Effective Facility Documentation
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Introduction

You wake up to the phone ringing. Its 1am and you're called down to the site. There has been a minor car accident in the parking lot during the shift change.

No one was hurt but as a result, a fallen tree has damaged the corner of one building and taken down several power and data lines. Emergency response is getting things under control but now you need to assess the situation and make a plan.

What does your building documentation look like?

- Are your drawings and data up to date and accurate?

- Can your staff, first responders and support team understand them?

- Can they be accessed quickly and easily, even if the network is down?

This whitepaper explores the basic elements of creating a useful and effective set of Facility Documentation that can serve you time and time again.

Having the right information in your hands quickly keeps you ahead of the questions and ready to make decisions with confidence.

What is Facility Documentation all about?

In the daily experience of Facility and Maintenance Management, you refer to a variety of information about your buildings and assets. It is important to make your documentation as comprehensive, approachable and easily understood as possible.

Many organizations get carried away implementing enterprise-scale FM tools when all they really need is a simple place where the primary facility data is centralized.

In the world of software sales, almost any feature can be pitched as a deal-making time saver. Keep your reality goggles strapped on tight and stay focused on what you really need in

order to understand what you have and how to take care of it.

What does it consist of?
Facility documentation can fall into a few basic categories.
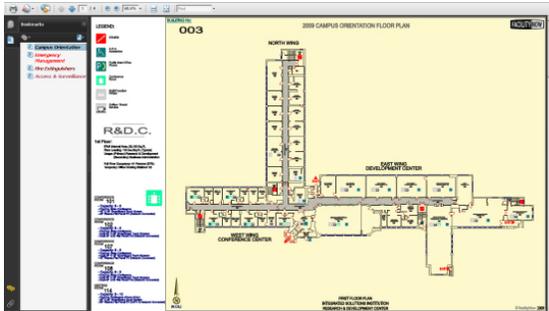
A base drawing gets new life as a wayfinding and building services document with room uses and employee locations.

Drawings
An overall site drawing is the big picture of your property. A good site drawing will call out all buildings, roadways, utilities, and use commonly accepted anecdotal names.

Each building and floor should have its own drawing. Minimally it will show walls, doors, and windows. Depending on the use of a building, other information can be added such as furniture, machinery layout, department locations, special equipment, or employee names.

Remember, this is the material you will show to internal and external customers, many of whom do not regularly read drawings - so simplicity and clarity are crucial.

Priority Documents

A quick reference collection of contact lists, employee and location lists, egress and rally plans, asset lists and hazardous materials documentation are just the start of what you'll need should an emergency arise. Digital photos can also be part of this documentation.

How is it stored?
This information can take several forms. A complete printed set should be maintained in the event that computer systems are unavailable when needed. Some documents, especially drawings are best presented on a medium-sized sheet such as 11x17 (ANSI B) or 17x22 (ANSI C).

One customer has developed their facility documentation over many years, covering multiple sites and backed by thousands of organized, immediately useful drawings, photos and documents.

They maintain a complete uncompressed copy of this documentation on a large-scale USB flash drive. Primary response documents are kept in standard Adobe PDF format.

Ruggedized USB drive loaded and ready for use in a laptop, or by police, fire, or EMT crews.

The popularity and market penetration of Adobe PDF Reader allows information to be referenced by a police officer, fireman, or other emergency responder on a laptop without proprietary cad applications. Quality documentation presented at the right time can save lives and protect your organization from litigation.

When do I use it?
Building Changes – Construction, renovation, and reconfiguration projects always begin with an information gathering phase. Having up to date documentation greatly reduces or eliminates the cost of rediscovering information.

Planning – Use drawings to visually depict vacancies to identify vacant space appropriate for a new employee or to find opportunities to consolidate. Even a simple depiction of your departmental layout over a floor plan can be a powerful planning tool. Understand where your departments are located and develop ways to meet their needs in either a growing or a reducing model.

Security - This is often the "front line" of emergency response. Keeping your security team informed with accurate drawings and employee lists makes them more effective. A good security drawing will include camera locations and fields of view, badge reader locations, safety equipment, hazardous materials, clearly labeled access and egress points, safety and ADA information.

Safety - Base drawings can easily be expanded to show hazardous materials, NFPA 70e electrical safety information, sprinkler layouts, and fire equipment locations.
Compliance and Certification - LEED, JCAHO, and The National Register of Historic Places all require documentation as a core part of their very definition.
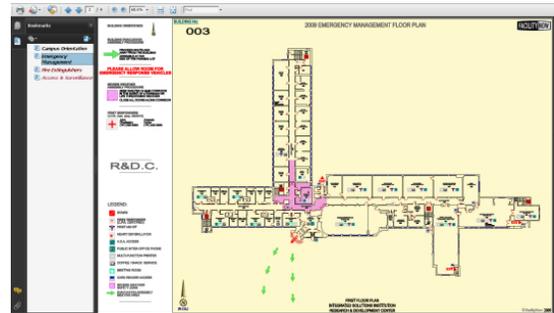
Evacuation and safety drawing indicating tornado safe areas, trained first responders, and evacuation rally information.

Contract Negotiation - Knowing exactly how much space you have is a valuable negotiation tool.

A starting place for others - Often internal customers and suppliers will have an individual need to produce a marked-up drawing themselves. For example, a food service supplier who wants to create seating layouts can be given an initial shell layout. Perhaps there's a special meeting that needs specific way-finding maps. Having an accurate place to start saves time lost recreating basic information. These can be kept at the ready in cad or PDF format.

How do I get started?
Start by assessing what you already have. Many building owners and managers end up with a roll of paper plans and the occasional cad file. These can be a great place to begin.

HR can be a starting place to gather employee information, but be aware that you'll usually need to dig a little deeper to really capture everyone who is typically on your site. Contractors and long-term suppliers can often represent 20% or more of the total population in a large organization.

Prioritize what you need. Ask yourself, "What's going to come in the door today and what will I need to take care of it?"

Thinking ahead gives you the time to prepare and reuse drawings that you rely on. The focus of your site's primary business will drive the definition of your needs.

For example, in a factory production environment you'll want to see a clear heads-up view of machine lines, process piping, and electrical support information. For an office building it will be a furniture and department space layout that highlights vacancies. Lab layouts will indicate primary equipment, designate functional areas and can also include safety requirements and overlay current assignment or grant areas.
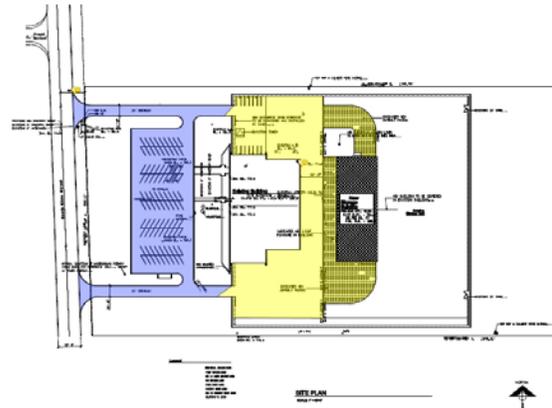
Site plan repurposed for grounds maintenance and parking lot re-stripe bidding.

How do I pay for it?
There are two basic approaches to funding the development of proper documentation. The first is quite obvious: Once you've assessed what you have and what you need, you'll create a specification and take bids on the work. Sometimes you'll discover a dedicated as-built or documentation company nearby, or more likely a construction or architectural firm will respond.

Never were the words *caveat emptor* more appropriately spoken. Ask specific questions:

Who will evaluate my existing drawings?

Who will perform the field work?

What file format will my documentation be in?

Will you stand behind the accuracy of these files?

The more digestible approach to funding is to make documentation and knowledge part of your core competency. In this model every move or construction project is a potential source of funds and should include a line item for updating your core information.

How do I maintain it?
Using information regularly is the key to maintaining accuracy. Involve your contractors and suppliers in your process and insist on accurate cad drawings and support data as part of your project deliverable. This is information that is being created already, so be sure to ask for a copy. After all, you're the one paying for the work.

Begin projects with your own accurate information and always leave it better and more up to date than when you started. As we've discussed, any project that uses or affects your facility documentation should include a line item for updating your working drawings and data after the project is completed. Updates completed during a project are far more valuable than those created after the fact.

Future uses?
The information that has been outlined here can become the basis for a CAFM (Computer Aided Facility Management) or CMMS (Computerized Maintenance Management) system.

When you're looking at implementing a more advanced system, starting with accurate and up to date information is a giant timesaver.

But don't get distracted. The idea of having accurate facility documentation is all about the real world of right now, not some long-range planning fantasy. This is about what you need today.

Robert is a Facility Management Consultant with FacilityNow, Inc. He brings an extensive background of day-to-day facility and maintenance operation skills and combines it with deep IT knowledge and an engaging personal style. Located in Milwaukee, Wisconsin, FacilityNow offers flexible service scenarios that encompass as-built drawing services, document management, software implementation, long-term facilities staffing and support, and many other services for facilities managers.

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