

NEWSPAPERS & TECHNOLOGY

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FACILITY PLANNING BY DARIO DIMARE



Designers must plan for the unknown

The difference between a planned building addition or modification and an unplanned one can vary in cost by more than a magnitude of ten. However, there are many times when a newspaper is asked to anticipate growth, and the answer is "We will never need to add anything else to this facility."

At the time, the answer may have seemed reasonable, but I have seen this turn into a disaster many times. In some respects, this is what keeps architectural firms in business, but if we do not guide our clients properly, it is also what can put us out of business. One should always plan for growth and flexibility in a building.

For example, we are currently working on a project where a small addition is required to accommodate new press units for more color and additional page count. Had the facility and press been designed for growth, the addition would have cost about \$150,000. In this case, the estimated construction cost is more than \$2,000,000! This is a magnitude of more than thirteen, or \$1,850,000 more than should have been spent, or the result of what happens when one says "never." Never say never.

We recognize three major ways to plan for the unknown.

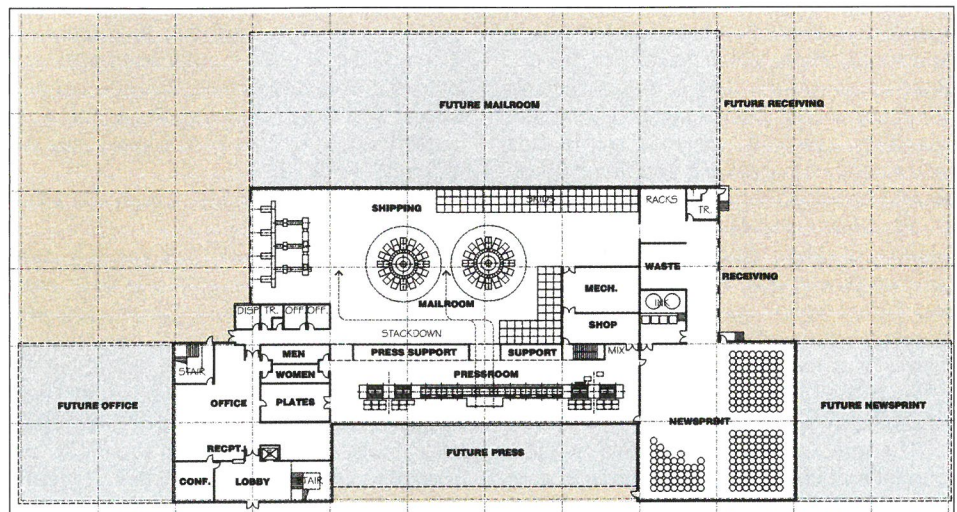
1. Build in the ability to grow.
2. Make it flexible.
3. Build in "smart" or "newspaper specific details" to accommodate future changes.

Planning for the future

Designing for growth begins with selecting the appropriate site.

The size and configuration of the site should be based on your long-term plans, not your immediate needs. We consider long-term plans to be 30 to 40 years, which coincides with the life expectancy of major production equipment and normal building systems/materials.

However, predicting which departments will grow or shrink or even exist 35 years from now is nearly impossible. Therefore, we suggest constructing the facility to accommodate the next 10 to 15 years, with the



The preliminary plan for Foster's Daily Democrat production facility.

built-in ability to double each area in size.

When purchasing a site, one of the most frequently overlooked areas requiring growth is parking. Do not overlook this because most building codes often will not allow you to add onto a facility without having enough space to accommodate additional parking.

When designing each major department for growth, it is essential to consider how the facility functions.

Each space should be able to grow simultaneously or on its own, and it should be able to grow without disturbing any of the existing operations.

For example, the newsprint area should be able to grow without affecting the receiving or waste areas; the office areas should be able to grow without changing the main entrance or major egress components; the pressroom should be able to grow without disturbing the current press operations, and the mailroom should be able to grow without disrupting the shipping areas.

One should also keep in mind that when the mailroom does grow, it usually requires additional shipping, and this should be considered when planning this growth.

A good example of planned growth can be seen in Foster's Daily Democrat's new production facility, located in Dover, N.H. Note that each major area can grow at any

time without disrupting any of the other areas.

Make it flexible

There are many ways to incorporate flexibility into each department of a newspaper. Several examples are listed below.

Production areas should be designed to accommodate various pieces of equipment. The column spacing in the mailroom should be able to handle GMA, Heidelberg, Harris, or Ferag inserters.

The same holds true for the ever-changing distribution systems. One should consider basic bundle conveyors, tray systems, cart systems, and palletizing when designing this area. Pressrooms should consider bottom-fed, end-fed, and even side-fed roll stands. Stacked units, angle bar nests, and additional formers should be considered as well.

The newsprint warehouse should be built for the maximum roll stacking height at the outset, because raising a roof is an impractical method of planning growth in a warehouse.

The production support areas should be grouped together and located out of the way of future growth.

Office areas should be modular in their layout to provide maximum flexibility. The

Continued on back

From front

sizes of the office and work cubicles should be limited to as few standard sizes as possible. This will allow for changes in the future. Neutral colors and traditional furniture systems will also enhance the flexibility of an office area. Color and excitement can be provided with elements that are more prone to wear and more easily replaced, such as paint, carpet and chairs.

Building support systems should also be built with blanks or knock-outs for future growth. Plenty of power, voice, and data chases should be provided to allow for new technologies. Blank panels and areas should be provided for future power needs. Additional empty conduits should be provided underground and in areas that are not easily accessible. Heating, cooling, and plumbing systems, as well as pumps, motors, and compressors, should be modular and designed for expansion.

Site design should consider the size and location of future additions so that utilities such as power, gas, water, sanitary sewer, and storm water, can be both sized and located so they will not have to be changed for the construction of any additions.

Newspaper specifics

The pressroom should have a press foundation that is strong enough to accommodate future stacked units, angle bar

nests and formers. It should also be long or wide enough for additional pasters and the associated printing equipment. There should be an opening to allow for the units to be received. Rigging rails and ceiling height should be considered if future units are anticipated. The ink tanks and system should be designed to handle future units.

The newsprint warehouse needs to have the proper floor slab if future newsprint will be stacked higher. Using the mailroom slab is most often a mistake.

The mailroom should also have a floor slab that will be able to accommodate high-rack skid storage systems. A "super-flat" floor may be needed if automated skidhandling is anticipated in a higher rack system. Space for extra shipping docks or bulk delivery docks should be designed into the mailroom shipping wall.

A single floor production area will allow for maximum flexibility.

When the newsprint warehouse, reel room, and mailroom are on one floor, area can be used to back up or support any other area. For example, if the price of newsprint is going up, the mailroom (if properly designed) can be used to store newsprint. Likewise, around the holidays when inserts are abnormally abundant, the newsprint warehouse can be used for temporary storage.

The aforementioned \$2,000,000 example was so expensive because the main switchgear was not only too small for the additional electrical load, but it was also located at the end of the press where the new units needed to go. Much of the building's mechanical areas had to be relocated and expanded. The press pad was on piles and was not long enough for additional towers.

There were no plans to receive extra units, so they have to be dropped in through the roof. The roof was too low for the stacked units and had to be raised. The pressroom level displaced key computer intensive office areas that had to be relocated in a small building addition, which in turn disrupted the egress areas of the facility, requiring new stairs and exit corridors.

Much of this could have been prevented. It is the result of poor planning and the use of the word never. Never say never.▲

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