

Building Department Best Practices: BOAL Conference

February 2008



Table of Contents

Better Practices or Practices That Have Worked.....	1
Written Procedures.....	2
Incentives for Going Green.....	3
Expedited Plan Review.....	14
Paperless Office.....	21
Plan Travel and Group Inspections.....	30
Make Big Projects Smaller.....	32
Rolling Terrain.....	36
For more information.....	38



Better Practices or Practices That Have Worked

- Written Procedures
- Incentives for Going “Green”
- Expedited Plan Review
- Paperless Office
- Travel, Large Projects, Compliance Options and more



Written Procedures

- Plaquemines Parish example:
 - Developed submittal requirements for new residential building permits
 - Stamped/signed plans
 - Reference codes
 - Identify wind design (140 mph) and exposure zone B or C
 - Means of opening protection
 - Plot plan



Incentives for Going Green

Enhanced building standards can reduce:

- Energy demand
- CO2 emissions
- Construction waste
- Water usage
- Waste/storm water
- Other infrastructure requirements



Incentives for Going Green

- Commercial – LEED®
- Residential – multiple programs
 - NAHB Green Building Program
 - USGBC LEED for Homes Program
 - Others



Incentives for Going Green

- Green construction is more expensive
- Greater upfront costs
- Green construction may cost less
- ROI may be several years
- Green construction is desirable
- Green construction reduces infrastructure demands



Incentives for Going Green

- Tax Incentives
- Density Bonus
- Expedited Permit/Plan Review
- Grants
- Technical Assistance and Education



Incentives for Going Green

Chatham County, Georgia Board of Commissioners passed an ordinance that gives full property state and county tax abatement for any building achieving LEED Gold certification for the first five years, then tapering off by 20% each year until the tenth year.



Incentives for Going Green

Arlington County, Virginia allows commercial projects and private developments earning LEED Silver certification to develop sites to a higher density than conventional projects. The County also encourages builders of new single-family homes to incorporate energy efficient and other green building components in their projects. The County offers "front-of-the-line" plan review, site signs, and publicity to program participants who achieve a given number of points as outlined by Arlington's Green Home Choice program.



Incentives for Going Green

Gainesville, Florida requires all government county buildings be LEED certified. Additionally, the county is providing a fast-track building permit incentive and a 50% reduction in the cost of building permit fees for private contractors who use LEED.



Incentives for Going Green

Cincinnati, Ohio passed an ordinance that sets aside funds from the Community Development Block Grant to provide financial assistance for builders of new residential or rehabilitated low-income or mixed -income structures and homes that meet LEED standards. Funds would be used to offset any increased costs from building to LEED standards.



Incentives for Going Green

Pennsylvania legislature amended the Public School Code to provide a financial incentive to public school districts that achieve LEED Silver certification.



Incentives for Going Green

- Role of the building department:
 - Oversee green or sustainable building measures for public and private sector development
 - Provide funding and training for staff development
 - Obtain services from outside to review qualified projects and to verify compliance with enhanced standards and/or incentive program as needed



Incentives for Going Green

Enhanced building standards can reduce:

- Energy demand
- CO2 emissions
- Construction waste
- Water usage
- Waste/storm water
- Other infrastructure requirements



Expedited Plan Review

“...the building official may expedite issuance of the permit.”



Expedited Plan Review

Is ***not***:

- A “buddy-system”
- ILLY
- Better/faster service for more money
- A means to transfer accountability



Expedited Plan Review

Is:

- A means to more quickly review projects that deserve special attention, while maintaining the integrity of the plan review process.



Expedited Plan Review

"The building official may accept reports from an approved person or agency that the construction documents have been examined and conform to the requirements of the [code] and may establish requirements for the person or agency submitting such reports. In addition, where such reports have been submitted, the building official may expedite the issuance of the permit."



Expedited Plan Review

- Building official may accept reports from approved parties
- Building official sets requirements for approved parties
- Approved parties must meet requirements
- Building official reviews work of approved parties
- Building official retains responsibility for permit issuance



Expedited Plan Review

Benefits:

- Produces plans that have undergone code review prior to the permit request
- Saves the building department time
- Costs the building department little to nothing



Expedited Plan Review

Who pays? Consider this:

- \$100,000 construction loan
 - \$700 *monthly* interest
- \$1,000,000 construction loan
 - \$1,500 *weekly* interest
- \$10,000,000 construction loan
 - \$2,000 *daily* interest



Paperless Office

Challenge

- Building departments generate paper
 - Guides, forms, rejections, approvals, reports
- Building departments request paper
 - Plans, forms, calculations, specifications, reports



Paperless Office

Challenge:

- Manage plans for 10% to 30% of all new single-family homes built in the US
- ~100,000 homes in 2007
- More than 8 million homes since 1976



Paperless Office

- HUD/IBTS receives all manufactured home designs
- HUD/IBTS reviews these designs to assess “building department” plan review performance and capability
- HUD/IBTS maintains these designs for future reference and retrieval



Paperless Office

Opportunity in 1990s:

- Majority of industry creates designs electronically
- Technology exists to receive, store and review electronic drawings
- Technology and equipment becomes affordable



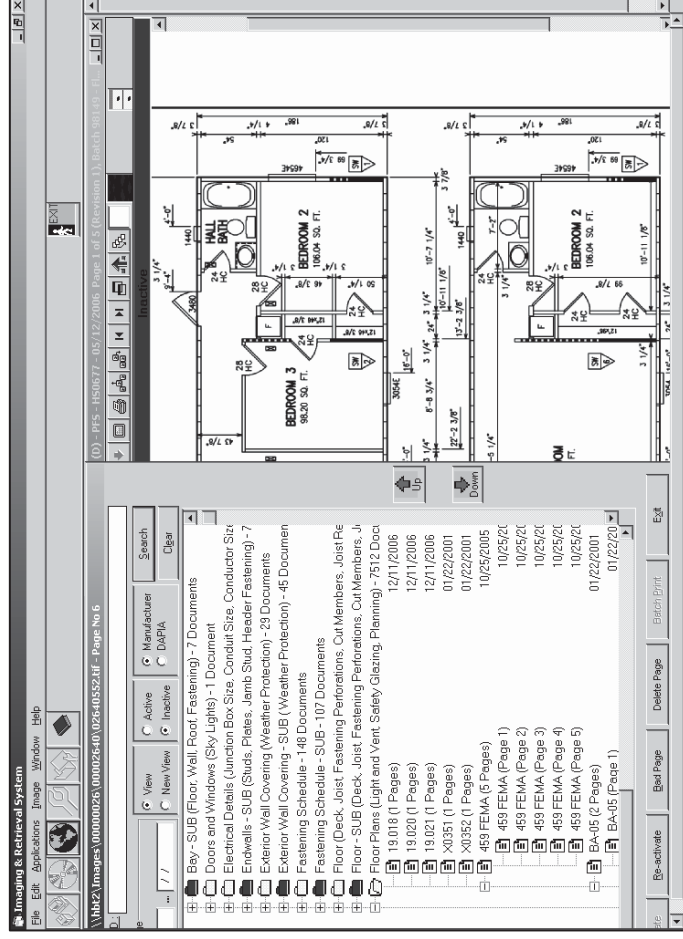
Paperless Office

Electronic Imaging and Retrieval System:

- Accepts drawings in multiple electronic formats, as well as hard copy drawings
- Maintains unique document naming and numbering conventions of designer
- Indexes each drawing to uniform criteria
- Automates document indexing
- System is expandable and upgradeable



Paperless Office



Paperless Office

Benefits:

- Stores more than 4 million documents
- Evolves with technology
- Eliminates delivery costs and associated environmental impact
- Provides simultaneous access to the same document by multiple reviewers
- Allows immediate, secure and searchable access to all documents from any computer with an internet connection



Paperless Office

In 10 years, IBTS conservatively saved:

- 2 billion BTUs of total energy
- 285,000 pounds CO2 (Greenhouse gases)
- 954,000 gallons of wastewater
- 114,000 pounds of solid waste
- 100,000 pounds of paper not used

Estimates from www.papercalculator.org



Paperless Office – Smarter Use of Paper

- Use recycled paper
- Change font size and/or paper margins
- Double-side copies
- Provide and accept electronic forms
- Discourage employees from making or requesting unnecessary copies



Plan Travel and Group Inspections

Question: On average, how many hours each day do your inspectors spend:

- Planning inspections?
- Driving?
- Inspecting?
- Following up on inspections?
- Other (define)?



Plan Travel and Group Inspections

- Arrange inspections to minimize travel
 - Use mapping programs and tools
- Use multi-disciplined inspectors where appropriate



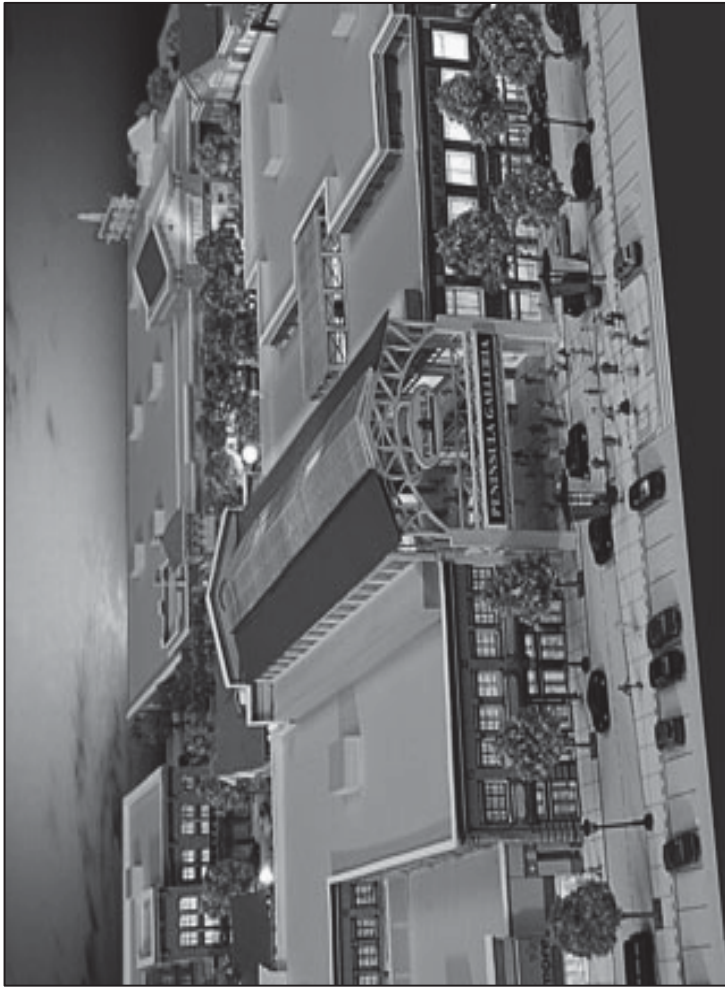
Make Big Projects Smaller



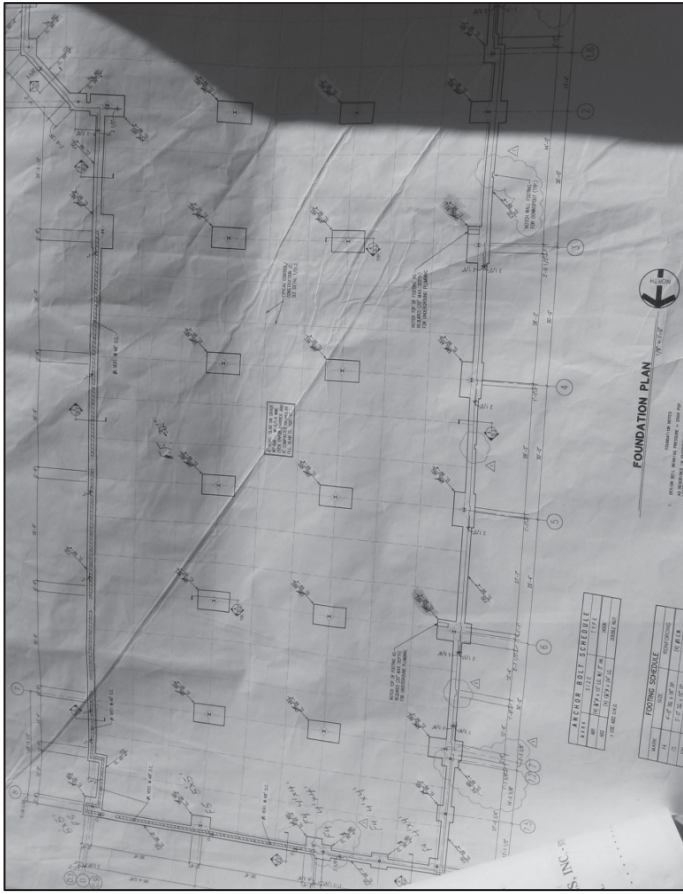
Make Big Projects Smaller



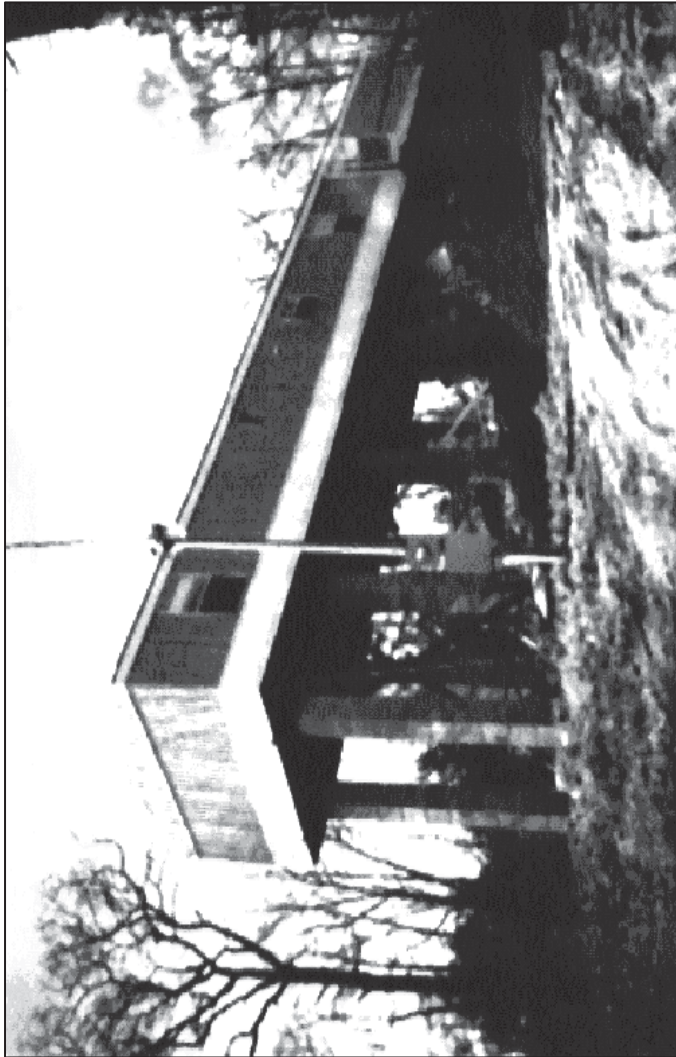
Make Big Projects Smaller



Make Big Projects Smaller



Rolling Terrain



Rolling Terrain

- Re-grade to level home site
 - Code requires soil compaction and verification or,
 - Footings to or below undisturbed soil
- Building Department can educate about code requirement and compliance options



For more information

www.ibts.org or www.laibts.org

Search for “Best Practices”

Or

Paul Hancher

phancher@ibts.org

