

Chapter Four
PROJECT MANUAL GUIDE
for General Work using RPA Standard documents

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00 00 00 GENERAL GUIDELINES

- A. This Guide is provided to aid the Designer in preparing the Project Manual so that it complies with requirements and customary practices of the State Building Commission (SBC). The staff of Real Property Administration (RPA) is available to discuss these requirements.
- B. Before assembling the Project Manual, most likely at the time outline specifications are developed, confirm with RPA on the use of documents for **“General Work”** or **“Minor Work and Procurement”**.
1. **General Work Documents** are intended for most projects, and is required if federal funding is directly involved or if there is a possibility that a contract of \$50,000 or more might be awarded.
 2. **Minor Work Documents** are intended for limited scope projects with three or fewer specification Divisions 2 through 49, and having no real possibility of a contract exceeding \$50,000.
 3. **Procurement Documents** are intended for direct purchases of equipment or furnishings involving little or no on-site construction. Their format follows that of Minor Work Documents.
- C. **Standard Bidding and Contract Documents**
1. **Standard documents and guides** are available for many of the Bidding Requirements, Contract Forms, Conditions, and Division 1 Specifications. Become thoroughly familiar with these documents, and use them as provided when text is appropriate.
 2. **Bidding documents by RPA are identifiable by their footer** in which the document number and name are prefaced with the Owner mark “RPA”, and a three-character set identifier “Std” for Standard. The document number, name, and version date follow. These are referenced in this guide without preface.
 3. **Example text for documents requiring editing** is provided in this chapter, and example guide (“Gde”) documents are included in [Appendix 3 - Bidding Documents](#). Do not retype others unless so approved by RPA.
 4. **All most-current documents are downloadable from the RPA website.** Edit/Gde documents can be downloaded as a “MSWord” (.doc) electronic file. Refer to the [Appendix 3 Reference Table](#) for documents having the “.doc” File Code.
 5. **Special usage bidding documents needed for certain projects** are referenced in this guide for their appropriate usage, and on the RPA website. Refer to the [Appendix 3 Reference Table](#) for documents having a non-Std special Use Code.
- D. Be familiar with applicable portions of:
1. **AIA Handbook of Professional Practice**
Available from: The American Institute of Architects (615) 259-9664
Middle Tennessee Chapter
209 10th Avenue South, Suite 415
Nashville, Tennessee 37203
 2. **CSI Manual of Practice**
Available from: Construction Specifications Institute (800) 689-2900
601 Madison Street
Alexandria, Virginia 22314
- E. Prepare the Project Manual in accordance with the **2004 CSI Manual of Practice** or latest version, unless approved otherwise. **AIA** documents are available for review at the Tennessee Society of Architects office, and **CSI** documents are usually available for review in the Business Section of many public libraries.
- F. Tailor the Project Manual to the project. Do not include provisions that are inapplicable to the project. Ensure that Bidding and Construction Documents are thoroughly coordinated, complete, concise, and free from redundancy.
- G. It is the intent of the SBC that construction contracts are procured through procedures promoting competition to the greatest extent possible. Language in the Bidding Documents placing limitations contrary to this intent that is beyond State Licensing Law requirements is not normally allowed. The State Architect on behalf of the SBC must approve use of language such as “minimum ‘number’ years experience “or” minimum ‘number’ projects completed.



00 01 01 COVER AND TITLE PAGE

- A. The COVER of the Project Manual may be any style or format that suits the Designer if a title page consistent with this guide is included. The cover shall at least include the project title.
- B. The TITLE PAGE may be omitted if the cover provides the prescribed content. A title page, if used, shall always provide the prescribed content.
- C. The DESIGNER'S SEAL AND SIGNATURE is to be affixed to only the cover and/or title page that follow the prescribed format. The Designer's seal and signature are required by statute, and those of major consultants are recommended to ensure compliance (T.C.A. Section 62-2-306(b)).
- D. PRESCRIBED FORMAT AND CONTENT: EXAMPLE:

PROJECT MANUAL
Date of Reference
For the Project Titled:
A brief name for the Work
Name of facility where the Work is located
Facility location (city, state)
SBC or RPA Project No.

OWNER
STATE OF TENNESSEE,
Contracting Agency
for User Agency

DESIGNER
Name of Design firm
address
phone/fax number

PROJECT MANUAL
March 12, 2008
For the Project Titled:
MUSEUM ADDITION
GREEN ACRES STATE PARK
HOOTERVILLE, TENNESSEE
SBC PROJECT No. 126/099-02-2007

OWNER
STATE OF TENNESSEE,
Department of Finance & Administration
for Department of Environment & Conservation

DESIGNER
Archie Tekt & Associates, Inc.
123 Godaddy Pike, Comesees, TN 37777
Tel (615) 123-4567 Fax (615) 123-4568

Additional graphics and information are acceptable, provided the standardized content requirements are met. For example, the Designer may elect to add:

CONSULTING ENGINEERS
Name of discipline (i.e.: STRUCTURAL)
Name of consulting firm or individual
Name of second discipline
etc.

00 01 10 TABLE OF CONTENTS

- A. Provide a Table of Contents for the entire Project Manual. Do not refer to the Table of Contents as an "Index". Also, do not provide a table of contents for each Division at its beginning.

00 01 15 LIST OF DRAWINGS

00 01 20 LIST OF SCHEDULES

- A. Provide a list of project drawings, and list of schedules when bound in the Project Manual. Differentiate drawings between:
 - 1. Those bound within the Project Manual. These drawings should be bound in after the specifications, so as to be consistent with the order in which this list follows the list of specifications in the Table of Contents.
 - 2. Those bound as separate companion volume(s), with date.



00 11 16 INVITATION TO BID

- A. Use or follow the standard:

Invitation to Bid**(Editable .doc)**

- B. The standard uses preferred wording and is formatted to provide space for filling in information for a particular job. Retype without modifying any standard wording, or type on a copy of the standard, filling in the blank areas thus:

1. **Project:** The official project title, including SBC number.
2. **Designer:** The design firm name and address, contact person, and phone & fax numbers, to be the primary source for obtaining Bidding Documents and channeling inquiries. Joint venture Designers should use a single address, contact person, and phone/fax numbers.
3. **Brief Project Description:** Work description in 25 words or less.
4. **Pre-Bid Conference:** Where and when, or, if yet to be determined or otherwise, stated as such.
5. **Bids sent by mail:** To whom and where: Refer to following No. 6.
6. **Bids will be received and opened:** Where and when: Page 5.10 provides a map delineating regional bidding locations. Appropriate wording corresponding to each location is given on page 4.04. The RPA Bidding Administrator, who also establishes time and date, should settle questions about where.
7. **Bidding Documents may be examined...:** List applicable plan rooms, giving name and city, omitting address and phone number. A list of commonly used plan rooms is given on page 4.05.
8. **Bidding Documents may be obtained...:** Indicate amount of plans deposit. This should be approximately 1/1000th of the estimated construction cost rounded to the nearest \$10, but neither less than \$50 nor more than \$1,000 for each set. In rare cases documents may be made available without deposit, in which case this sentence is normally supplanted by:

"Bidding Documents may be obtained from the Designer in accordance with the Instructions to Bidders upon request and without plan deposit."

- C. Mention of Prevailing Wage Law can be deleted if the project is significantly less than \$50,000 in value. (See page 4.01; consider Minor Work Documents.)
- D. Additional information may be appropriate for some projects, such as identifying a contact person for scheduling a pre-bid site visit.



Bids will be received:
(See 00 11 16)

**Bids will be received by
the State of Tennessee at:**

**Bids sent by mail should be
directed to the attention of:**

a. For projects located in the TRI-CITIES Region, use:

US Armed Forces Reserve Center
HQ 176 Maintenance Battalion
Tn Army National Guard
251 Don May Road
Johnson City, Tennessee 37615

Major William Del Castillo
HQ 176 Maintenance Battalion
Tn Army National Guard
253 Don May Road
Johnson City, Tennessee 37615

b. For projects located in the KNOXVILLE Region, use:

Tn Dot Region 1 Headquarters
7345 Region Lane
Knoxville, Tennessee 37914

Ms. Ruth Beason
Regional Office Manager

c. For projects located in the CHATTANOOGA Region, use:

Tn Dot Region 2 Headquarters
Bureau of Operations Building
4005 Cromwell Road
Chattanooga, Tennessee 37421

Mr. Bob Brown
Regional Director

d. For projects located in the NASHVILLE Region, use:

William R. Snodgrass Tennessee Tower
Conference Center North, Robertson Room
3rd Floor, 312 [Rosa L. Parks Avenue](#)
Nashville, Tennessee 37243-1102

Ms. Penny Stafford, Bid Administrator
William R. Snodgrass Tennessee Tower
Suite 2200, 312 [Rosa L. Parks Avenue](#)
Nashville, Tennessee 37243-1102

e. For projects located in the JACKSON Region, use:

Tn DoT Region 4 Headquarters
300 Benchmark Place
Jackson, Tennessee 38301

[Ms Venida Jackson](#)
[Administrative Services Assistant](#)

f. For projects located in the MEMPHIS Region, use:

230th Army Liaison Team
National Guard Armory
2610 East Holmes Road
Memphis, Tennessee 38118

[Major Steven Cox](#)



Major market PLAN ROOMS used by the State Building Commission:

(See 00 11 16)

Do not include *italicized* portions in Invitation to Bid.

a. TRI - CITIES:

Associated General Contractors
249 Neal Drive
Blountville, TN 37617
(423) 323 - 7121

b. KNOXVILLE:

F. W. Dodge Corp. Plan Room
622 Leroy Avenue
Knoxville, TN 37921
(865) 673 -9042

Knoxville Builders Exchange
300 Clark Street
Knoxville, TN 37921-6327
(865) 525 - 0443

c. CHATTANOOGA:

Chattanooga Builders Exchange
2100 South Greenwood Ave.
P. O. Box 3124 (37404)
Chattanooga, TN 37404
(423) 622 - 1114

Associated General Contractors
101 West 21st Street
Chattanooga, TN 37408
(423) 265 - 1111

d. NASHVILLE:

F. W. Dodge Corp. Plan Room,
1604 Elm Hill Pike, Suite 200
Nashville, TN 37210-3604
(615) 366 - 4173

Nashville Contractors Association
220 Great Circle Rd., #136
P. O. Box 281973 (37228)
Nashville, TN 37228
(615) 254 - 8346

Associated General
Contractors
(Pro Graphics)
1811 Church Street
Nashville, TN 37203
(615) 327-0386

e. JACKSON:

West Tennessee Plan Room
439 Airways Blvd.
Jackson, TN 38301
(731) 427 - 2573

f. MEMPHIS:

F. W. Dodge Corp. Plan Room
Shelby Oaks Plaza, Building 1
5909 Shelby Oaks Drive, #238
Memphis, TN 38134
(901) 386-3045

Memphis Builders Exchange
642 South Cooper Street
Memphis, TN 38104
(901) 272 - 7495

g. ALL REGIONS:

Reed Construction Data
Document Processing Center
30 Technology Pkwy South, Suite 500
Norcross, GA 30092-2912
(770) 417 - 4085
FAX (800) 303 - 8629
docprocessing@reedbusiness.com



00 21 00 INSTRUCTIONS TO BIDDERS

- A. Include the standard:

00 21 13 Instructions to Bidders

- B. Detailed review with RPA is required before using supplementary or other instructions.

00 22 00 SPECIAL SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

- A. **NGB-FUNDED MILITARY PROJECTS.** For Department of Military projects in which certain major portions of the Work is funded by the National Guard Bureau, and requires a bid breakdown of these portions of the Work so to determine actual funding amounts to be apportioned. Include the standard:

00 22 13.13 Supplementary Instructions to Bidders

- B. **SPECIAL REGULATORY CERTIFICATION.** For projects in which the Work includes the removal of underground storage tanks or of lead-containing materials (lead paint), TN Dept. of Environment and Conservation rules require contractor certification. Include the standard:

00 22 13.19 Supplementary Instructions to Bidders

- C. **MULTI-SITE PROJECTS.** This applies to projects in which the Work involves two or more sites in distinctly separate business regions, and a bidder may choose to list a different subcontractor for each trade for each site. Consult with the RPA Bidding Administrator on its use. Include the standards:

00 22 13.23 Supplementary Instructions to Bidders

and

00 22 13.26 Subcontractor Multi-Site Bidding Form *(Editable .doc)*

And, on the form, fill in the appropriate spaces each of the specific permissible sites.

00 30 00 AVAILABLE INFORMATION

- A. Identify information that is available in addition to the Bidding Documents for review by bidders. Such information may include preliminary scheduling, geotechnical data, description of existing conditions, photographs, pre-existing drawings, etc.

- B. **HAZARDOUS MATERIALS DATA.** If a hazardous materials survey has been conducted and is available for review by bidders, but not bound into the bidding documents, include in the project manual:

00 31 26 Hazardous Materials Data *(Editable .doc)*

- C. **GEOTECHNICAL DATA.** An example of this as would be provided regarding a geotechnical report is available as:

00 31 32 Geotechnical Data *(Editable .doc)*

- D. **DISQUALIFICATION INFORMATION.** Current lists have been established (regarding this information) and are available for review by bidders at the RPA Web Site. Include in the project manual:

00 38 60 Disqualified Contractors and Subcontractors

- E. Whenever such information is to be made available, it should be stipulated that the information was gathered solely for the use of the Designer and not for use as a basis for preparing a bid; and, the use and interpretation of this information for any purpose will be entirely the responsibility of the using party.



00 41 00 BID FORM

- A. For soliciting a Base Bid only, without Phases, Alternates, or Unit Prices, use the standard:

00 41 13 Bid Form (Std) *(Editable .doc)*

- B. Normal items to fill in on Bid Form:

1. address of regional bid location;
2. project title and SBC project number, appearing on all pages of bid form;
3. Roof Bond amount, if applicable (see **00 60 00**), otherwise "N/A";
4. number of calendar days Contract Time; and,
5. amount of Liquidated Damages.

- C. Special items to edit into Bid Form when required:

1. phasing of the Work;
2. alternate bids (See **01 23 00**);
3. unit price proposals (See **01 22 19**); and,
4. maintenance agreement proposals.

D. GUIDE FOR EDITING BID FORM:

1. The Bid Form may require retyping in order to accommodate special items (see paragraph C) for the project. Normal fill-ins and several variations are illustrated in the guide:

00 41 13G Bid Form Gde *(Editable .doc)*

2. Provide an edited Bid Form that suits the particular project, following the format and wording of the guide.

- E. Whenever an attachment or supplement to the Bid is to be required, either include in the edited bid form a provision requiring the attachment or supplement, or make such a provision via Supplementary Instructions to Bidders (See **00 22 00**.)

00 43 00 SPECIAL BID DOCUMENT ENCLOSURES

- A. **NGB-FUNDED MILITARY PROJECTS.** This applies to Department of Military projects in which certain major portions the Work is funded by the National Guard Bureau, and requires a bid breakdown of these portions of the Work so to determine actual funding amounts to be apportioned. Include the standard:

00 43 99 Bid Breakdown



00 52 00 AGREEMENT FORMS

- A. Include the standard introduction to the construction Agreement form, which provides information on how the form will be used:

00 52 01 Agreement Form

- B. **NGB-FUNDED MILITARY PROJECTS.** This applies to Department of Military projects in which certain major portions of the Work is funded by the National Guard Bureau:

1. Delete the standard:

00 52 01 Agreement Forms

2. Substitute:

00 52 01.13 Agreement Forms

- C. Include the standard blank of the actual construction Agreement form:

00 52 13 Standard Form of Agreement**00 54 00 SPECIAL AGREEMENT FORMS**

- A. Include the standard introduction to the Automatic Clearing House (ACH) agreement form, which provides information on how the form will be used and, include the attachment federal tax information form:

00 54 33 ACH Credits Form**00 54 35 Substitute W-9 Form**

- B. **NGB-FUNDED MILITARY PROJECTS.** This applies to Department of Military projects in which certain major portions of the Work is funded by the National Guard Bureau:

00 54 39 Corporation Certificate**00 60 00 PROJECT FORMS**

- A. Include the standard State of Tennessee Contract Bond, which serves the dual purposes of a Performance Bond and a Labor and Material Payment Bond:

00 61 13 Contract Bond

- B. If project requires application of a roofing system to a low-sloped (i.e.: flat) roof, or a metal roof of any slope, include the RPA Std Three-Year Roof Bond. The roof bond adds two years to the basic one-year of bond coverage of the Contractor's warranty for the roof system:

00 61 43 Three-Year Roof Bond

1. In the space provided on the Bid Form indicate the penal sum of the roof bond. Appropriate indications may be "An amount equal to the Base Bid", "An amount equal to Alternate No. 1", "An amount equal to 85% of the Base Bid", or an actual dollar figure, deriving percentages or amounts from the Designer's estimate for the roofing.
2. Other roofing systems may prove applicable for including the roof bond but without the RPA Std **01 78 36 Roofing System Warranty**. Consult with RPA as to its applicability for other such systems.



00 72 00 GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

A. Include:

00 72 13 RPA Modified AIA Document A201, Fifteenth Edition, 1997

This applies to projects in which federal funding of the project requires inclusion of federal acquisition regulations, such as Davis Bacon Act and Copeland Amendment clauses, including National Guard Bureau projects. Some federal grants permit the state to undertake Work without these additional requirements. The Project Manager is responsible for determining the applicability of these provisions.

A. Delete the standard:

00 72 13 RPA Modified AIA Document A201, Fifteenth Edition, 1997

B. CIVILIAN FEDERAL FUNDS. For civilian construction projects involving federal funds, insert:

00 72 13.29 Civ Fed RPA Modified AIA Document A201, Fifteenth Edition, 1997

C. MILITARY FEDERAL FUNDS. For military construction projects involving federal National Guard Bureau funds, insert:

00 72 13.39 Fed NGB RPA Modified AIA Document A201, Fifteenth Edition, 1997

00 73 00 SPECIAL SUPPLEMENTARY CONDITIONS

A. CONTRACTOR-PROVIDED PROPERTY INSURANCE. For projects that the Contractor is required to provide property insurance rather than the Owner; normally, on projects located on property not owned by the State or certain very large dollar projects. Add:

00 73 41 Supplementary Conditions

00 73 00 SUPPLEMENTARY CONDITIONS

A. PREVAILING WAGE DETERMINATION:

1. Should the estimated Contract Sum be \$50,000 or more, and usually for any estimated contract even close to \$50,000, Owner will provide a completed Wage Determination(s) for incorporation in Project Manual at **00 73 43** in place of the uncompleted standard:

00 73 43 Supplementary Conditions (Wage Determination)

2. The Department of Labor and Workforce Development sets twelve regional scales for building trades and one statewide highway scale that may apply to other sitework contracts. Sitework incidental to a building project often is not required on a separated scale. Once the **00 73 43** Wage Determination is received, it can be checked to see whether one or both Wage Rate listings are needed.

3. If the Wage Determination indicates Building Rates apply, include:

00 73 44 Supplementary Conditions (Building Wage Rates)

And, if the Wage Determination indicates Highway Rates apply, include:

00 73 46 Supplementary Conditions (Highway Wage Rates)



4. Multiple contracts specified in a single project manual may require a separate determination or decision number for each contract, and multiple building sites in different wage regions may require a determination for each region.
 5. **A federal wage rate determination may be required**, and if so, will be provided by the User Agency for incorporation in the **00 73 00s**. This applies to projects in which federal funding of the project requires inclusion of federal acquisition regulations, such as Davis Bacon Act and Copeland Amendment clauses, including National Guard Bureau projects. Some federal grants permit the state to undertake Work without these additional requirements. The Project Manager is responsible for determining the applicability of these provisions.
- B. No modifications or other conditions are acceptable unless specifically reviewed and approved by the Owner. If approved, integrate them in proper sequence and referenced to the appropriate paragraph.

ADDENDA

00 90 00 ADDENDA AND MODIFICATIONS

- A. If Contract Documents are issued subsequent to the award of a contract, bind any addenda that are a part of the Contract Documents into such Project Manuals with a first page index to the addenda.
- B. It is not required that Contract Documents be recompiled at award of contract. Normally, compilation of Addenda as series **00 91 13** pages of the Project Manual is only done for the microfilm record. Refer to Chapter 7 - *Close-Out and Record Documents*.



REQUIREMENTS FOR ALL SPECIFICATIONS

- A. Format specification sections in 3 parts: General, Products, and Execution. A master list of section titles and numbers can be found in **CSI MasterFormat 2004** Edition. The page format as described by **CSI** is optional. Specific examples of specifying in accordance with the **CSI** format are given in the **Manual of Practice**.
- B. Do not assign work to trades in the specifications. The Conditions of the Contract establish the Contractor as responsible for all Work, and expressly excludes the Designer from control of construction means, methods, and techniques. Specifications may establish qualifications for those performing a specific task.
- C. Sections of Division 1 are unique as specifications in that they relate directly to Bidding Requirements and to all parts of the written Contract Documents. Sections of Divisions 2-49 constitute basic units of the total specification, covering requirements for one portion of the Work.
- D. Tailor and coordinate Division 1 to the size and complexity of the project, and the requirements of Divisions 2 through 49. Complex projects will require a complete and thorough Division 1. Simpler projects may only require an abbreviated Division 1.
- E. **Avoid Proprietary Specifications:**
 - 1. When specific manufacturers are named, the naming of a specific manufacturer should serve only to establish a level of quality. Specifications should not be made proprietary unless there is sufficient justification, which must be well documented and specifically approved in writing by RPA, and normally with SBC approval.
 - 2. Use Performance, Descriptive, or Reference Standard specifications to the greatest extent possible. If a manufacturer's name is used to establish a level of quality, include whenever possible the names of three or more acceptable manufacturers that have been evaluated and found equal in quality to the specification. Add "or approved equal" language to product specifications that mention manufacturers by name but are not intended to be proprietary.
 - 3. When specifically permitted by the Owner, a specification may restrict manufacturers to a single source or short list of sources. In such cases, the specification must state the restriction explicitly. Standard language in the RPA Std documents makes all specifications generally subject to substitutions (with normal approval procedures) unless explicitly restricted. Similarly, if consideration of substitutions must be limited to pre-bid or another time frame, this must be explicitly stated.
 - 4. RPA intends to promote the substitution of products of equal or better quality whenever possible, within a process of obtaining Designer approval before making the substitution. Document **00 73 13** Supplementary Conditions and guide Section **01 62 25** Product Options & Substitutions have been written to provide a mechanism for this, even after the award of contract, though the Contractor who submits a bid depending on post-bid approval of a substitution does so at risk.
- F. Augment, but do not repeat the provisions already contained in the Bidding Requirements, Contract Forms, and Conditions. In Divisions 02 through 49, likewise do not repeat provisions already in Division 01. Throughout this Project Manual Guide there are instructions for coordinating with other sections.



01 10 00 SUMMARY

- A.** Include as a minimum in Section **01 10 00** at least a brief description of the work of the Base Bid, and inform the Contractor of related conditions under which the Work will be performed. Address related work, restrictions, future work and similar known factors. Identify specific phasing or sequencing of the Work, if any.
- B.** Describe restrictions to access and use of premises. Many State facilities have security regulations that may affect the Contractor's schedule. Have the Owner acquaint you with the controls at the facility.
- C.** Describe the conditions for partial occupancy, if any will be permitted or required. Identify the extent of the Owner's on-site operations, if the Owner intends to continue these during construction.
- D.** An outline of appropriate topics for this section include:
1. Summary of Work:
 - a. Work covered by Contract Documents;
 - b. Work by Owner.
 2. Multiple contracts:
 - a. Summary of other contracts;
 - b. Work sequence;
 - c. Construction by Owner;
 - d. Contract interface and coordination.
 3. Work sequence.
 4. Products:
 - a. Ordered in advance;
 - b. Owner furnished products.
 5. Future work.
 6. Work Restrictions:
 - a. Site access and security procedures;
 - b. Work hours and use of premises;
 - c. Owner occupancy details;
 - d. Owner maintenance and operation requirements;
 - e. Adjacent activities to the project site.
 7. Use of the site:
 - a. By Contractor for Work, including parking and staging;
 - b. By Owner and Owner's clientele, including egress;
 - c. Project utility sources.
- E. Hazardous Materials.** If applicable, specify whether the Work includes removal or abatement of hazardous materials, such as friable or non-friable asbestos. It is important that this be clearly specified here because the Conditions clauses addressing abatement hazards insurance set forth different requirements based on the form of asbestos, and the person administering the award of contract will rely on the description here when determining which insurance requirements apply.
- F. Phasing of Work.** If dividing the Work and Time into Phases, establish a primary element of the Work which will not be otherwise assigned to a Phase and assign it the "Total Time" of the Contract, even if this only includes general administrative portions of the Work. Specify that the Work also includes the following Phases, then list each Phase, providing a two-character name, a caption, and a specific description (such as "Phase 3a, Paving Parking Lots, including site-prep, paving, striping, curbs, and appurtenances as shown on sheet A9 and applicable specifications").



01 21 00 ALLOWANCES

- A. Allowances are used only when unavoidable and specifically approved in writing by RPA, in which case incorporate the standard:

01 21 13 Allowances **(Editable .doc)**

- B. Specify no unassigned or discretionary allowances. Provide descriptions of each allowance (in Article 1.04 of standard). Specify amounts included in Contract Sum for Contractor's product costs, and procedures for selection of products.
- C. In appropriate sections of Divisions 02 through 49, specify products and their incorporation into the Work as completely as known factors allow. Do not include the value of allowances, but refer to the Allowances section.
- D. **CONTAMINATED/HAZARDOUS MATERIALS DISPOSAL WORK.** If disposal of contaminated or hazardous materials of unknown quantities is likely, such as impacted soils and groundwater associated with underground storage tank removal work, then a cash allowance for removal, treatment and disposal of materials may be applicable. This is due to the possible high costs associated with such work. The staff of RPA is available to discuss the potential incorporation of the special section:

01 21 46 Disposal Allowances **(Editable .doc)**

01 22 00 UNIT PRICES

- A. Using unit prices is discouraged. Use unit prices only if unavoidable and specifically approved in writing by RPA.
- B. If unit prices are used, incorporate the standard:

01 22 19 Unit Prices **(Editable .doc)**

- C. Provide descriptions of each unit price (in Article 1.03 of standard). Include an item number, reference to related sections, Base Quantity allowance, Unit of measure, Unit Price per unit, and a caption for the Work included which relates to a complete description in the related sections. Following is an example of preferred format and wording:

Item	Related Sections	Base Quantity	Unit Price per Unit	Unit	Work Included
1	061600	2000	(S)	S.F.	Replace doomafitchies
2	074000	100	\$24.50	Each	Whatchamacallits

1. **Item:** numeration for the list of items.
2. **Related Sections:** give the number of the section(s) in which detailed specification is found.
3. **Base Quantity:** This is an allowance of units included initially in the contract, and should be a "best guess" of the number actually needed. In "Related Sections", the allowance should be distinguished from like units in the Work and not subject to unit price. For example, if 1,000 L.F. of pipe is shown in drawings plus 200 to 300 L.F. of identical pipe is to be placed according to on-site directions of the Designer at a Unit Price, a Base Quantity of 250 L.F. might be used, with the related section specifying that the quantity of pipe shown in drawings is not part of the Base Quantity allowance for the Unit Price.
4. **Unit Price per Unit:** It is preferable that the Designer specify unit prices which represent the current local prevailing trend, based on a current survey of actual market costs, including direct and indirect costs except overhead and profit. If the Designer recommends soliciting unit prices, and the Owner concurs, "(S)" should appear in the column in accordance with paragraph 1.01.A of the specification.
5. **Work Included:** This can range from a one-word caption to a complete technical description. It is preferable to provide a brief caption; and, in the related section, in the "Summary" Article, in the "Unit Prices" paragraph, provide a fully descriptive subparagraph headlined by the same caption.



- D. In discussing the possible use of unit prices on a project, consider the following issues:
1. Are there issues to clarify about unit price items that require specification in the Summary?
 2. Are unit price items and/or their base quantities affected by Alternates or other factors?
 3. The possibilities of actual unit price(s) units exceeding the base quantity (whether more than or less than) by more than 25%, and should there be a cap on the degree of change to be permitted in unit prices under the renegotiation clause, perhaps expressed as a percent of the initial unit price?
 4. Should there be a time limit for invoking unit price work? Does relative nearness to the beginning or end of the job affect the validity of the unit price?

01 23 00 ALTERNATES

- A. Use of alternates is discouraged. If sufficient cause exists to warrant the use of alternates, incorporate the standard:

01 23 00 Alternates

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- B. If retyping the Section, adhere to standardized text for articles 1.01 through 1.03.

- C. In Article 1.04:

1. List alternates in descending order of priority after the Base Bid. Alternates shall be additive and limited to three in number unless the particular situation warrants otherwise and specific approval is received through RPA.
2. Provide specific details defining each Alternate, with reference to applicable specifications and Drawing details. If unit prices are affected, include details as to their effect. Avoid alternates which are complex or involve several trades unless a complete unit.

- D. Coordinate this Section with solicitation of alternate prices in Bid Form (See **00 41 13**), and applicable specifications and details.

01 26 00 CONTRACT MODIFICATION PROCEDURES

- A. Include the standard section on Change Orders:

01 26 00 Modification Procedures

- B. Additionally, though it may be omitted with RPA approval, normally include the standard:

01 26 20 Weather Delays

or, if the Work is reroofing, use instead:

01 26 23 Reroofing Weather Delays

- C. Include the standard Change Order Form and the Cost Itemization form:

01 26 40 Amendment, Change Order, or Directive

and

01 26 50 Cost Itemization form



01 29 00 PAYMENT PROCEDURES

- A. Unless otherwise approved by RPA, include the standard sections:

01 29 73 Schedule of Values

and

01 29 76 Payment Procedures

and

01 29 76.13 Personnel Used in Contract Performance

01 31 00 PROJECT MANAGEMENT AND COORDINATION

- A. Coordination of the Work and its various parts, and coordination with other separate contracts, or amongst multiple contracts, and special meetings may be specified in **01 31 00s** sections, **01 31 13 Coordination**, or in appropriate sections of Divisions 02 through 49.

- B. If a Commissioning Agent is included as part of the Owner's team, include the standard:

01 31 13.91 Commissioning Coordination

- C. Unless RPA agrees that the particular needs of a job dictate developing a special Section **01 31 00** Project Meetings, include the standard:

01 31 19 Project Meetings

- D. Include requirements for submittals log and visitor log, at least as set forth in the standard:

01 31 90 Administrative Logs

- E. If asbestos abatement or removal is involved:

Delete:

01 31 90 Administrative Logs

Include in its place:

01 31 93 Administrative Logs

- F. Some projects may have no significant submittals, and need no submittals log. Visitor Log may be impractical for very small projects, or redundant where extensive entry/exit logs are used. It may then be appropriate to modify the section or merge it into another section. Confer with RPA before doing so.

01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION

- A. If Owner-assisted scheduling is involved:

01 32 13 Scheduling of Work

- B. Include requirements for initial progress and submittals schedules and updated progress schedules and reports. For projects not utilizing Owner-assisted scheduling:

01 32 15 Progress Schedules and Reports

- C. If Owner-assisted scheduling is involved:

Delete:

01 32 15 Progress Schedules and Reports

Include in its place:

01 32 16 Progress Schedules and Reports



01 33 00 SUBMITTAL PROCEDURES

- A. Address requirements common to all submittals. Sections of Divisions 02 through 49 should reference these sections for the common requirements, and then expand on specific requirements unique to them. Few projects will require every one of the following to be addressed, but appropriate topics for Submittals include:
1. Certificates
 2. Design Data
 3. Field Test Reports
 4. Shop Drawings, Product Data, and Samples
 5. Source Quality Control Reports
- B. **COMMISSIONING AGENT:**
1. If a Commissioning Agent is included as part of the Owner's team, include the standard:
01 33 91 Commissioning Submittals

01 35 00 SPECIAL PROCEDURES

- A. **BUILDING DEMOLITION or ASBESTOS ABATEMENT WORK:**
1. If building demolition or asbestos abatement or removal is involved to the extent that regulatory notification is required, require Contractor to give proper written notice of impending commencement of such work to the Tennessee Division of Air Pollution Control, or to the county air permit agency if the project is located in Davidson, Hamilton, Knox, or Shelby counties.
 2. For certain projects where abatement is considered significant in scope, RPA will recommend including the standard:
01 33 43 Abatement Submittals
- B. **DETENTION PROJECTS.** On most projects in which Work takes place inside the secure perimeter of a detention facility, such as a state prison or juvenile facility, due to the unusual conditions in a detention facility, include [one of the following](#):
- 01 35 13.16 Detention Project Procedures**
 - 01 35 13.17 Youth Development Center Project Procedures**
- C. **SCHOOL FOR THE BLIND / DEAF PROJECTS.** On most projects in which Work takes place inside the perimeter of a School for the Blind or School for the Deaf, due to the unusual conditions in such a facility, include [one of the following](#):
- 01 35 13.22 School for the Blind Project Procedures**
 - 01 35 13.25 School for the Deaf Project Procedures**
- D. **MENTAL HEALTH & MENTAL RETARDATION PROJECTS.** On most projects in which Work takes place inside the secure perimeter of a mental health or mental retardation facility, such as a mental health hospital, due to the unusual conditions in such a facility, include:
- 01 35 13.19 Mental Health & Disabilities Project Procedures**
- E. Verify with RPA whether any of these sections may not be needed, has been updated, or requires additional provisions specific to the facility in an accompanying section.



01 41 00 REGULATORY REQUIREMENTS

- A. Include the list of building codes and regulations used for State Building Commission projects:

01 41 15 Regulatory Requirements

- B. Depending on the use of the building, other codes or regulations may also apply. Regulatory requirements in addition to those in the standard section should be enumerated by adding a separate section.

01 43 00 QUALITY CONTROL

- A. For a concrete testing laboratory, the standard section may be included, and may serve as guide for similar sections:

01 43 25 Testing Laboratory Services

- B. This broadscope group specifies contractor's quality control and tests by independent testing laboratory. Include specifications for testing on each project. Describe the extent of testing required. Requirements should include:
1. The cost of tests shall be paid by the Contractor.
 2. The firm engaged and personnel used to perform tests shall be approved in writing by Designer.
 3. Tests such as compaction, investigation of borrow areas, analysis of bearing conditions and similar work, shall be done under the direction of an engineer registered in Tennessee.
 4. Test reports shall be identified by project name and SBC number, and bear the seal and signature of an engineer registered in Tennessee.
 5. Copies of test reports shall be sent to the Designer, the Contractor, and the Owner.

C. ASBESTOS ABATEMENT WORK.

1. If asbestos abatement or removal is involved, Specify that Air Monitoring is to be performed by a properly qualified subcontractor provided by Contractor. Specify minimum subcontractor qualifications and performance requirements. Air monitoring standards may be specified in other broadscope sections instead of **01 40 00**, such as **01 41 15** Basic Regulatory Requirements and **02 82 13** Hazardous Materials Abatement.
2. RPA will consider unusual circumstances wherein the Designer might recommend that air monitoring be provided by the Designer or a consultant, but such would be the exceptional case. If such recommendation is approved, include the standard:

01 43 28 Testing Laboratory Services

01 50 00 TEMPORARY FACILITIES AND CONTROLS

A. Temporary Utilities

1. The Contractor is normally responsible for installation, maintenance, rental and service charges, and removal of temporary utilities.
2. If the project is at a State-owned facility where services are adequate, the Contractor may be allowed to use available utilities.
 - a. The Owner may pay for water, power and possibly temporary heat.
 - b. The Owner will have the right to direct tap points, identify panels and other services that the Contractor may use.
 - c. The Owner will have the right to restrict use in time of emergency or for repeated abuse by the Contractor.
 - d. Installation, maintenance & removal of temporary services is Contractor's responsibility.
3. An outside telephone line is normally required.



B. Construction Facilities

1. The Contractor is typically responsible for all construction facilities, such as toilets, offices, and sheds; including installation, maintenance, rental and service charges, and removal.
2. On some projects, it may be advantageous to assign existing toilets, temporary offices and storage areas for the Contractor's use. Check with the Owner to identify what temporary facilities are available and how they may be used. If this is done, make the Contractor responsible for the maintenance of the spaces, and specify that the Owner may revoke these privileges in the face of repeated abuse.

C. Cleaning during construction, distinct from final cleaning, should be addressed. This is normally found within the topic of Temporary Controls.

D. Owner may have specific requirements for a project sign, such as requiring a certain logo, size, or style. Some agencies have policies forbidding signs, or at least disallowing the requirement of a sign. Check for such agency restrictions and needs before specifying a project sign.

E. Any related items that will be required should be addressed. Appropriate topics include mobilization and:

1. Temporary utilities (See paragraph A)
2. Temporary construction and construction aids (See paragraph B)
3. Security, barriers and enclosures
4. Traffic regulations, access roads and parking areas
5. Temporary controls (See paragraph C)
6. Project identification and signs (See paragraph D)
7. Field offices and sheds

F. FACILITIES PROVIDED FOR OWNER & DESIGNER. On projects as determined by the Owner in which field office facilities for the Owner Representative and Designer are to be provided by the Contractor, normally on large and complex projects. Add:

01 52 25 Owner's Field Offices

01 60 00 PRODUCT REQUIREMENTS

A. Specify general requirements for materials and equipment. Appropriate topics, if needed, include: transportation and handling, storage and protection, product options and substitutions (See B)

B. Product Options and Substitutions: Specified general requirements for product options and substitutions should neither conflict with nor repeat provisions already included in paragraph 3.4 of **00 73 13** Supplementary Conditions, and should take into account the instructions to **avoid proprietary specifications**.

C. The following optional standard documents are recommended either as guidelines or Sections:

01 62 25 Product Options and Substitutions

01 62 32 Substitution Request Form

01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

A. Field Engineering

1. Specify Contractor's responsibilities for providing and paying for engineering services required during construction. Set basic requirements for survey work based on Contract Conditions requiring Owner to provide initial survey control points and property lines.



2. Field engineering by the Contractor, such as structural design of formwork, scaffolding, special earthwork, hydraulic groundwater control design, or other civil engineering work, are only broadly covered due to the specialized requirements of portions of the Work, and some requirements should be specified in other appropriate sections.

B. Cleaning

1. Specify the Contractor's general responsibilities during construction for regular cleaning, distinct from the provisions for temporary barriers and enclosures specified within sections on temporary facilities and controls.
2. Specify the Contractor's general responsibilities at the end of the project for final cleaning and removal of debris, waste materials, rubbish, tools, construction equipment, machinery, and surplus materials. Do not repeat the provisions stated in this Section in other Divisions. Cleaning which is unique to a product should be specified in the same Section as the product, with reference to the general requirements in Division 01.

C. Starting and Adjusting

1. When applicable, and always if commissioning of building systems is involved, specify initial checkout and startup procedures, and initial adjusting to ensure safe operation during acceptance testing and commissioning. When commissioning is involved, RPA's Commissioning Agent will provide assistance on developing this section.

01 77 00 CLOSEOUT PROCEDURES

- A. Include requirements for establishing Substantial Completion and closing-out, as provided in the standard:

01 77 70 Contract Closeout

- B. If commissioning of building systems is involved, include:

01 77 70.91 Contract Commissioning Closeout

01 78 00 CLOSEOUT SUBMITTALS

- A. This Section complements Conditions paragraph 3.11 with regard to Contractor's responsibilities for maintaining a record of actual construction, compiling data binders, and submitting these to Designer for review prior to delivery to Owner.

- B. Additionally, this Section complements Conditions paragraph 1.6 with regard to Contractor's responsibilities for reporting minority-owned businesses.

- C. Use one of the following:

1. Minimum requirements are included in the standard:

01 78 21 Close-Out Submittals

2. For projects that are more complex or of varied scope and may include a commissioning agent, essential elements common to all projects and several possible specific data items for editing to suit the project are shown in the guide:

01 78 21G Close-Out Submittals Gde

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- D. If roofing work is involved, include the standard:

01 78 26 Form for Roof Data

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- E. For any project involving application of a roofing system to a low-sloped (i.e.: flat) roof, or a metal roofing system of any slope, include:

01 78 36 Roofing System Warranty

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1. Refer to the **DIVISION 7 THERMAL AND MOISTURE PROTECTION** specification guidelines that follow in this Guide to ensure proper coordination with the standard warranty.
2. Include **00 61 43** Three-Year Roof Bond.

- F. Include:

01 78 88 Report of Subcontractors and Suppliers

01 79 00 DEMONSTRATION AND TRAINING

- A. This applies to projects in which Work includes the installation of any major equipment and systems for which a comprehensive demonstration and training is warranted. Demonstrations of each system to Designer's and Owner's representatives, using the operating and maintenance data as the basis of instruction, shall be provided prior to substantial completion inspection, to ensure that Owner's personnel are properly instructed in operation, adjustment, and maintenance of equipment and systems, so that Owner will be able to occupy or utilize the Work or designated portion thereof for the use for which it is intended.
- B. Specify Contractor duties for demonstrating newly provided equipment and systems, and providing videotaped training to facility personnel, by including:

01 79 13 Demonstration and Training

07 00 00 DIVISION 7 THERMAL AND MOISTURE PROTECTION

- A. For any project involving the application of a roofing system to a low-sloped (i.e. flat) roof, or a metal roof of any slope, review the standard documents **00 61 43** Three-Year Roof Bond and **01 78 36** Roofing System Warranty and the related parts in this chapter, and coordinate specifications accordingly.
- B. **Specify the manufacturer's warranty:**
1. The roofing system warranty shall be provided on the RPA Std form Section **01 78 36** Roofing System Warranty.
 2. **Name the appropriate "Roofing System Components Included Under this Warranty"**, listing one or more of the component options listed on the middle of page 1 of Section **01 78 36**. Name them exactly to avoid confusion. Frequently, only the system, system accessories, and system flashing can be warranted together, and other items need separate manufacturer's warranties.
 3. **Name the appropriate warranty term, from 10 to 25 years.** Consult with RPA regarding which of the terms are to be specified. Factors for determination will be system type, current industry acceptance, and cost differences; however, a 20-year term is preferable. Whatever the case, a longer length term may be made a bid alternate by specifying an alternate time(s) substituting a longer term for the base bid term.
 4. **Specify to provide separate warranties if more than one roof or type of roof system** is being installed in a single project. For such cases, specify a separate components list for each separate warranty to be provided. Consult with specified membrane manufacturer to verify whether sheet metal items can be warranted under the **01 78 36** form. If not, a separate sheet metal warranty is to be required. Sheet metal warranty should have a 20-year finish & 3-year contractor material and workmanship warranty.
 5. The Designer may specify or supplementary instruct the Contractor as to the "Designer's Roof Cost Estimate".



6. **Specify that warranty form Section 01 78 36 shall supersede all other provided warranties** pertaining to same-covered systems and/or components.
 7. **Other warranties may be specified** covering same systems as warranty form Section **01 78 36** and having longer terms, but only when stipulating such would become effective only upon the term end of the warranty form Section **01 78 36**. If other such warranties are specified, stipulate precisely the minimum warranty requirements.
- C. The RPA **Roofing / Re-roofing Design Guideline** shall be used for projects involving this work. The intent of this guideline is to maintain a level of standardization with all State-owned roofs. This guideline shall be utilized for developing the specifications and drawings required for this work. The staff of RPA shall provide this document, and is available to discuss this requirement.

31 00 00 DIVISION 31 EARTHWORK

- A. Take care when specifying and detailing sitework to diligently set bearing and excavation elevations. Do not provide specifications that contradict the principle of unclassified subsurface conditions to design depth.

33 56 00 UNDERGROUND STORAGE TANK INSTALLATION

- A. The RPA **Underground Storage Tank Installation Design Guideline** shall be used for projects involving this work. The intent of this guideline is to maintain a level of standardization with all State-owned tanks in their compliance with related federal and state regulations, and in their possible incorporation with the "Fuelman" automated fuel inventory system. This guideline shall be utilized for developing the specifications and drawings required for this work. The staff of RPA shall provide this document, and is available to discuss this requirement.

23 00 00 HVAC INSTRUMENTATION AND CONTROLS (COMMISSIONING)

- A. If commissioning of building HVAC systems is involved, consult with Owner's Commissioning Agent in development of the following sections:
1. **23 05 93** – Testing, Adjusting, and Balancing. Specify technical procedures for TAB of mechanical systems, including; demonstration of mechanical equipment, duct/pipe/mechanical TAB, mechanical equipment starting/commissioning.
 2. **23 09 93** – Sequence of Operation. Specify how the HVAC equipment is intended to operate.

CHAPTER 4 END

