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IMPROVING CAPITAL IMPROVEMENT PROJECTS

Stephen A. Varone, AIA, President
Rand Engineering & Architecture, PC
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PLANNING

Assemble the appropriate project team.

- The skills of each team member must be appropriate for the project.
- Don't forget to introduce the parties.



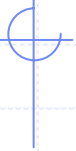
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PLANNING

Know your priorities.

- Is this your most important project?
- Have all the building systems been surveyed?





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PLANNING

Establish the scope and objectives.

- Where are you going? How do you get there?
- Clearly defined construction documents are essential.





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PLANNING

Set a realistic budget.

- Include contingency allowance.
- Contingency amount depends on project scope (typically 15%).
- Don't forget incidental items, such as filing fees, overtime, extra security, etc.



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BIDDING

Thoroughly research the bidders list.

- Select firms with specific experience in the project being undertaken.
- Limit the number of firms (4 to 6) to maintain interest.



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BIDDING

Provide comprehensive pre-bid instructions.

- Thorough specifications avoid confusion.
- Get manufacturer's rep involved.
- Hold pre-bid site meeting for all bidders.
- Bidders must have easy access to site for investigation.
- Above all: Don't reveal the budget.



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BIDDING

Insist on a sealed bid process.

- Have bids sent to two locations.
- Hold to a strict deadline.
- Complete a bid opening report with witness for the record.



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BIDDING

Confirm the legitimacy of the bids.

- Have pre-bid budget estimate.
- Itemized bids easier to analyze.
- Don't be seduced by too low a bid.
- Don't dismiss any bids out of hand.



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BIDDING

Negotiate for bid bargains.

- Contractor may have lost another job and have a crew on hand.
- Contractor wants to establish relationship with your building, agent, engineer/architect.
- Contractor has another project nearby.
- Don't be afraid to haggle.



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BIDDING

Maintain standards for bidders.

- Interview bid finalists.
- Get references from similar projects.
- Be aware of union demands.





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CONTRACT

Avoid a unit-price nightmare.

- Get a fixed-fee contract for specific work items.
- No additional work without formal change orders.
- AIA 101-201 contract (1997 version) or AIA 107 for small projects.



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CONTRACT

Obtain advantageous payment terms.

- Refuse down payments.
- Keep retainage of at least 10%.
- Get at least 20 days to review invoices.
- Insist on liquidated damages (0.1% to 0.3% a day, minimum \$500 a day).
- Be wary of non-specific clauses.



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CONTRACT

Insurance and Bonding.

- Insurance requirements depend on your building: Commercial space? High-traffic?
- Get occurrence-made, not claims-made basis.
- Insist on “hold harmless” clause and additional insureds.



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CONTRACT

Insurance and Bonding.

- Contractor should have \$2 million per occurrence; \$5 million aggregate.
- Less need for a bond with no down payment.
- Performance and labor-and-material bond (1½% to 3%) suggested for large projects.
- Consult your insurance broker.



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CONTRACT

Establish a firm schedule.

- Assume winter shutdowns (if applicable).
- Allowance for adverse weather days should be figured in schedule in advance.
- Have liquidated damages kick in two to four weeks after scheduled completion date.



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IMPLEMENTATION

Project Coordination.

- Communication is the key.
- Project initiation conference with engineer, manager, and contractor.
- Daily calls and weekly faxes/e-mails on project progress.
- Engineer/architect site visit reports.
- Weekly or biweekly meetings between engineer, contractor, and manager.



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IMPLEMENTATION

Project Supervision.

- Supervisor should be full-time person responsible for entire project (not engineer or architect).
- Keep construction documents on hand.
- Daily log documenting completed work.
- Large projects may need full-time construction manager.



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IMPLEMENTATION

Subcontractors.

- Both contractor and owners should be upfront about discussion of subcontractors.
- Contractor must get prior approval from owner.
- Owner doesn't pay for replacing unsatisfactory subcontractor.



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IMPLEMENTATION

Site Safety.

- Contractor must follow OSHA guidelines.
- Sidewalk shed needed for most exterior work.
- Motorized (not rope-hoisted) scaffold.
- Use common sense.
- Don't assume liability as owner.



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IMPLEMENTATION

Stay in financial control.

- Waiver of lien with subclause on responsibility for removing any liens.
- Itemized bills, with updated timeline.
- Work should stay ahead of payments.
- Engineer approves payment requests.
- Contractor can't stop work over payment disagreement.



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IMPLEMENTATION

Guarantees and sign-off.

- Get manufacturer's guarantee; keep manufacturer's rep involved.
- Certificate of Substantial Completion signed by all parties.
- Engineer's punch list of unfinished items.
- No sign off until all work is completed.



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Speaker Information

Stephen A. Varone, AIA, is President of **Rand Engineering & Architecture, PC**. Founded in 1987, Rand is a 47-person firm specializing in consulting services for evaluating, renovating, upgrading, and restoring residential, commercial, and institutional properties. Rand's services include design, specification, and construction administration for new and upgraded exteriors; roofing and structural systems; and HVAC, electrical, and plumbing systems.