

LESSON THREE- CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

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INTRODUCTION

The subject matter of this lesson is also covered in detail in the companion course, *Construction Documents & Services 2*.

The general conditions of a construction contract between an owner and contractor establish the legal basis for constructing a project. AIA Document A201, General Conditions of the Contract for Construction (see Documents Package), is the most widely used form of this kind for private construction projects. It is a complex and extensive document, and often provides the basis for a number of questions on the exam.

Remember two basic things about AIA A201:

1. It is general and covers items that are common to every project. It must, therefore, be tailored to meet the needs of a specific project by supplementary or special conditions.
2. It forms a part of the owner-contractor agreement, which is a contract between those parties only. The architect is not a party to that contract and is not permitted to prepare it. Only an attorney is authorized to prepare such a contract.

The architect should forward all legal contract forms to the owner. These documents must be reviewed by the owner's attorney and incorporated into the *Project Manual* after written instructions have been received from the owner. Architects should never act unilaterally concerning general, supplementary, or special conditions of the construction contract.

PRACTICE OF ARCHITECTURE VS. PRACTICE OF LAW

Many owners and their attorneys seek advice from architects on construction contracts. Architects must restrict such advice to technical matters within their training and experience. An architect should not prepare construction contracts or apply the law to specific contractual matters. These are duties of the owner's attorney.

The AIA has produced a series of standard documents intended for use on construction projects. Although architects frequently advise clients that AIA documents should be used, only an owner and his or her legal counsel can decide if the AIA documents are appropriate for a specific project.

CONDITIONS OF THE CONTRACT

Standard Form of General Conditions

Building construction is a complex undertaking involving many parties who often have not previously worked together. These parties join to build a structure on a unique site under environmental conditions which are sometimes difficult. They need a fair and comprehensive set of rules to establish and govern their relationship.

The conditions of the contract establish rules which are consistent from project to project. They deal with contractual matters, not with procedural requirements necessary to administer a contract. Although the general conditions are extensive, there may be supplementary and special conditions required to cover unique

situations. Together, all of the conditions expand upon the basic agreement between owner and contractor.

A number of organizations individually publish standard forms of general conditions. AIA Document A201, the General Conditions, has the longest history. It was first published in 1911, and has since undergone many revisions. It represents the careful work of many knowledgeable and experienced people. No one individual can be expected to create a set of general conditions that matches the collective wisdom contained in this standard document. It also has a history of interpretation. Its language has been tested and its meaning determined by the courts. Experience has shown the AIA General Conditions to be generally fair and equitable.

People in the construction industry are familiar with the format of A201. Contractors understand the meaning of the terms in this document and the consequences of working under it. Standard documents inspire confidence, which is often reflected in bid prices which are not inflated to cover unknown contingencies. These advantages can be significantly diluted if the documents are printed in a new format for each project, even if copied verbatim from standard forms.

Supplementary General Conditions

Standard documents are general and therefore cannot possibly address the exact requirements of each project. Supplementary general conditions are used to modify the standard forms. They accommodate the legal, physical, or climatic conditions of the specific project,

usually following the format of the general conditions and paralleling its provisions. New items can be inserted, and other items revised or deleted according to the requirements of the project.

Why not reformat the general conditions with all modifications integrated into the text? This might be practical if standard forms were not so widely known and accepted. But since they are, it is much easier and more efficient for a contractor to read the supplementary conditions to determine what is unique about the project.

Supplementary conditions are particularly important on projects with multiple prime contracts, phased or fast-track construction, or a contract price based on cost plus fee or any method other than a stipulated sum. Standard general conditions alone are not intended to cover such situations.

Special Conditions

Special conditions are used when supplementary conditions must be further extended. For example, when governmental agencies require that their standard conditions be incorporated into a contract, special conditions may be used. Local laws or customs may also require special conditions. See pages SC-1 through SC-6.

RELATION TO DIVISION ONE— GENERAL REQUIREMENTS OF THE SPECIFICATIONS

The general, supplementary, and special conditions of the construction contract have a legal and contractual purpose. They establish rights and responsibilities of the parties, which are

consistent from project to project.

The conditions do not establish administrative procedures. Such procedures are found in the General Requirements division of the specifications. For example, the AIA General Conditions (Document A201) establishes the contractor's legal obligation to review shop drawings prepared by subcontractors. He or she must approve such shop drawings and point out any deviations from the contract documents prior to submitting them to the architect. The General Requirements division of the specifications defines the specific procedures that a contractor must follow with regard to that obligation. For example, the General Requirements might state that six sets of prints and one reproducible copy of each shop drawing must be submitted. Likewise, if shop drawings must be sent to the attention of a particular person or department in the architect's office, this requirement is also stated. A duty is established in the General Conditions, and a means for discharging that duty is defined in the General Requirements division of the specifications.

RELATION TO LAWS, CODES, AND STANDARDS

Construction contracts are subject to the laws in effect at a project's location, which may supersede specific contractual provisions. While contracting parties establish legal provisions that deal strictly with their own relationship, they cannot establish or modify provisions that involve the government or other third parties.

For example, an owner and contractor may agree to limit the amount of damages that the contractor will pay the owner if construction is

not completed on time, but they cannot agree to limit their legal liability to a pedestrian who is injured while walking past the construction site. Building codes and zoning ordinances also regulate aspects of construction processes. Contracting parties do not have the right to agree between themselves to do less than the minimum required by such codes and ordinances.

RIGHTS AND OBLIGATIONS OF THE OWNER

An owner has both implicit and explicit rights and obligations relative to construction projects. Under the law, owners implicitly promise that contractors will have access to the construction site. Contractors are also entitled to assume that owners will cooperate and not interfere with construction work.

Other rights and obligations of owners are explicitly stated in the general conditions. An owner's principal obligation is to pay the contractor. The AIA General Conditions requires an owner, upon request, to provide evidence that money is available to make payments.

Owners also have obligations related to the property on which a project will be constructed. For example, an owner must provide required surveys, legal descriptions of the site, and easements if necessary.

An owner is required to provide the contractor with as many copies of the drawings and specifications as are reasonably necessary during the construction period. According to AIA standard contracts, the architect owns such documents, and the contractor must return them or suitably account for all sets given to him or her.

Article 6 of the AIA General Conditions discusses an owner's right to perform construction work on a project with his or her own forces or to hire more than one contractor at the same time. The article also contains provisions by which multiple prime contractors can perform work simultaneously.

Under certain circumstances, an owner has the right to order a contractor to stop the work. This may occur if construction is determined to be defective or not being performed according to the contract documents. If a contractor does not correct mistakes or does not make proper progress on a project, an owner has the right to have the work corrected or completed by others.

OWNER'S RELATIONSHIP TO SUBCONTRACTORS

The AIA General Conditions assumes that there will be one prime, or general, contractor on a project. While much of the construction work is typically subcontracted, the construction contract is between the owner and the general contractor. In this regard, subparagraph 1.1.2 of the AIA General Conditions (Document A201) clearly states that nothing in the contract documents creates a contractual relationship between an owner and any subcontractor or subsubcontractor.

Although there is no contractual relationship, there is an implied relationship between an owner and subcontractors. The General Conditions requires a general contractor to bind all subcontractors to the same terms and conditions that bind the contractor to the owner. It also requires that subcontractors have the same rights relative to the contractor that the contractor has

relative to the owner. The General Conditions extends rights and responsibilities from owner to contractor to subcontractor and creates the context for all contractual relationships on a project.

SEPARATE PRIME CONTRACTS

Special attention must be paid to supplementary conditions on projects where there will be more than one *prime contractor*. A prime contract is one executed between owner and contractor. *Separate prime contracts* may be used if an owner wants to, or is required by law to, contract directly with several contractors. Separate prime contracts may be written for structural, HVAC, plumbing, electrical, or other major portions of the work.

In this event, each set of contract documents requires its own agreement, conditions, drawings, specifications, and so forth, and there is no single contractor responsible for the whole project. Each is responsible for his or her portion of the construction work, and to coordinate with the others.

Problems frequently arise when one contractor delays or damages another contractor's work. Subparagraph 6.2.5 of the AIA General Conditions makes claims involving separate contractors subject to the claims procedure in A201. Other problems of a minor nature may also occur. For example, general clean-up may be neglected while other construction details may be needlessly duplicated. Many contractors could, for example, use the same scaffolding if there were adequate coordination. Such problems may be solved in several different ways: a *construction manager* may be retained to provide coordination services, the owner may have a staff capable of

the task, or administrative and supervisory responsibilities may be assigned to one of the prime contractors.

MAJOR ELEMENTS OF THE CONDITIONS

Bonds

The AIA General Conditions (A201), Paragraph 11.4, gives owners the right to require the contractor to provide bonds assuring that contract work will be performed in accordance with the contract documents. These bonds also guarantee that obligations arising out of the contract will be paid or satisfied. Bonds reduce an owner's risk of financial loss if a contractor defaults in performance or does not pay the bills.

The bonds specifically referred to in the General Conditions are the Performance Bond and the Labor and Material Payment Bond, AIA Document A311. (See Documents Package.) They are usually written for the full amount of the construction contract.

Bonds are provided by *surety* companies which guarantee that the contractor (the *principal* or *obligor*) will fulfill his or her contractual duties to the owner (the *beneficiary* or *obligee*).

Contractors are usually required to furnish a bid bond, Document A310 (see Documents Package) on most competitively bid projects. Bid bonds are usually written for five or ten percent of the bid amount. If the low bidder refuses to sign a contract for the amount bid, the surety partially or fully compensates the owner for the difference between the low bid and the actual contract price of the substituted contractor.

Insurance

OWNER'S

Paragraph 11.3 of the AIA General Conditions states that an owner must purchase property insurance for the full insurable value of construction work. The insurable value of a project is usually less than the construction contract sum because certain elements of the contract, such as earthwork and grading, are not included. Owners must also purchase boiler and machinery coverage if required.

Property insurance is commonly referred to as *builder's risk* insurance. It includes fire and property damage insurance for a project during construction. It also covers temporary structures, materials, equipment, and supplies, and usually covers tools and equipment if they are located within 100 feet of the project site. Property in transit or stored off-site is not covered.

The General Conditions usually requires that builder's risk coverage be the *all risk* type, which provides broader coverage than standard *named peril* forms. All risk covers everything but specified exceptions, while named peril insurance only covers risks that are specifically identified.

Property insurance must include riders for extended coverage, including theft and vandalism and malicious mischief. None of these riders includes coverage for earthquake or flood damage. These coverages must be purchased separately.

Since title to construction work passes to the owner upon incorporation of that work into the

project or upon payment for it, the AIA General Conditions provides that owners, not contractors, purchase property insurance. If the owner wants the contractor to purchase property insurance, the General Conditions may be modified by appropriate provisions in the supplementary conditions.

Property insurance will be cancelled if an owner occupies all or part of a project prior to substantial completion without the insurance company's consent. Partial occupancy of a project is relatively common and insurance companies must therefore be notified if coverage is to remain in effect.

All coverages mentioned must include the financial interests of contractors and subcontractors, as well as those of owners. For example, a contractor may have paid for materials which are on-site, but which have not been incorporated into the project. If these materials are destroyed, the contractor will have an interest in money paid by the insurance company to cover the loss. The General Conditions provides that the owner will act as trustee for the proceeds paid by insurance companies.

Finally, an owner may purchase *loss of use* insurance which protects against losses arising out of delays or other events that prevent an owner from using a project when and as intended.

CONTRACTOR'S

The AIA General Conditions also requires contractors to purchase certain types of insurance. Paragraph 11.1 lists required coverages which include:

1. *Workers' compensation* insurance. Covers job-related injuries and is usually required by law, which also sets required limits.
2. *Liability* insurance. Covers claims for damages for bodily injury, sickness, disease, or death of the contractor's employees or any other person.
3. *Personal injury* insurance. Covers libel, slander, false arrest, and defamation of character.
4. *Property damage* insurance. Intended to cover property, other than construction work itself, which may be damaged by construction activities. Usually, explosion, collapse, and underground damages are excluded and must be added by endorsement if required.
5. *Automobile liability* insurance. Covers claims for damages arising out of the use of an owned, non-owned, or hired automobile.
6. *Contractual liability* insurance. Covers liability assumed by contract. Under Paragraph 3.18 of the AIA General Conditions, this is primarily *indemnification*, wherein contractors agree to hold owners and architects harmless from damages arising out of specified events.

AIA Document G715, Certificate of Insurance, summarizes the insurance coverage required under the general conditions of the contract.

Contractors are usually required to obtain *products and completed operations* coverage. This insurance covers claims for bodily injury

or property damage arising from accidents that may occur after the construction work has been completed and turned over to the owner. However, completed operations insurance does not apply to damage of the completed work itself.

All required coverages, in amounts specified in the supplementary conditions, must be purchased prior to starting construction work, and certificates of insurance must be provided to the owner and the contractor. The certificates must state that the insurance company will notify all parties in advance if insurance is going to be cancelled for any reason.

Liens

Mechanic's liens exist by statute in each state to provide security for payment for labor and materials supplied to construct buildings.

Such liens apply only to the real property in question, buildings and land, and not against other assets of the owner. Liens give the worker, contractor, or material supplier the right to force the sale of an owner's property in order to satisfy a claim for payment. Lien rights give contractors leverage over an owner to force payment of legal claims because valid liens encumber an owner's title to his or her property. Without clear title, an owner may be prevented from transferring the property through sale or other means.

Liens were devised to encourage people to supply labor and materials for construction projects. Lien laws may seem unfair from an owner's point of view because subcontractors and suppliers who have not been paid by a general contractor may file liens against an owner even if the owner has paid the general contractor for their work.

However, liens are basically fair and equitable since, in most cases, it is impossible to repossess labor and materials that have been incorporated into a construction project.

The AIA General Conditions addresses liens in two places. In subparagraph 9.3.3, the contractor warrants that all labor, materials, and equipment for which payment is requested are free of liens and claims of every kind. Subparagraph 9.10.2 states that final payment will not be made until the contractor submits an affidavit that all debts arising out of the project for which the owner or the owner's property may be liable have been satisfied. The owner may also ask for releases and waivers of liens from the contractor and subcontractors, though sometimes a bond is acceptable in lieu of such waivers. (See Documents Package for AIA Document G706A, Contractor's Affidavit of Release of Liens.)

Liens are not permitted on publicly owned projects. Instead, labor and material payment bonds provide the necessary protection. The Federal law requiring such bonds is known as the *Miller Act*, and many states have similar laws, referred to as *little Miller Acts*.

Details related to these matters vary considerably, depending on the jurisdiction in which the project is located, and the owner's attorneys should respond to questions about liens. Architects should not advise owners on the legal sufficiency of required affidavits, waivers, or releases of liens.

Shop Drawings and Submittals

Improper processing of submittals by the contractor and architect may result in controversy, delays, additional costs, and even litigation.

RESPONSIBILITY OF THE CONTRACTOR

Paragraph 3.12 of the AIA General Conditions defines a contractor's responsibilities concerning shop drawings. The contractor must review, approve, and promptly submit shop drawings required by the contract documents.

A contractor's stamp of approval on shop drawings means that the contractor will or has *determined and verified materials, field measurements, and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals....* Because contractors have this obligation, architects should *not* review shop drawings unless they contain such a stamp of approval.

The General Conditions prescribes that the contractor is responsible for errors or omissions in shop drawings. Deviations from the requirements of the contract documents are not considered approved by the architect simply because they appear in approved shop drawings. If there are proposed deviations, they must be called to the architect's attention in writing and approved in writing before they become effective. Similarly, if there are revisions to resubmitted shop drawings, other than those revisions requested by the architect on the prior submittal, they must specifically be called to the architect's attention or they will not be effective.

RESPONSIBILITY OF THE ARCHITECT

The architect's responsibilities are primarily described in the owner-architect agreement. Those described in the AIA Owner-Architect Agreement (Document B141) are restated in the

AIA General Conditions (Document A201) for the contractor's information. If Document B141 is not used, contractors may not know what services the architect is obligated to provide.

Architects must promptly *review and approve or take other appropriate action* on shop drawings that contractors submit. The General Conditions clearly states that review is strictly to determine if shop drawings conform to the design concept and information given in the contract documents. Matters outside the scope of the design concept and the contract documents are not reviewed.

An architect may be reluctant to use the word *approved* when acting on a submittal because he or she may perceive some professional liability exposure. However, the AIA General Conditions and the AIA Owner-Architect Agreement both limit the architect's duty with regard to submittals, which results in limited liability exposure. As with other duties, if the architect has performed his or her services in accordance with these AIA documents and within a *standard of care*, there should be no concern about professional liability.

In addition to *approved*, other appropriate action which an architect can take includes *approved as noted, revise and resubmit*, and *not approved*.

Time Limits, Schedule, and Delay

The General Conditions, particularly Article 8, contains many provisions related to timely completion of the work. For example, contractors must complete construction work in the allotted number of calendar days. Calendar days

(7 days per week), as opposed to working days, are used to preclude questions about how to count weekends and holidays.

Contract time may start on the date of signing the owner-contractor agreement, upon the issuance of a formal notice to proceed, or on another date stated in the owner-contractor agreement. Contract time ends when construction work is substantially complete. If an owner anticipates a financial loss if the project is not completed on time, and if his or her attorney recommends the inclusion of a provision for *liquidated damages*, such a provision is included in the owner-contractor agreement. Liquidated damages is an amount of money stipulated in the contract which is chargeable against the contractor as reimbursement for damages suffered by the owner because of the contractor's failure to fulfill his or her contractual obligations.

According to subparagraph 8.2.1 of the AIA General Conditions, time limits are *of the essence of the contract*. This term has a special legal meaning. When timing is not crucial, there is no breach of contract as long as work or services are completed reasonably close to anticipated deadlines. However, when *time is of the essence*, even a slight delay may constitute a breach of contract.

The contractor is required to prepare and submit a progress schedule, showing how he or she intends to complete the work within the contract time. On small projects, a bar chart, also known as a Gantt chart, is often used. On large or complex projects, a *critical path method (CPM)* schedule is usually required. The CPM schedule is computerized and differs from a bar chart because it shows relationships between activi-

ties, not just durations and sequences. CPM is discussed in greater detail in Lesson One.

The General Conditions also provides for extensions to the contract time if an owner's actions or inactions delay a contractor. Changes to required work may also justify time extensions. The General Conditions provides for events of *force majeure*, or acts of God, that are beyond the control of either party. If any delays of this kind occur, the contractor must notify the architect within 21 days or the claim for time extension is waived. The contract time may *only* be changed by change order or construction change directive.

All of the delays mentioned above may result in an extension of time to complete the contract work. Without this extension, a contractor might be assessed monetary damages for late completion. On the other hand, the contractor may claim monetary damages because of delays allegedly caused by the owner or architect. Time extensions, however, do not automatically entitle the contractor to monetary damages. Standard AIA documents provide means by which a contractor may make a claim for time extensions, monetary damages, or both. Supplementary conditions often contain detailed provisions related to scheduling and the consequences of delays.

Payment Procedures

Prior to submitting the first *application for payment*, the contractor is required to submit a *schedule of values* for all parts of the construction work. This schedule is the basis for the contractor's subsequent applications for payment.

When reviewing the contractor's proposed schedule of values, the architect must determine that

appropriate values are assigned to each portion of the work. Usually the contractor is entitled to initial payment for site mobilization, preparation of submittals, and other work that is not actual construction. However, the contractor may *front load* the schedule of values by overstating the value of materials and understating the value of labor. In that event, after the materials are delivered and paid for, the payment for the labor required to install the materials may be inadequate. Of course, the contractor must still pay the labor charges. In the worst case, if the contractor defaults and has unpaid bills from subcontractors or suppliers, the owner may be exposed to financial loss. The architect can protect the owner from such exposure, and save the owner from unnecessarily advancing funds to the contractor, by carefully reviewing the contractor's schedule of values.

Prior to each progress payment, the contractor must submit an application for payment for the architect's review. (See Documents Package for AIA Document G702, Application and Certificate for Payment.) On the basis of the application, the contractor will generally be paid for all materials and equipment incorporated into a project and for all materials and equipment stored on-site. Special provisions must be made if the contractor requests payment for materials and equipment stored off-site or in transit.

The contractor must also warrant that the owner will obtain title to materials and equipment free and clear of liens and claims. This guarantee becomes effective either upon their incorporation into the project, or payment by the owner in the case of stored materials and equipment.

The architect reviews the contractor's applications for payment and assesses the progress of the construction work. Each application must be based on the approved schedule of values. For example, a typical entry on an application for concrete work with a total value of \$60,000 might be for 50 percent completion less 10 percent retainage, for a partial payment of \$27,000 ($\$60,000 \times 50\% \times 90\%$), less amounts previously paid. In that case, the architect must determine if 50 percent of the concrete work is actually complete, and that the retainage figure is correct. Each line item must be similarly analyzed.

Architects have the right to certify that *no* payment, or an amount less than that requested by a contractor, is due. This action might be necessary if the work has not progressed as claimed by the contractor or if it is not completely acceptable.

Architects also have the right to nullify all or part of previous certificates for payment if it is necessary to protect an owner against:

1. Defective work that has not been corrected;
2. Claims, or the likelihood of claims, by third parties;
3. A contractor's failure to pay subcontractors;
4. Evidence that the contract work cannot be completed for the unpaid balance of the contract sum;
5. Damage to the owner or another contractor;
6. Evidence that the contract work cannot be

completed on time; or

7. A contractor's persistent failure to comply with contract documents.

When an architect issues a certificate for payment, an owner must pay the contractor as stipulated in the contract documents.

Once a contractor has received payment, all subcontractors must be paid proportionately. Similarly, the amounts of money retained by the contractor from payments to the subcontractors must be in proportion to the amounts retained by an owner. Subparagraph 9.6.3 of the AIA General Conditions states: *The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.*

It is solely the contractor's responsibility to pay subcontractors. Neither the owner nor the architect has an obligation to insure that subcontractors are paid. The architect is not responsible for the contractor's disposition of funds paid as a result of applications and certificates for payment.

Finally, the General Conditions states that nothing in the payment process shall be construed as acceptance of work not performed in accordance with the contract documents. Acceptance is determined by provisions for final payment, correction of work, and warranty.

Safety

Contractors are responsible for safety precautions

and programs relative to construction work. This includes the safety of the contractor's employees, the construction work itself, and adjacent property that is not part of the construction work.

If damage is caused by a contractor, subcontractor, or other entity for which a contractor is responsible, the contractor must repair or pay for it. Normally, a contractor's superintendent is the individual responsible for construction site safety. In case of emergency, the superintendent may act in any reasonable manner to prevent loss of life or damage to property. If such action or inaction delays work or increases costs, the contract time and contract sum may be changed appropriately by change order.

Since safety is the contractor's obligation, an architect should not review or enforce safety programs or procedures. If an architect notices an unsafe condition, however, he or she should report it promptly to the contractor's superintendent and prepare a written record of the circumstances. Contractors are the appropriate parties to decide what actions, if any, are required to remedy unsafe conditions. It is improper for an architect to approve or order changes to a contractor's safety programs. Such involvement may create liability for the architect should an accident occur on the site.

Substantial Completion

LEGAL EFFECT

In general, contracts must be *completely* performed. Anything less than completeness may be interpreted as a breach of contract. In fact, however, neither the owner nor the contractor would benefit from such a strict definition of completion.

Therefore, the law recognizes *substantial completion*, which is sometimes called *substantial performance*. Once a construction contract is substantially complete, a contractor is entitled to the contract sum, less the value of incomplete work and retainage. Upon *final completion*, the contractor is entitled to final payment.

Under the AIA General Conditions, the contract time is the period allotted for substantial completion, including authorized adjustments. Warranty periods begin upon substantial completion. In cases where there are separate prime contracts or phases of construction, there may be more than one date of substantial completion, and more than one warranty period.

Paragraph 9.8 of the AIA General Conditions explicitly defines the *date of substantial completion* and describes its significance. In practice, this date is the same as the date on the certificate of occupancy issued by the code official and the date when the owner can occupy the premises. The AIA Certificate of Substantial Completion (Document G704), when signed by the owner, architect, and contractor, establishes the date of substantial completion and the responsibilities of each party.

ROLE OF THE CONTRACTOR

Paragraph 9.8 of the AIA General Conditions discusses the requirements for the date of substantial completion. It is the contractor's responsibility to decide when a project is substantially complete. According to the contract documents, this occurs when the owner can occupy or use the project for its intended purpose. At that time, the contractor prepares a

list of items to be corrected and those which must still be completed. That list is submitted to the architect, and a date is set for the architect's inspection. The contractor's list of items may not be definitive, and it is of no legal consequence if items are omitted. The contractor is still required to comply with the contract documents. However, such a list is helpful to the architect performing an inspection.

ROLE OF THE ARCHITECT

According to the AIA Owner-Architect Agreement, an architect *inspects* a project at only two points in the construction process—substantial completion and final completion. All other site visits are considered to be *observations*, which are less detailed and comprehensive than *inspections*. Upon being notified by the contractor, an architect schedules an inspection to determine if a project is substantially complete.

The list of items to be completed or corrected is provided by the contractor and usually expanded by the architect as a result of a detailed inspection. This list is commonly referred to as a *punch list*. At times, additional work is required before an architect is able to certify that a project is substantially complete. Many architects include provisions in the supplementary conditions requiring the contractor to pay the architect's fee and expenses for subsequent inspection trips if the project is not substantially complete when first inspected.

The certificate of substantial completion establishes the date of substantial completion and states the time within which the contractor must perform the work described on the *punch list*. The certificate also states the responsibilities of

both owner and contractor for ...*security, maintenance, heat, utilities, damage to the Work, and insurance...*

These items are important because the contractor must continue to work on-site, which usually requires access to substantially completed and occupied portions of a project. Construction workers may damage completed portions of the project, use power and water, and possibly injure themselves or others between substantial and final completion. All such events must be anticipated and responsibility for the consequences pre-determined.

ROLE OF THE OWNER

The owner, the contractor, and the architect must sign the certificate of substantial completion. By doing so, they indicate their acceptance of the responsibilities assigned in it.

At substantial completion, the full contract sum, less the value of incomplete work and retained amounts, is normally due the contractor. The amount of retainage may be reduced at this time to reflect the actual value of the work to be completed and corrected.

INSURANCE

Owners usually occupy projects immediately after the issuance of a certificate of substantial completion. Occupancy invalidates property insurance coverages which were in effect during the construction period. It is important, therefore, for owners to inform the insurance company and make necessary insurance changeover arrangements prior to occupying any portion of a project.

A contractor's surety has a financial interest in money retained by an owner from amounts due the contractor, since that money can be used by the surety if the contractor defaults. If any portion of the retainage is refunded to a contractor, the surety's risk of loss is theoretically increased. Applicable bonds are voided if retainage is released without the surety's consent.

It is essential, therefore, for an owner to obtain the surety's written consent before any portion of the retainage is released to a contractor. The AIA Consent of Surety to Reduction in or Partial Release of Retainage (Document G707A) is intended for this purpose.

Warranties and Guarantees

Paragraph 3.5 of the AIA General Conditions contains a general warranty for performance from the contractor to the owner and the architect. It states that all materials and equipment are to be new, unless otherwise specifically required, and that completed construction, including workmanship, is to be of good quality and free from faults and defects.

In subparagraph 9.3.3, the contractor warrants that legal title to all materials and equipment will pass to the owner upon its incorporation into construction or upon the contractor's receipt of payment, whichever is earlier. Title must be free and clear of liens, claims, or other security interests. The owner's attorney, not the architect, must determine if that requirement is met.

Since these warranties are governed by state law, their terms may vary. They are generally in force for several years from their effective date. The owner may recover monetary damages from

the contractor during the full time the warranty is effective under a state's statute of limitations.

Subparagraph 12.2.2 of the AIA General Conditions states: *If, within one year after the date of substantial completion...any of the Work is found to be not in accordance with the requirements of the Contract Documents, the contractor shall correct it promptly....* Although not termed a *warranty* in this subparagraph, this provision is commonly referred to in the construction industry as the *one-year warranty period* and is important because most defective work cannot be detached and returned to the manufacturer for repairs.

Specific product warranties are often required in the technical sections of the specifications. Manufacturers, through subcontractors, usually provide warranty certificates prior to substantial completion. The procedure is usually described in Division One.

Record Drawings

Record drawings are sometimes inaccurately referred to as *as-built drawings*. According to Paragraph 3.11 of the AIA General Conditions, contractors are required to maintain copies of all drawings, specifications, addenda, change orders, and other modifications at the site in order to accurately record all changes made during construction. Similarly, they must keep copies of all shop drawings, product data, and samples. These are record drawings.

For example, record drawings might indicate that a door originally intended to be 2'-0" from a corner was installed at 4'-0" from the corner. Architects have occasionally been held liable for

what were purported to be as-built drawings when subsequent construction work resulted in damage to concealed utility lines, structural elements, and so on. No drawings can ever depict all as-built conditions.

An owner may want a reproducible set of record drawings when a project is completed. Supplementary conditions or Division One—General Requirements of the specifications may require contractors to prepare such a set. If the owner requests the architect to prepare such drawings, it is considered an additional service under subparagraph 3.4.16 of the AIA Owner-Architect Agreement (Document B141).

Final Completion and Final Payment

When the work noted on the *punch list* is completed, the contractor notifies the architect that the project is ready for final inspection and submits a final application for payment. The architect then inspects the project and if, in his or her opinion, it is complete in accordance with the contract documents, he or she issues a final certificate for payment to the owner. This payment represents the entire balance due the contractor including retainage.

Before final payment is made, the contractor must submit: (1) an affidavit that all debts for which the owner or the owner's property could be held responsible have been satisfied, to avoid the filing of liens or claims; (2) written consent of the surety to final payment, to avoid surety bonds being voided; and (3) other data such as receipts and waivers that an owner may require to demonstrate that there are no outstanding obligations related to the project. It is solely the responsibility of the owner and the owner's

legal counsel to determine the extent and form of required documents. Architects should not advise an owner on, nor judge the legal sufficiency of, legal documents being submitted for final payment.

The AIA General Conditions, subparagraph 4.3.5 states that, upon making final payment, an owner waives all claims against the contractor except those arising from:

- .1 *liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;*
- .2 *failure of the Work to comply with the requirements of the Contract Documents;*
or
- .3 *terms of special warranties required by the Contract Documents.*

Upon acceptance of final payment, the contractor waives all claims except those made previously in writing and identified as unsettled at the time final application for payment was made. (See Documents Package for AIA Document G706, Contractor's Affidavit of Payments of Debts and Claims.)

Project Close-out

Close-out procedures are more administrative than contractual. Therefore, these procedures are described in Division One—General Requirements of the specifications, rather than in the AIA General Conditions.

To close out a project, the contractor is usually responsible for:

1. Submission of record drawings and specifications as well as maintenance manuals, warranties, and other record information.
2. Delivery of tools, spare parts, and extra stock of materials.
3. Removal of temporary facilities.
4. Start-up testing of equipment, as well as training of owner's operating/maintenance personnel.
5. Final touch-up, repairs, and cleaning.