



Engineering & Construction Corp.

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## THE OWNER'S GUIDE TO FACILITY GROWTH

### OBJECTIVE:

*To explain the building process in a way that will enable you to hire the right professionals, who will get you the results you need, and bring you through the process in the most efficient manner.*

### MAIN CHAPTERS IN THE PROCESS

Determine what you need

Find the land with the help of your real estate agent

#### Due diligence:

Town zoning

Environmental (Phase I, wetlands, DEP issues)

Survey

Site plan layout (best results when Engineer & Architect work together)

Cost estimate for the entire project

Get your approvals (town, county, state, outside agencies)

Banking: Where does the money come from for the project?

Land closing (you own it, you paid for it usually in cash or private money, point of no return)

Building design & drawings & pricing (best results if Architect & GC work together)

Building permits from township

Closing on construction loan with bank

CM and/or GC start work

Interior finishes and specialty work

Certificate of Occupancy (C of O)

Closing on the permanent financing

The big move

**Some professionals who may participate in your expansion:**

Real Estate Agent	
Land use attorney	Traffic Engineer
Civil Engineer	Environmental consultant (Phase I's)
Architect	Wetlands consultant
Building Engineers (M.E.P. & S)	Surveyor
Construction Manager	Geotechnical Engineer
General Contractor	Interior designer
Bank	Owner's representative
Contracts attorney	Bank's representative
Sub Contractors	
Specialty subs (furniture, phones, computers, security, IT, etc.)	

**Agencies & organizations you may need approvals from:**

Township planning/zoning board  
Township commissions (tree, environmental, health, etc.)  
Municipal utilities authority (Sewer & Water)  
County planning board  
County Soil Erosion & Sediment Control  
DOT  
DEP (many different approvals may be necessary)  
D & R Canal Commission  
Utility Co. "will serve" letters (electric, gas, water, sewer, phone, cable, etc.)

**Fees you may have to pay:**

General application fees to all approving agencies (occasional waivers for non-profits)  
MUA – sewer/water hook-up fee based upon ERU's (negotiable occasionally)  
COAH – Coalition of affordable housing (fees suspended for one year as of 7/2009)  
Township building & engineering department's review and inspection fees  
Twp./County development contribution fees (traffic, open space, education, etc.)

**Do these things before anyone in the building industry is contacted:**

1. Determine the geographic area you wish to be located.
2. Determine your business plan for the next 5, 10, 20 years.
3. Determine your physical space needs over this time (this will be reviewed again by a consultant)
  - a. Office size
  - b. Shop / Storage size
  - c. Parking lot (cars & trucks)
  - d. Special features: loading docks, cranes, clean rooms, labs, retail, etc.
4. What can you afford?(this may be done with your banker/accountant, if you need help)

**Progression of steps you should take:**

1. Complete the first four steps listed at the top of this page to the best of your ability.
2. If you are looking for a new location for your business, Land is the key. Find the property before anything else. Contact your real estate broker. Encourage him or her to talk to economic development people at townships you are interested in. Contact the local mayors. Remember, you are a business. New businesses bring taxes and jobs into towns. They should want you. Many of the professionals you will end up hiring will depend upon what town your property is in. Local connections are important for your project to go smoothly.
3. Find at least two or more people from the following list who are competent that you trust:
  - Real Estate Broker
  - Land use attorney
  - Civil Engineer
  - Architect
  - General Contractor (GC)
  - Construction Manager (CM)
  - Real Estate agent
  - Owner who has been through the process already

Recognize that these people will be experts in their own field, but may not know about the other requirements that you will have to go through. It is important that you bring in a “team” that will be able to bridge the entire scope of your project with their own experiences.

4. Run with that team, manage them, supervise them, support them, pressure them, and celebrate with them in the end, in your new building.

### **Who is on your team?:**

After you find the property with the help of your realtor, opinions vary about what order you should hire consultants in. Examples:

Attorney – Surveyor – Engineer – Architect – GC – etc.  
Architect – Civil Engineer – Surveyor – Attorney – GC – etc.  
GC – Architect - Civil Engineer – Surveyor – Attorney – etc.  
CM - Surveyor – Engineer – Architect – GC – etc.

While the same players seem to be involved, the order in which they are brought in will mean a HUGE difference in how much money you spend up front, before you know if the plan will succeed.

### **Just make sure that the consultants you decide to hire all work together, and together provide you with full coverage for all the different phases of the process.**

Personally, before I start going down a road, I like to know how much it will end up costing me at the end, what I will get for it, and when will I get it. Whether I am buying a copier for my office, a \$700,000.00 site sub contractor for one of my jobs, or a wetlands consultant, I ask the same basic questions:

- How much does it cost now?
- What extras are available, what do they cost?
- How long will you stand behind it?
- What am I getting?
- What else do I need ?
- If you were me, what would you do?

### **Pitfalls:**

There are so many pitfalls with building construction in NJ that it is not uncommon to have a number of false starts, delays, and cost overruns. The trick is to minimize them.

False starts will cost you time and money.

Most of the time these are caused by one professional getting ahead of another.

Examples:

Don't have the architect layout the offices before the engineer locates the building on the site....

Don't let the civil engineer lay out your building until the surveyor completes the topography...

Don't let the surveyor complete the survey before the wetlands consultant flags the wetlands ...

Don't let the wetlands guy visit the site until the realtor finds out it is not in the highlands...

Pitfalls: continued

Delays occur because of a lack of coordination:

Completing a building is about getting different people, with different priorities, to work together towards the same goal.

No one will tell you that they never received your application in the mail, or let you know that the review letter went out last month to your attorney, or that the carpet you picked out 3 months ago is on backorder.

It is rare to get a complete checklist of requirements from the township, and even rarer to find out that the spec-ed ceiling tile is discontinued.

You need to ask the right questions – information will not be volunteered.

Most delays are caused by omissions, omissions of details, forms, money, or just following up.

Cost overruns:

Uncontrollable cost overruns like the prices of steel, oil, or concrete going up can't be helped – no sense discussing.

Controllable cost overruns are caused by mainly three things:

Decisions that are made during the process without fully understanding the consequences.

By the omission of details, or knowledge of requirements.

Not performing the proper due diligence, as it relates to the site, and the approval process.

**Conclusions:**

You have to look after yourself, and stay on top of your professionals.

It is not important what the cost is before the job starts. The importance is the total costs when the job is finished. Costs include cash, time span, your time, etc.

The facility you build has to work for you for the next 20+ years. Make sure it will enable you to grow and be successful, and not burden you. Keep this in mind during all decisions you make during the process.

There is an old saying in construction:

- FAST
- CHEAP
- GOOD

Pick any two...