ANSI/IES LP-7-20

Illuminating
ENGINEERING SOCIETY

LIGHTING PRACTICE:
THE LIGHTING DESIGN AND CONSTRUCTION PROCESS

AN AMERICAN NATIONAL STANDARD

Approved American National Standard
ANSI

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1.0 Introduction and Scope

1.1 Introduction

Lighting design is a process that requires careful planning, thoughtful choices, multi-disciplinary collaboration, and persistent shepherding in order for a creative concept to become a completed building or venue that can be occupied and enjoyed. To bring a project to successful fruition, a host of parties with disparate interests and skill sets will need to contribute toward that success. Excellent communication among the ownership, design, construction, and procurement teams is critical to achieving desired results.

Excellent communication and quality documentation throughout the design and construction process are critical if the expectations of the Owner and other relevant parties are to be reflected in the finished lighting design. In this document, *Owner* is used to reference the party or parties who initiate a building project and may refer to any of several parties, including the property owner, owner's representative, developer, building manager, tenant, or business operator. As the initiator of the project, the Owner has decision-making authority regarding most aspects of the project, including legal structures and primary agreements, project delivery methods, selection of project team members, design direction, and even production. An Owner selects a qualified project team to work together to competently provide professional advice and services within the Owner-defined scope to address the goals for the project.

There are many paths that may be followed from the project idea to occupancy. The most common is the traditional delivery method, also known as design-bid-build (DBB), in which the Owner hires a team to design a project and create Contract Documents, which are then put out to bid by multiple contractors. (See **Figure 1-1**.) The Owner awards a separate contract to the successful bidding contractor, who sets about constructing the project. There are some perceived shortcomings to DBB that have led to other delivery methods, such as guaranteed maximum price (GMP), design-build, design assist, and integrated project delivery (IPD). Regardless of the delivery method, the general design process is the same, although decisions may be made very differently depending on the project priorities. Several example of the contractual process are shown in **Figure 1-2**.

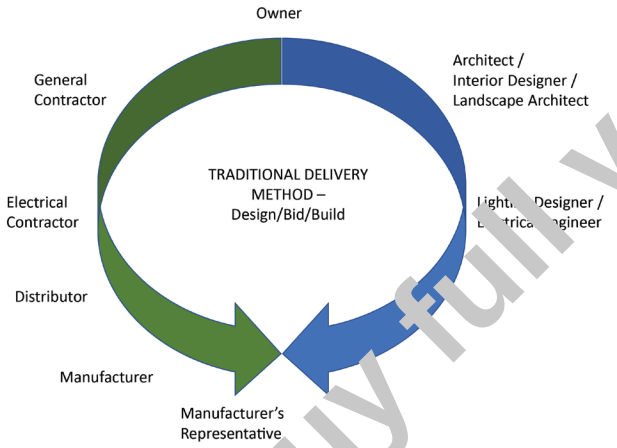

Figure 1-1. Design/bid/build documentation cycle.
(Graphic courtesy of Auerbach Lighting Design, Inc.)

Documenting the design for purposes of defining a contract and providing construction instructions requires careful preparation. Construction documents (CDs) that are clear, concise, and unambiguous are the objective. Taking the time to be meticulous about clear communication will ensure that the design is realized as intended and meets the requirements of the project.

1.2 Scope

ANSI/IES LP-7-20 covers the essential process that a lighting practitioner follows in concert with members of the building team to document a design for construction.

2.0 Project Team Responsibilities

2.1 Roles and Responsibilities

Whether the project focus is a building or an exterior venue, successful execution requires diligent focus of a team of people from multiple disciplines. The project team may be categorized according to roles: owner or operator, and the design, construction, and commissioning teams. Project teams may be small, consisting only of an Architect and a General Contractor, or they may be a cast of hundreds. The Owner may have a single representative or an entire team that could