the contract to be awarded late (&gt; 45 days) without penalty to the contractor.</li> <li>Bids are generally better because of guaranteed working days.</li> <li>District can delay start without penalty to the contractor.</li> <li>Easier to administer.</li> </ul>	<ul style="list-style-type: none"> <li>Specifies a date when all work must be completed (before special events or before winter).</li> <li>Can prevent contractor from prolonging the work over more than one season.</li> </ul>	<ul style="list-style-type: none"> <li>Specifies a date when the major items of work must be completed (before special events).</li> <li>Working days allow time for miscellaneous work to be completed after the completion date.</li> </ul>	<ul style="list-style-type: none"> <li>Allows the contract to be awarded late (&gt; 45 days) without penalty to the contractor.</li> <li>Can prevent contractor from prolonging the work over more than one season.</li> <li>Completion date is established based on start date.</li> <li>Establishes a date when all work will be completed.</li> </ul>	<ul style="list-style-type: none"> <li>Allows the contract to be awarded late (&gt; 45 days) without penalty to the contractor.</li> <li>Can prevent contractor from prolonging work over more than one season.</li> <li>Completion date is established based on start date.</li> <li>Specifies a date when the major items of work must be completed (before special events)</li> </ul>
<b>Weakness</b>	<ul style="list-style-type: none"> <li>No specified date for completion.</li> <li>Charging working days can be subjective.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflicts due to potential time extension requests.</li> <li>Could result in higher bid prices if expedited schedule is required.</li> <li>Potential for project delays if contract is awarded &gt; 45 days after letting or if contractor rejects.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflicts due to potential time extension requests but easier to administer than completion date contracts.</li> <li>Could result in higher bid prices if expedited schedule is required.</li> <li>Potential for project delays if contract is awarded &gt; 45 days after letting or if contractor rejects.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflicts due to potential time extension requests.</li> <li>Could result in higher bid prices if expedited schedule is required.</li> </ul>	<ul style="list-style-type: none"> <li>Possible conflicts due to potential time extension requests.</li> <li>Could result in higher bid prices if expedited schedule is required.</li> </ul>
<b>Applicability</b>	<ul style="list-style-type: none"> <li>Preferred type of contract method.</li> <li>Use on contracts that do not have strict dates that the work needs to be completed.</li> </ul>	<ul style="list-style-type: none"> <li>Use on contracts when all project work must be completed by a specific date (e.g., State Fair, special events, farming operations, school start or end dates) or when coordination with other contracts requires all work to be completed prior to start of next contract.</li> </ul>	<ul style="list-style-type: none"> <li>Use when facility needs to be open by a specific date, but all work does not have to be completed.</li> <li>Use when miscellaneous items in the contract are weather sensitive and/or require performance or establishment periods (landscaping, pavement markings, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>Use when you want the work to be completed in a specific timeframe, not by a specific date.</li> </ul>	<ul style="list-style-type: none"> <li>Use when the work is to be completed in a specific timeframe, not by a specific date and when the facility could be open sooner and all work does not have to be completed.</li> <li>Use when misc. items in the contract are weather sensitive and/or require performance or establishment periods (e.g., landscaping, pavement markings).</li> </ul>

**BENEFITS, WEAKNESSES, AND APPLICABILITY OF EACH CONTRACT TYPE**

**Figure 66-2.D**

**66-2.04(d) Expanded Use of Lane Rental Contracts**

Lane rental is a contracting technique where the contractor bids the number of days of work requiring lane closures as part of the contract, or the Department sets the number of days that lane closures are allowed. If the contractor finishes early, an incentive is paid. If the contractor exceeds the number of days allowed, a disincentive payment is deducted from the contract for each day the limit is exceeded. This type of contract forces the contractor to schedule resources and perform work in a more timely manner.

Contracts using a lane rental specification should be considered on all high-volume, multi-lane projects (e.g., Interstates, expressways). Complete a traffic capacity analysis for these projects to determine the level-of-service to be anticipated during construction. In addition, complete a queuing analysis to determine the anticipated traffic backups at different times during the day and week. Once a traffic capacity analysis and queuing analysis are complete, a decision may be made on whether or not to use a lane rental specification. If a lane rental specification is used, this information will aid in determining the average road user benefit cost.

Include lane rental specifications for all Interstate and expressway projects. The lane rental specification must apply to the patching operation and may be applied to the whole project. Prepare a traffic capacity analysis and queuing analysis to determine the anticipated back-ups at different times during the day and week. This information is used in determining the average road user benefit cost for purposes of developing the Lane Rental Specification.

**66-2.05 Incentive/Disincentive Policy**

The term Incentive/Disincentive describes a contract provision, which compensates the contractor a prescribed amount of money for each day identified that critical work is completed ahead of schedule, and assesses a deduction for each day the contractor overruns the schedule. The Incentive/Disincentive clause is used to motivate contractors to complete critical projects by an expedited work schedule on or before a specified date. The use of Incentive/Disincentive provisions should be restricted to those critical projects where it is highly desirable for traffic inconvenience and delays to be minimized. Before an Incentive/Disincentive clause is included in a contract, prior approval must be obtained from BDE. Unique cases not covered in Section 66-2.05(a) may be submitted for review and approval to the BDE.

**66-2.05(a) Guidelines for Project Selection**

Incentive/Disincentive clauses are intended for those projects where early completion would greatly benefit both the road user and the Department and where ramifications of not meeting the completion date are extreme. Use of Incentive/Disincentive clauses should be limited to projects that involve one or more of the following characteristics:

1. Adverse Effects. High-volume roads/high-volume truck traffic/structures that involve: high road-user cost increases, extended inconveniences, hazards to the motoring public, or severe disruption on adjacent business communities. Lower volume roads and river

structures that involve long adverse travel and area economic impact also may be considered.

2. Timing. Projects that have a direct bearing on the start and/or interruption of progress on major freeways, arterials, or structures may be considered for Incentive/Disincentive (e.g., utility relocations). However, where late completion, not early completion, is the primary concern, the designer should instead consider adding a clause providing for higher liquidated damages based on other Department costs per the *Code of Federal Regulations — Title 23*. A beam fabrication project is an example where late completion may be the primary concern.
3. Urban River Crossings. River structures in or adjacent to central business districts.
4. Night Time Construction. Nighttime construction (rehabilitation and/or resurfacing) on major urban freeways.

#### **66-2.05(b) Application**

Incentive/Disincentive clauses can be applied to a single project or to a combination of two or more projects. The following will apply:

1. Single Projects. The Incentive/Disincentive can apply to all or part of the project. The designer should consider the following:
  - a. Entire Project. For projects where the Incentive/Disincentive applies to the entire project, all work must be completed before the Incentive/Disincentive is applied. River structure (rehabilitation or replacement) and urban freeway resurfacing projects are examples of single projects with the Incentive/Disincentive applied to the entire project.
  - b. Project Portion(s). For projects where the Incentive/Disincentive applies to a portion of the work, a completion date is set on the specific portion of the project in which the Incentive/Disincentive is applied, and the remaining work is covered by liquidated damages. For example, an interchange reconstruction project where the primary concern is to restore traffic flow, the Incentive/Disincentive could be applied to only the work necessary to reopen the ramps and the interchange structure to traffic. Miscellaneous items, such as seeding and lighting, are not critical to reopening the roadway and could be completed after the Incentive/Disincentive completion date. These miscellaneous items would be covered by liquidated damages.
2. Multiple Projects. Cooperative Incentive/Disincentives are used to expedite a combination of two or more projects. The cooperative Incentive/Disincentive clause will require that work be completed on all projects before the total Incentive/Disincentive is applied. This type is used where a greater benefit is received by completion of a combination of projects. Adjacent sections of roadway that would provide usable

segments of a freeway would be an example where a cooperative Incentive/Disincentive could be used.

### 66-2.05(c) Amount Determination

The Incentive/Disincentive amount is the daily rate to compensate the contractor for early completion or assess the contractor for overrunning the completion date. This Incentive/Disincentive amount is based on the sum of the road-user delay cost and liquidated damages and should, in general, be adjusted downward for fiscal responsibility.

The Incentive/Disincentive amount should not exceed a total of road-user delay costs and liquidated damages. On projects where the Incentive/Disincentive amount applies to a portion of a single project, this amount is based only on the road-user delay cost. On projects where the Incentive/Disincentive amount applies to the completion of all work, the amount is based on the sum of road-user delay costs and liquidated damages.

The final costs are determined as follows:

1. Road-User Delay Cost. This cost is based on the change in travel time, number of passengers per vehicle, and an hourly cost per person determined as follows:
  - a. Travel Time. The change in travel time is determined by comparing the travel time through the project under normal conditions versus the estimated travel time through the project or along the designated detour during construction.
  - b. Passengers. The number of passengers per vehicle is assumed to be 1.25, based on research by the Chicago Area Transportation Study.
  - c. Hourly Cost. The hourly cost per passenger is assumed to be \$10.00/hour, based on average earnings issued by the Department of Employment Security.
2. Liquidated Damages. Liquidated damages rates are based on construction engineering costs. Liquidated damages rates are found in Section 108 of the *Standard Specifications* and the Supplemental Specifications.
3. Rate Adjustment. The final daily rate for the Incentive/Disincentive amount should be adjusted downward from the sum of the calculated road-user delay costs and the liquidated damages. When setting the rate, the designer should note the following:
  - a. The Incentive/Disincentive amount must provide a favorable benefit-cost ratio (B/C) of at least 1.0.

$$\frac{B}{C} = \frac{\text{calculated road user delay cost and liquidated damages}}{\text{adjusted road user delay cost and liquidated damages}}$$

- b. The final daily Incentive/Disincentive amount must be large enough to motivate the contractor to work an accelerated schedule.

**66-2.05(d) Determination of Scheduled Completion Date**

The setting of the completion date is a very important step in the use of Incentive/Disincentive clauses. The completion date must be based on a realistic and expedited work schedule. The work schedule will involve accelerated construction procedures because projects with Incentive/Disincentive clauses are critical projects. Expedited work schedules may involve one or more of the following:

- six-day work week, double shift with night illumination;
- extended work hours with 12 to 14 hours per day;
- expedited work schedule with 228 working days per calendar year; and/or
- multiple work crews in multiple areas.

**66-2.05(e) Limits of Incentive/Disincentive**

The incentive amount should not exceed five percent of the total construction cost. All Incentive/Disincentive clauses should include an upper limit to the number of days that an incentive will be paid. The incentive payment limit is a maximum of 30 calendar days. These limits are used to protect the Department. Disincentives are not time limited so that the contractor is effectively encouraged to meet the scheduled completion date.

**66-2.05(f) Extension of Contract Time**

Contract extensions may be granted by the Department as noted in Section 108 of the *Standard Specifications*. Extension of time applies to only the Disincentives. Incentive payments will be based on the completion date in the special provisions regardless of any extension of time. The extension of the completion date for Incentive payments will only be considered where significant extra work is added to the contract due to unforeseen circumstances.

**66-2.05(g) Project Development**

During the development of Incentive/Disincentive projects, greater attention to plans, specifications, and schedules is required. Omissions or errors in the plans or specifications may result in a claim from the contractor. The plans and specifications should indicate any unusual conditions or restrictions on the contractor. Specifications should clearly delineate the work that must be completed to meet the Incentive requirements.

The preconstruction phase of Incentive/Disincentive projects should include contacts with local officials, police, and/or other agencies to ensure a coordinated effort during the construction phase. A prebid meeting may be necessary to address the special features of an Incentive/Disincentive project.

**66-2.05(h) Example Calculations**

The following are two examples of how to calculate road-user delay costs and the Incentive/Disincentive rates.

\* \* \* \* \*

**Example 66-2.04(1)**

Given:           Urban Freeway Rehabilitation  
                   \$5.0 million construction cost  
                   60,000 ADT  
                   Project Length — 1.8 miles  
                   Average Normal Speed — 55 mph  
                   Average Construction Speed — 35 mph

Problem:        Determine the appropriate Incentive/Disincentive rate for the project.

Solution:       Motorist Time (normal conditions) =  $\frac{(\text{Project Length})(\text{ADT})}{\text{Average Normal Speed}}$

$$\text{Motorist Time (NC)} = \frac{(1.8)(60,000)}{55} = 1,964 \text{ hrs}$$

$$\text{Motorist Time (under construction)} = \frac{(1.8)(60,000)}{35} = 3,086 \text{ hrs}$$

$$\text{Motorist Time Lost} = (3,086 \text{ hrs} - 1,964 \text{ hrs}) = 1,122 \text{ hrs}$$

$$\text{Total Road-User Delay Cost} = (1,122 \text{ hrs}) (1.25 \text{ Passengers/Vehicles}) (\$10/\text{hr})$$

$$\text{Total Road-User Delay Cost} = \$14,025.00$$

$$\text{Liquidated Damages Per Specifications} = \$1,800.00$$

$$\text{Calculated Road-User Delay Cost} + \text{Liquidated Damages} = \$14,025.00 + 1,800.00 = \$15,825.00$$

Based on the 5% incentive cap and the 30-day time limit, the maximum incentive is determined as follows:

$$\frac{(\$5,000,000)(0.05)}{30} = \$8,333.33 / \text{day}$$

Therefore, the adjusted road-user delay cost and liquidated damages must be less than \$8,333.33/day. See Section 66-2.04(e).

For this example, the Incentive/Disincentive rate was set at \$8,000/day.

$$\text{The B/C ratio is: } \frac{15,825.00}{8,000.00} = 1.98$$

**Example 66-2.04(2)**

Given: Rural River Bridge Replacement  
 \$3.25 million construction cost  
 2,000 ADT  
 Project Length — 1 mile  
 Detour Length — 20 miles  
 Average Normal Speed — 55 mph  
 Average Construction Speed — 55 mph

Problem: Determine the appropriate Incentive/Disincentive rate for the project.

$$\text{Solution: Motorist Time (normal conditions)} = \frac{(1.0)(2,000)}{55} = 36.4 \text{ hrs}$$

$$\text{Motorist Time (under construction)} = \frac{(20.0)(2,000)}{55} = 727.3 \text{ hrs}$$

$$\text{Motorist Time Lost} = (727.3 \text{ hrs} - 36.4 \text{ hrs}) = 691 \text{ hrs}$$

$$\text{Total Road-User Delay Cost} = (691 \text{ hrs}) (1.25 \text{ Passengers/Vehicles}) (\$10/\text{hr}) = \$8,638.00$$

$$\text{Liquidated Damages Per Specifications} = \$1,800.00$$

$$\text{Calculated Road-User Delay Cost} + \text{Liquidated Damages} = \$8,638.00 + 1,800.00 = \$10,438.00$$

Based on the 5% incentive cap and the 30-day time limit, the maximum Incentive is as follows:

$$\frac{(\$3,250,000)(0.05)}{30} = \$5,416.67$$

The Incentive/Disincentive rate was set at \$5,400/day.

$$\text{The B/C ratio is: } \frac{10,438.00}{5,400.00} = 1.93$$

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**66-2.05(i) Sample Special Provisions**

The following are two sample special provisions that may be used where Incentive/Disincentive clauses are used in the project. The first is a sample for an Incentive/Disincentive contract where the Incentive/Disincentive applies to the completion of all work. The second is a sample where the Incentive/Disincentive applies to a portion of the contract.

**(Sample Special Provision for Entire Project)**

Incentive/Disincentive: Effective \_\_\_\_\_ (DATE)

Date of Completion: The Contractor shall schedule his/her operations so as to complete all work and open all the roadway to traffic on or before \_\_\_\_\_ (DATE). The Contractor shall note that this completion date is based on an expedited work schedule.

Failure to Complete the Work on Time: Should the Contractor fail to complete the work on or before the specified date of completion, or within such extended time allowed by the Department, the Contractor shall be liable to the Department in the amount of \_\_\_\_\_ (\$), not as a penalty but as liquidated and ascertained damages for each calendar day beyond the date of completion or extended time as may be allowed. Such damages may be deducted by the Department from any monies due the Contractor.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work because the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual losses to recover these liquidated damages provided herein, as these damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

Incentive Payment Plan: The nature of this project is such that the use of this roadway cannot be safely and efficiently used until all roadway work is essentially complete. On this basis, the Contractor shall be entitled to an Incentive Payment for the completion of all work including clean up as set forth by the date of completion.

The Incentive Payment shall be paid at the rate of \_\_\_\_\_ (\$) per calendar day for each day of completion prior to \_\_\_\_\_ (DATE). The maximum payment under this incentive plan will be limited to \_\_\_\_\_ (#) calendar days.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

**(Sample Special Provision for Entire Project)**

(Continued)

Should the Contractor be delayed in the commencement, prosecution, or completion of the work for any reason, there shall be no extension of the incentive payment calculation date even though there may be granted an extension of time for completion of the work unless significant extra work is added to the contract by the Department. No Incentive Payment will be made if the Contractor fails to complete the work before the specified date of completion or within such extended time allowed by the Department. Failure of the Contractor to complete all work as required by the contract before           (DATE)           shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any incentive amount or damages arising from the refusal to pay any incentive amount.

If the contract is part of a combination award, no Incentive Payment shall commence on this contract, which is part of the combination until all work on contracts that are part of the combination award has been completed.

**(Sample Special Provision for a Portion of the Project)**

Incentive/Disincentive Plus Working Days: Effective \_\_\_\_\_ (DATE)

Date of Completion: The Contractor shall schedule his/her operations so as to complete all work, except as specified below, and open all the roadway to traffic on or before \_\_\_\_\_ (DATE).

The Contractor shall note that this completion date is based on an expedited work schedule. The Contractor will be allowed \_\_\_\_\_ (#) working days, after the \_\_\_\_\_ (DATE) completion date, to complete any remaining planting, seeding, and sodding work.

Failure to Complete the Work on Time: Should the Contractor fail to complete the work on or before the specified date of completion or within such extended time allowed by the Department, the Contractor shall be liable to the Department in the amount of \_\_\_\_\_ (\$) not as a penalty but as liquidated and ascertained damages for each calendar day beyond the date of completion or extended time as may be allowed. Failure to complete the remaining planting, seeding, and sodding work within \_\_\_\_\_ (#) working days shall be governed by the provision of Article 108.09 of the Standard Specifications. Such damages may be deducted by the Department from any monies due the Contractor.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work because the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual losses to recover these liquidated damages provided herein, as these damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

Incentive Payment Plan: The nature of this project is such that the use of this roadway cannot be safely and efficiently used until all specified work is complete. On this basis, the Contractor shall be entitled to an Incentive Payment for the completion of all work as set forth by the date of completion.

The Incentive Payment shall be paid at the rate of \_\_\_\_\_ (\$) per calendar day for each day of completion prior to \_\_\_\_\_ (DATE). The maximum payment under this incentive plan will be limited to \_\_\_\_\_ (#) calendar days.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

**(Sample Special Provision for a Portion of the Project)**

(Continued)

Should the Contractor be delayed in the commencement, prosecution, or completion of the work for any reason, there shall be no extension of the incentive payment calculation date even though there may be granted an extension of time for completion of the work unless significant extra work is added to the contract by the Department. No Incentive Payment will be made if the Contractor fails to complete the work before the specified date of completion or within such extended time allowed by the Department. Failure of the Contractor to complete all work as required by the contract before        *(DATE)* shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any incentive amount or damages arising from the refusal to pay any incentive amount.

If the contract is part of a combination award, no Incentive Payment shall commence on this contract which is part of the combination until all work on contracts which are part of the combination award has been completed.

### **66-3 PROJECT DEVELOPMENT AND IMPLEMENTATION SECTION**

The following sections discuss the responsibilities of the Project Development and Implementation Section within the Bureau of Design and Environment to advance the plans and special provisions to letting after they have been submitted by the district.

#### **66-3.01 Plan Check-In and Review**

##### **66-3.01(a) Program Support Unit**

The Program Support Unit duties include the following:

- Checking in all plans submitted to the BDE for letting.
- Verifying that the plans are on the list of recommended projects previously submitted to the Section.
- Checking the CA/Project Status Form. All items listed as “Required” on the CA Form are noted.
- Verifying that the project is programmed and that the scope of work is correct.
- Checking eligibility for projects using bridge funds.
- Determining final funding of the project based on availability of the funds as initially programmed.
- For a project with joint agreements requiring local, private, or other sources of funding, checking the agreements and summary of quantity sheets to ensure that they are consistent and correct.

##### **66-3.01(b) Project Development Unit**

The Program Support Unit forwards the plans to the Project Development Unit where the project file folder is set up and the project is sent to the Regional Field Engineer and technicians for review. Plans and special provisions are also sent to appropriate central bureaus for review of bridge, traffic signals, landscaping, and other special items for concurrent reviews.

The technician will prepare the Transportation Bulletin worksheets to advertise the project. The Bulletin worksheet should address the following information:

1. Basic Information. The Transportation Bulletin worksheet must include the following:
  - the contract number, county, section, project number, route, and district;
  - the location and a brief description of the improvement;

- a summation of the major items of work including the unit of measure and quantity of each; and
  - the working days or completion date and the job number.
2. Improvement Description. In preparing the material for the Bulletin worksheet, describe the basic or main part of the improvement and any other work of major importance. For example, if the improvement is primarily roadway construction but includes major quantities for storm sewers, frontage roads, ramps, pumping stations, box culverts, and bridges, also reference these element descriptions. The description of the location of the improvement should be such that the beginning and ending can be identified on a current Illinois Official Highway Map.
  3. Location Description. When describing an improvement in relation to other routes, show the approximate distance to the nearest large city (e.g., on Illinois Route 4 between Illinois Route 104 and FAI Route 72 approximately 2 mi (3 km) southwest of Springfield). Place the corresponding marked route, as shown on a current Illinois Official Highway Map, in parentheses after the designated FA or SBI routes (e.g., FA Route 68 (Illinois Route 4)) and, if the improvement is in an urban area, show the corresponding street name.
  4. Bridge Improvements. When describing the replacement of a bridge superstructure, note the face-to-face curb width of the existing and proposed roadway. If the improvement involves two or more independent types of work or if both urban and rural type construction is involved, describe and give the length of each type. Show distances to the nearest hundredth of a mile (thousandth of a kilometer). The Bulletin worksheet description for bridge and structure improvements should give a brief description and location of the improvement similar to that shown on the title sheet of the plans. If approaches are included with the structure contract, list the length, type, and width of the approach. Also list the number of spans, span sizes, and material type.
  5. Patching and Resurfacing Improvements. Where patching and resurfacing are included in the same improvement and portions of the patching quantities are outside the limits of resurfacing, list the length of patching outside the resurfacing limits separately. In describing intermittent bituminous resurfacing, show the total length of the improvement and also the net length of resurfacing. When resurfacing is on less than four routes or in less than four counties, show the length, width, type, and location for each route; otherwise, this work may be summarized as "various routes and counties" in the given district.
  6. Traffic Signals. If the improvement is for the installation of traffic signals and the number of locations is ten or less, describe each location separately. Where more than ten locations are involved, the description may be summarized (e.g., at 14 intersections on various routes in the north portion of Cook County).

Prior to reviewing a set of plans, the Regional Field Engineer should review the project file folder and determine if the plans are in accordance with the approved scope of work. The engineer

will review the plans to determine if they comply with the criteria presented in this *Manual* unless the design file indicates prior approval for deviations.

Due to the complexity and varied nature of highway plans, it is impractical to establish a set of rules which will completely govern a comprehensive review of plans; however, certain features should always be checked. Figure 66-3.A provides a checklist of items to consider during the review of plans prior to advertisement for letting.

All changes to special provisions and plans (including quantity changes), performed at the Central Office, must be supported with documentation from either the district or their consultant. This documentation will either be in writing or via email and will clearly describe the changes to be made. If the district or their consultant comes to the Central Office to make changes personally, they must document the changes with marked-up sheets or an itemized list. The documentation will then be kept in the contract file until the project is complete.

## **66-3.02 Final Plan and Proposal Review**

### **66-3.02(a) Special Provision Review**

The special provisions are reviewed by the Project Development Unit for compliance with the requirements in Section 66-1.04. For plan reviews, inflexible rules cannot be established for reviewing special provisions. The engineer should be certain that all pay items are covered by the *Standard Specifications*, Supplemental Specifications, Recurring Special Provisions, or Contract Special Provisions, and that on applicable Federal-aid projects FHWA requirements are met. An especially important aspect of special provisions is that they must adequately cover the intended work and that details must be given which will distinguish the equipment or method required to perform the work. Generalities in special provisions are undesirable because they can often lead to misinterpretation and disputes with resultant claims for extra work. The performance of work on a force account basis should be minimized.

### **66-3.02(b) Procedures**

After the special provisions have been reviewed and found satisfactory, return the prints of the plans and special provisions to the district for a final review prior to advertising bids. The memorandum transmitting the plans and special provisions to the district for final review should note significant changes in the plans or special provisions made by the Bureau of Design and Environment.

The Regional Field Engineer prepares the check sheet of appropriate Recurring Special Provisions and attaches the check sheet to the contract. Plans ready for letting are then forwarded for duplicating. Contract Special Provisions are sent to the Project Management Unit where the appropriate State or Federal boilerplate sheets are added which completes the proposal. The proposal is then sent for duplication.

Figure 66-3.B presents the minimum advance time that the Project Development Unit should plan for when preparing a contract for letting.

### **66-3.03 PS&E Submittal**

For new or reconstruction projects over \$1 million on the Interstate system, the plans, Contract Special Provisions, estimates, and supporting documents that are prepared, reviewed, and processed by the various sections or units of BDE are submitted to FHWA for approval.

The review of plans by the FHWA may have occurred during the design stage. On major freeway projects, this may include a plan-in-hand inspection. This prior coordination will minimize the need for re-design and will expedite the approval process upon completion. All correspondence with the FHWA regarding design matters will be administered by BDE.

Date Completed \_\_\_\_\_  
Project No. \_\_\_\_\_  
Checker \_\_\_\_\_

Route \_\_\_\_\_  
Section \_\_\_\_\_  
County/City \_\_\_\_\_

- 1. Ensure that the CA/Project Status Form has been completed. If not, return it to the district for completion.
- 2. Ensure that the plans are complete by checking them against:
  - the approved Phase I report;
  - the design criteria presented in the *Bureau of Design and Environment Manual*, except where revised by a design exception;
  - the criteria presented in the Procedural Memoranda;
  - any reports prepared for the project (e.g., soils, pavement, intersection design study); and
  - the plan preparation guidelines presented in Chapter 63 (see Section 63-6 for a plan preparation checklist).
- 3. Ensure the plans and/or special provisions have addressed the maintenance and protection of traffic through construction zones.
- 4. Ensure that the designer has addressed all the issues in the Commitment File somewhere in the plans, special provisions, or agreements.
- 5. Ensure that all applicable units have reviewed the plans and Contract Special Provisions by checking the transmittal memoranda between the designer and the bureaus. For example, the Bureau of Operations should have reviewed the signal plans and the Bureau of Bridges and Structures should have reviewed the structural plans.
- 6. Ensure that the Recurring Special Provision Checklist is included and properly completed.
- 7. Ensure that all applicable Contract Special Provisions have been provided including:
  - Project Specific Special Provisions,
  - District Special Provisions,
  - Bridge Special Provisions, and
  - Inserted Special Provisions.

### PLAN REVIEW CHECKLIST

Figure 66-3.A

- 8. Check the Contract Special Provisions prepared by the designer to ensure they meet the criteria presented in Section 66-1.04.
- 9. Ensure that all pay items are covered by the *Standard Specifications*, Supplemental Specifications, Recurring Special Provisions, or Contract Special Provisions.
- 10. Copy and distribute the special provisions for review as discussed in Section 66-3.02(b).
- 11. Ensure the designer has completed the quantity estimate sheet and has segregated the quantities according to the criteria presented in Section 63-4.04.
- 12. Ensure that the quantities, coded numbers, and pay items on the plans, summary of quantities, and proposals agree.
- 13. Ensure that the district estimating engineer has forwarded the unit prices to the Project Management Unit.
- 14. Ensure that the Project Management Unit has prepared the Engineer's Estimate.
- 15. Check the designer's construction time estimate to ensure that it is reasonable and complete.
- 16. Prepare the Bulletin worksheet and forward it to the Project Management Unit for copying and distribution.
- 17. Verify with the Program Support Unit that all agreements with utility companies, railroads, local municipalities, etc., are signed prior to letting.
- 18. Verify through the Program Support Unit that all applicable permits have been approved before letting (e.g., Corps of Engineers, Coast Guard, USEPA).
- 19. Verify through the Program Support Unit that any right-of-way acquisitions, easements, agreements, etc., are completed prior to letting.
- 20. Forward all construction documents to the Project Management Unit.

### PLAN REVIEW CHECKLIST

**Figure 66-3.A**  
(Continued)

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<b>Submittal</b>	<b>Minimum Time In Advance Of Letting</b>
PS&E to Federal Highway Administration	6 Weeks
Transportation Bulletin	5 Weeks
Addendums to FHWA (See Chapter 31)	17 Days
Addendums to Contractors	10 Days

**PLANNING SCHEDULE  
(Project Development Unit)**

**Figure 66-3.B**



## **66-4 PROPOSALS AND CONTRACTS**

### **66-4.01 Transportation Bulletin and Advertising**

#### **66-4.01(a) Transportation Bulletin**

The Project Development and Implementation Engineer selects the projects that will be on the letting. Bulletin worksheets of projects to be advertised are prepared by the Project Development Unit in the Bureau of Design and Environment or the Central Bureau of Local Roads and Streets. The worksheets are sent to the Contracts Office where they are logged in. Once selected, the Bulletin worksheets are numbered and the Contracts Office prepares a draft of the Transportation Bulletin.

#### **66-4.01(b) Electronic Advertising**

Once the Transportation Bulletin has been prepared, it is published on the IDOT Internet site and emailed a notice to subscribers of the IDOT electronic subscription service at least 21 days before the letting.

### **66-4.02 Proposals and Plans**

#### **66-4.02(a) Assembly of Proposal**

As specifications are received from the districts, the Project Development Unit or the Bureau of Local Roads and Streets will review the specifications for accuracy, prepare a copy of the Illinois wage rates (if applicable), and develop the schedule of prices to form the draft proposal. The Contracts Office will prepare a typing package which consists of the cover sheet, certifications, financial disclosure sheets, bidder's employee utilization form, bidder's affidavits (if required), signature sheet, assurances, and the notice-to-bidders sheet. The draft proposal is combined with the typing package to form an original proposal. The proposal is reviewed for accuracy and posted on the IDOT Internet site. Hard copies are processed by the Reproduction Service Unit for internal use.

#### **66-4.02(b) Plans**

Plans are received from the districts and reviewed for accuracy by the Project Development Unit. Once reviewed, the plans are posted on the IDOT Internet site. Hard copies are processed by the Reproduction Service Unit for internal use.

#### **66-4.02(c) Authorization to Bid**

Authorization to bid is issued to prequalified contractors who have sufficient financial and work ratings that indicate their ability to complete work on which they wish to bid. Requests for authorization to bid (BDE 124) are to be submitted to the Contracts Office. The Bureau of Construction's Prequalification Section reviews the submitted BDE 124. . The Prequalification

Section analyzes each request for authorization to determine if the contractor has sufficient prequalification. Upon determination of sufficient prequalification, notification is given to the Contracts Office to authorize or deny the contractor to bid.

#### **66-4.02(d) Subcontractors and Material Suppliers**

Subcontractors and material suppliers can download proposals and plans from the IDOT Internet site.

#### **66-4.02(e) Bidder's List**

As proposals and plans are posted to the IDOT Internet site, a list of contractors receiving authorization to bid is maintained by the Contracts Office. A similar list is maintained for other interested parties (e.g., subcontractors and material suppliers). The bidder's list is updated four times with the final list being available the day before the letting. The lists are available for review on the IDOT Internet site.

#### **66-4.02(f) Addendums to Proposals and Plans**

The Program Development Unit will be responsible for making corrections to the original proposal and the original plans. Addenda on local roads projects are handled similarly between the Bureau of Local Roads and Streets and the Contracts Office.

When an addendum will be issued on a project, the Project Development Unit notifies the Contracts Office of the item number and if the correction is on the proposal, plans, or both. The Contracts Office updates the Addendum/Revision Checklist on the IDOT Internet site.

### **66-4.03 Letting Process**

#### **66-4.03(a) Receipt of Bids**

Bids sealed in proposal envelopes are deposited in locked bid boxes at the place and time designated in the Transportation Bulletin. Bidders may also submit their bids by mail to the Contracts Office where they are stamped, logged and locked until the time of the letting. After the specified time, no additional bids will be accepted. The bid boxes are unlocked and the bids are sorted by item number. The total amount of each bid, including alternatives and combinations, if any, are marked and then read publicly. A bidder's proposal package is not read at the letting if Paragraph K is incomplete or a bidder has not been authorized to bid. When bids have been publicly read, they are reviewed for bid bonds or guaranty checks. If proposal guaranty checks are received, they are detached from the bids and submitted to the Contracts Office for further processing. Once this is completed, the bids are then transferred to the Project Development and Implementation Section for further processing.

**66-4.03(b) Proposal Guaranty Checks and Bid Bonds**

A proposal guaranty check or bid bond must accompany each bid. If the proposal guaranty check or bid bond is missing or incomplete, the Contracts Office will notify the bidder by letter of the problem and what is required for correction. A copy of the letter is kept in the Chief Contracts Official's letting folder and a note is included in the Letting Status database. Once received, guaranty checks are placed into individual envelopes and locked in a safe. The envelope indicates the contractor's name, item number, check amount, and check number. The guaranty checks of the low and second low bidder are retained in the safe until the contract documents are executed by the Department. The guaranty checks of the low and second low bidders are returned by United Parcel Service (UPS) after the contract is executed. The guaranty checks of the other bidders are returned by the UPS Ground. Bid bonds of the low bidders are retained in the safe until all contracts are executed. After all contracts are executed, the bid bonds are destroyed. A bid bond may be submitted by the low and second low bidder after the letting as a substitute for the guaranty check.

**66-4.03(c) Processing of Bids Received**

The Project Development and Implementation Section is responsible for the processing of bids received. All bids are entered into the computer system to be checked for accuracy. Once a low bid has been determined, the system is locked and the low bid is transferred to the Contracts Office for further processing pending the decision of the Awards Committee.

**66-4.03(d) Awards Committee**

The Awards Committee is responsible for approving or rejecting the bid. This Committee consists of the following personnel:

- Deputy Director of Program Development,
- Engineer of Design and Environment,
- Engineer of Construction,
- Engineer of Project Development and Implementation,
- Engineer of Project Management,
- Chief Contracts Official,
- representative from Bureau of Local Roads and Streets,
- representative from Office of Planning and Programming, and
- representative from FHWA.

At the conclusion of the Awards meeting, the Engineer of Project Management prepares the official bid letting tabulation and the award memorandum for submittal to the Secretary.

**66-4.03(e) Preparation of Contract Prior to Award**

Once low bids are received in the Contracts Office, they are placed in numerical order by item number. Bids are checked for Form A (Financial Information & Potential Conflicts of Interest Disclosure), Form B (Other Contracts & Procurement Related Information Disclosure), Apprenticeship and Training Specification, Doing business in Iran specification and Workforce projection (Form BC-1256), to see if the contractor included the Steel, Bituminous or Fuel Cost Adjustment forms, and check the Signature page. DBE plans (SBE 2025 & 2026) are pulled off and taken to the Bureau of Small Business Enterprises, if applicable. Bidders are checked for Delinquent debt. Bids are checked to see if the Certification with the State Board of Elections was included, if applicable. Contracts that included a Project Labor Agreement are checked for the Letter of Assent. If any deficiencies are found while the sub-unit is reviewing the bidder's proposal package the bidder is notified by telephone of the problem and what is required for correction. A note is included in the Letting Status database of the telephone call. Subsequently, a contract schedule of prices showing the low bidders unit prices is requested through the Bureau of Design and Environment's Letting Management (ELM) System. The bid, contract schedule of prices, and the original proposal are combined to form a draft contract. The Contracts Office will type two original contracts and two original contract bonds. All original copies of the contract and contract bond, plus the bidder's Federal taxpayer identification sheet, and a copy of insurance requirements, are taken to the Reproduction Service Unit for preparation prior to award.

**66-4.03(f) Award and Rejection**

Prior to the award or rejection of projects, concurrences may be required. County concurrence for local projects is obtained by the Bureau of Local Roads and Streets. Concurrence may also be required from other State and Federal agencies or other States. This information is obtained by the Program Support Unit and logged by the Contracts Office, when notified. Agreements between the State of Illinois and local agencies, private benefits, and utilities must also be cleared prior to award. DBE utilization plans, if required, must also be approved prior to award. Email notification of approval is received from the Bureau of Small Business Enterprises. Prior to award, the Bureau of Land Acquisition advises the Contracts Office of the status of the right-of-way concerning projects advertised in the Transportation Bulletin. Also prior to award any potential conflicts of interest that were noted on Form A (Financial Information & Potential Conflicts of Interest Disclosure) must be cleared by the Procurement Policy Board. After the Chief Contracts Official has determined that all required concurrences, agreements, and right-of-way have been received, the award or rejection letter is prepared by the Contracts Office, approved by the Engineer of Project Development and Implementation, and transmitted to the Deputy Director of Program Development for review. The letter is then forwarded to the Director of Highways for signature. When the award or rejection letter has been signed for the Secretary, it is returned with all correspondence to the Contracts Office for dating, mailing, and distribution. The Contracts Office also notifies the Reproduction Service Unit to mail out the package that was previously prepared that includes an office copy and a bonding company copy of the draft contract package. Additional copies of the draft contract package are sent to the responsible district handling the project and the Bureau of Materials and Physical Research.

Note that when a project is rejected, the low bid is filed with the unsuccessful bids. The award date is entered into the Letting Management (ELM) System; this triggers the contract to pull into the Highway Procurement Policy Review (HPPR) system. The Form A (Financial Information & Potential Conflicts of Interest Disclosure) is attached to the contract information and the Disadvantaged Business Enterprise (DBE) goal is entered for each bidder, the contract is then submitted to the Procurement Policy Board for their review and approval.

#### **66-4.04 Execution of Contracts**

The bidder's Federal taxpayer identification form, contracts, contract bonds, power of attorney, trust agreement forms, and required insurance are reviewed for accuracy and compliance with Department policy. If it is determined the contract documents or the insurance requirements have not been properly executed, the paperwork is returned with a letter by mail to the contractor for correction. A copy of the letter is kept in the Chief Contracts Official's letting folder and a note is included in the Letting Status database. When it is determined the paperwork has been properly executed, the contract documents are dated, signed by the Chief Contracts Official (for the Secretary) or the Bureau Chief of Design and Environment (for the Secretary) and the Chief Procurement Officer or designee. If the department is unable to execute the contract the contractor is notified by letter of the problem and allowed to withdraw their bid. A copy of the letter is kept in the Chief Contracts Official's letting folder and a note is included in the Letting Status database. Once fully executed, one copy of the contract is returned to the contractor via the United Parcel Service (UPS) utilizing the UPS tracking system. The original copy is transmitted to the Bureau of Construction for further processing. The State Comptroller's Office receives a copy of the bidder's schedule of prices, certifications, affidavits, signature sheet, and executed contract documents. A certified copy of the contract is sent to the Federal Highway Administration on non-exempt Federal and Interstate projects only.

#### **66-4.05 Railroad Insurance**

Railroad insurance is required for projects on or adjacent to railroad right-of-way. Information concerning this requirement can be found in the special provisions of the proposal. The contractor must furnish the Contracts Office with one original policy, one copy of the policy, and a copy of the general, workman's compensation and automobile liability insurance certificate. The original, plus the copy of the general, workman's compensation and automobile liability certificate, are forwarded to the railroad for approval. Approval must be received before the contractor can undertake any work on the railroad or railroad right-of-way. Once approval is received, the contractor and the applicable district are notified by letter that the policy has been approved.

#### **66-4.06 Contractor Services**

Prior to each letting, the proposal and plans for each project being advertised in the Transportation Bulletin are available for inspection on the IDOT Internet site. The authorized For Bid and Not For Bid list is also available on the IDOT Internet site. Other services provided

to the public are the Pay Item Report and the Pay Item Report with Awarded Prices available on the IDOT Internet site.

| As contracts are executed, the Contracts Office prepares a unit price tabulation for the IDOT Internet site. Each individual tabulation will contain the following information — contractors bidding on the project, low bidder, unit prices, and totals. These tabulations are published on the IDOT Internet site approximately once per week.