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Unit Price Books for Job Order Contracting—WHITE PAPER

#### INTRODUCTION

Here's a quick tutorial about Unit Price Books, UPB (s), for Job Order Contracting, and what you need to know.

A Job Order Contract Unit Price Book, provides thousands of tasks for commonly encountered renovation, repair construction activities, with associated definitions of each, as well A COMMON DATA ENVIRONMENT IN THE FORM OF A LOCALLY RESEARCHED DETAILED UNIT PRICE BOOK, UPB, SIGNIFICANTLY IMPROVES RENOVATION, REPAIR, MAINTENANCE, AND NEW CONSTRUCTION OUTCOMES.

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as detailed labor, material equipment costs. Activities, also known as unit price line items, should be described in industry standard terms that are easily understood. The also should be organized using CSI Masterformat.



Look for a UPB that covers at least 90% of the tasks to be encountered using the Job Order Contract. It also should be objective, independent, and easy-to-use.

Transparently sharing detailed information, about renovation, repair, and construction requirements and associated costs, among collaborative team members is key to the success of any Job Order Contract.

A Common Data Environment in the form of a locally researched detailed Unit Price Book, UPB, significantly improves renovation, repair, maintenance, and new construction outcomes.

JOC Lean business practices, combined with timely, actionable information, enable better decision-making and a significantly higher percentage of construction projects to be delivered on-time and on-budget.

The use of CSI Masterformat data aggregation assures efficient distribution, modification/updating, and proper use of the UPB in concert with JOC procedures and goals. The cost database and associated projects and estimates can only be cost effectively created, stored, maintained, and used within a common data environment and JOC-specific technology.

Making the necessary changes within an organization to adopt collaborative JOC processes and the shared common information is easier within some organizations than others. Initial implementation costs and a learning curve will be encountered. These create an acceptance barrier for some owners, facility managers, and contractors that are mired in traditional construction delivery methods.

While not all organizations will shift to collaborative LEAN construction methods and independent and objective Common Data Environments, those that have made the journey consistently produce over 90% of projects on-time and on-budget, and to everyone's satisfaction. When compared

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to the industry norm of 2% of construction projects delivered on-time and on-budget, it's clear that the AEC sector will eventually need to change. Organizations that don't make the step forward, will be left behind.



## **JOC Players**

JOC impacts all participants within the construction value chain:

"The Owner"

Owners are becoming increasingly aware of the waste and productivity associated with traditional methods, and are demanding change.

In order to increase productivity, early and ongoing sharing of standardized information within common data environments is now recognized as a requirement.

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The Common Data Environment provided by a JOC Unit Price Book, drives higher renovation, repair, maintenance or new construction project productivity and satisfaction through improved availability of detailed current requirements, costs, and timelines.

Associated JOC software technology embedding LEAN collaborative best management practices, is important in managing information and processes. JOC contract, project, estimate, coefficient, and document management are provided within JOC-specific software.



JOC software is available for desktop or cloud deployment. Cloud-based systems are faster to implement, less costly to maintain, and relatively simple to use. When combined with other software tools (Building Information Modeling software-solutions, including CAFM (computer-aided facility management for space planning), CMMS (computerized maintenance management software for routine maintenance under \$10,000), CPMS (capital planning and management software for physical and functional condition assessment and reinvestment planning/decision-support, and 3D visualization environments) JOC LEAN Project Delivery Software can deliver benefits to stakeholders throughout every part of the life-cycle of a built structure.

#### "The Contractor"

In JOC, as with any LEAN construction delivery method, Contractors are an active part of the proceedings from the earliest planning stages in order to take advantage of their field experience and knowledge.

Each project participant must offer their contributions and experience as early as possible in order to more efficiently meet objectives for quality, time, and cost.

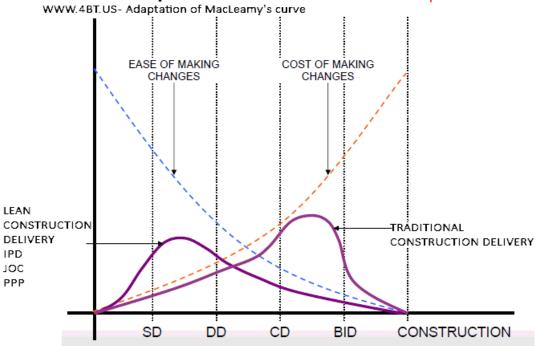
The importance of using LEAN collaborative construction delivery methods can't be overstated. LEAN methods such as IPD (Integrated Project Delivery) and JOC (Job Order Contracting) require early and ongoing collaboration among project participants and help to assure continuous improvement.

The traditional and problematic "transition between the design phase and the construction phase" is eliminated. The builder obtains all the information needed to complete the work per standards and specifications required by the Owner concurrently with other project participants.

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"The Facility Manager"

The Facility Manager and related colleagues, depend upon a CDE to assure available access to historical, current, and planned operations and maintenance management activities, costs, and impacts.

Within the CDE, a wide range of standardized information is stored and immediately accessed. This information is always available, at any time, in the office or in the field.

A Common Data Environment is central to improving productivity and quality across the AECOO industry (Architects, Engineers, Contractors, Owners, and Operators) and associated supply chain participants. Common terms, definitions, and data architectures allow access of current, standardized, easily understood, detailed, timely, and actionable information across all stages of the life-cycle of a built structure.

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# Line Item Unit Cost Construction Estimating



Total Cost Per Unit of Output / Task





