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Chapter

5

Organizing in the Field

The Site Logistics Plan

Quite often the contract requirements include a provision directing the contractor to prepare a site logistics plan for submission to the architect for review and approval. Depending upon the contract language, this plan may be required prior to moving the field office on-site, while other contracts may give the general contractor a little more time to submit the site logistics plan.

Each site is different from the last one, and that is one of the reasons why the construction business is so interesting—new situations arise on each and every project. Urban sites present a whole list of problems different from those encountered in building in a suburban or campuslike setting. Construction projects even in the heart of a small or mid-sized city with their crowded building sites can sometimes become a logistical nightmare—so planning ahead becomes even more critical.

Dealing with site logistics can be a time-consuming process, but proper planning in the early stages of a project can obviate many problems as construction activity speeds up. A costly site fence hurriedly installed, with little or no consideration for traffic flow, or security considerations may need to be relocated several times often at considerable expense.

The site logistics plan ought to include provisions for the following:

1. Maintain a secure site, making sure that the height of the fence is adequate for the site and that it can be secured at the end of the day with a minimum amount of time and effort.
2. Gates should be placed to allow ease of entry and egress, not only for small trucks but also for ready-mix concrete trucks and tractor-trailers with long turning radii.
3. There should be parking areas for the general contractor's field personnel, visitors, owner's representatives, and subcontractor (if space is available). Consideration of worker parking must be addressed, and if it is not available on-site, an off-site location should be investigated.

4. Access points around the site will be required for trucks to travel and to unload their materials and return to the exit.
5. Placement of the field office should be done so that it does not have to be moved and offers easy access to visitors.
6. Placement of the field office should take into consideration close proximity to site utilities such as existing electric, telephone, and water mains.
7. Placement of the field office should afford visibility to a maximum portion of the area under construction.
8. Storage areas for those materials and/or equipment are to be supplied by the general contractor.
9. Subcontractor field office and storage trailer and material storage areas require discussions and input from the major subcontractors.
10. If the building has a structural steel framework, a *lay-down* area for the structural steel members needs to be designated along with the path for the erection crane. The same will be true if precast plank structural or architectural panels are required on the project.
11. Lay-down areas will also be required if any substantial amount of masonry work is involved in the project.
12. The path where underground utilities will be located must be considered early on so that the relocation of materials, trailers, etc., is minimized when these utilities are being installed.

A fairly simple way to begin to develop a site logistics plan is to take a spare copy of a site or site utilities drawing and begin to lay out the security fencing and entrance and exit gates, keeping in mind the location of gates and the turning radius of tractor-trailers entering from the street.

By referring to the scale on the site and site utilities plan (1 inch equals 40 feet, as an example), prepare a series of templates to the proper scale that represent the size of an office trailer, a storage trailer, and other potential material storage areas. These templates can be cut out of an old manila folder and labeled *office trailer, storage trailer,* etc. Cut out enough of these office/storage trailer and storage area templates to represent the possible requirements for the major subcontractors, and place all these templates on the site plan to see if they will fit. They may have to be moved several times before a final location is determined along with access roadways to these locations. Before the plan is finalized, review the site logistics plan with the subcontractors who will be occupying the site. And it might be best to have them all in the room at the same time. One subcontractor may require more storage space while another may require less. Resolving all space and access issues at one time is preferable to dealing with a separate meeting with each subcontractor.

When all templates have been moved to their final location, merely trace their perimeters; label and identify the trailers, storage yards, and roadways; and send the site logistics plan off to the architect for review. When it is

approved, hang it on a wall in the office trailer so that it can be easily accessed and viewed by all interested parties. Changes will inevitably be made during the life of the project, but hopefully they will be minor and will not disrupt the flow of workers and materials during intense construction activity.

Setting Up the Field Office

When the field office has been physically established on the site, it will become home to the superintendent for the duration of the project, and proper attention needs to be devoted to this home away from home. Proper organization, orderliness, neatness, and cleanliness of the field office will all reflect upon the superintendent's professionalism. Easily read signage directing visitors, vendors, and deliveries to the proper location on the site will become an early necessity.

The need to control the flow of workers and visitors on the site will also become an early order of business.

Visitor control

A superintendent does not want people roaming the site without knowing who they are and what their business is. Visitor control necessitates a highly visible sign requiring all visitors to report to the field office. A simple sign in bold letters is easy to make (Fig. 5-1).

A visitor sign-in sheet should be placed in a prominent position right inside the field office trailer. A sample sign-in register for visitors is shown in Fig. 5-2. Sign-in procedures should be strictly enforced and ought to be reviewed at the first project meeting.

ALL VISITORS

Please Report to (Company's) Field Office

BEFORE

Proceeding Anywhere on the Site or in the

Building. Please Register on the Sign-In

Sheet.

THANK YOU

Figure 5-1 Sample visitor sign format.

JOB SITE VISITOR LOG

Project _____ Plat # _____ Tax # _____

Location _____ Street Address _____

Job # 8034 Project Superintendent _____ City _____ State ____ ZIP _____

	Date	Name	Representing	Purpose Of Visit	Person Contacted	Time In	Time Out
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Figure 5-2 Sample visitor log.

Did you remember to bring or order everything you need?

A checklist similar so the one displayed in Fig. 5-3 may be helpful. Along with ample supplies of pads, pencils, pens, and various payroll and field reporting forms, the field office must be organized to receive, store, and retrieve all the paperwork, reports, and drawings coming from the office, subcontractors, and design consultants.

Shop drawings for structural steel, precast, or cast-in-place concrete structures stored in the field office will be voluminous. Ductwork, heating and plumbing piping, and sprinkler shop drawings will be required not only for construction purposes but also to record as-built conditions.

Don't let filing get away from you

Equipment and material catalog sheets and samples of products to be incorporated into the structure all require controlled storage space. Unless there is

PROJECT START-UP CHECKLIST

Order telephone	_____	Hand tools	_____
Pay phone for subs	_____	Power tools	_____
Temporary power	_____	Generator	_____
Access to temporary water	_____	Laser, transit	_____
Portable toilets	_____	Wooden stakes	_____
Temporary fencing	_____	Mason's line	_____
Hay bales, siltation fence	_____	**Office Supplies**	
Construction sign	_____	Lumber crayon	_____
Emergency numbers	_____	Pencils, pens, pads	_____
Field Office Supplies		Cans of spray paint	_____
Building permit	_____	File folders	_____
OSHA documents	_____	**Telephone Numbers**	
EEO documents	_____	Owners	_____
First-aid kits	_____	Architect	_____
Lock for door	_____	Engineer	_____
Security system tie-in	_____	Testing lab	_____
Temporary stairs	_____	Building official	_____
Equipment		Suppliers	_____
Foul weather gear	_____		

Figure 5-3 Project start-up checklist.

organization in the field office, chances are that critical drawings and documents will become lost—always when they are needed the most.

A condensed version of the office job files should be prepared for the field office. Correspondence from the architect and engineer, memos from the office, job meeting minutes, and letters to the owner and architect are to be filed in their respective files—promptly. Unless filing is current, papers pile up on the desk, get misplaced, or are mistakenly discarded. Filing daily is key to prompt and accurate retrieval.

Equipment catalogs for the mechanical and electrical trades can be placed in the folders designated for each trade.

Shop drawings should be installed on a plan rack or in a file drawer *only* when they are approved. Some superintendents prefer to receive an advance copy of a shop drawing to review either before or during its transmission to the architect or engineer. In many cases a review by the superintendent may reveal problems that may have been missed by the project manager, and this procedure should not be discouraged.

But what is important is that all *unapproved shop drawings* must be either discarded or filed in an area that is not accessible to anyone but the superintendent, and they must be clearly marked, "Not Approved—Do Not Use."

It is important to state, once more, that unapproved shop drawings left on the plan table in the field office scrutinized by a subcontractor seeking information can spell trouble for everyone. So put away those unapproved shop drawings and put away those superceded plans before someone inadvertently refers to them for current, approved field information.

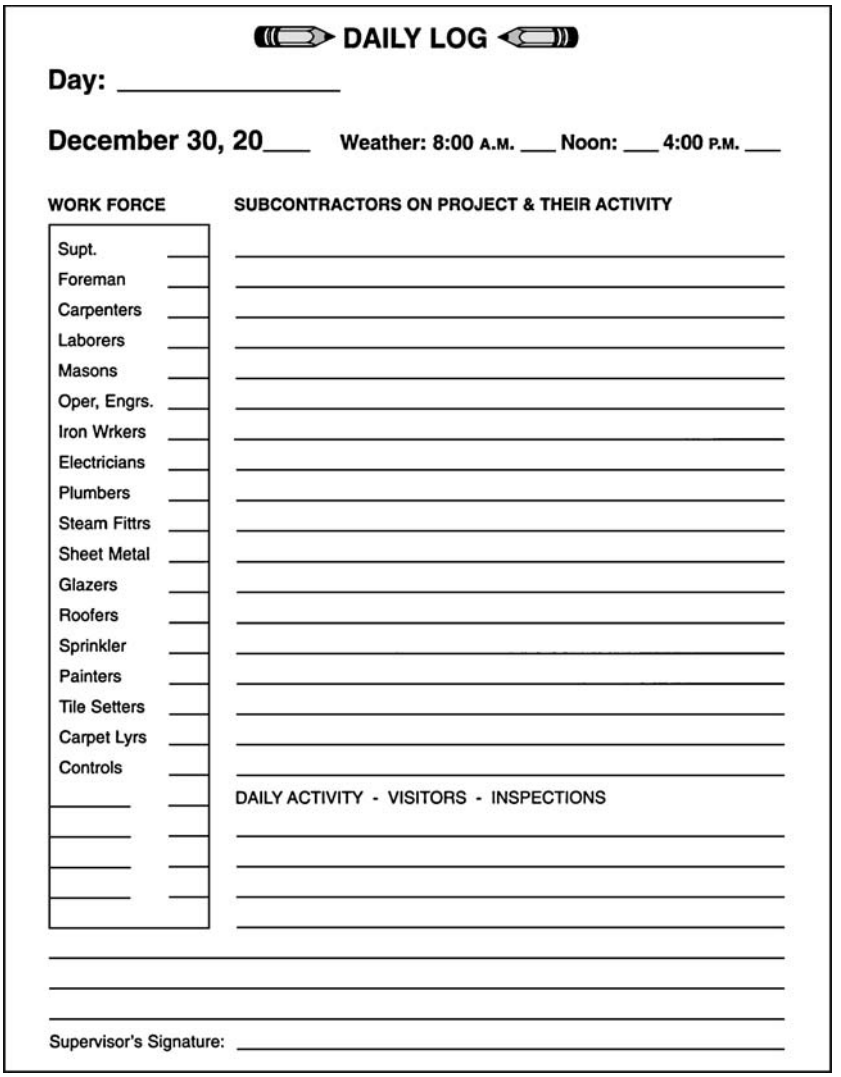
The daily log and its function

One of the many chores that a superintendent must face is the entries into the daily log or daily diary (Fig. 5-4). At the end of a long and tough day, it is sometimes difficult to spend the time required to properly fill out a log describing many of the key events during that long, hectic day. But the daily log or diary can be one of the most important pieces of documentation when a claim or dispute arises, either when construction is underway or long after the project has been completed.

The information required to be posted daily may seem to serve little function at the time it is recorded. But suppose the company is involved in a lawsuit and the case comes to trial 3 years after the project was completed—and you are called to the stand to testify. The lawyers will have accumulated and introduced lots of documents into the trial, one of which will be the daily log.

You are on the stand, being questioned about an event that took place about 3½ years ago and the lawyer asks you whether it did, in fact, rain for 2 days while the foundation was being excavated at the northwest corner of the building. The company's justification for defending a delay claim may hinge on the answer to this question. Can you clearly remember this situation? If you have a fantastic memory, you might; but most of us could not answer with certainty. Your lawyer will ask, "Would it be of value for you to review your daily log and refresh your memory before you answer that question?" You'll respond in the affirmative, and after turning to the pages representing the dates involved, you can unequivocally say, "Yes, here it is in my daily log. It rained all day on both days you asked about, and we had been excavating for footings along the A line from column 2 to 7."

Would you be able to help your company in a case like this? Or, in the absence of a well-documented daily log, would you stumble and hem and haw on the witness stand and get some pretty angry stares from the boss?


DAILY LOG

Day: _____

December 30, 20____ Weather: 8:00 A.M. ___ Noon: ___ 4:00 P.M. ___

WORK FORCE

Supt. ___
Foreman ___
Carpenters ___
Laborers ___
Masons ___
Oper, Engrs. ___
Iron Wrkers ___
Electricians ___
Plumbers ___
Steam Fittrs ___
Sheet Metal ___
Glazers ___
Roofers ___
Sprinkler ___
Painters ___
Tile Setters ___
Carpet Lyrs ___
Controls ___
_____ ___
_____ ___
_____ ___
_____ ___

SUBCONTRACTORS ON PROJECT & THEIR ACTIVITY

DAILY ACTIVITY - VISITORS - INSPECTIONS

Supervisor's Signature: _____

Figure 5-4 Daily log.

The proper application of a daily log serves many purposes:

1. It provides a chronological, day-to-day account of the number and type of workers on the job and the type of activities taking place each day.
2. It provides a record of all visitors to the site. (It does *not* take the place of a visitors' sign-in sheet.)
3. It provides a log of the weather, not only on a daily basis, but if filled out correctly, the weather at various times of the day (morning, early afternoon, late afternoon).

4. It provides a record of the types of materials, and sometimes the quantities, delivered to the site each day.
5. It provides a record of the types of equipment on the site each day, whether the general contractor's or subcontractor's. The equipment record should record *active time* and inactive or *down time.*
6. Record any inspections by either government officials or consultants.
7. Provide a short description of any problems occurring on the site or unusual conditions uncovered.
8. Include any discussions with the owner or the owner's consultants regarding problems, extra work items, or specific directions received from the owner or the owner's consultants (even though they indicate that they will be sending a letter to the office confirming their field instructions).

Organizing Subcontractor Meetings

Developing and maintaining a good relationship with subcontractors on the job site is one of the project superintendent's most important jobs. This book devotes a full chapter to dealing with subcontractors, but we will now deal with some of the procedures required to organize an effective subcontractor meeting agenda.

Depending upon company policy (does the superintendent or project manager conduct subcontractor meetings?) and the frequency of these meetings (initially once every 2 weeks, increasing to weekly as project reaches peak activity), these subcontractor meetings require advance preparation to be effective and productive. After the first such meeting, documentation of prior meetings will have been prepared and sent to all participants and other interested parties in advance of the currently scheduled meeting.

It is not enough to review old business. Items of interest or concern should be presented by the superintendent at every meeting.

Management by walking around

Several decades ago when management gurus seem to be everywhere, coming up with new and often bizarre methods to train managers so they could increase productivity, one such scheme really did seem to make sense—management by walking around. The basic idea behind this concept was that managers cannot sit behind their desks all day long, cranking out procedures and policies without actually going out to the factory floor to observe real working conditions and real problems. By walking around, not only does the manager become familiar with what the workers are actually doing during their workday, but also he or she is highly visible and is therefore perceived as having an interest in observing what workers do, experiencing some of the problems they often bring before him or her.

In construction this concept of managing by walking around is almost one of the golden rules. The superintendent cannot sit in a warm or air-conditioned

office all day, going out on the site only when an emergency arises. Effective management means knowing what is going on in every corner of the site and the structure, and this can only be accomplished by walking the site and project several times each day.

Coordination—a prime topic for the subcontractor meeting

Coordinating the sequence of trade work is one of the prime responsibilities of a project superintendent, but there is another coordination activity that is also very important—ensuring that everything fits in the space allotted to it, as shown on the plans. Many contract specifications require the general contractor to prepare a *coordination drawing* that includes all the mechanical, electrical, plumbing, and sprinkler work to be installed above the ceiling. When a specific requirement such as this exists, the superintendent will be responsible for distributing related drawings to all subcontractors involved in installing above-ceiling work. When it is determined that everything will fit into the space shown on the drawings with no deviation from locations as designed, this drawing will be transmitted to the architect for review. However, often modifications to ductwork, piping arrangements or lighting fixtures, or ceiling heights must be made to ensure a proper installation. Appropriate remarks are included on the submittal to the architect for review, acceptance, or comments.

The problem often arises when there is no contract requirement for a coordination drawing but the general contractor is still responsible to ensure that everything fits into its designated space. The project superintendent must be proactive in this regard, and the subcontractor meeting is the perfect place to discuss and resolve any coordination matters. With all subcontractors sitting around the table, a potential problem can be reviewed and commented on by each subcontractor, in turn, to ascertain whether there are concerns about performing the work per plans and specifications. If there is such an agreement, it will be important to document each subcontractor's acceptance, and this can be achieved by sending each subcontractor a letter or including a statement in the subcontractor meeting minutes. This will avoid any problems that may arise, e.g., as the work is being installed above the ceiling and one of the subcontractors at that meeting now requests extra costs to modify the installation to fit. Their prior agreement, confirmed in writing, by letter or meeting minutes, will promptly end that discussion.

Other subcontractor meeting requirements

The first subcontractor meeting will consist of introducing each subcontractor to the other members of the team and to the architect, engineer, and owner, if they attend that first kickoff meeting. Discussions regarding shop drawing submissions, the date by which subcontractors are to submit their requisitions, general safety rules, and guidelines will also take place. At this meeting, if the subcontractors have not worked together before, each one will size up the other

to anticipate how their current working relationship will be. The project superintendent who has not worked with any of these subcontractors previously can also get a sense of which subcontractors will be "team" members and which ones are likely to be irritants throughout the project. The superintendent can then establish the ground rules that will be implemented and enforced to manage this project.

The kickoff subcontractor meeting

An owner's initial opinion of a successful project may turn sour when the closeout process does not proceed in an orderly and rapid fashion. When the punch list completion seems to drag, when equipment commissioning goes on and on when operation and maintenance manuals fail to be submitted in a timely manner and attic stock somehow never shows up, owners can become upset and all those good relationships that have been building suddenly disappear. A successful closeout process is a very important aspect of the entire construction cycle.

The time to start planning the project's closeout is at the very beginning, and the first subcontractor meeting is the perfect time to begin.

It is to everyone's advantage to close out the project quickly and cleanly, submit that final payment request, and move on to the next job.

The specifications usually contain a section of general closeout procedures and various other sections contain closeout items specific to a particular trade.

The closeout procedures will include to one or more of the following:

- Submittals
- Inspection reports
- Operation and maintenance manuals
- Commissioning and test-adjust-balance (TAB)
- Punch list
- Warranties and guarantees
- Attic stock, spare parts, special tools
- Material safety data sheets (MSDS)

A master checklist similar to the one shown in Fig. 5-5 can be prepared and serve as a matrix for all project closeout requirements, including site clean-up and field office and site demobilization.

Checklists can be prepared for each subcontractor; the checklists may have closeout requirements and should be distributed, at the first subcontractor meeting. A note in the meeting minutes will document that the list has been distributed, and subsequent meeting minutes will carry this item forward so that subcontractors can be reminded at various stages of construction that closeout procedures and documents are to be completed fully as the project nears completion.

A fast walk-through the project specification book can uncover the items required for project closeout which can then be converted to a list similar to this one:

1. Permits and inspections, including the Certificate of Occupancy (C of O), also referred to as the Use and Occupancy (U and O) Permit.
2. Certificate of substantial completion. Read Article 9.8 of AIA Document A201 to fully understand the term *substantial completion.*
3. Certifications and signoff from architect, mechanical and electrical engineers, and structural and civil engineers (if applicable). This may include a final inspection report from the MEP and structural engineer.
4. Final property survey.
5. Maintenance bond (if applicable).
6. Final lien waivers from each subcontractor and a general release of liens from the general contractor.
7. Warranties and operating and maintenance manuals (O&Ms)
   - *a.* Roofing and flashing warranties
   - *b.* Joint sealant warranty
   - *c.* Doors and hardware warranties + O&M
   - *d.* Flooring—carpet, vinyl composition tile, sheet vinyl, ceramic, epoxy
   - *e.* Windows—aluminum,wood, vinyl, steel, + O&M
   - *f.* Curtain wall and storefront work including antichalking of aluminum, color retention of members, air/water infiltration
   - *g.* Waste compactor and trash chute, + O&M
   - *h.* Window covering—blinds, curtain, shades, + O&M
   - *i.* Toilet and bath accessories, + O&M
   - *j.* Transmittals of trades, generally in separate three-ring binders
     - (1) Plumbing and mechanical + O&M, including air and water balancing reports.
     - (2) Electrical + O&M
     - (3) Fire protection + O&M
     - (4) Elevator + O&M
     - (5) Data/communication systems + O&M
   - *k.* Attic stock
     - (1) Extra flooring materials
     - (2) Extra cans of paint in various colors
     - (3) Hardware
     - (4) Toilet accessories
     - (5) Sealants
     - (6) Masonry materials—brick, concrete masonry unit (CMU)
     - (7) HVAC—spare filters, fusible links
     - (8) Plumbing—filters, trim
     - (9) Fire protection—sprinkler heads, fire extinguishers
     - (10) Electrical parts—wiring devices, fixture lenses, lamps
   - *l.* Start-up and test reports
     - (1) Boilers
     - (2) Chillers
     - (3) Air-handling units (AHUs)
     - (4) Makeup air unit (MUAU)
     - (5) Water treatment
     - (6) Balance reports for air and water
     - (7) Fireman's test report
   - *m.* Valve charts, tags, piping and equipment identification, directories
   - *n.* As-built drawings

Figure 5-5 A master checklist of typical project closeout requirements.

Submittal requirements. Commencing with record drawings and ending with O&M manuals and warranties, Fig. 5.5 also can serve as an all-encompassing list of required closeout submittals. This list can be copied and distributed to subcontractors with appropriate sections highlighted for each subcontractor.

Inspection reports. Inspection reports, other than those prepared by government inspecting authorities, may be required to be submitted to the architect and engineer during the course of construction, with a copy of the A/Es approval stamp included in the closeout documents.

These inspection reports may encompass:

- Earth compaction inspections and other geotechnical tests
- Concrete compression tests
- Infiltration and exfiltration tests for underground stormwater lines
- Mills reports from the supplier of structural steel
- Weld, bolt-up steel connections (if TC bolts are not used), shear stud testing
- Mortar cube testing
- HVAC and plumbing testing to include water/air pressure tests, duct integrity, pump curve performance
- Acoustical batts or in-wall insulation batts before concealment
- External, below-grade wall penetrations
- Roof penetrations, flashings
- Fenestration flashing inspections pertaining end dams, sills, and head flashings
- Various substrates before enclosure, including moisture content testing of concrete before installation of direct application flooring
- Underground fire protection lines, pressure testing of filled lines, fire pump flow characteristics

Operation and maintenance (O&M) manuals. Each subcontractor required to submit O&M manuals must follow the instructions outlined in the specifications pertaining to number of submissions and format (in three-ring binders with tabbed sections). Some O&M instructions may include the preparation of a video taken at start-up in the presence of the manufacturer's representative. Some specifications allow the owner a certain number of training sessions where the manufacturer's representative and a representative of the appropriate subcontractor will run through certain operating procedures. Coordination of these training sessions need to be timely and with assurance that the proper representatives from the owner, manufacturer, subcontractor, and general contractor are in attendance. Someone should be assigned the responsibility to document attendance and prepare a brief description of the session.

Commissioning of equipment and test-adjust-balance reports. Equipment commissioning will generally take place in the presence of the design engineer and an owner's representative. With respect to HVAC equipment, there will be a series of start-up check-offs:

- Electrical inspection, to ensure that all connections are complete and disconnects installed.
- Starter and wire size per specification, motor bumped to insure proper rotation, panel board termination identified and marked, voltage and amps verified.
- Ductwork complete, piping complete, vibration isolation installed, O&M available. Manufacturer's start-up sheets attached and warranties on hand.
- Distribution ductwork pressure tested as required, any ancillary piping pressure tested, balancing report available, termination devices functioning properly, and all attachments to VAV boxes as required.
- Automatic controls—confirmed, electrical interlock inspected and complete fire alarm interface inspected and functional. Building operations security interface complete. Temperature/humidity settings verified.

The TAB procedure is a critical operation that requires close attention by the project superintendent and experienced mechanics from the appropriate subcontractor trades.

Not only must the equipment be installed properly, but it also must operate according to the design criteria, and that is what the TAB process will accomplish.

According to the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), the following procedures define TAB:

- Testing—determining the qualitative performance of the equipment
- Adjust—regulating the specified fluid flow rate and air patterns at the terminal equipment through operations such as adjusting dampers and fan and pump speed via sheaves and belts
- Balance—checking proportion flows within the distribution system (mains, branch piping, submains, and terminal devices) according to the specified design quantities

Punch list. We discuss the punch list later in this chapter and again in Chap. 9. Suffice it to say, a lingering open punch list will be detrimental to all parties, holding up release of retention, and infuriating the owner who wonders, "When will that (expletive deleted) contractor ever finish the job and get out of my building!"

Warranties and guarantees. The standard one-year builder's warranty may be supplemented by longer-term guarantees for a number of products. Compressors in HVAC equipment are often warranted for five years; insulated glass for

windows, doors, and storefront also carry a longer manufacturer's guarantee period, and new roofing applications offer 15- to 50-year limited warranties.

A quick look through the warranty section of each specification can produce a list of expected warranty/guarantee certificates from subcontractors and vendors.

Special HVAC warranty considerations. Of particular interest to a project superintendent is the subcontractor/manufacturer warranty on heat and cooling equipment. Generally, the guarantee period begins when the equipment is up and running and accepted by the owner, after the equipment is approved and signed off by the design engineer.

If this process occurs much before the building is turned over to the owner at substantial completion, there may be a conflict between the start-finish date of the equipment's warranty period and that of the general contractor's one-year warranty obligation that usually commences from the date of substantial completion rather than the date of acceptance of the equipment. For example, if the HVAC equipment has been accepted by the engineer on June 15, 2007, the manufacturer's warranty period will end on June 15, 2008 (except for the extended warranty of any compressors). If substantial completion has been reached by the general contractor on August 15, 2007, the general contractor's one-year warranty (including the HVAC equipment) may end on August 15, 2008. What happens if a major component of the HVAC equipment fails on July 25, 2008? Must the general contractor honor their warranty even though the manufacturer's warranty has expired?

This situation can be avoided if the owner agrees, in writing, that their warranty period for any equipment accepted by their architect/engineer commences on acceptance and not on substantial completion.

Another approach is to direct the subcontractor, when their subcontract agreement is initially negotiated, to provide an extended warranty, say 16 months instead of one year, on their equipment, which they can buy at a nominal fee when the equipment is purchased. This will provide a lag time between equipment commissioning and owner acceptance and substantial completion.

Attic stock, spare parts, special tools. The furnishing of attic stock should be a rather straightforward affair, but many times an acoustical ceiling contractor, for example, will use a great deal of that attic stock to replace damaged tiles at the end of the job, and they need to be advised to replenish this stock ASAP.

The same may be true of resilient flooring stock such as VCT, when attic stock may be used to replace flooring damaged during construction. Subcontractors should be notified that any attic stock used during the course of construction must be replaced in time to turn over to the owner at the proper time. When attic stock is turned over to an owner's representative, it should be accompanied by a transmittal verifying receipt by that owner. Also, some special tools may be required for specialized operations and the specifications often require the contractor to leave these tools with the owner, refurbished, in their original case and with their O&M instructions.

Material safety data sheets (MSDS). Material safety data sheets for materials or equipment containing potentially hazardous components are to supplied by the vendor prior to the material/equipment being shipped to the site. A collection of all such MSDS are to be turned over to the owner at the end of the project. If a separate file is set up in the field office every time an MSDS is received, and it is placed in this file, it will be a simple matter to assemble a packet and send it on to the owner.

Walking the job before the subcontractor meeting

Before the next subcontractor meeting, usually the day before that next meeting, it is important to walk the site and observe the progress made since the last meeting. This is often best done late in the afternoon when most trades have finished their workday and left the job. A walkthrough at this time will probably not interrupt other workers or trade foremen, and the project superintendent can concentrate on preparing tomorrow's subcontractor meeting.

With a copy of the last meeting minutes in hand, the superintendent can check whether certain production goals have been met, whether the defective work has been corrected as scheduled, whether various subcontractors have kept their areas clean and relatively free of debris, and whether any other old business items have been attended to. Any items for discussion under new business can also be prepared during this walk-through. With a clear picture of the current status of the project, the superintendent will be prepared to respond to scheduling and quality issues, if raised at the subcontractors' meeting.

The topics to be covered in the subcontractors' meeting are discussed in Chap. 6, but we will address the actual format for these meeting minutes in this chapter.

Figure 5-6 is a typical subcontractor meeting minutes format and contains the basics:

1. Project name, number, site phone, site fax, and (if applicable) site e-mail address.
2. Date of meeting.
3. List of attendees, with their address, phone and fax numbers, email address, or all the above. (A sign-in sheet is passed around at the beginning of each meeting, and this forms the basis for filling in the attendee list.) Don't forget to add carbon copies in case you want to send copies to someone who did not attend the meeting.
4. Two main topics of discussion are highlighted—old business (which usually comes first) and new business (for some reason this particular set of minutes has the reverse).
5. Some method is needed to indicate that an old business item was not completed and was carried over to another meeting. This can be done as shown in Fig. 5-5, which is the 36th meeting. Under new business, item 1 is identified

PROJECT: WALKER AVENUE JOB NO.: 1324 SITE PHONE: SITE FAX:	MEMORANDUM FOR THE RECORD SUBCONTRACTORS PROGRESS MEETING #36

Date of Meeting: November 18, 1999

Attendees:	Phone	Fax
Carol Gailey- Napoli-Cover		
Rusty Burkhead- Winchester Drywall		
Ron Asbury-		
Clyde McKinney- Business Flooring		
Butch Spangler-		
Bob Akins- My Electrician		
Rob Andrieux- Winchester		

ITEMS OF DISCUSSION:

The Progress Meetings will be held weekly on Thursdays at 9AM at the construction site/office The next meeting will be **Thursday December 2, 1999.**

All subcontractors are required to attend the subcontractor meetings every week. If you are unable to attend please call Butch or Ron at the site **before the meeting is to occur and let them know that you will not be there.

NEW BUSINESS:

36.1 All subs are to get their punch lists completed or the punch out crew will be hired to finish it for you.

36.2 Electric work needed for Napoli-Cover: AHU-4 starter mounted and wired, pump 1,2 heating starters mounted, CP-2 wired up, Domestic boiler CP-1 pump needs 120v feed with switch, 120v feed to ATC panel, all cabinet heaters wired up, AHU 3 starter wired, permanent 120v feed to boiler panel

36.3 Window glass for the first floor here on Monday the 22nd Nov.

36.4 Maria will be here on December 1,2 to punch the units so get the work ready now.

36.5 Napoli-Cover needs the heat trace so they can insulate at the chiller

OLD BUSINESS:

1.6. All invoices should be sent to by the **Monday before the last Thursday** of each month in order to process the invoices to get paid for the work completed that month. Checks are available on Fridays after 4pm at Charles Street after the subcontractors have been notified by Lien releases will need to be signed. Please do not call accounting regarding the availability of checks. anticipates that we will get paid 30 days after the requisition meeting has occurred. **Due to the Thanksgiving holiday the next draw meeting with the owner will be scheduled for Thursday December 2, 1999. All requisitions from subs are due on Monday November 29, 1999.**

21.1 There will be no smoking in the building.

29.9 Columbia Roofing needs to finish their punch out list. Columbia is working to complete it and will be done in the next few days- by October 14th. **Columbia has finished the preliminary punch list and he will complete the final punch by the end of the job. Butch will make up the punch list by November 19th.**

28.2 The two condensing units at the back of the building need to be piped in and wired ASAP. .Napoli-Cover to pipe the units in ASAP and then Bob Akins will follow up to wire the units. Carol is to make a date to do the work and Butch will schedule Bob Akins for the same day.

30.6 would like D&H to fix the door frame in the electric room in the basement. **is to talk with Maria to see if there might be other alternatives.**

34.1 My Electrician is to man the job with 6 men or more in order to meet the commitments that have been made to finish the job.

34.7 Business Flooring has asked about the runner and the binding for the first floor main stair- what color? to discuss with Maria. Clyde to get Harriett a color sample for the binding.

34.8 Tom Newell has commented on concerns about the "ridging" in the walls on the third floor corridor. to discuss. to get with Winchester to discuss and fix 7 or 8 of the problem areas.

35.1 Bob Akins is to start the site lighting on Saturday November 13. The concrete is finished and Bob is to finish pulling the wire and setting the steel posts.

Figure 5-6 Typical subcontractor meeting minutes.

35.2 Winchester has said that there are still 3 units where the wall tile is not finished- Units 212, 224 and 313. Ron to check drywall work and call Ace Tile.

35.3 Business Flooring is to get the base done on the first floor by Monday November 15 and the second floor would be done by Wednesday November 17. told he has to finish the second floor ASAP.

35.4 The punch lists are attached to the doors of the units. All subs are to go back and designate a crew to finishing the punch lists. This needs to be completed now so that the remaining punch work can be completed. The punch out company needs to start immediately. Subcontractors need to finish their work in the units by Monday the 22nd of November or will go back and do the work and backcharge each sub for their that is not done.

35.5 has asked Carol to complete the chiller work so we can get it started and checked. Carol asked if the electrical wiring was completed.

35.6 has stated that it will take ten to fifteen working days to complete the generator work when it arrives. **NEW:** The generator will be arriving at the site on Wednesday November 17th. The transfer switches arrived at the site on Monday November 15th.

35.7 John from D&H Carpentry said he would have ten men working at the site on Monday November 15th. He would start the punch work and the caulking in the units. There have not been ten people at the site as of Nov. 18th. to call

The sequence for the punch out process for the building will be as follows:
Rough clean
list
finish list
Like- Nu- tub refinishing
IV Construction Punch- punch out company
Final Clean
TAT and CSI punch
IV Construction- 2nd
Touch up clean
Acceptance- Turn over to Owner

These minutes are a summary of the writer's interpretation of what transpired at the meeting. If there are additions or corrections or if you disagree with the interpretation, contact me at 332-1352 before the next scheduled meeting.

Submitted by:

Figure 5-6 (*Continued*)

as 36.1, item 2 as 36.2, and so forth. If any of these items appear in meeting 37, they can be quickly identified as having first appeared on meeting 36. A look at the old business section of Fig. 5-6 shows that the topic of no smoking in the building was discussed at meeting 21.

6. Each item requiring action must be identified as such, and the person or persons responsible to provide that action must be indicated. Look at item 29.9 in Fig. 5-5. An individual has been assigned the responsibility to create the punch list, and that person's name would be indicated in bold type. Other superintendents will add an "Action by" column to the minutes in, say, the

far right margin. In the case of item 29.9, someone would be designated to assume this task, and that person's name would be inserted in the column under the heading "action by."

7. The last item in the meeting minutes, following a statement establishing the next meeting, is a disclaimer of sorts. Quite often the person taking notes for the minutes will have missed an important point or misunderstood an important point. Because at some future date these minutes could be introduced as evidence in a court trial, their accuracy may be challenged.

Company Letterhead

Oriole Construction Company
566 Southway
Baltimore, Maryland 21200

A/E Collaborative
888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

As of (date) we have completed the work to the point where, in our opinion, the preparation of a punch list is warranted. We would appreciate your scheduling an inspection at your earliest convenience for the purpose of creating a punch list while most of the trades are still on-site to address any items relating to their trade.

When the date of your inspection arrives, (name of superintendent or foreman who will walk through with the A/E) will accompany you on your tour of the project.

With best regards,

Will Spencer
Project Superintendent

Letter 13 Requesting a punch list while subcontractors are still on the job.

By adding a disclaimer similar to the one in Fig. 5-5, all attendees are given the opportunity to take exception to any item in the minutes; and if they do not, they in effect have agreed to their content. A typical disclaimer is as follows:

> The attached meeting minutes represent the writer's interpretation of items discussed at this meeting. Any comments to the contrary are to be submitted, in writing, prior to the next scheduled meeting.

Company Letterhead

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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date of initial letter requesting a punch list) we requested that your office conduct an inspection to create the official punch list. To date we have not had a response to our request. We had hoped to receive the punch list before most of the subcontractors have left the site in order to achieve a more rapid completion of any required work.

Your prompt response to our request will not only expedite the completion of the punch list but will also assist us in achieving a more rapid closeout of the project.

With best regards,

Will Spencer
Project Superintendent

Letter 14 Second letter requesting a punch list.

Company Letterhead

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566 Southway
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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

During your (date) inspection of the status of the official punch list dated (date), several items were added to the original list. We assume that this will be the final punch list, and once these additional items are completed, final payment will be authorized by your office (assuming all other closeout documents have been submitted).

If you still have other closeout documents to submit, substitute the following for the second sentence:
We assume that this will be the final punch list, and once these additional items are completed, your office will officially sign off on this list.

With best regards,

Will Spencer
Project Superintendent

Letter 15 The architect/engineer adds more items to the original punch list on a subsequent punch list inspection.

Monthly project reviews

In many companies, at least once each month the project manager is required by upper management to prepare a review of the entire project, including

1. Costs to date and costs to complete each item in the schedule of values
2. The status of change orders to the owner and to subcontractors or vendors
3. Actual schedule of progress versus the baseline or adjusted schedule to complete

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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

While we were completing items contained in the punch list received from your office, we received another punch list from the (Owner/Owner's Representative) adding items that did not appear on the list prepared by your office.

Although we wish to accommodate the Owner, we are of the opinion that the Owner should discuss these items with your office so that only one official punch list is prepared and submitted to the General Contractor.

With best regards,

Will Spencer
Project Superintendent

Letter 16 Owner sends the punch list to the contractor and the contractor wants to stop this practice.

4. Quality issues
5. Safety issues
6. Any potential or actual disputes or claims involving the owner, subcontractors, or vendors
7. Any other problems that have surfaced on the project

If your company employs such a monthly analysis of each project under construction, you as the superintendent will need to prepare for a meeting with

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Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

We have received a letter from your office denying our request for final payment because certain punch list items have not been completed and accepted. We refer to (list the items that are in question).

These items, in our opinion, represent *warranty* work, not incomplete or unacceptable *punch list* work, and would therefore be covered by our 1-year builder's warranty/guarantee certificate.

We will, of course, expedite the repair or replacement of this work, but question whether this is cause to withhold final payment.

We would appreciate your response to our interpretation of this matter.

With best regards,

Will Spencer
Project Superintendent

Letter 17 When final payment is withheld because of "incomplete" punch list work when the work is really covered by the warranty.

the project manager to assist him or her in the assembly of this report. The project superintendent should keep notes on the following topics during the month for which the report will be prepared, in anticipation of this project update meeting:

Costs

1. Have any unanticipated or unforeseen conditions occurred on the project during the period? If so, will the associated costs be an extra to the contract, or will they be absorbed by the general contractor?

2. Have any other costs been incurred that will result in a change order to the owner? Is the owner in agreement as far as scope and costs are concerned?
3. Have any subcontractors or vendors requested additional costs because their subcontract agreement or purchase order did not adequately cover the scope of work?

Change orders

1. If any change orders are being prepared by the project manager, does the project manager need additional cost information from the project superintendent?
2. Will the contract completion time be extended or reduced or remain the same if the change order work is authorized?
3. Does the project superintendent have any knowledge of impending scope changes?

Schedule

1. Are any adjustments to the schedule warranted during the monthly update?
2. Has the baseline or adjusted schedule extended or shortened the contract completion time?
3. If delays have occurred, what is required to prepare a recovery schedule and what are the anticipated costs to implement this recovery schedule?
4. Have any subcontractors advised the project superintendent of any potential delays in any delivery of equipment or performance of work?

Quality issues

1. Are there any quality issues that need to be discussed with the architect/engineer involving constructability or conformance with the plans and specifications?
2. Are there any subcontractor quality issues that need review and resolution?

Safety

1. Were any accident reports filed during the period that involve lost workdays or injuries?
2. Are there any safety issues to be addressed?

Claims

1. Is the project superintendent aware of any disputes that may be in the offing involving either the owner or a subcontractor?
2. Are there any unresolved issues that could escalate into a claim or dispute if not resolved during the period?

The request for information (RFI) and request for clarification (RFC)

Referring to the base contract and the general conditions document attached to it, generally AIA A201, we see that it is the contractor's responsibility to review the plans and specifications, and "any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Architect as a request for information in such form as the Architect may require." The accepted format for such requests for information or clarification is the RFI form (Fig. 5-7) or RFC form (Fig. 5-8).

PROJECT: JOB NO.: SITE PHONE: SITE FAX:	REQUEST FOR INFORMATION

TO:	RFI#:
	DATE:
	DRWG REFERENCE
	SPEC SECTION

DATE NEEDED TO BE ANSWERED: ASAP

We request an answer to the following condition or problem:

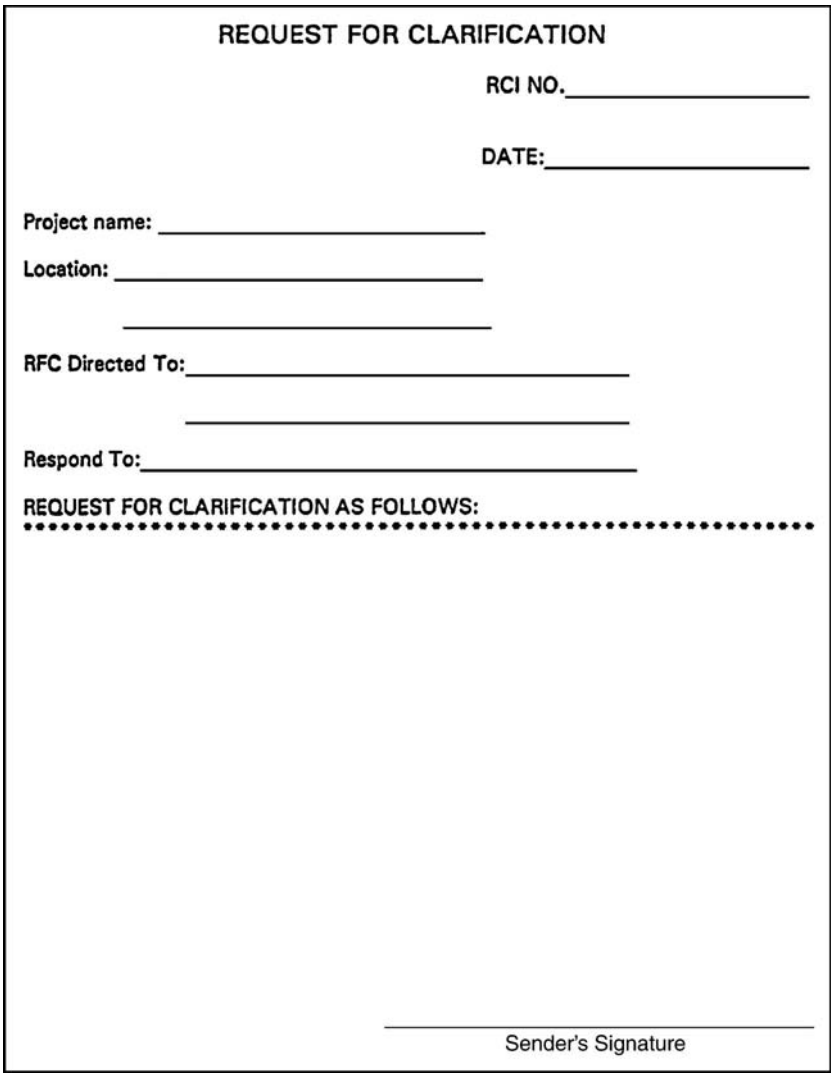
Signed:

Answer:

Signed: *Date:*

Cc:

Figure 5-7 Request for information (RFI) form.



REQUEST FOR CLARIFICATION

RCI NO._____

DATE:_____

Project name: _____

Location: _____

_____

RFC Directed To:_____

_____

Respond To:_____

REQUEST FOR CLARIFICATION AS FOLLOWS:

_____

Sender's Signature

Figure 5-8 Request for clarification (RFC) form.

Although the completion of these types of forms appears to be rather straightforward, there are several entries that merit attention. Figure 5-7 has a preprinted ASAP in the "Date Needed to Be Answered" blank—this is not good practice. Just as the little boy shouldn't cry wolf, don't overuse ASAP. Give the architect or engineer ample time to respond to your RFI; ASAP should be used only when as soon as possible is actually required. By alerting the architect/engineer via email or phone, to an RFI in the works that requires prompt review and comment, such requests will generally be treated expeditiously.

Company Letterhead

Oriole Construction Company
566 Southway
Baltimore, Maryland 21200

A/E Collaborative
888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we were advised by your office that (explain which major changes are being considered by the architect/owner).

If sufficient information was supplied to quantify the change, continue as follows:
Based upon our initial review of this added scope, we anticipate that an extension of contract completion time of (days, weeks, etc.) will be required in order to add this work to the baseline schedule. We will be submitting our change order proposal, which will include the adjustment to the contract completion date, within (number of days, weeks required).

If insufficient information was supplied, substitute this paragraph for the one above:
Upon receipt of sufficient information from which to prepare a change order proposal, we will include not only the cost of the work, but the extension of the contract completion time required to incorporate this extra work into the project.

With best regards,

Will Spencer
Project Superintendent

Letter 18 When a major change in work is contemplated by the architect/owner and it will extend the contract completion date.

Achieve clarity in requesting clarity. It is important to be clear about the nature of the request being made. If at all possible, refer to a specific drawing and/or detail or specification section, using column lines or the north arrow to pinpoint the area in question if a drawing is involved.

For example, when you request clarification or further information regarding a conflict between the door size and location shown on an architectural floor plan and that item listed in the door schedule on another drawing, identify the door by number, say, door 201, and its location, say, second-floor electrical closet.

Company Letterhead

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Baltimore, Maryland 21200

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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we were advised that a change was being considered by the owner in (describe the area in the building or on-site—be as exact as possible).

We have advised our subcontractors to delay (or stop) work in the area under consideration, as of this date. If further direction on how to proceed with the change is not received by (date), we can either commence work in the designated area or continue the "stop work" order, which may result in a delay to the project.

Please provide us with your decision in this matter.

With best regards,

Will Spencer
Project Superintendent

Letter 19 Architect requests that the contractor slow down work in an area where changes are being considered.

Be specific as to the conflict: e.g., second-floor drawing indicates door 201 to be a 3070 hollow-metal door but item 15 on the door schedule, drawing A-20, states that a 3068 door is required. Please clarify.

Because it is likely that a number of RFIs or RFCs will be issued during the life of a project, and the status of each outstanding request must be tracked promptly, an RFI or RFC log should be prepared similar to the one shown in Fig. 5-9. This log should be reviewed weekly to determine the status of all issued RFIs and RFCs. This update ought to be a topic of discussion at each project

CONSTRUCTION

DEVELOPMENT

BROKERAGE

PROJECT:
JOB NO.:
SITE PHONE:
SITE FAX:
Architect:
Engineer: [Engineer]

RFI LOG

Revision Date:

RFI #	Div	Description	Date to Architect	Date Returned	Remarks

Figure 5-9 RFI log.

meeting where the owner and/or architect is in attendance. When response to an RFI or RFC has not been received by the date requested, the architect/engineer should be notified that this late response may have time-related consequences.

Preparing for project closeout

Preparing for the project's closeout ought to begin at the first subcontractor's meeting, where these requirements should be discussed. Each subcontractor should be requested to read the project's general and special requirements as they relate to

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Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we were advised by (owner, architect/engineer) that design changes were being prepared for (describe the area). Upon receipt of information from the (architect or engineer), we will prepare a proposed change order for the work in a lump sum amount for your review. Any changes in the contract completion time will also be included.

With best regards,

Will Spencer
Project Superintendent

Letter 20 Owner/architect advises of an impending change in scope.

closeout procedures in general and to read each subcontractor's applicable specification section for more definitive requirements. During the closing weeks of the current project, all eyes are turned toward that next project. It is at this point that the project superintendent needs to inject some urgency in the pursuit of closeout documents.

A checklist similar to the one displayed in Fig. 5-10 prepared at the beginning of the project can prove helpful in collecting all the closeout requirements on one document. The "Responsibility" column should be filled out to ensure that both

PROJECT: JOB NO.: SITE PHONE : SITE FAX:	MEMO Re: Project Closeout Procedure

	Task	Responsibility	Comments/completion date
1.	Review plans and specs for close out requirements		
2.	Prepare the table of Contents for the General Contractor's O&M early enough to track the requirements as needed throughout the project. See attached examples for reference.		
3.	Review contract for closeout requirements		
4.	Send letters to subs outlining procedures		
5.	Verify subcontractors have provided all extra material as stated in the contract documents		
6.	Officially transmit this extra material to the owner.		
7.	Receive and submit to owner as–built drawings and O&M manuals		
8.	Notify accounting department of completion to activate the Confirmation Form process		
9.	Generate and send statements to subs to confirm contract amount,		
	changes, claims and payments		
10.	Final lien releases signed, notarized, dated and returned		
11.	Lower tier obligations verified and paid		
12.	Provide subcontractors with preliminary punchlist before they leave the project		
13.	Ensure that no retention is released until punchlist work is completed		
14.	Release retention commensurate with submitting closeout materials and payment by owner		
15.	Schedule the deactivation of all services including phone, electric, water delivery, security, trailer return, dumpster, alarm monitoring, and routine supply deliveries		
16.	Properly pack and label for storage historical records from project		
17.	Return all excess office supplies, equipment, tools and storage, signage, etc.		
18.	Leave site in acceptable condition		
19.	Consolidate at PM location all critical contract, change order, submittal, permit, inspection (including occupancy), and other frequently requested project documents.		
20.	Maintain an accurate list of storage box numbers and contents		
21.	Complete download at date of substantial completion		
22.	Initiate Cost Certification based on Substantial Completion budget		

Figure 5-10 Project closeout checklist.

23.	Submit and track billing for retention as allowable by contract documents.		
24.	Prior to completion prepare a written closeout plan that identifies known issues that would hinder completion per the schedule		
25.	Receive and distribute architect's punch list		
26.	Confirm Subcontractor and completion of all punch work		
27.	Obtain all necessary signatures from architect, owner, funding representative, etc. agreeing to completion of punch work		
28.	Establish process with owner for warranty communication		

Figure 5-10 (*Continued*)

the project superintendent and the project manager are aware of their individual obligations.

Since the company's final payment hinges on the completion, submission, and approval of all closeout requirements, this task, while tedious, nevertheless remains an important part of the construction process.

Problem solving

Don't bring me problems—bring me solutions! How many times have you heard this from the boss. As the first line of defense in the problem-solving area, the ability to anticipate a problem is the mark of a good superintendent. Often problems can be averted or resolved if caught early and the situation is carefully thought through. But time is the key factor, and the superintendent's day is filled with answering questions from subcontractors and vendors, inspecting work for compliance with contract documents, documenting important events on the job site, and dealing with a multitude of documents that seem to show up on the site everyday. Without organization in the field office and in the superintendent's

Company Letterhead

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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we were instructed by (name, title, organization of owner's representative or architect) to proceed with (describe the work) on the basis of time and materials. We will commence work on (date) and will prepare daily work tickets for your representative to sign each day while this extra work is being performed.

It is important to have your representative available to sign these tickets since duplicates will be attached to our invoice for this extra work.

With best regards,

Will Spencer
Project Superintendent

Letter 21 Proceeding with extra work on time and materials basis, represented by daily work tickets.

daily routine, the task of supervising a project can be overwhelming at times. So if it takes a little longer to organize the field office properly and establish the procedures that need to be followed on a day-to-day basis, these preplanned procedures will pay off during the life of the project.

Learning Effective Time Management

With all the demands placed upon a superintendent's time, learning how to productively manage that time is a key element in the effective management of

Company Letterhead

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Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we sent you a letter indicating that we were proceeding with (describe the extra work) on the basis of time and materials.

We indicated at that time that we would be preparing daily work tickets to be presented to your representative (you may name him/her if known) for (his/her) signature for each date that this extra work was performed.

On (date or dates), your representative was not on-site to sign these tickets, and we assume that there will be no disagreement as to the work performed on those days after our invoice has been submitted.

With best regards,

Will Spencer
Project Superintendent

Letter 22 Performing time and materials work when the owner's representative or architect is not available to sign the daily work tickets.

the construction project. Pulled between answering subcontractor questions, reviewing important documents, receiving phone calls, and chasing down materials, a project superintendent's day often seems unending.

How often are you interrupted in the midst of tackling a problem? That equipment rental salesperson who shows up at the field office with a bunch of pads and pens requires you to stop what you're doing and hear what he has to offer. A subcontractor calls to inquire about submitting a bid for work and asks where she can pick up a set of plans and specifications for estimating. Some of these

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Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we were instructed by (name, title, organization of owner's representative or architect/engineer) to proceed with (describe the extra work); however, no agreement could be reached on the method to be used to establish the cost of the work.

We would recommend that you authorize us to proceed with this extra work in accordance with the procedures outlined in Article 7.3.3 of AIA Document A201, General Conditions, relating to the Construction Change Directives (CCD).

Note: If you are not using the A201 document, you can cite the basic provisions of this article as the method by which you want to document your costs.

Upon receipt of your authorization, we will commence with these changes.

With best regards,

Will Spencer
Project Superintendent

Letter 23 Proceeding with change order work when an agreement on costs cannot be reached.

interruptions may be beneficial, but knowing when to politely turn them away may be just as beneficial.

With some time management tricks, learned and implemented, that seemingly endless day may be shortened. Experts in the field of time management have distilled problems relating to effective use of time down to 10 basic blunders.

Company Letterhead

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Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we submitted (PCO#?, RFI#?, RFC#?) for your review and comment. As of this date we have not received your response.

If you have any questions regarding our submission, please give me a call; if not, your prompt review and return will be appreciated.

With best regards,

Will Spencer
Project Superintendent

Letter 24 Inquiring about the status of a recently sent proposed change order (PCO), request for information (RFI), or request for clarification (RFC).

Blunder 1—Inability to deal with drop-in visitors

One of the problems with an open-door policy of being available to everyone all the time is that you allow drop-in visitors to interrupt your preplanned schedule. When these unanticipated guests arrive at the job site, ask whether this visit is important, what the purpose of the visit is, and how much time is needed to discuss or resolve the matter. Tell them how much time you can spare. "I can't talk to you now, but if you wait a half-hour (10 minutes) (until later this afternoon), I can meet with you."

Company Letterhead

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888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we inquired about the processing of (PCO, RFI, RFC) initially submitted on (date). We have received no response to our follow-up letter of (date),

If PCO, add:
and, at our option, we may need to reprice this proposed change if your response is not received by (date).

If RFI, add:
and we may determine that additional costs will be required to complete this work unless we have received your response by (date).

If RFC, add:
and we may determine that additional costs will be required to complete this work unless we have your response by (date).

With best regards,

Will Spencer
Project Superintendent

Letter 25 When there is no response from the architect/engineer to a letter inquiring about the status of a PCO, RFI, or RFC.

Blunder 2—Lack of priorities

Some superintendents create a daily A list and a B list. The A list contains those items that positively, absolutely must get done today. Obviously, this list must be short. The B list contains work items that will be dealt with once the A list has been completed. The key to preparing these priority lists is to only include items that truly are critical and, with respect to the A list, are achievable. Although the B list items can be carried over to the next day, if the A list items are not achievable in the day in which they have been created, rethink the priorities. Did they

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Oriole Construction Company
566 Southway
Baltimore, Maryland 21200

A/E Collaborative
888 Airport Road
Towson, MD 21240

Re: The Academy
Project No. 5732

Attention: Mr. Arch Teck

Dear Mr. Teck:

I refer to our (meeting at the site, telephone conversation) on (date) and your verbal instructions to

Select one:
proceed with the work as follows: (describe the work).

do not proceed with the work (describe) until further notice.

We are proceeding as directed and would appreciate receiving your written confirmation of these instructions.

With best regards,

Will Spencer
Project Superintendent

Letter 26 Confirming verbal instructions received from the architect/engineer.

really belong on the top-priority list, or could they have been included on the secondary B list?

Blunder 3—Inability to control telephone conversations

At the start of the project, is the flooring contractor calling for a meeting to discuss the scope of work? Is it necessary to carry on a long telephone conversation with this subcontractor whose work may not be required for 6 months or so?

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Re: The Academy
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Attention: Mr. Arch Teck

Dear Mr. Teck:

We have been requested to turn over a portion of the building by (owner/owner's representative/architect) on (date).

We request that an inspection be made of that area and adjacent areas by your office before releasing the space for partial occupancy of the building. Our (superintendent or foreman) will accompany you on this inspection, which should include the following:

1. A clear delineation and definition of the space to be occupied.
2. A punch list for this space.
3. The status of work remaining to be completed in this area and adjacent areas.
4. Delineation of egress and ingress areas to be used by the occupant during this partial occupancy period.
5. An inspection of adjacent areas to document any existing damage or lack thereof.

We will establish an apportionment of all utility costs for the partially occupied portion of the building and forward to your office within the next (10/7/fewer) days.

With best regards,

Will Spencer
Project Superintendent

Letter 27 Responding to the owner's request for partial occupancy.

When these types of phone calls occur, be curt and tell the caller to get back to you in 5 months (3 months) or whatever time frame is appropriate.

If it is your nature to socialize during phone calls, think about how much more time you could free up if you limited the social talk. Could you make an additional three phone calls if you didn't review the weekend's football scores with that last four callers? Twelve calls of 10 minutes each computes to 2 hours on the phone! Can you afford to spend that much time on the telephone without affecting other work tasks?

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Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) the Owner took partial occupancy of the building, occupying (identify the area — second-floor offices, computer room, Rooms 105 to 107, etc.). In order to apportion utility costs such as electricity, gas, and water, we determined that the area occupied at this time represents (X) percent of the total building area. The current monthly utility costs are (whatever the latest utility bills show — and you might be required to submit copies!), and so we have allocated (the same percentage as the space the Owner occupies) of the total monthly bills.

We will therefore be submitting a monthly invoice in the amount of ($$$$$) to the Owner for its share of the utility costs.

With best regards,

Will Spencer
Project Superintendent

Letter 28 Notifying the owner of apportioned utility costs for partial occupancy.

Blunder 4—The electronics trap

With the widespread use of electronic assistants, are you spending more time reprogramming, updating, and revising this device than the time savings benefits it will provide? With the cell phone, adding frequently accessed phone numbers to the phone's electronic directory is a time saver, but is entering the job-site temperature three times a day into an electronic database more efficient than jotting down the temperature in the morning and at midday on paper and then accessing the electronic daily log at the end of the day to record all pertinent

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Re: The Academy
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Attention: Mr. Arch Teck

Dear Mr. Teck:

We wish to establish the date of (date) as the date of Substantial Completion per the requirements set forth in the contract documents (or you can include the section within the specifications that defines Substantial Completion; if none exists, refer to AIA Document A201, General Conditions, Article 9).

It would be appreciated if you could arrange a visit to the site, at your earliest convenience, to confirm that Substantial Completion has been achieved.

With best regards,

Will Spencer
Project Superintendent

Letter 29 Requesting a visit to establish the date of Substantial Completion.

data? Don't invest in electronic devices solely to have the most up-to-date, or cutting-edge, product. Use devices that are time savers, not just flashy, cool gadgets.

Blunder 5—Reluctance to delegate

How often have you said to yourself, "It's quicker to do it myself than to give it to Joe Hamfist" or "If I do it, it will be done right"? Both of these statements may be true, but your function is to manage, and managing means delegating—*not* doing

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Re: The Academy
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Attention: Mr. Arch Teck

Dear Mr. Teck:

We have received your Certificate of Substantial Completion establishing that date as (date). All utility companies servicing the project have been advised to submit billings to the Owner for all utility costs incurred after this date.

All applicable guarantees and warranties will commence on (date of Substantial Completion).

With best regards,

Will Spencer
Project Superintendent

Letter 30 Notifying the architect/engineer of the switch of utility costs to the owner after Substantial Completion has been established.

the work yourself. It is up to you to select those assistants you can trust or to train them to perform their assigned tasks adequately. Although it may seem like too much time is spent instructing or supervising these delegated functions, in the long run you will have created an effective team that can be relied upon to do the job, thereby relieving you of the necessity to deviate from your core work responsibilities. You are also helping other team members grow in their job by taking on additional responsibilities.

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Attention: Mr. Arch Teck

Dear Mr. Teck:

Due to the extended period of time during which severe weather (you may also name the severe weather — heavy rains, flooding, heavy snowfalls, sleet/hail) has occurred, the progress of the project has been seriously delayed. We are in the process of preparing a formal claim for delay due to weather and will be presenting that claim within the next (10 days, 2 weeks, or whatever).

Note: When weather delays are prepared, you need to obtain extended weather patterns from the local or national weather bureau to establish the fact that this weather is unusual and could not have anticipated.

With best regards,

Will Spencer
Project Superintendent

Letter 31 Notification of intent to file a weather-related delay claim.

Blunder 6—The cluttered desk syndrome

Does your field office look like a tornado picked it up, turned it upside down, and set it back down right-side up? Neatness and orderliness in a field office achieve several goals. This displays an orderly approach to work which will be reflected and required in the construction taking place on the site. A neat office displays a certain amount of discipline on the part of the superintendent that is easily transferable to discipline in the construction process. And just as important, when the filing of documents is done promptly, plans and specifications are

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Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we will have a pencil copy of Application for Payment No. (X) for the period (month) available for your review at the jobsite. Please advise when you would be able to meet (name of project manager or superintendent) to review this requisition.

With best regards,

Will Spencer
Project Superintendent

Letter 32 Requesting a review of a pencil copy of a requisition.

stored properly, and the field office in general is neat and orderly, it is so much faster to locate items, which translates to time savings.

Blunder 7—Procrastination

It is probably human nature to put off disagreeable tasks and promptly perform those items of work that are pleasant. Putting off important tasks because they are unpleasant or demand aggressive action usually results in significantly

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Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we submitted (number) copies of Application for Payment No. (X) to your office as requested. As of this date, we have not received payment. Please advise if you require additional information or documentation or have any questions regarding this requisition. If not, when may we expect the payment to be processed?

With best regards,

Will Spencer
Project Superintendent

Letter 33 Inquiring about the status of payment of a requisition.

more time to perform these tasks and often is done in under urgent conditions that do not allow the sufficient amount of time and attention that should have been devoted to resolve these matters properly.

Consider dealing with those more difficult or unpleasant tasks first and leaving the easier, more pleasant tasks until later.

Blunder 8—The need to achieve perfection

Allotting equal time to all tasks may not be the best use of time. Although the goal of perfection is admirable, as in the case of delegating work, a delicate

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Attention: Mr. Arch Teck

Dear Mr. Teck:

On (date) we submitted Application for Payment No. (X) in the amount of $(XXXXX). When we inquired about payment on (date of previous letter or telephone call), we were advised that a check would be forthcoming on (date). As of this date, we have not received payment.

Our subcontract agreements contain the standard "pay when paid" clause and delays in payments from the owner will affect the project schedule if not received by (date).

Please advise when we may expect payment.

With best regards,

Will Spencer
Project Superintendent

Letter 34 When previous requests to the architect/engineer for payment go unanswered.

balance between devoting equal time and energy to simple tasks when more time and energy are required for critical tasks is something that a time-stretched superintendent must deal with. When a limited amount of time is available to deal with problems, time must be directed to those tasks having the greatest impact on the project.

Blunder 9—Attempting to do too much

A mental state of paralysis can develop when you attempt to do too many tasks at once. Where to start, how can I prioritize when everything I have to do is

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Attention: Mr. Arch Teck

Dear Mr. Teck:

We have received (X) complete sets of plans and specifications to date. The contract for construction indicates that the owner is to furnish the contractor such copies of drawings and project manuals as are reasonably necessary for execution of the work; accordingly, we are requesting (X) additional sets.

Note: In case you need to refer to this portion of the contract, look at Article 2.2.5 of AIA Document A201, General Conditions.

With best regards,

Will Spencer
Project Superintendent

Letter 35 Requesting additional sets of plans and specifications at no cost to the contractor.

equally important? That is the time to stop and reevaluate your work load. Don't attempt to do more than you reasonably think you can. Going back to blunder 2—rethink your priorities. Is it absolutely essential that I tackle all these issues this morning, or on this day? If I rush through all these tasks, will I be unable to spend sufficient time on the most important ones? I will therefore shorten my A list, I may have to reduce the number of items on my work list today, but what I do complete will be done thoroughly and done well. One expert advises that a planned work list should occupy only 50 percent of your

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Attention: Mr. Arch Teck

Dear Mr. Teck:

We wish to have you consider and approve a substitution for the following product:
(list the product/equipment and the drawing or specification section where it is contained).

We were recently advised that the delivery time required for the specified product is (8, 10, 12) weeks after approval and this extended delivery date will seriously impact our schedule. The (substituted product) is available within (1, 2, 3) weeks. Your consideration in this matter will be greatly appreciated.

For your review we are attaching a shop drawing for both the specified product and the substitution.

Note: You need a reason for substitution of a product, and delivery time is usually a good one. If the substituted product is of lower cost, you might offer a small credit.

With best regards,

Will Spencer
Project Superintendent

Letter 36 Requesting a substitution of a specified product.

available time, leaving the other 50 percent for additional time to complete any of these tasks that take longer than expected while also leaving time for unexpected events. Avoid the mental paralysis that comes from trying to do too many things at once, and rethink your daily goals.

Blunder 10—Inability to say no

Sometimes it is difficult to say no to your supervisor or boss when you are asked to take on an assignment or two in addition to your already crushing workload.

Does saying no suggest an unwillingness to cooperate or inability to take on more work? Will this extra workload seriously detract from your ability to perform your primary responsibilities, so that one or the other will have to be compromised? Possibly the best way to say no is to explain the pressing activities now occupying your daily workload, with the caveat that if there is time left to handle these new assignments, you would be more than happy to accommodate your manager. Or you can ask for a temporary assistant to help with your present-day assignments so you can free up some time to devote to the added tasks. This should send a signal that you are willing and able to assume these added responsibilities, but only if time allows or extra help is offered. If these assignments are that important, your supervisor will either offer to relieve you of some current activities or, more likely, look elsewhere for help.

End of Lesson Wrap-Up

Congratulations on completing this lesson! You've taken another important step in your journey to becoming a certified professional in the construction industry.

Up Next: Quiz Time

Before we move forward, there's a short quiz waiting for you. Remember, this quiz isn't designed to trip you up but to reinforce your understanding of the concepts we've covered. It's a way to ensure that you have grasped the essential elements of the lesson and are ready to build on this knowledge in subsequent modules.

You're Doing Great!

You're doing an excellent job so far, and we encourage you to keep up the momentum. Every quiz and lesson is a building block towards your ultimate goal of certification and professional advancement.

See You in the Next Lesson!

We are excited to continue this journey with you and look forward to seeing you in the next lesson. Keep up the great work and stay motivated—your future in construction management looks promising!

Keep learning, keep growing, and remember, we are here to support you every step of the way. See you soon for more learning and development

Contact Information:

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