A SCHOOL FOODSERVICE DIRECTOR'S GUIDE TO NEW FACILITIES DESIGN AND CONSTRUCTION



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NOTES:

INTRODUCTION

This guide is intended to provide an outline for the foodservice director to understand the design and construction process, identify critical milestones, and communicate effectively to design and construction professionals during the course of the development of new foodservice facilities. Recognizing that a foodservice director's knowledge of this process can be extremely varied, I have tried to write this so that it well be helpful to directors with little or no knowledge as well as provide some useful guideposts for those who have traveled this path many times.

Imagine that you have some vacation time coming and have decided to go to Florida. You were thinking that Florida would be nice this time of year so you made plans, budgeted, bought airline tickets, made hotel reservations, and did all of the things that one does to prepare for such a trip. Then, the big day arrives and you get on the appropriate flight and take off headed for Miami.

Now, lets suppose that an hour or so after take off, but before you get to Florida, you think, "Gee, I really would rather go visit my sister in Milwaukee. It would be a lot less expensive, I haven't seen her in a while, and I never really cared much for the beach anyway." Perhaps in the rush of your day to day life over the previous months you didn't take the time to consider this option. Perhaps going to Milwaukee really would be a much better way to spend your vacation. However, now that you are in a commercial airplane, 27,000 feet in the air headed for Miami, how practical would it be for you to decide to change your mind about it now?

This scenario may seem far fetched but it is amazing how frequently foodservice directors find themselves in much the same predicament when new school cafeterias are about to open. Often it is totally unclear from the foodservice director's vantage point just how and when to insert themselves into the process early enough to keep from winding up in such a position. School district hierarchies are generally set up in such a way that the director is more or less autonomous in the foodservice operations but the construction of a new campus usually happens completely outside of the director's area of responsibility and on someone else's turf. Since running a multiple site foodservice operation is a full time job, if the foodservice director doesn't make the time to get involved and if the process is unclear or unfamiliar, it can be very difficult to effectively influence the final result.

This guide includes a brief description of the phases of a project, some pitfalls of non-involvement, a step by step, "A to Z" guide to the design and construction process written from the vantage point of the foodservice director, and a glossary of terms you are likely to encounter. If you already have a project underway, determine where the process is now on the A to Z list and get with the appropriate people to review the decisions that have already been made. Then use this list to be pro-active through the completion of the project. If you have positioned yourself to be involved in the decision making process from the beginning, then I hope that this list will be a useful guide to help you influence the development of your new facilities. If the process is followed from start to finish, the facility should be designed and equipped to efficiently and effectively fulfill your operational requirements and everyone involved should understand exactly how and why the facility wound up the way it is – you should have no surprises!

THE ARCHITECTURAL PROCESS

The development of a new campus (and most renovations) nearly always follows the standard format of architectural phases below. The idea is basically to start with the big picture and work your way down to the details. It is always helpful to know which phase the project is in so that you will know what decisions have likely already been made and what the focus of the project team is currently on. There is nearly always a project schedule available that details these phases and their timeframes. You will often hear the phases of the project abbreviated by their initials; "SD", "DD", "CD", etc. One of the biggest mistakes foodservice directors tend to make is to be unaware of these important milestones thereby missing the windows of opportunity they have to provide input.

STANDARD ARCHITECTURAL PHASES OF A PROJECT

Program Phase: Definition of the building requirements in terms of square footage, performance, and budget.

Schematic Design Phase (SD): Determination of "flow", adjacencies of functional areas, and rough layout.

Design Development Phase (DD): Finalization of the basic layout and sign off point for the project team to develop final, coordinated, "for bid and construction" documents.

Construction Document Phase (CD): The development of coordinated documents that will be used to obtain bids and permits, contract for, and build the facility.

Construction Administration Phase (CA): Construction and the processes through which the owner, design team, consultants, and various contractors interact during the construction of the project.

Note that the very first thing to do is to understand the hierarchy of any given project. Usually there is one person within the district who is the key school district person responsible for passing information from the school district to the design and construction team. Since there are many possible ways that a project can be structured, it is not possible for this guide to address all possible scenarios. But by identifying and informing the school district contact, you will be on your way to a pro-active role in the development of your new foodservice facilities. Depending on your situation, this may turn out to be your primary contact, you may have primary contact with the architect, the consultant, or there could be a construction manager through which you must communicate your input. Find out the ground rules for the hierarchy in your particular situation and follow them for all important communications and information.

It is also important to recognize that written documentation is very important. An instruction or comment to the district's construction manager, the architect, consultant, or any of the team members will have far more impact, and be much more likely to be considered, responded to, and incorporated into the project if it is in writing. You might even start by developing some standard requirements for your district's facilities to give to the project team. As you go though the process, such memoranda can be quite useful.

SOME PITFALLS OF NON-INVOLVEMENT IN THE PROCESS

First, a discussion of a some pitfalls that can easily occur when the foodservice director is not fully involved in the process. These are some examples you might use to help those in charge of the development of new facilities within your district understand the importance of your involvement to the success of the project.

1. Problems associated with the duplication of previous facilities

It is not uncommon for a school district to duplicate a previous design for a new school, sometimes even a previous design from another district. Make sure the decision makers in your district know that two schools with the same population may not have the same foodservice facilities requirements due to participation levels, free/reduced meal percentage, breakfast programs, scheduling, and production and serving methodology. Also, if they are duplicating a facility that you are already familiar with, you will probably have a list of what could be improved and may wish to update equipment to match evolving methodology.

2. Not enough space allocated for foodservice operation

As in the above scenario, it is common to determine the space requirements based on previous projects not considering the impact of different methodologies, meal counts, etc. Make sure enough thought has gone into the development of the foodservice area space allocation and that it is based on your specific needs.

3. Not enough money budgeted for foodservice equipment

Does this point need further comment? A current "rule of thumb" range for foodservice equipment cost is \$90 - \$100 per square foot. Also, if you are successful in increasing the square footage allotment for the foodservice area, make sure the budget still matches your space.

4. Inappropriate or even bad design of foodservice functional area.

This is pretty simple. If you are uninvolved you are not going to get what you want. And, if the facility is not professionally designed by someone familiar with current school foodservice methodology and your particular needs, you may be stuck with an inefficient and/or difficult to operate facility. Anyone can fill up a space with foodservice equipment. A professional foodservice consultant working closely with the operator has the best chance of developing a well designed, efficient facility, appropriate to your specific needs.

5. Foodservice equipment not consistent with operational methodology.

Again, the design team can't know what you want/need unless you tell them. You could wind up with inadequate oven capacity and too much of something else or equipment that is outdated, of poor quality, or inappropriate to the need.

6. Costly or improvised fixes required after the completion of the new facility.

All of the above can lead to increased labor costs, inefficient or inappropriate operations and the need to devote time and additional expense to fix the problems after the facility is complete. Sometimes an ideal solution is no longer feasible and an improvised fix may be required. It is less expensive and a lot easier to get it right the first time.

PROJECT TASK/SEQUENCE A TO Z CHECK LIST

The project team process functions very much like an orchestra. The "conductor" is responsible for coordinating the entire ensemble and achieving a harmonious result. You must go through the "conductor" (or the person who is feeding the sheet music to the conductor) if your section is going to play the piece you want and be in harmony with the other "musicians" (architects, mechanical, electrical, and plumbing engineers, etc.) The architect or construction manager is generally the appropriate contact, however you may be asked to work directly with the consultant in the early stages of the project. But be aware that all of your input must still be coordinated with the entire project team. Generally the architect is the foodservice consultant's primary contact and legal/financial client. The architect is usually the main point of contact for the school district and conduit to the appropriate consultants (including foodservice), the contractors, etc.

The following is an A to Z list of tasks, arranged chronologically, that can be used as a guide to facilitate your involvement in the design and construction process. Each mention of a specific phase of project development has been bolded to help you identify where these tasks are in the process.

- A. Definition of project scope and formation of project team including the foodservice consultant. Most projects use a standard AIA form of agreement to contract with the architect for design services. These standardized forms generally provide that the architect is responsible to provide additional consultants for any and all specialties which may be involved in the project including foodservice. The architect is responsible for providing, as part of the basic services included in the fee, a team with expertise in every aspect of the project. Consultants usually include civil, structural, mechanical, electrical, and plumbing engineers, landscape architects, and any number of specialized consultant services including acoustical, lighting, theatrical, natatorium, roofing, communications, IT, and, of course, foodservice. Even though the architect is "hiring" the foodservice consultant you can probably influence the decision of whom to use since the architect is interested in having someone on board who you want to work with.
- B. Initial meeting between foodservice director and consultant. The purpose of this meeting is to define general operational goals for the facility and the operational methodology of the foodservice director. General operational goals include type of serving system (Food court, traditional lines, scramble servery, etc.), whether this is a scratch prep or satellite serving facility, and what other schools in the district are doing (Director's frame of reference). If possible, the consultant should tour other schools and/or review previous plans with the director and ask questions like "What could have been done better in this facility?". Design directives with statements on big picture issues that start with "Please don't..." or "Please don't leave out..." or "What we really need is..." are very appropriate. The consultant should make note of the director's general wants and needs at this stage of the project.
- C. Information gathering for program development. This is best done through a written program questionnaire but is sometimes done less formally. The development of criteria at this stage of the project includes all information that determines the optimum physical size of the foodservice area, information about serving style and operational processes, and information that would impact the major decisions being made at this stage of project development effecting building infrastructure such as whether disposables or permanent service ware will be used

and whether foodservice equipment will be gas or electric powered. The projected meal counts, staffing levels, serving schedule and serving style are other questions to be answered in order to develop the **Program** for the foodservice areas of the project.

- D. Confirmation of foodservice Program criteria. The consultant should issue a document which parrots back to the client and the design team all design information gathered to this point and defines the optimum square footages and adjacencies of all functional areas within the foodservice facility. This is called the "Program" for the facility.
- E. Evaluate Architectural background and reconcile with foodservice Program and optimal flow requirements. It is not unusual for there to be some discrepancy between the early architectural Program and/or Schematic Design studies and the Program developed by the foodservice consultant in concert with the foodservice operator. This is the point at which these issues must be worked out and a final square footage space allocation for the foodservice area must be determined and agreed to. Also, this is the point at which the big picture flow and adjacencies of the plan must be considered. For example, if the Program calls for six traditional serving lines facing the dining area and the architectural background shows only thirty feet of common wall between the dining area and the kitchen/serving area, this is not going to work. The overall flow of the plan should be considered with regard to receiving, storage, preparation, production, serving, and warewash at this stage of the design in order to confirm that the proposed operation will work in the confines of the architectural space allocated.
- **F. Schematic Design** studies Sometimes the best design solution is fairly obvious and sometimes there will be several possible solutions dependent on the background and the operational goals. Usually the consultant will do rough layout sketches and send back and forth to the Foodservice director and Architect until a general consensus is reached. Sometimes two or three optional design solutions are prepared for presentation and decision.

At this stage each individual functional area (receiving, refrigerated, frozen and dry storage, preparation, production, serving, utensil wash, warewash, mop closet, chemical storage, non-food storage, employee lockers and toilet, laundry, and manager's office) should be located and outlined on the plan. Careful attention should be made to adjacencies and the flow of staff and products through the facility. There should be a logical flow from receiving at the outside door through the kitchen to serving and from warewash back to the outside door where the trash will be collected. Ideally, a well designed layout should place the office so that it is in close proximity to the receiving door, with a good view of the kitchen for supervision, and so that the path from the storage areas to the back door passes by the office for internal security. On a good layout, you can usually draw a line through the entire plan such that on one side of the line is the food preparation and production zone with direct adjacency to storage and the serving area and on the other side of the line are the ancillary and non-food prep functions such as warewash, utensil wash, lockers and toilets, mop closet, laundry, chemical storage, etc. You should be able to go to and from the outside or from the dining area to the office, the restroom, the mop closet, chemical storage, and warewash without walking through the food preparation/production or serving areas. This simplifies your ability to maintain the sanitation of the food zones separate from the other

- areas and to keep non-staff members out of the food preparation zone. You should also be able to remove trash without going through the food preparation zone.
- **G. Workstation development.** Once the big picture design issues are settled the individual workstations are fleshed out with specific equipment. The foodservice director should be heavily involved in this stage of the project. These decisions are the basis on which the **Design Development** documents will be produced. The individual equipment items within each workstation are defined and located. As previously stated, the design process works from the big picture down to the details and the workstation development process is really just a station specific, more detail oriented version of item "F" above applied to each functional area within the foodservice envelope.
- H. Consultant/Client meeting After review of preliminary drawings prepared by the consultant, the parties should meet to go through the facility plan considering all operational and staffing issues. The consultant should go through each workstation on an item by item basis and make adjustments from the director's input. The consultant and design team are producing the Design Development documents at this stage of the project.
- I. Design Development approval. The design team presents the final layout for approval by the client. This is the point at which all layout decisions should be final. The director should pay close attention to "Design Development" as this is a milestone in the design process beyond which it could be costly or infeasible to make further changes.
- J. The design team reconciles any client or Architectural changes at the **Design Development** level plan. This is usually the beginning of the coordination process between the foodservice consultant and the various engineers and other members of the project team other than the architect.
- K. The consultant compiles and issues foodservice focused Design Development information. These documents should represent all design decisions made up to this point including specific equipment selections and be the foodservice director's "Design Development" approval documents. Review these carefully.
- Consultant/client meeting The consultant and foodservice director finalize specifications for each individual piece of equipment. Pay particular attention to finishes and accessories for equipment when going through this process as you are now down to the details. Discuss operational issues to determine electrical outlet locations, computer terminals, hose bibs, security, etc. This is probably your last opportunity to make decisions about the facility that require coordination with other members of the design team without going through a formal design change process and/or incurring additional cost.
- **M.** The consultant issues preliminary information to the design team to commence **Construction Document** phase coordination.
- N. Progress printing and review (?%) Construction Documents review package (should include FOODSERVICE plan, MEP's, and outline specifications). There are different milestones during the Construction Document phase where the team is asked to provide a progress printing which is basically a snapshot of where the documentation process is at that time. Different contracts call for different

milestones but 25%, 50%, 75%, and 95% are common increments. The purpose of these progress printings is for owner review and to determine the progress of the work. The foodservice director should ask to be included on the distribution list for progress review printings. A common problem that foodservice directors experience is trying to communicate with project team members while referring to out of date documents due to not having been included in the distribution of superceding documentation. Always compare the date and issue information on your set of drawings before trying to participate in conversations with the project team.

- O. Final Progress review (near 100%) Construction Document review package (should include all FOODSERVICE documents). Sometimes these review documents are also used for preliminary pricing and, on CM projects, these documents can be used to establish a guaranteed maximum price (GMP) for the project. It can be daunting to review all of these documents but it is important to check that your input is being translated into these drawings and specifications.
- P. Issue 100% CD package The final Construction Documents should include fully coordinated, complete drawings and specifications. The foodservice drawings are usually "FS" sequence numbered sheets (sometimes "K") and the foodservice specifications are in section 11400. These documents are sometimes first issued as a review set, then separately for bidding, for permits, and for construction. The title block on each set should always have a date and the reason for issue. Again, it is important to be aware of what issue you are looking at and to be sure you are up to date. Misunderstandings and errors can arise from not having the most recent set of documents.
- Q. Identification of bidders. It is possible to "pre-qualify" foodservice equipment contractors. This is usually done based on experience and capability criteria rather than identifying individual contractors. Usually the qualification of bidders is left up to the consultant/design team and natural market forces however there may be circumstances where pre-qualification of bidders is desirable and the director should alert the team if there is concern on this point.
- R. **Bidding and award** - The project is put out to bid and contractors are given a period of time to develop their pricing. During the bidding phase of the process there are often questions that arise about the bid documents (note that at this point the CD's are the "bid documents"). There may be instances where one consultant is not fully coordinated with another, there may be discrepancies in quantity listings between drawings and specifications, there may be voltages that are unavailable or equipment that has been discontinued. In reviewing the documents and preparing their bids, the prospective contractors will ask questions about unclear directions and point out instances where revision is required for various reasons. Sometimes a pre-bid conference is held in an effort to draw out these questions and comments in a structured format however, for some reason, the foodservice equipment contractors seem never to ask their questions at these conferences. instruction issued by the project team that modifies the documents to answer or clarify contractor questions or, as is often the case, to address issues discovered by the project team between the time the bid documents are issued and bids are received are called addenda (singular is addendum). These addenda will ultimately become part of the "contract documents". The contract documents, as the term implies, are the documents upon which the contract is based between the owner and the contractor. Once the contract has been awarded, the contractor is

only required to furnish that which is documented in the "contract documents" which include the drawings, the specifications, any addenda that were issued prior to the opening of bids, and the general conditions of the contract outlining procedural issues, legal requirements, insurance requirements, etc.

- S. Review of contractor rough-in submittals. After the contract is awarded the submittal process begins. This is the beginning of the Construction Administration phase of the project. Basically, what is occurring is that the responsibility for the details of construction are shifting from the design team to the contractor and the details of construction are being coordinated and confirmed. The foodservice equipment contractor first issues drawings showing the locations of all utilities required in the foodservice functional areas. These drawings, unlike the contract documents, show the exact location of each utility stub up or "rough in" dimensionally locating it within the building. The review of the rough in submittal is the responsibility of the consultant. But the director may wish to review these as well to check for outlet locations, hose bibs, data lines for point of sale equipment, etc. Again, the director should ask to be included on the distribution list for all "submittal" documents. Confer with your consultant during this review and make sure you get a copy of the "approved" set.
- T. Review of contractor brochure book submittals. The brochure book submittal is a booklet with manufacturer's catalog data on all standard manufactured foodservice equipment and should detail all accessories, finishes, and utility requirements of each piece of equipment. The consultant/design team reviews these documents to insure compliance with the contract documents. It is helpful to the foodservice director to get copies of these documents for reference during completion and start up of the facility. Remember that, once the contract has been issued, the task is now to ensure compliance with the documents, not to make changes.
- U. Review of contractor's shop drawing submittals. This review is also the responsibility of the project team and consultant. But the director should be sure to review these documents as well because these are the drawings from which custom serving counters and other equipment will actually be built. Although the time for changing this equipment substantially has passed, the foodservice director can and should review these drawings and make comments. These drawings are much more detailed than the contract set and often there are minor decisions, changes or modifications that are desirable and do not effect the contract cost. These might be things like the height of a serving shelf, the width of a display space on a serving counter, or the location of a drawer. Think through the efficiency of individual work stations when reviewing these documents.
- V. Site visits and the details of Construction Administration The consultant should visit the site after rough-ins are complete and should issue a memo regarding observations. The director can also usually visit the site but should make sure the consultant has confirmed that everything is in place.

A word about process and communications during the **Construction Administration** phase of the project. You will hear the term, "RFI" used periodically during construction. RFI stands for "Request For Information" and is a standard form, issued by the contractor to the project team to ask for clarification of issues that arise during construction. RFI's are generally answered by the project team but you may be asked for input as well in a case where there is a discontinued

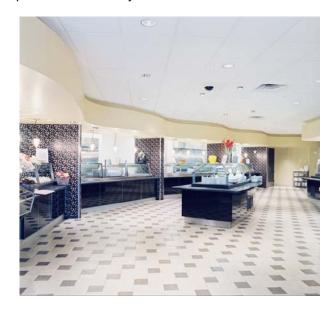
piece of equipment or if something must be relocated. Many issues do not require additional cost and these are answered as clarifications. When an issue arises that could add additional work or materials and equipment, the project team will issue a PR (Proposal Request) to the contractor to get pricing prior to authorizing them to proceed with the work. Subsequent authorizations to proceed with such work are called "Change Orders." Change orders are also sometimes initiated by the owner in cases where some prior decision has been rethought or additional work is added to the project. As in the vacation to Florida example in the introduction to this guide, the further along the project is, the more impractical and expensive changes become. Also, when the project has already been awarded, the "PR" pricing method does not allow for competitive bids so you are pretty much at the mercy of the contractors on site and will not likely get the best pricing. So any deviation from the "Contract Documents" is likely to add much more cost during construction than it would if it were in the original plans.

- W. Equipment installation and hook up. Usually the first items of foodservice equipment to be installed are the walk in coolers and freezers and the exhaust hoods. Anything which must be on site to be coordinated and integrated into the building will be installed ahead of the rest of the equipment. The balance of the equipment is brought to the site when the finishes in the foodservice area are complete and the area can be secured. The foodservice equipment contractor usually is responsible for delivery, setting in place, and any caulking or sealing. The equipment is hooked up to utilities by other subcontractors; electrical, plumbing, etc.
- X. Inspection of project at substantial completion (Punch List). The consultant and the design team, upon notification from the contractors that the project is substantially completed, visit and make a visual inspection and note all discrepancies/deficiencies on a "Punch List". The foodservice director should be involved to make sure that all deficiencies are included on this list (this is not the director's responsibility, but it can be beneficial and save time and trouble later on). Remember that when making a "Punch List" you are only verifying that the contractors have furnished everything that is required within the contract documents and any change orders that may have been issued. You cannot expect to add additional work on the punch list that is not in the documents. I recommend that the foodservice director keep three lists at the end of a project. One for the Punch List items which should include anything that is missing, damaged, incomplete, incorrectly completed, or otherwise not in compliance with the documents. The second list is for warranty issues which include any equipment problem that is covered by a manufacturer's warranty and is not the fault of the contractors. The third list is for things that are not included in the contract documents but that you hadn't thought of until then and would like to have in the facility. This list might include mobile carts, possibly signage if that wasn't included under the contract, office furnishings and equipment and whatever you might think of during this process that are outside of the contract. I call this the "wish list" although admittedly this term is not in common usage. It just helps to know that there are three categories of issues that you will discover and it is simpler to sort them out as they arise. The contractor is responsible to address all punch list items, any warranty issues should be handled by the appropriate service agencies, and if you have "wish list" items, they can either be additions to your small wares purchase or discussed with your consultant.

- Y. Equipment Demonstrations and start up. Prior to final acceptance, and usually during the correction of punch list items, the contractor should provide operational demonstrations of foodservice equipment. The director should note any problems in writing so that they can be resolved and/or included on the warranty list. Usually the various manufacturer's local representatives perform these demonstrations and can be relied upon to make their equipment perform properly. It is very helpful to make sure that as many of your staff as possible attend these demonstrations. You should also receive "O & M" (Operation and Maintenance) manuals which should include the operating instructions and service information on each item of new equipment.
- Z. Final owner acceptance. Final owner acceptance occurs after all punch list items have been addressed and the owner accepts the facility. It is possible that you will occupy the facility prior to the completion of ALL issues but the contractor is still responsible for completing the work and final completion is generally determined by the project team including the consultant, who informs the owner that the contractor has completed the work and final payment can be made. At this point the contractor and the project team have completed their work although you may continue to need follow up on some issues. Also, some contracts call for an additional inspection after a certain period of usage (usually one year).

A FINAL NOTE

As I developed this list and supporting information a number of related issues, explanations, and information occurred to me but my purpose was to provide a general road map, not to detail every address along the way. This list was written based on the traditional design and construction process and there will be some deviations from this in fast track and CM projects but most generally the process will closely follow the above phases and sequence. I hope that these comments and suggestions prove useful for the purpose they were written, as a general guide to the process. And, I hope to have the opportunity to work with you and assist in the development of new facilities in your district. As I noted several times in this guide, the very best facilities result from the successful combination of your knowledge and expertise with that of your consultant.



GLOSSARY

ADA: "Americans with Disabilities Act" This is the federal law that established guidelines for accessibility for the disabled in public facilities. Building codes now include requirements for counter heights, turning radiuses for wheelchairs, door widths and openings, and a host of other requirements all of which are commonly referred to as "ADA" requirements. Note that in commercial foodservice operations, there are a few instances where health code requirements or practical considerations supercede ADA requirements. For example the required depth of sinks prohibits the ability to adhere to ADA counter height and clearance requirements. And if wheelchair reach limitations were applied to walk-in shelving, your walk-ins would need to be twice as large and half of the available storage space would go unused.

Addenda: Amendments to the bid documents issued during the bidding period but before the award of the contract.

AIA: "American Institute of Architects" This is a professional society, not a certification. Note that while most architects you encounter will probably be AIA members, this is not a requirement to practice architecture. Architectural practice requires "Registration" which is done at the state level. Some architects will have "RA" after their name rather than "AIA" indicating that they are "Registered Architects." Full membership in AIA is only available to registered architects.

Alternate: This term could refer to an individual item or an entire portion of the work where the bid documents ask for alternative pricing in order to be able to evaluate adding or eliminating parts of the work based on firm pricing obtained in a competitive bidding environment. It is fairly common to have an "Add Alternate" in the bid package for inclusion of some portion of the work or equipment which can either be included in the contract now, or purchased/performed later if necessary due to budget limitations.

Bid documents: These are the "Construction Documents" issued to obtain bids from prospective contractors. The bid documents include the drawings, specifications, and general conditions and instructions to the bidders. Note that there could still be revisions to the "Construction Documents" between the time they are issued for bid and when they are issued for construction.

CA: "Construction Administration"

CD: "Construction Documents"

Change order: An instruction issued to the contractor after the contract has already been awarded (usually during construction) that modifies the work outlined in the contract documents usually increasing cost.

Clarification memo: A written instruction from the project team to the contractor clarifying an issue that is unclear in the documents but does not modify the scope of the work.

Code: A written set of regulations, adopted by government authority, that dictate minimum requirements for different aspects of construction. The primary codes effecting foodservice are Health Codes, Plumbing Codes, Electrical Codes, and ADA focused code issues.

CM: "Construction Manager"

Contract documents: The set of documents upon which the contract for construction is based including the drawings, specifications, and general conditions.

DD: "Design Development"

Equal: Sometimes a specification will provide that an "equal" product to the one specified is acceptable. Since "equal" is difficult to establish, "approved" or "pre-approved" equal is more often used requiring the contractor to submit "equal" substitutions for approval to ensure quality.

FCSI: "Foodservice Consultants Society International" Similar to AIA, this is a professional society, not a certification. Membership is not a requirement for foodservice consultants and, in most jurisdictions, there is currently no certification requirement for the role of "Foodservice Consultant."

GMP: "Guaranteed Maximum Price"

MEP's: Drawings showing "Mechanical, Electrical, and Plumbing" requirements.

Occupancy: When the permit is obtained to legally occupy the new building.

O & M manuals: "Operation and Maintenance manuals"

PR: "Proposal Request" Issued after the award of the contract, usually during construction, to request pricing from the contractor on modifications or additional work.

Pre-qualification of bidders: Placing restrictions on which contractors are allowed to participate in a project usually based on capabilities and historical performance.

Program: The first phase of most design projects through which space requirements are determined, budgets are set, and general facility requirements are defined.

Progress print: A set of drawings issued during the construction document phase of the project which are not yet complete but are a snapshot of where the documentation process is at that moment in time. Progress printings are commonly done at 25%, 50%, 75%, and 95%.

Proprietary specification: A specification that limits the contractor to furnishing the exact manufacturer and model listed with no substitutions allowed. These specifications are legal and can be justified based on standardization of operations, service, and spare parts.

Punch list: The list compiled at the end of the project detailing issues that must be completed or corrected in order for the work to conform to the requirements of the contract documents.

RA: "Registered Architect"

Retainage: The final payment to the contractor for the work is sometimes referred to as the "retainage" because a certain percentage of each payment has been "retained" until the project team can certify that the work is 100% complete. A "retainage" provides the owner with leverage to get the final details of the project completed at the end of the job.

RFI: "Request For Information" Issued by the contractor to the project team during construction to ask for clarification of construction issues.

Rough in: The raw utilities connections placed beneath the floor or within walls during construction for later use to provide connections to equipment.

SD: "Schematic Design"

Shop drawings: The detailed drawings of individual fixtures showing construction details from which the fixtures will actually be built.

Submittal: Any document or set of documents sent by the contractor to the project team for review and approval prior to construction including rough-in drawings, shop drawings, brochure books, and manufacturer's detailed shop drawings of equipment such as exhaust hoods and walk in refrigerators and freezers.

Substitutions: When the contractor furnishes something other than the item listed in the specifications. Generally, you do not have to accept substitutions however this determination is dependent on the contract documents.

Value engineering: The evaluation process by which the cost of a project is reduced in order to meet the budget. When you hear this term be sure you are in the loop for any decisions involving your area. Your careful planning can be partially undone by "value engineering" if you are not vigilant during this process.



