



Exterior Lighting Compliance

Presenter's Names :

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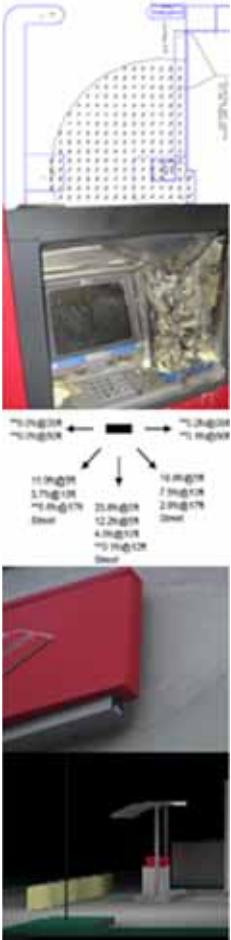
Date: January, 26, 2011



Introduction to GMR (Authorized Bank Vendor)



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- GMR is a premier facilities inspection company focused on servicing financial institutions
- GMR provides our clients with useful tools to implement security lighting programs
- GMR is the leader in ATM Security Compliance due to our proprietary data collection software, field methodologies and reporting formats
- GMR does not sell or service light fixtures and is therefore able to provide objective reports to our clients

GMR's Role with Bank of America



- Bank of America and its facilities partners retain GMR to provide the following services:
 - Quarterly lighting, signage and landscaping inspections (lights out) at all Bank of America locations with external ATMs or NDs throughout the US
 - Annual foot-candle evaluations at all Bank of America locations with external ATMs or NDs throughout the US
 - Lighting Design Services
 - Signage Quality Control Inspections



Bank of America Lighting and Landscaping Compliance Standards



Basics of Bank of America's ATM, Night Depository and Associate Entrance Lighting and Landscaping Standards

300-L1. Landscaping Standards

Security Reference:	300-L1
Description:	Landscaping Standards
Reference (s):	Industry Standards State Legislation Local Regulations

300-L2. Lighting Standards

Security Reference:	300-L2
Description:	Lighting Standards
Reference (s):	Industry Standards State Legislation Local Regulations



- - ATM Law
- - ATM and ND Law
- - Implied ATM Law

- The bank has adopted a national standard for ATM and Night Depository (ND) lighting and landscaping
- 300-L1 Landscaping Standard (adopted 2009)*
- 300-L2 Lighting Standard (adopted 2009)*
- The state regulations supersede Bank of America's standards when the state regulations are more stringent

* See appendix for full definition of standard

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Landscaping Standards Summary 300-L1



- Shrubs within 10 feet of ATM's, ND's or associate entries no taller than 24 inches
- Shrubs more than 10 feet but less than 50 feet from ATM's, ND's or associate entries no taller than 36 inches
- Trees within 50 feet of ATM's, ND's or associate entries trimmed up 6 feet from ground level
- Keep trees trimmed away from light fixtures
- Check landscaping semi-annually

*Note: The landscaping standards are meant to prevent concealment and visibility issues

Lighting Standards Summary 300-L2

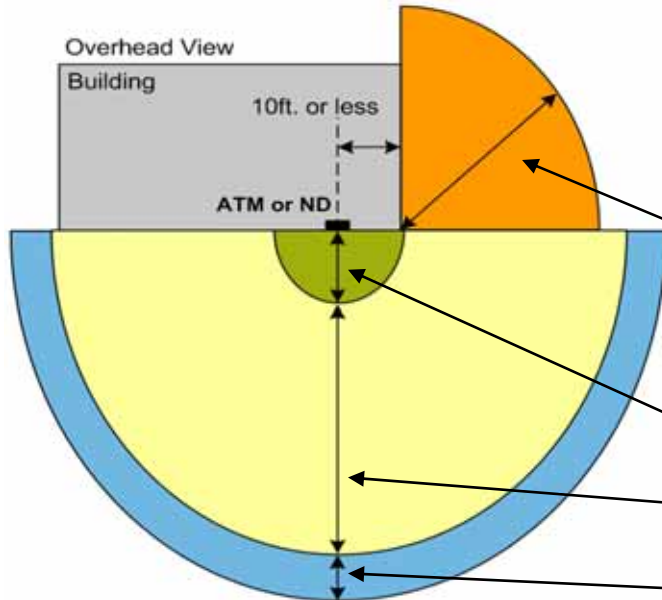


- GMR (authorized bank vendor) takes light readings in a standardized pattern using guidelines established by Bank of America and GMR
- Readings must be taken at a height of 36 inches
- Readings must be taken on a horizontal plane
- Readings must be taken during hours of darkness (between 30 min. after sunset and 30 min before sunrise)

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Lighting Standards Summary 300-L2



Through The Wall ATM or ND

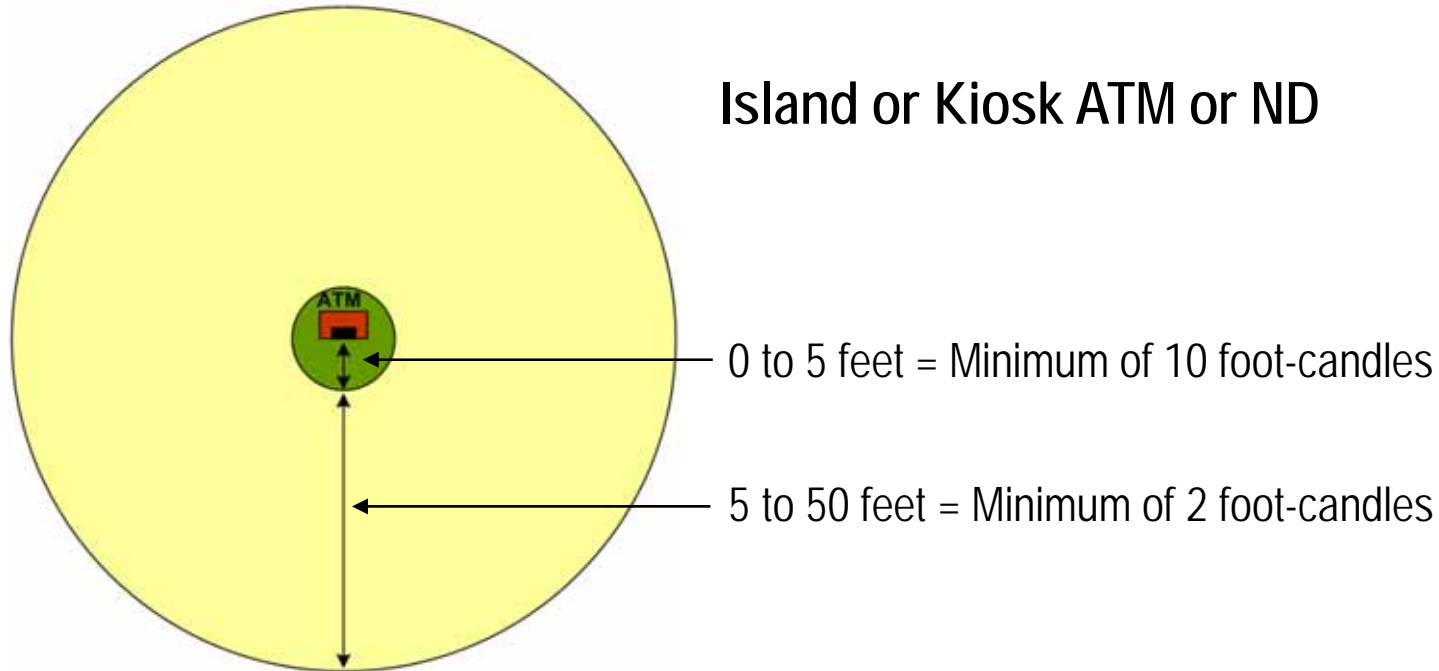
- When an ATM or ND is within 10 feet of the building corner the following requirement applies: Adjacent corner to 40 feet = Minimum of 2 foot-candles
- 0 to 5 feet = Minimum of 10 foot-candles
- 5 to 50 feet = Minimum of 2 foot-candles
- Nearest designated parking within 60 feet = Minimum of 2 foot-candles



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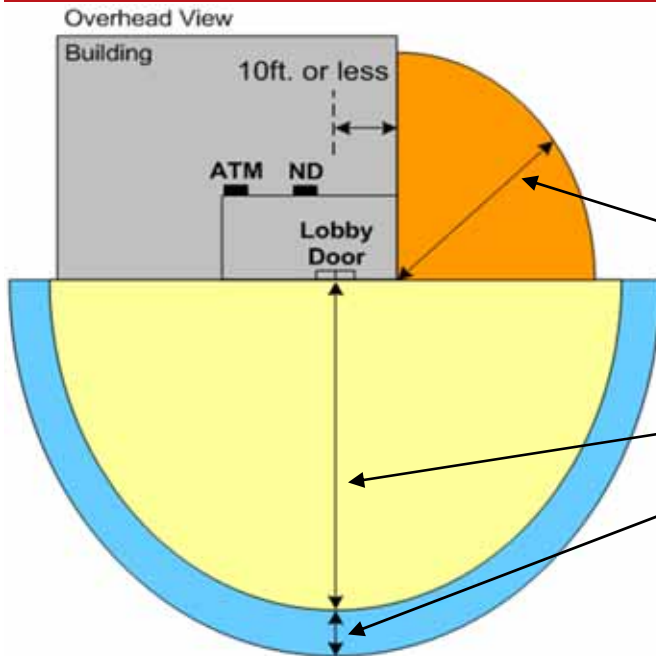
Lighting Standards Summary 300-L2



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Lighting Standards Summary 300-L2



Lobby ATM's and ND's (Part 1 of 3)

From the entrance door outward

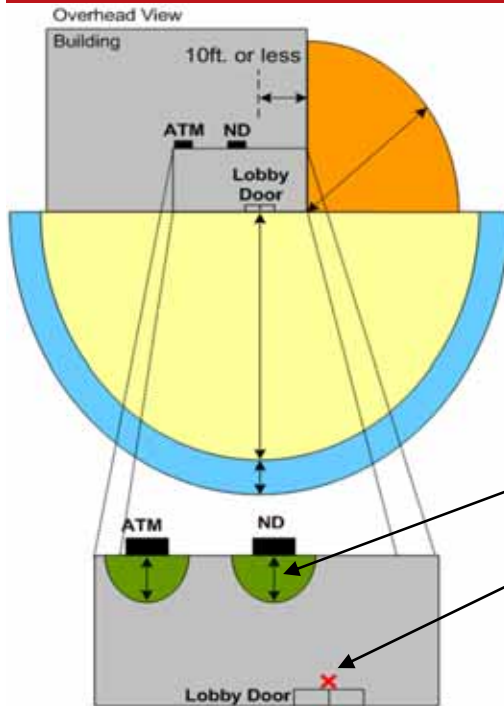
- When the lobby door is within 10 feet of the building corner the following requirement applies: Adjacent corner to 40 feet = Minimum of 2 foot-candles
- 0 to 50 feet = Minimum of 2 foot-candles
- Nearest designated parking within 60 feet = Minimum of 2 foot-candles



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Lighting Standards Summary 300-L2



Lobby ATM's and ND's (Part 2 of 3)

Inside the lobby

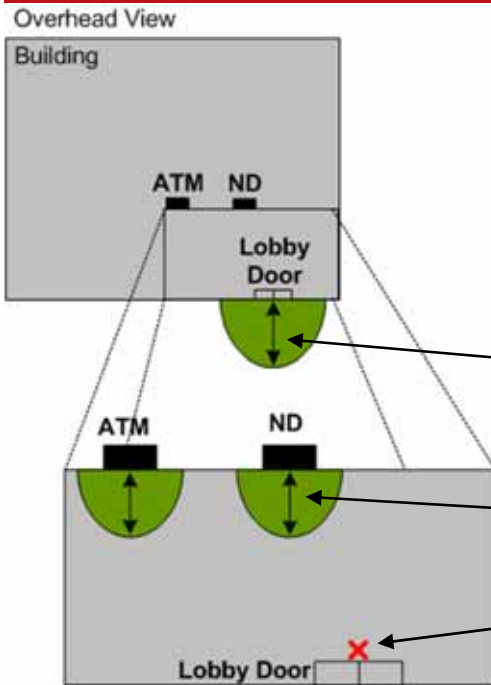
- 0 to 5 feet = Minimum of 10 foot-candles
- Minimum of 2 foot-candles inside each lobby entry



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Lighting Standards Summary 300-L2



Lobby ATM's and ND's (Part 3 of 3)

Vestibules located on the street where the only way to access the lobby is by using the public sidewalk and there is no bank controlled parking within 60 feet of the entrance.

From the entrance door outward

- 0 to 5 feet = Minimum of 2 foot-candles

Inside the lobby

- 0 to 5 feet = Minimum of 10 foot-candles
- Minimum of 2 foot-candles inside each lobby entry



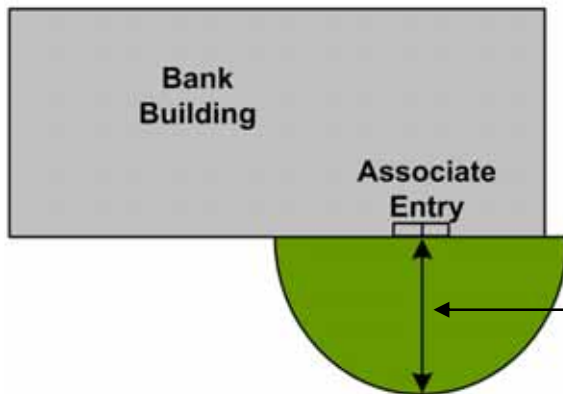
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Lighting Standards Summary 300-L2

Associate Entrances

The associate entry is the main entry used for opening and closing procedures



From the entrance door outward

- 0 to 10 feet = Minimum of 2 foot-candles



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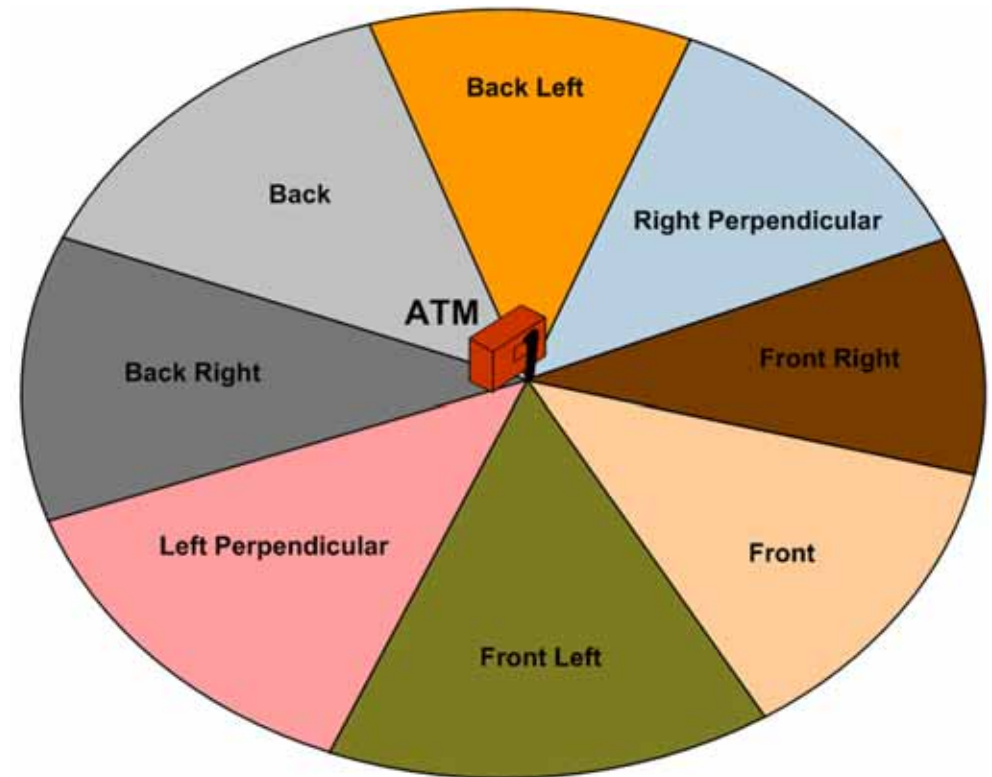


Lighting Evaluation Methodology



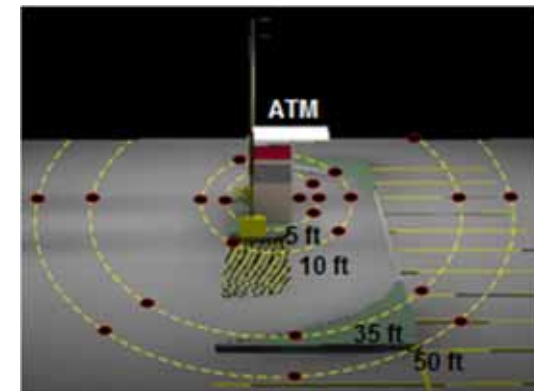
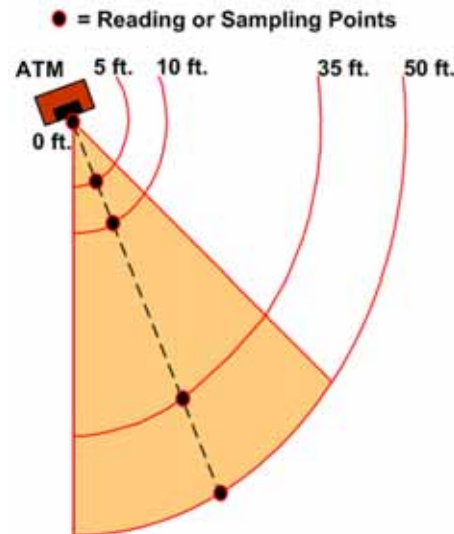
Lighting Evaluation Methodology

- Bank of America and GMR have agreed on a predetermined set of testing points designed to sample lighting levels throughout the access area in an even and repeatable manner
- The sampling area is circular. We divided the sampling area into “slices” to establish a consistent pattern throughout the access area



Lighting Evaluation Methodology

- We sample at certain distances within each “slice” resulting in an even distribution of sample light readings and repeatable sampling methodology
- GMR samples at:
 - 0 feet
 - 5 feet
 - 10 feet
 - 35 feet
 - 50 feet

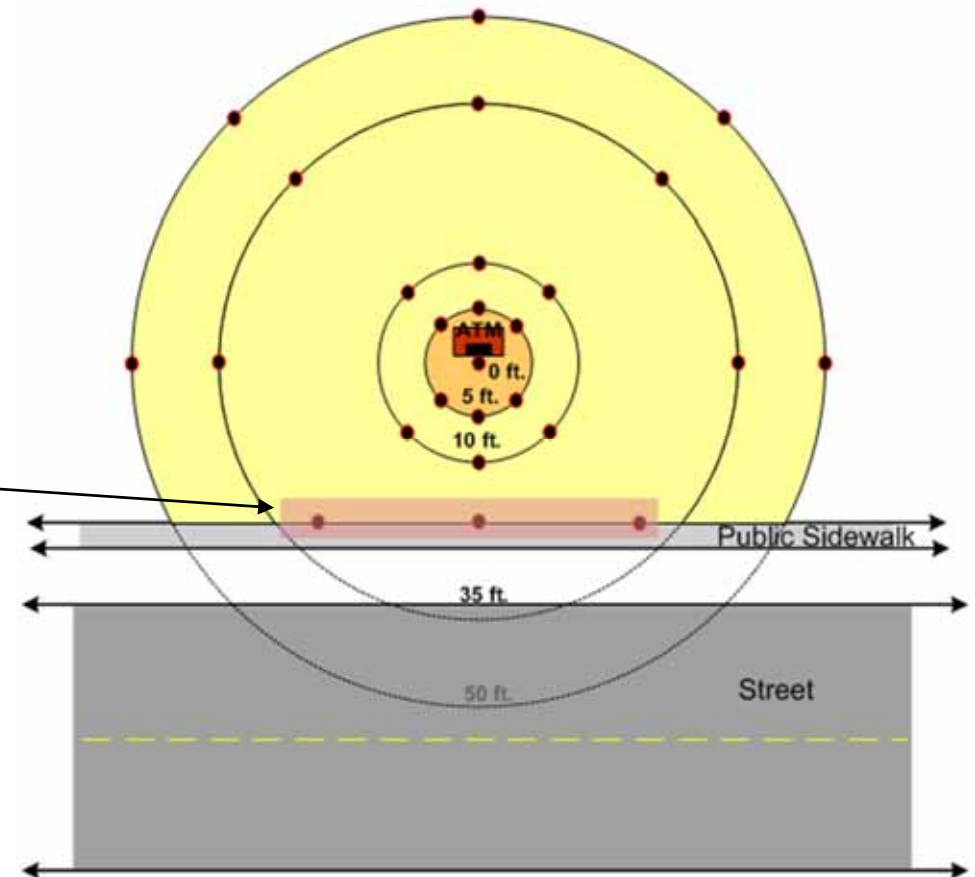


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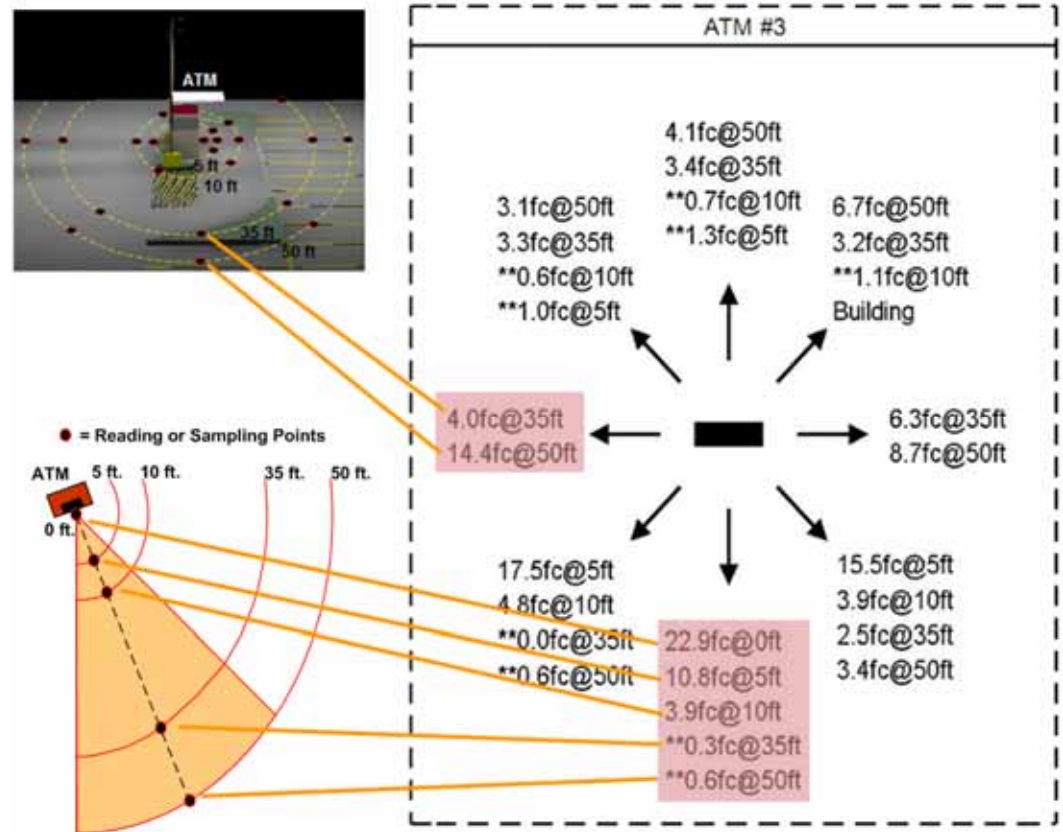
Lighting Evaluation Methodology

- GMR will adapt the predetermined reading pattern to accommodate property lines, streets, sidewalks or permanent obstructions
- In the example to the right, GMR would move the reading points in order to accommodate a public sidewalk



GMR Lighting Evaluation Report

- The readings for each unit are contained within it's own display box or "reading box"
- GMR displays the readings on the report in a fashion similar to the reading pattern used in the field



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Effective Lighting Design



Benefits of Effective Lighting Design

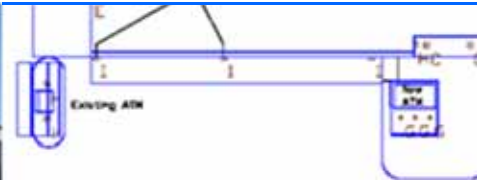


- Increased revenue to Bank of America through:
 - Improved visibility
 - Appropriate lighting
 - Attractive lighting
 - Inviting environment
 - Reduced legal exposure
 - Compliance with Bank / Regulatory policy
 - Enhanced associate and customer safety
 - Time savings for ATM / Retail team



Lighting Design Concepts

- Security lighting is a critical element of bank architectural design
- Poor and inefficient lighting affects Bank of America in multiple ways:
 - Financial
 - Security and safety of associates and customers
 - Regulatory non-compliance
 - Legal exposure



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Challenges of Lighting Design



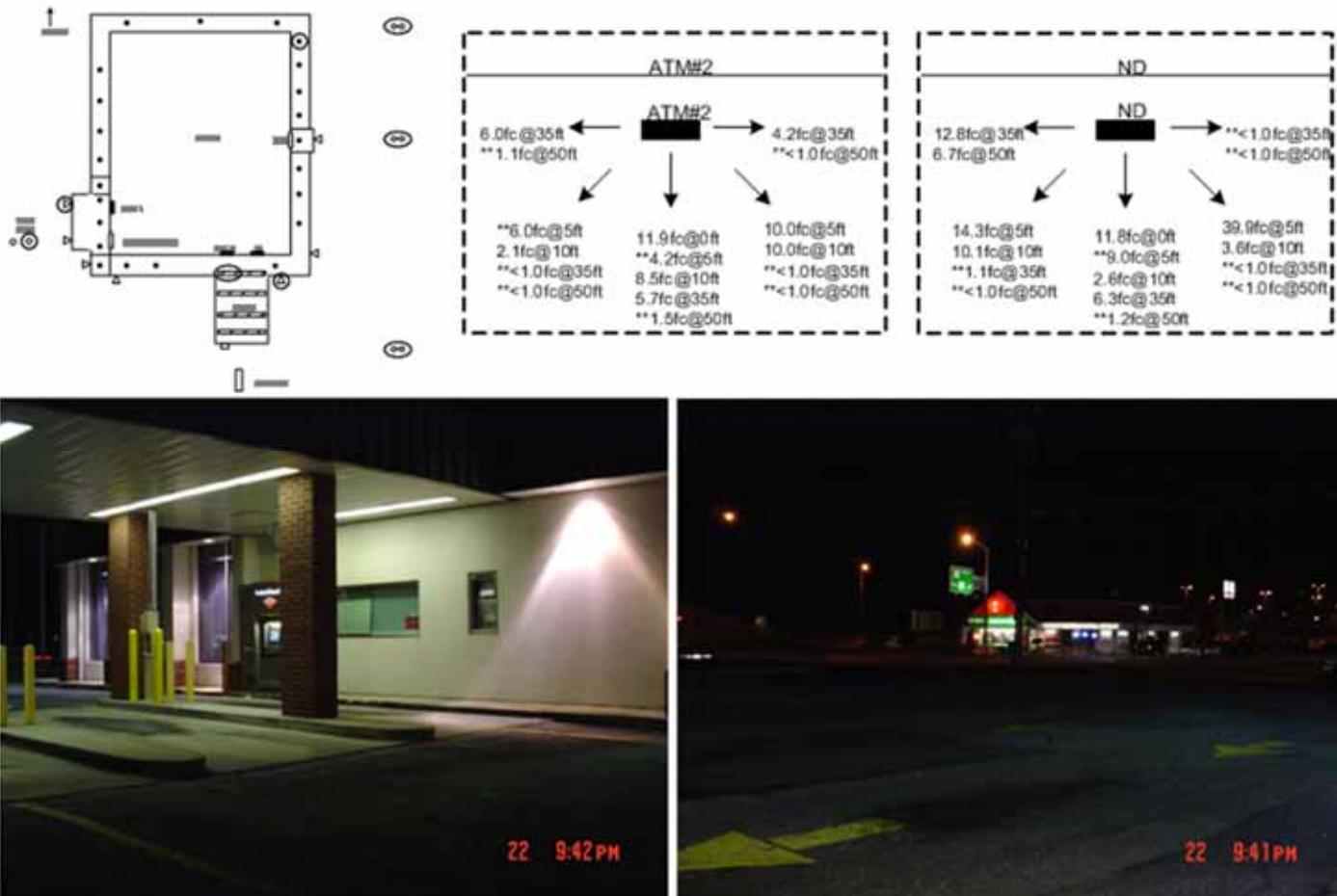
- No two locations are the same
- Lighting design should be:
 - considerate of surroundings
 - designed to maintain compliance, not just meet compliance
 - considerate of energy consumption
 - lighting that impacts ATM's, ND's, Associate entrances or 24hr access lobbies should not be included in the iC3 system.
 - under Bank control and not dependent on lighting sources controlled by others
- Quality is more important than quantity of lighting
 - Avoid "wall-pack syndrome" – In an effort to avoid design cost, some end up spending more time and money installing less effective fixtures to overcome deficient lighting.
- Lighting maintenance should validate ongoing design integrity

Challenges of Poor Lighting Design



- Noncompliance with bank / regulatory policy
- Customer safety
- Increased costs due to:
 - Use of improper fixtures
 - Increased energy use
 - Too little light
 - Increased maintenance
 - Over-lighting
 - Blinding glare
 - Light trespass issues

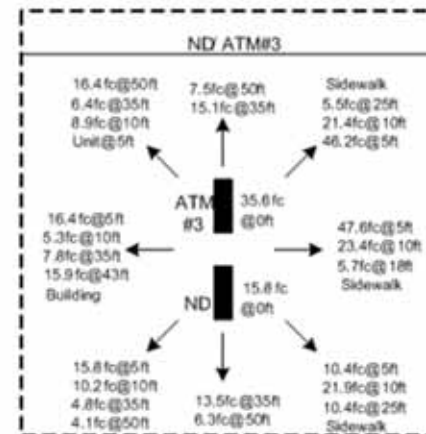
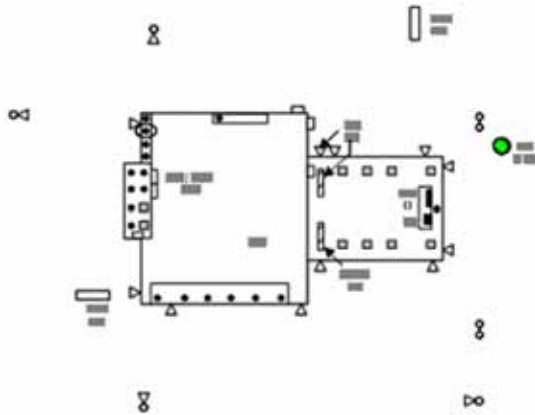
Example: Poorly Lighted (Non-Compliant)



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Example: Well Lighted (In Compliance)



Case Study #1



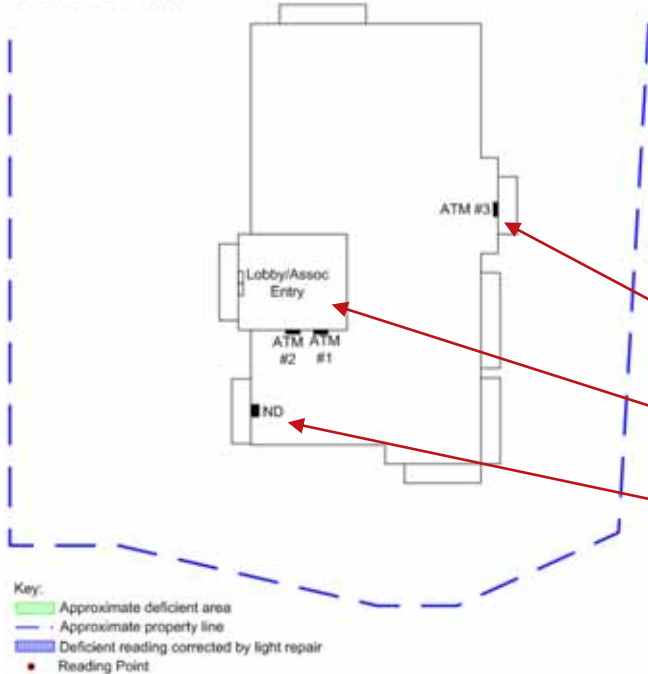
“New Store and ATM Capacity Add”

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Case Study #1 (New Store and Cap-Add)

Overhead View of the Site



Scope of work for GMR Design and Lighting Survey:

- There are three exposures (things to be designed for and surveyed) at this location:

- ATM - Thru The Wall
- Lobby containing 2 ATM's
- ND - Thru The Wall

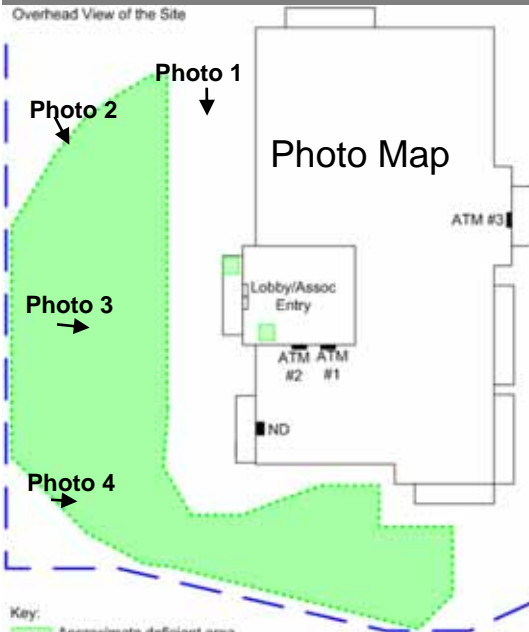


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Case Study #1 (New Store and Cap-Add)

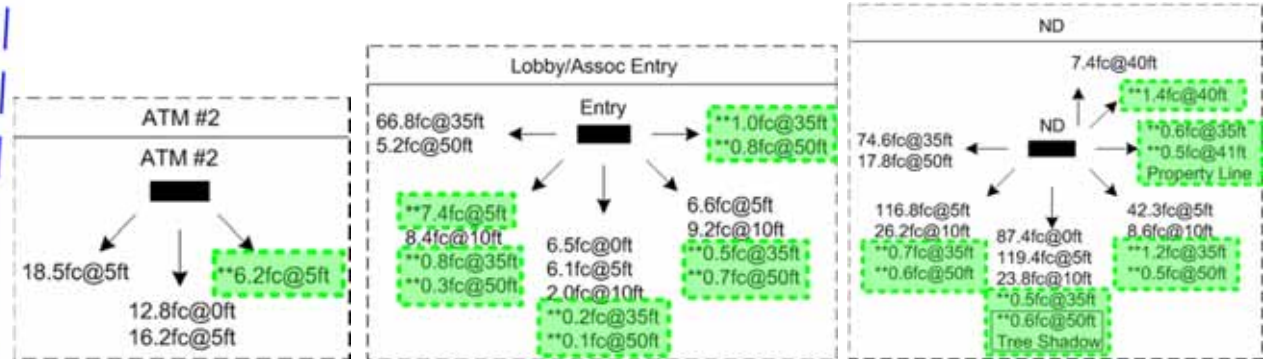
Overhead View of the Site



Key:

- Approximate deficient area
- Approximate property line
- Deficient reading corrected by light repair
- Reading Point

Photos and reading boxes illustrating the deficient areas:

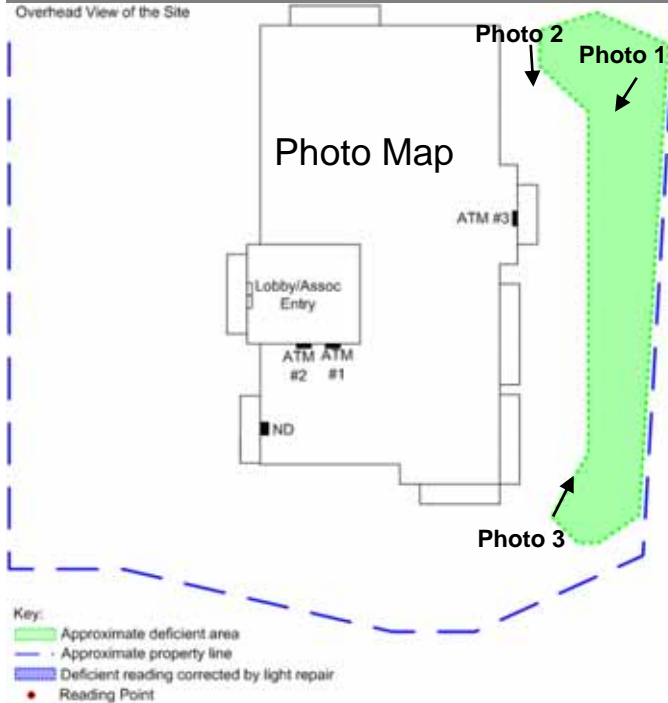


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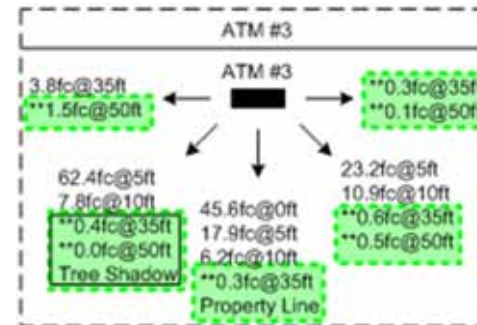
Bank of America

Case Study #1 (New Store and Cap-Add)

Overhead View of the Site



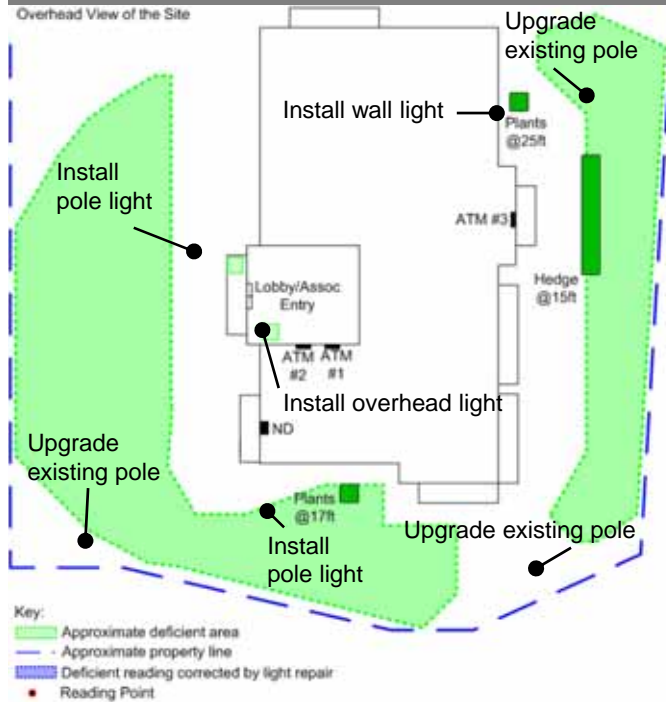
Photos and reading boxes illustrating the deficient areas:



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Case Study #1 (New Store and Cap-Add)



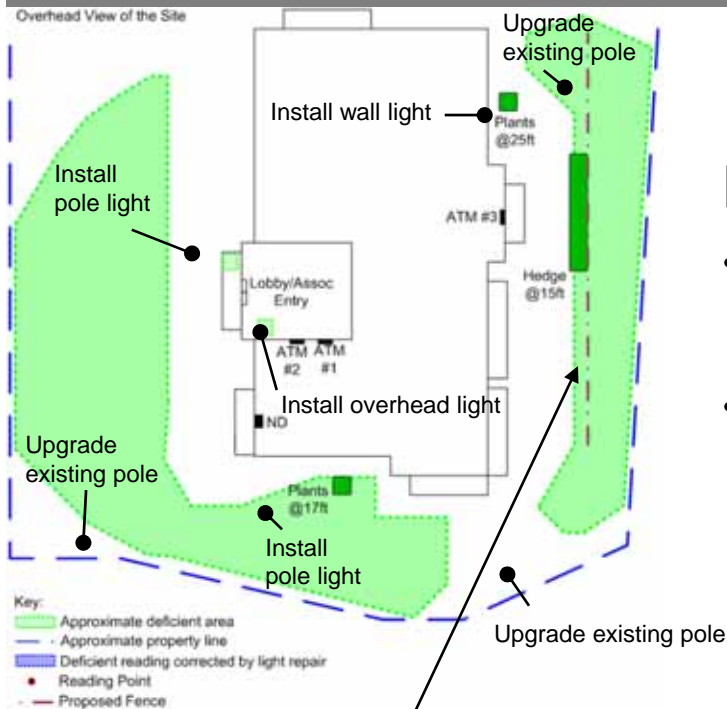
Possible solutions:

- Address landscaping issues (e.g. reduce height, remove or refresh landscaping)
- Install new fixtures as noted on drawing
- Upgrade existing fixtures as noted on drawing



Note: Be sure to obtain proper approval (i.e. city and landlord) prior to taking corrective action

Case Study #1 (New Store and Cap-Add)



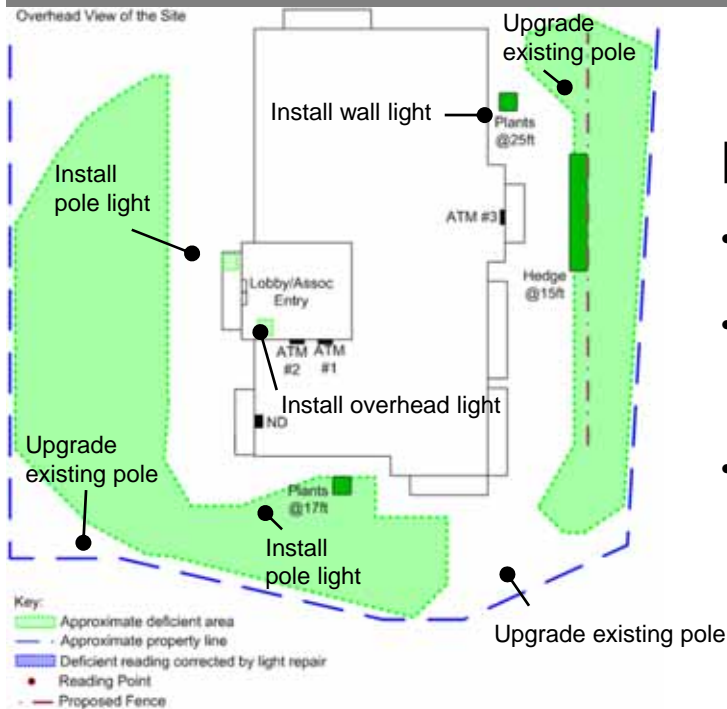
Possible solutions:

- Install a 5 foot tall iron fence (approx. 75 feet long), as noted on drawing, to shrink the access area and reduce risk
- A fence is used at this location, in part, due to the drop in grade along the front side of the ATM



Note: Be sure to obtain proper approval (i.e. city and landlord) prior to taking corrective action

Case Study #1 (New Store and Cap-Add)



Possible solutions:

- Fences should be used very selectively
- Generally fences in this type of application should extend 30 feet in each direction from the centerline of the ATM or ND
- Generally fences in this type of application should be at least 5 to 6 feet tall from ground level



Note: Be sure to obtain proper approval (i.e. city and landlord) prior to taking corrective action

GMR Contact Information

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GMR main number (972) 771-6038

GMR Fax (972) 722-2762



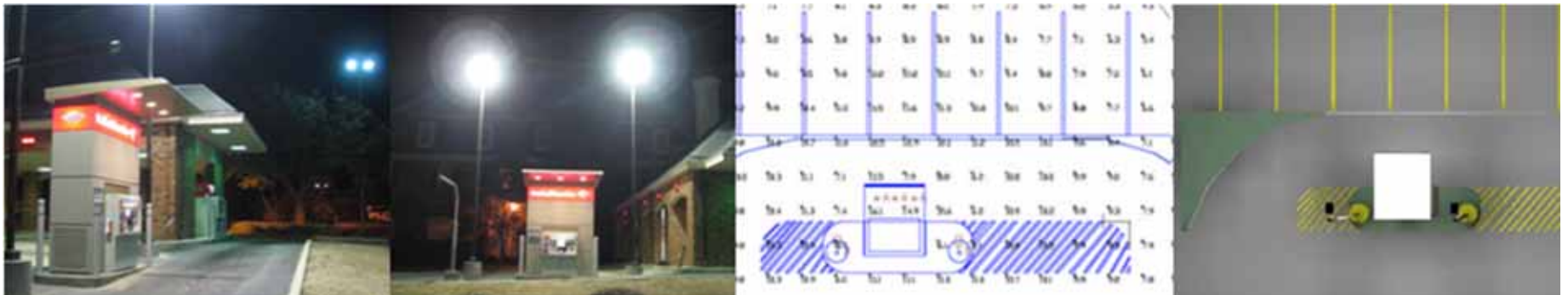
Appendix



Standards

The next two slides contain a copy of the actual Bank of America standards for ATM, ND and associate entrance lighting and landscaping

- 300-L1 Landscaping Standard
- 300-L2 Lighting Standard



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Standards

Bank of America's ATM and Night Depository Landscaping Standard

300-L1. Landscaping Standards

Security Reference:	300-L1
Description:	Landscaping Standards
Reference (s):	Industry Standards State Legislation Local Regulations

Minimum Standard

- Vegetation density and height should be maintained so that it precludes concealment of individuals. Since potential concealment differs greatly among the various types of vegetation, the following should be used not as an absolute, but as a guideline.
 - Shrubbery shall be maintained at or around twenty-four (24) inches if located within ten (10) feet of designated associate entrances/exits, after-hour depositories or ATMs.
 - Shrubbery, except trees, shall be maintained at or around thirty-six (36) inches if located more than ten (10) feet but less than fifty (50) feet from designated associate entrances and exits, after-hour depositories or ATMs.
 - Mature trees within fifty (50) feet of designated associate entrances/exits, after-hour depositories or ATMs shall be maintained so that at least six (6) feet of space exists between the ground and the lowest limbs.
- Trees must be trimmed away from light fixtures to ensure that the leaves or branches do not mask the lighting.
- All landscaping should be checked semi-annually to ensure compliance.
- Corporate Real Estate has overall responsibility of ensuring that bank properties remain in compliance.

Typical Application Areas

- ATM and after-hour depository locations.
- Banking centers, Cash Vault Services Facilities, ATM Regional Deposit Verification Units and other Bank facilities.

Considerations

- Landlords responsible for lease space and access areas in which Bank of America facilities reside should be educated by a bank representative as to the Bank's landscaping guidelines. Should the landlord not respond appropriately, then formal documentation should be exchanged noting that some state laws affect both the operator of the ATM and the property owner.



Q & A

