

# Pre-Construction Orientation Booklet

## University of Missouri-Columbia

Construction Management  
E117 General Services Building  
Columbia, Missouri 65211-3200  
Phone: (573) 882-3230 Fax: (573) 882-1175

Project Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date: \_\_\_\_\_



The Preconstruction Orientation Booklet is meant to familiarize the Contractor with the University of Missouri's Contractor payment process.

The booklet contains the following:	<u>Page #</u>
<u>Instructions for Completing the Breakdown of Costs Form</u> which is the contractor's cost breakdown of the project that serves as the basis for the contractor payment process as well as blank and sample forms for the Contractor's review and use.	2
Blank <u>Breakdown of Costs Form</u> (Exhibit #1)	
<u>Instructions for Completing the Periodic Estimate for Partial Payment</u> which is the Contractor's monthly application for payment.	4
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## Instructions for Completing the Breakdown of Costs Form

### 1. Procedures

The Breakdown of Costs form presents a detailed breakdown of the Contractor's estimated cost (bid price) for use in computing payments for work performed under each contract.

#### A. Submission

Within fifteen (15) days of the date the Notice to Proceed is received, a Breakdown of Costs must be submitted to the Owner's Representative for review and approval. No payment will be processed until this information is approved by the Owner's Representative. The breakdown shall include detailed information for all subcontractors included in the contract. The cost and schedule information provided by the Contractor in the Breakdown of Costs will be used by the Owner's Representative to establish the basis for future Contractor payments.

#### B. Preparation

The Contractor's Breakdown of Costs will be used to input costs and schedule data into the University's project management system (Projex) which will produce the monthly applications for payment, the contract's construction schedule, and internal accounting data.

The Breakdown of Costs form should be carefully prepared by the Contractor in accordance with the instructions below. Further assistance can be obtained from the assigned Owner's Representative or by calling 573-882-1133. When filling out the Breakdown of Costs on line, you need to tab between each field. When you're at the end of available fields, hit enter (when the "Update" button is highlighted) and more fields will be made available for additional data.

**Column 1:** Description of Task: Enter the description of the task that best describes the item of work. (Up to 30 characters).

**Column 2:** Quantity: Show the quantity of units for each task.

**Column 3:** Unit: Enter the standard of measure for each task (cy., sf., etc.) from the pull down menu when filling out this form on-line.

**Column 4:** Material Cost: Show approximate material costs as total dollars including applicable shipping and taxes.

**Column 5:** Total Cost: Show the task total including material, labor and other costs. All Contractor operating costs including taxes, overhead, small tools, supplies, plant rental or depreciation, profit, contingencies and similar costs shall be distributed with each task.

**Column 5:** Start Date: List the start date (month, day, and year) for each task as indicated by the Contractor's construction schedule.

**Column 6:** Finish Date: List the finish date (month, day, and year) for each task as indicated by the Contractor's construction schedule.

**The total cost on the Breakdown of Costs must exactly match the contract amount.** Once you have completed the Breakdown of Costs, click on the finalized button at the bottom of the screen.

### C. Certifications and Approval

The Contractor and Owner's Representative are to manually sign in the spaces provided on the Breakdown of Costs form if the written form is submitted. E-mails acknowledging acceptance will be done when the form is filled out on line.

## 2. Progress Schedule

A. The Contractor shall submit a project schedule as detailed in article 9.3 of the General Conditions. The Contractor shall include the same task items, start dates, and finish dates on the progress schedule as included on the Breakdown of Costs. The Contractor may be requested to include the proposed rate of progress in terms of cumulative percent complete shown as an "S" curve superimposed on the bar chart schedule.

B. The Contractor is to manually sign the schedule and submit it to the Owner's Representative for their review. See article 9.3.2 of the General Conditions for further requirements of the project schedule.

The following Exhibit #1 is a blank Breakdown of Costs form to be used by the Contractor when submitting the Breakdown of Costs in written form.

## Instructions for Completing the Periodic Estimate for Partial Payment

### I. Periodic Estimate for Partial Payment Summary

1. Enter the Original Contract Earned Value to Date by summing the current earned value of each task.
2. Enter the total change order work performed to date from the Schedule of Contract Change Orders page.
3. Add these two numbers to obtain the Total Earned Value to Date.
4. Deduct the appropriate contract retainage. This retainage shall be 5% until the project is substantially complete. Retainage after substantial completion shall be 200% of the value of the incomplete work. See articles 9.4.6 & 9.9.3 of the General Conditions in the specifications.
5. Deduct the Previous Payments to obtain the Balance Due this Payment.
6. Sign and date the form and submit to the Owner's Representative for review and approval.

### II. Schedule of Contract Change Orders

1. Enter the amount complete of each authorized change order.
2. Total the amount complete of all *completed* and *authorized* change orders.

### III. Step by Step Instructions for completing the Periodic Estimate for Partial Payment

For each task code,

**Columns 5 & 7:** To determine % complete, divide number of items within each task code that have been completed (column 5) by total number of items (column 3). Enter this percentage (as a decimal) in column 7. Notes: If percentage of task code cannot be calculated by quantity, use other appropriate methods to determine % complete.

**example:** *30 of 75 light fixtures have been brought on site and installed to date.*

Task Code (1)	Description of Task (2)	Quantity (3)	Unit (4)	Installed (5)	%Complete-Labor	
					Last (6)	To Date (7)
0017	Light Fixtures	75	ea	<b>30</b>	0	<b>0.40</b>

**Column 10:** If material was brought on site and installed (as in the example above), then the percentage in column 10 will be the same as in column 7.

**example:** 30 of 75 light fixtures have been brought on site and installed to date.

Task Code	Description of Task	Quantity	Unit	Installed	%Complete-Labor		Total Labor	%Complete-Material		Total
					Last	To Date		Last	To Date	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0017	Light Fixtures	75	ea	<b>30</b>	0	<b>0.40</b>	\$490	0	<b>0.40</b>	\$1100

If material for this task code has been delivered, listed on the Claim for Material Stored on Site, and is adequately stored but not yet installed, then the value added for this material must be added in with the material installed value.

**example:** 75 of 75 light fixtures have been brought on site (claim for material stored on site completed) and 30 have been installed to date.

Task Code	Description of Task	Quantity	Unit	Installed	%Complete-Labor		Total Labor	%Complete-Material		Total
					Last	To Date		Last	To Date	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
0017	Light Fixtures	75	ea	<b>30</b>	0	<b>0.40</b>	\$4900	0	<b>1.00</b>	\$1100

**Column 12:** Multiply column 7 times column 8 to get the labor value earned to date. Multiply column 10 times column 11 to get material value earned to date. Add these two values together to determine the earned value to date.

**example:** 75 of 75 light fixtures have been brought on site (claim for material stored on site completed) and 30 have been installed to date.

%Complete-Labor		Total	% Complete-Material		Total	Current Earned Value
Last	To Date	Labor	Last	To Date	Material	
(6)	(7)	(8)	(9)	(10)	(11)	(12)
0	<b>0.40</b>	\$4900	0	<b>1.00</b>	\$1100	$.4 \times \$4900 = \$1960$ $1.00 \times \$1100 = \underline{\$1100}$ <b>\$3060</b>

**As a general rule: For the current billing, if % Complete-Material is greater than % Complete-Labor, the "Claim for Material Stored on Site" form must be filled out and invoices must be attached. Invoices are not required for this material for subsequent months.**

**Important: The % complete columns (7 & 10) should be input to two decimal places and will be used to calculate the current earned value exactly (column 12). If the value shown in column 12 is rounded on the billing form, the Balance Due this Payment may**

**be slightly off.**

IV. Claim for Material Stored on Site

1. To provide incentive for the Contractor to purchase long lead items critical to the project completion, Paragraph 9.4.4 allows for payment of materials and equipment delivered to the site but not yet incorporated into the work. Currently MU is allowing reimbursement of 100% of approved material stored on site. The overall project retainage still applies.
2. Advanced written approval by the Owner's Representative shall be obtained before application for payment for material stored on site.
3. Material out of the Contractor's stock may not be claimed as material stored on site.
4. For monthly claims, the Contractor shall use a Claim for Material Stored on Site form provided to the Contractor with each months billing forms to itemize all major items stored during the month of the claim, including subcontractor furnished major items. **Each item claimed must be accompanied by an invoice which includes the project number and title and identifies the appropriate task code for each item on the invoice.** The form and invoices must be submitted with the Periodic Estimate to the Owner's Representative for review and approval.
5. Once items are accepted as material stored on site, no materials shall leave the project site or storage location unless prior written approval is given by the Owner's Representative. Violations which relate to removal of items from the site without the Owner's Representative's approval or any misrepresentation of items claimed as material stored on site may void the Contractor's right for reimbursement for claims for materials stored on site.
6. Step by Step Instructions for Completing the Claim for Material Stored on Site:

**Column 1:** Enter the task code which identifies the work which will incorporate the material to be claimed.

**Column 2:** Enter the applicable task description.

**Column 3:** Enter a two-digit item number to further delineate material claimed under a specific task code. For example, if a Contractor wished to claim three major items of material, all to be installed under the Electrical task code of 17, the item numbers would be 17-01, 17-02, and 17-03. Thus, the item number assigned to a particular piece of material is specific to the piece, and should not be duplicated throughout the project duration.

**Column 4:** Enter a brief name, description, and size of each major item.

**Column 5:** Enter the invoice number for each Item Number.

**Column 6:** Enter the quantity of units added to date.

**Column 7:** Enter the standard of measure for this task (ea, lf, cy, etc.).

**Column 8:** Enter the unit cost actually paid by the Contractor or Subcontractor for this material.

**Column 9:** Enter the total amount actually paid for this material as supported by the original paid or billing invoice attached (not purchase orders, delivery tickets, etc.). The Owner will retain these original invoices.

Total each task code in the spaces provided. Add the value of this material to the appropriate tasks as discussed on Page 5.

## Contract Closeout Procedures

1. At Substantial Completion the Contractor is required to furnish record drawings in accordance with Paragraph 3.14 of the General Conditions.
2. Four copies of Operating Instructions and Service Manuals shall be submitted to the Architect prior to 50% of construction in accordance with article 3.15 of the General Conditions.
3. When all requirements of the drawings, specifications and change orders are completed, the Contractor notifies the Owner's Representative by letter that they are ready for a final inspection of the project. A copy of this letter is forwarded to the Consultant.
4. The Owner's Representative then arranges a punch list date with the Contractor and the Consultant.
5. Representatives of the Consultant, Owner and Contractor inspect the building, system by system and room by room, and make a record of any deficiencies or corrections required to fully comply with drawings, specifications and change orders.
6. The Consultant shall prepare a punch list by room or system and send the requested number of copies to the Owner's Representative.
7. Steps 3 through 6 may be followed prior to the project completion date for partial occupancy of an individual piece of equipment, system, or area per article 9.10 of the General Conditions. The University will issue a Certificate of Partial Occupancy to the Contractor detailing the area accepted for use by the University. Upon completion of all punch list items for the equipment, system, or area accepted for partial occupancy, the Consultant must submit a Certification on their letterhead that the equipment, system, or area is complete in accordance with the plans and specifications and record the date of final completion.
8. The Contractor notifies the Owner's Representative when all items on the final punch list have been completed. After verifying completion:
  - A. The Office of Construction Management requests the Contractor to submit his final Periodic Estimate for Partial Payment along with an attached *manually signed, notarized* letter on the Contractor's letterhead certifying that:
    - a. All labor, material costs, wage rates, and fringe benefits have been paid;
    - b. All subcontractors and manufacturers furnishing material and labor for the project have fully completed their work and have been paid in full;
    - c. The project has been fully completed in accordance with the plans and specification as modified by change orders.

The Contractor's final pay request will be returned unprocessed if the certification is not attached.

- B. Construction Management concurrently requests the Consultant to make a final certification in writing that the job has been completed according to the plans and specifications as modified by change orders. The date of final acceptance by the Consultant is recorded in the letter of certification as the date of the completion of all contractual requirements. The Consultant's Certification is required prior to processing the Contractor's final payment request.
9. After all items are received and approved by the Owner's Representative and Construction Management, the final payment will be processed and mailed to the Contractor under cover of the final acceptance letter.

