



Additional Considerations: Underground, High-Bay and Remote Storage Facilities

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1999 – Alternative Archival Facilities

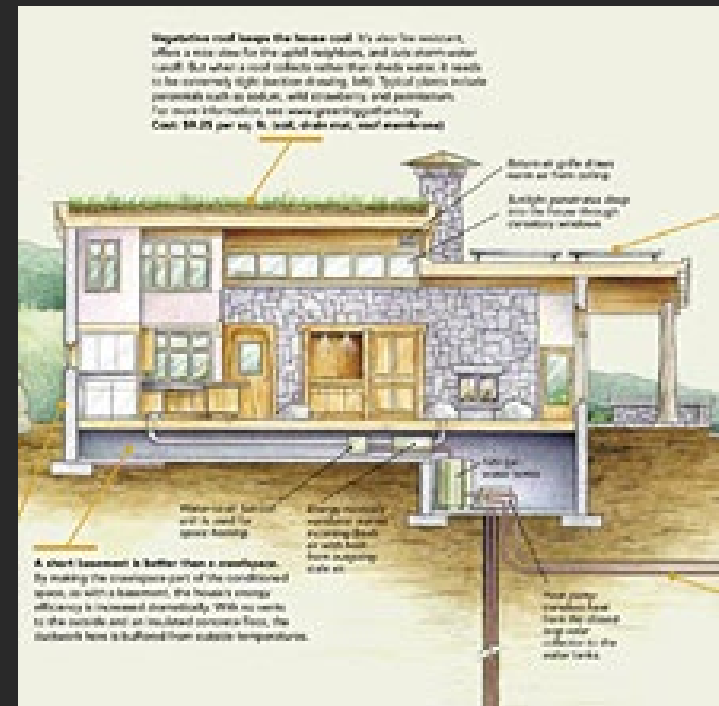
- Paul Banks – “Alternative Space Options”
 - “From the monumental, to the forbidding, to the cozy, to the patently unsuitable.”
- [http://www.nara-at-work.gov/
archives_and_records_mgmt/
archives_and_activities/
preservation/storage_alternatives.html](http://www.nara-at-work.gov/archives_and_records_mgmt/archives_and_activities/preservation/storage_alternatives.html)

Goals

- Without sacrificing holdings and preservation goals
- Reconcile needs with costs
- Go beyond minimum performance
- Leadership in achieving energy savings

“Zero Energy, Infinite Appeal”

by Nathan Good, *Fine Homebuilding*, March, 2006, 25th Anniversary Edition.



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- Supplement specifications and program requirements with dialogue & decisions
 - Fire suppression
 - Monitoring
 - Water detection
 - This is where collaboration, teamwork and communication are paramount.

High-bay Storage Environment

- **Stable, dark and minimal handling**
- **Working conditions – training in safety**
- **Precision for managing system**
- **Tracking system must be flawless and robust**



Ft. Meade, LOC, LCIB

Additional Considerations

- **High-Bay**
 - **Fire-suppression and limiting damage in single incident**
 - **High level of intellectual control to link for tracking**
 - **Air-circulation and monitoring**
 - **Stability**

National Palace Museum – Taipei, Taiwan

From Wikipedia file source



Entrances to Lenexa, KS and Lee's Summit, MO – NARA facilities



NARA - Remote and Underground

- **Lenexa, Kansas**
 - **Archival storage**
 - **Records Center storage**
 - **Cold storage**
- **Lee's Summit, Missouri**
 - **Archival storage**
 - **Records Center storage**

NARA space entrance in Lenexa



Additional Considerations

- **Underground**
 - **Temperature stability and no extraneous light**
 - **Managed RH stability**
 - **Ventilation & human comfort**
 - **Maintaining pollutant standards**
 - **Security for collections**

Underground – Raw space



Lenexa, KS

HVAC freezer system underground



Lenexa, KS

Lenexa



Lenexa, KS

Lee's Summit



Lee's Summit, MO

Lenexa cold storage



Ventilation & Power issues



Tracking by barcodes



Human comfort



Remote facilities

- **Pros**
 - **Potential for lower costs**
 - **Increased security**



Lenexa, KS

Remote Facilities

- **Additional considerations**
 - **Relocation costs for current staff**
 - **Decreased ability to provide training and/or oversight for new staff or contractors**

Remote facilities

- **Additional consideration**
 - **Risks to items from transport**
 - **Shipping costs**



Remote Facilities

- **Opportunities to be developed**
 - **Delivery by digital surrogates to clients everywhere**



Communication & Collaboration

- **Process is important**
- **Resolve issues**
- **Resolve issues in a way that honors everyone's contribution**
- **Resolve issues in a way that does not look for culprits.**
- **Resist the temptation to search for panacea.**

Future Considerations

- **Gathering of information on operating costs and design developments**
- **More sharing of information with allied professionals**
- **More partnerships**
- **More creativity**

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