

Communication During Construction

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Everything we do throughout the day could not be accomplished without some form of communication, whether it is one way (e.g. radio and television) or two-way (e.g. email and conversations). Communication is a key element of daily living, and the construction process is no exception.

Basic Construction Communication

George Bernard Shaw once said, “The single biggest problem in communication is the illusion that it has taken place.” The essence of communication is that a message is transmitted, received, and understood. However, in some cases, a message is not understood by the recipient, but the transmitter assumes it was; thus the “break-down in communication” begins.

An example of hearing what was said, but not understanding what was said, can be found in the classic baseball skit of Abbott and Costello, *Who’s On First*. In the skit, dialogue occurs between the two comedians, but neither one truly understands what the other is trying to say. In business, and specifically construction, miscommunication can lead to problems that can be costly for some or all parties.

Before getting too deep into the subject of communication, it should be clearly stated that there is a difference between communication and documentation. Communication may involve documentation, but documentation is not required to have good communication. However, the construction business relies heavily on documentation, because the construction business is a contractual arrangement. As in any agreement, the more you have in writing, the better you can defend your position should it fall into question.

Whether during design or during construction, communication is most effective when the four Cs are covered: clear, concise, complete, and correct. Each one should be considered if you are writing a letter, preparing an email, talking on the phone, or preparing a set of construction documents. Failure to do so can result in the message being misunderstood, either partially or

completely. How well you communicate has an impact on how you are perceived by others. Thus, a poor communicator will either have their messages questioned or ignored completely.

The process of constructing a structure involves teamwork. Like teamwork on the sports playing field, communication is essential to integrate all players to achieve a win. The motivation of team players to have a successful outcome improves communication and further enhances teamwork. Thus, a good *attitude* is important to successful communication.

According to the Construction Specifications Institute (CSI), teamwork communication relies on timeliness of communication. Delay in transmitting essential information can lead to misunderstandings and eventual escalation of problems. To avoid these problems, identifying the lines of communication before a project begins is a good practice. This can be best accomplished at the preconstruction meeting and re-emphasized, if necessary, at the periodic progress meetings.¹

Construction communication channels are dependent somewhat on the delivery method used for the project. Those delivery methods that have similar communication channels are:

- Design-Bid-Build
- Construction Management as Constructor
- Design-Negotiate-Build

Although the above delivery methods incorporate different means of selecting the contractor, each utilizes the traditional tripartite relationship² of owner, architect, and contractor, which will be the basis of this article and discussed in detail later.

On the other hand, delivery methods that do not utilize the tripartite relationship have very different channels of communication. These delivery methods include the following:

- Design-Build
- Construction Management as Advisor
- Owner-Build

¹ Introduction to Chapter 6, *Construction Contract Administration Practice Guide*, The Construction Specifications Institute.

² The tripartite relationship is discussed in detail in Chapter 5 of CSI’s *Project Delivery Practice Guide*.

Regardless of which delivery method is employed on a project, the content that is communicated and the method by which it is communicated between all parties involved remains the same—only the channels through which content is transmitted differ.

At the center of construction communication are the contract documents—the drawings, specifications, contracting requirements, and other documents defined in the agreement. The contract documents set the foundation for all construction communication. The contractual network within the traditional tripartite relationship is not the same as the communication network.

The contractual network is between the owner and contractor under an owner-contractor agreement and between the owner and architect under an owner-architect agreement. In the contractual network, the owner is the focal point. However, within the tripartite relationship, there are “third party obligations” between the architect and contractor. Although there is no agreement between the contractor and architect, the contract documents do establish some responsibilities that both must follow.³

In the American Institute of Architects’ (AIA) Document A201-2007, *General Conditions of the Contract for Construction*, Section 4.2.4 sets the basic communication network for the construction of the project:

...the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract.

The above requirement thus places the architect as the focal point as it relates to the communication network of a construction contract.

AIA Document A201 further defines the communication channels with the architect’s consultants, with the contractor’s subcontractors and material suppliers, and with the owner’s other contractors:

Communications by and with the Architect’s consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

³ Although not pertinent to this article, it is important that the architect’s responsibilities in the contract documents be coordinated with the owner-architect agreement.

Regardless of the above, AIA Document A201 does allow other channels of communication when the contract documents allow it or when it has been given approval:

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized...

In regard to the latter condition, permitted direct communication should be relegated to situations where direct communication will expedite the process and minimize the potential for misunderstanding. For example, allowing the mechanical engineer to speak directly with the mechanical subcontractor will likely benefit the project by putting together the two people who can carry on a dialogue on a technical subject matter without transmission through an intermediary. If decisions are made as a result of the direct communication, those decisions should be documented and copied to the necessary individuals.

When communicating with the contractor, any information passed on to the contractor’s superintendent is deemed to have been transmitted to the contractor per AIA Document A201, Section 3.9.1:

The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

In several locations throughout AIA Document A201, there are provisions that require one party to give written notice to another party. To clarify this requirement, Section 13.3 defines what constitutes “written notice”:

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice.

So far, the discussion has addressed how important good communication is for teamwork and who can talk to whom according to the contract requirements. The next step is to identify the varieties of communication that can be used during the course of construction.

Types of Communication

In very basic terms, there are two types of communication: verbal and nonverbal. Verbal communication involves the use of words, both written and spoken, to relay a message. On the other hand, nonverbal communication utilizes methods that do not involve words, such as signals, drawings, and symbols. Contract drawings utilize both methods: specifications and notes (verbal) and drawings (nonverbal). Even when we talk with others we use both types of communication: speech (verbal) and body language (nonverbal). Since this is not an article on drawings, it will focus only on the types of verbal communication. As previously mentioned, verbal communication includes written and spoken (*i.e.* oral) methods.

Oral communications include telephone conversations or other transmitted conversations that do not require participants to be in the same location. The face-to-face conversation, such as at a meeting or site visit, is another form of oral communication where the participants are in the same location. Advantages of oral communication include the following:

- *Can use inflection and nonverbal cues.* Feeling can be easily expressed through speech by how it is spoken. Body language can further enhance the oral message.
- *Saves time and provides immediate feedback.* Unlike written communication, which requires a somewhat rigid back-and-forth process, oral communication allows a more fluid dialogue.
- *Is typically less formal.* With the exception of prepared speeches and scripted dialogue, oral communication is relatively informal and is not restricted by rigid formats other than common civil courtesy.
- *Can be confidential.* Unless the conversation is being recorded, oral communication is limited to those present.

Conversely, oral communication has its disadvantages:

- *Can be misunderstood or misinterpreted.* Oral communication is contingent upon the speaking skill of the speaker and the listening skill of the recipient.
- *Generally, there is no permanent record and messages are not easily retained.* Unless the conversation is recorded, there is no exact ac-

count of what was said, and people tend to forget conversation details over time.

- *Not the best method for lengthy communications.* Except for speeches or other presentations, most oral communications are dialogues consisting of short messages.

Written communication utilizes a multitude of media to present messages. In general applications, not specific to construction, written communication includes, but is not limited to, the following:

- Correspondence
- Emails
- Transmittals
- Faxes
- Meeting minutes
- Text messages
- Social media

More specific to the construction process, written communication includes specific documents or media, such as:

- Requests for information/interpretation (RFIs)
- Proposal requests
- Change order requests
- Change orders
- Field observation and daily reports
- Submittals
- Web-based project management systems

Like oral communication, written communication has its advantages and disadvantages. The advantages consist of the following:

- *Provides a permanent record and can be used as evidence.* The message written one day is the same message available weeks, months, and even years later.
- *Is less likely to be misunderstood or misinterpreted.* Unlike oral communication, written communication can be reread until the message is understood.
- *Can be disseminated quickly and widely.* In this technology-based society, the written communication can be sent to all parties in a timely manner.

In a contractual environment, the disadvantages are few, but important. They are:

- *Provides a permanent record and can be used as evidence.* The advantage can be a disadvantage,

too. In preparing documents, be judicious about what you place in the permanent record.

- *Requires some level of skill.* Not everyone is a good writer.

Required Construction Communication

AIA Document A201 establishes the roles and responsibilities of the tripartite relationship: owner, architect, and contractor. These roles and responsibilities involve a certain minimum level of communication—some are conditional, others are not. Conditional communication means that a certain condition must exist in order to require the communication, such as the contractor's notice to the owner that the contractor will stop work for nonpayment. In that example, the notice is only required when the condition of nonpayment by the owner exists. The following is a general list of communications established in AIA Document A201, broken down by the entity responsible for the communication's preparation:

Owner

§2.1.2 – 15 days after written request, furnish information for lien rights.

§2.2.1 – After written request and prior to commencement of construction, provide evidence of financial arrangements.

§2.2.4 – Furnish information with reasonable promptness.

§2.3 – Written order to Contractor to stop the Work.

§2.4 – Written notice to Contractor for failure to carry out the work.

§9.8.5 – Written acceptance of responsibilities in Certificate of Substantial Completion.

§10.2.8 – Written notification to Contractor of injury or damage.

§13.5.2 – Written notice to Architect to authorize additional testing and inspections.

§14.2.2 – Written notice to Contractor that the contract will be terminated for cause.

§14.3.1 – Written notice to Contractor that the contract will be suspended.

§14.4.2 – Written notice to Contractor that the contract will be terminated for convenience.

§15.1.2 – Written notice to Contractor of claim.

Contractor

§3.2.2 – Report errors, inconsistencies, or omissions to Architect as an RFI.

§3.2.3 – Report nonconformities to laws, statutes, ordinances, codes, rules, and regulations in the Contract Documents.

§3.3.1 – Written notification to Owner and Architect that means, methods, methods, techniques, sequences, or procedures in the Contract Documents are not safe.

§3.7.4 – Provide notice to Owner and Architect for differing site conditions.

§3.7.5 – Notification to Owner and Architect of burial, archaeological, or wetlands encountered.

§3.9.2 – Written notification to Owner of proposed superintendent.

§3.10 – Submittal of schedule.

§3.12 – Submittal of Shop Drawings, Product Data, Samples, and other submittals.

§5.2.1 – Furnish to Owner names of subcontractors and major material suppliers.

§6.1.3 – Cooperation with Owner's other contractors.

§6.2.2 – Report to Architect of defects in work of Owner's other contractors if impacting Contractor.

§9.2 – Submittal of schedule of values.

§9.3.1 – Submittal of Applications for Payment.

§9.7 – Stop Work notification to Owner for nonpayment.

§9.8.2 – List of items to be completed or corrected.

§9.8.5 – Written acceptance of responsibilities in Certificate of Substantial Completion.

§9.10.1 – Written notification for final inspection.

§10.2.8 – Written notification to Owner of injury or damage.

§10.3.1 – Written notification to Owner and Architect of hazardous materials encountered.

§13.5.1 – Timely notice to Architect of tests and inspections.

§14.1.3 – Written notification to Owner and Architect that Contractor will terminate the contract for cause.

§15.1.2 – Written notice to Owner of claim.

Architect

§3.7.4 – Written notification of negative finding to Owner and Contractor on differing site conditions.

§4.2.3 – Keep Owner reasonably informed about the progress and quality of the Work.

§4.2.7 – Take action on submittals.

§4.2.8 – Prepare Change Orders, Construction Change Directives, and minor changes.

§4.2.11 – Written interpretations on matters concerning performance and requirements from Owner and Contractor.

§4.2.14 – Respond to RFIs.

§9.4.1 – Written notification to Owner and Contractor with reasons for withholding payment.

§9.8.4 – Prepare Certificate of Substantial Completion.

§12.1.1 – Written request to Contractor to uncover work required to be inspected by the Contract Documents.

§12.1.2 – Request to Contractor to uncover work not required to be inspected by the Contract Documents.

Communication may be further defined in the specifications by the architect. Within each section, submittals and other forms of documentation are usually required of the contractor. However, the majority of the communication requirements can be found in Division 01, General Requirements. The Division 01 sections that could specify significant communication requirements include the following:

01 10 00 – Summary: If the work is in an existing building, coordinating with occupants and notifying occupants about utility interruptions; and if multiple prime contractors are involved, coordinating with other contractors.

01 25 00 – Substitution Procedures: Preparing and reviewing substitution request packages.

01 26 00 – Contract Modification Procedures: Preparing contractor proposal requests.

01 29 00 – Payment Procedures: Preparing the schedule of values and applications for payment.

01 31 00 – Project Management and Coordination: Coordinating procedures, preparing RFIs, setting up and operating a project website, and conducting project meetings.

01 32 00 – Construction Progress Documentation: Preparing construction schedules, reports, and construction photographs and videos.

01 33 00 – Submittal Procedures: Preparing submittals.

01 77 00 – Closeout Procedures: Preparing list of incomplete items (punch list).

01 79 00 – Demonstration and Training: Training owner's personnel on how to operate the building's systems and equipment.

Communication Tools and Methods

Although the contract documents establish minimal communication requirements, communication takes place at all times and under a variety of conditions. Communication tools and methods utilized during construction should be appropriate to those times and conditions. For example, you do not want to use a telephone conversation to issue a change order—the provisions of the contract must be enforced. Although there are many ways to communicate, construction communication is generally limited to basic tools and methods; however, as technology changes, the tools and methods will likely change, as well.

The first method is the *formal meeting*. This is a prescribed meeting, usually with an agenda and a list of required attendees. The meeting may be routine or a singular event scheduled at a specific time during the construction process. Minutes of formal meetings should be taken and distributed to attendees and other identified individuals shortly after the conclusion of the meeting, generally within a few days. This allows attendees to comment on the accuracy of the minutes while the meeting is fresh in everyone's mind. The person identified to conduct the meeting should not be the

person taking the minutes. Typical formal meetings during construction include:

- Preconstruction meetings
- Progress meetings
- Contractor/subcontractor meetings
- Preinstallation meetings
- Closeout meetings

The next method is the *informal meeting*. These meetings are typically unscheduled and may be called to address a specific issue and probably occur more frequently than formal meetings. Attendees may consist of a group of individuals down to as small as two individuals. Informal meetings may not be scheduled at all, but occur out of happenstance, such as a conversation during a site visit. Informal meetings can be very beneficial for a project—they allow for immediate discussion that can result in a quick solution to an issue. However, decisions that are made or directions that are given during these informal meetings should always be followed up with some form of written communication. This is to make sure that there are no misunderstandings or misinterpretations of what was discussed.

Another common and traditional construction communication tool is the *telephone*. Telephone communications can fill the gap between written media and face-to-face dialogue—it is quick and can be used to accomplish a variety of tasks without having to travel to another location. The telephone conversation, like the informal meeting, can be used to discuss issues with possible immediate results, but it should also be documented if important decisions were made or instructions were given.

Reports are another tool that provides beneficial information for all members of the project team. Reports are used to record and convey information about the status or condition of the project or a portion of it. Reports may be generated by all members of the project team, such as field observation reports by architects, daily reports by contractors, or installation quality control reports by manufacturer representatives. The most important thing to remember about a report is that it be factual—conjecture, hearsay, and judgmental language have no purpose in a report. In cases where a picture explains the situation better than words, a photograph can be inserted into a report with a brief explanation and markups that highlight specific items (*e.g.* keynotes, clouds, etc.).

Reports, which document details that are typically lost over time, could be used as evidence. However, poorly prepared reports may be considered inadmissible as evidence. Once the quality of some reports are determined to be questionable, then the entire set of reports by the same individual are also called into question and may be considered unreliable, even if the remaining reports are actually good and accurate.

Growing at a rapid rate is the use of *electronic communications* during construction. Starting with faxes, the use of electronic communications has expanded to include email, text messaging, and, now, social media, such as Facebook, LinkedIn, and Twitter. Electronic communications can also include web-based software programs that provide full project management capabilities. Electronic communications are typically used in addition to other communication tools and methods. The main benefit of electronic communications is the ability to store and quickly retrieve documents. As with database systems, information can be searched in a fraction of the time it would take to search file folders and storage boxes. Like printed documents, electronic communications are subject to discovery⁴ and can be used as evidence.

Another method of construction communication does not happen within the team, but with the public. Used frequently on large public projects and sometimes on private projects, *public communication* allows people not associated with a project to be informed of the progress of the work. Since public projects involve public funding, citizens like to know how their tax dollars are being spent. Some projects, public or private, have a significant impact on the communities in which they are built. Keeping neighboring residents informed helps to soften the impact the dramatic changes may bring.

Communication tools that are used to keep the public informed can span the entire list presented in this article. Written communications, such as news articles and mailed flyers provide updates. Oral communications may include periodic meetings with residents and recorded updates that people can obtain through a phone call. A common tool used is the project website, where

⁴ Discovery is a legal process where the parties on each side of a lawsuit seek information from the other side to uncover the facts about the case. Discovery is governed by state and court rules of evidence.

information and updates are posted on a regular basis. Some websites employ webcams that operate during the entire construction period to allow people to visually see the progress of the work.

The bottom line is that the construction process could not happen without communication. From the contract documents through all the phone calls, emails, and meetings, to the final application for payment, every member of the project team communicates at some time with another project team member. As a project team member, it is important to remember that other team members are relying on the information you provide. If you have information to provide, make sure it is timely and that it is communicated through the proper channels using the proper method or tool.

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