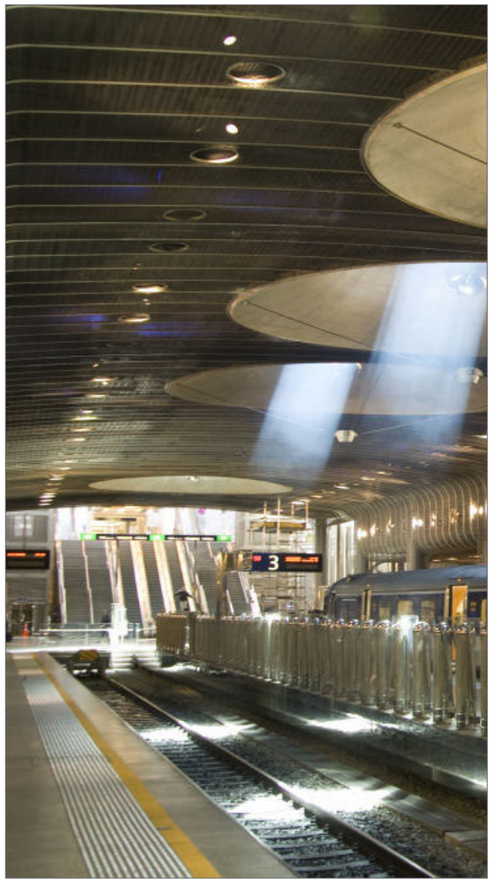
◀ Combine artificial and natural light to improve station aesthetics.



◀ (Left) Natural lighting can make underground stations feel larger than they are in reality; (Right) Proper lighting increases safety at night.

◀ Example of on-street solar lighting.

2.2.2.15 LIGHTING

Proper illumination of a site requires both natural and artificial light. When used in conjunction with one another, they can provide high quality, efficient lighting. Lighting levels are dependent on the needs of the particular function being illuminated, the availability and quality of natural light, the intensity of fixtures used and the hours of operation. Site lighting should enhance the quality of the facility both functionally and aesthetically.

▶GUIDELINES

- Conform electrical design to the latest editions of all appropriate applicable standards and codes.
- Identify and satisfy appropriate levels of illumination for all site functions (see Fig. 8 for details).
- Ensure that the light and lighting elements are acceptable for their intended use and physical context.
- Provide proper lighting of all platforms, waiting areas, circulation paths and parking areas to deter criminal activity.
- Illuminate any dangerous site elements (eg. stairs, ramps, platform edges).
- Explore the use of natural light and natural lighting elements. Natural and artificial lighting should be used in conjunction to develop an aesthetically pleasing lighting scheme.
- Consider whether lighting infringes upon neighboring uses. Buffering or shielding elements can be utilized to resolve certain conflicts.
- Establish a system-wide standard bulb, and possibly fixture type, to promote energy savings and cost efficiency.
- Design fixtures and electrical service to meet both long and short-term energy conservation goals.

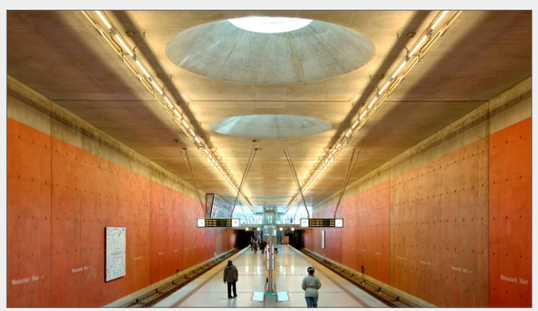
FIG. 8

TECHNICAL CONSIDERATIONS

▶ILLUMINATION LEVELS

Minimum average maintained illumination levels for various areas should be as indicated in the tables based on an update to the Design Criteria. Maintained foot-candle values should be measured as follows:

- For train-ways, in a horizontal plane at the tunnel floor.
- For site and above-grade station areas, in a horizontal plane at-grade.
- For all others, in a horizontal plane 30" above the finished floor.



◀ Proper signage is visible and conveys information quickly.

◀ Signage gives clear directions for complicated information.

◀ An example of a clearly identified emergency evacuation route.

2.2.2.16 SIGNAGE

Signage consists of all graphics and visual images provided to direct or convey information about a facility to its patrons. Signage should clearly and quickly convey information about a site or facility. It must be legible, consistent, sequential and appropriate. There are three basic types of signage:

- **Systems & Information Signage:** To identify the transit system and inform patrons of its operations.
- **Station Signage / Wayfinding:** To inform, direct or alert patrons to site facilities.
- **Advertising:** Space rented to private companies as a revenue source for the system.

▶GUIDELINES

- Refer to Metro's Design Criteria to determine the exact placement, height and structural support system for systems and information and wayfinding signage.
- Ensure ability of signage to convey information quickly and clearly. Signs should conform to the following criteria for legibility:
  - » Signage must be simple, clear and concise for quick identification.
  - » Pictographic signage, such as international symbols, should be used for basic functions (eg., restrooms, directory, etc.).
  - » Text signage must be of appropriate size, color and contrast from its background to be legible. Appropriate signs should be designed to standards for the visually impaired.
  - » Signage must be located and illuminated so as to be easily read with minimal distraction from other elements.
- Standardize signage to ensure consistent size, shape, color and content throughout the system.
- Locate signage for similar functions at consistent locations from site to site.
- Utilize a modular system where practicable to contribute to clarity and consistency as well as enabling ease of placement, modification, maintenance and repair.
- Consider the prevalent direction of pedestrian movement so that signage may be arranged in appropriate sequence.
- Position signage at or before points of decision and organized in a pattern that is predictable from station to station.
- Use signage of appropriate character to create harmony with the station and site design.
- Allow signage to take precedence over artwork where conflicts occur.
- See Fig. 9 for more details concerning site-specific signage.

FIG. 9

TECHNICAL CONSIDERATIONS

▶SITE-SPECIFIC SIGNAGE

STATIONS

- Primary Information
- Station Entrances
- Ticket Dispensers
- Patron Routes to Platforms
- Station Identification (Platform)
- Secondary Information
- System Use Instructions
- Transit Interconnections
- Services (Telephones, etc.)
- Routes to Other Facilities (Concessions, Hotels, etc.)
- Escalator / Stair Directives
- Exit Routes
- Handicapped Routes
- Entry / Use Restrictions
- No Smoking
- Emergency Equipment

STATION SITES

- Bus or Other Public Transportation Modal Interfaces
- Kiss-and-Ride Facilities
- Park-and-Ride Facilities
- Taxi Zones
- Surrounding Traffic Patterns and Requirements
- Adjacent Buildings and Uses

SYSTEM SYMBOL & OFF-SITE SIGNAGE

- Legends
- Station Identification
- Vehicle Destinations
- Fare Zones
- Systems Use Instructions
- Exit Routes
- Routes to Other Facilities
- Pictograms
- Feeder Bus / Other Transit Mode Interconnections
- Entrance Routes
- Services (Telephone, etc.)
- Handicapped Routes
- Escalator / Stairs Directives
- Entry Restrictions
- Restrooms
- No Smoking

◀ Seating can be functional as well as aesthetically pleasing.

◀ Public art brings creativity and culture into transportation systems.

2.2.2.17 SEATING

Although the stay at each station is transient in nature, the amenities provided should enhance the use of the system and encourage continued patronage (see. Fig. 10). Aside from offering necessary comfort and convenience, seating and other station furnishings should add color and visual appeal to the station environment.

▶GUIDELINES

- Employ modular or standardized systems to ease maintenance, repair and replacement of items.
- Discourage seating use as a sleeping platform.
- Select sloped, perforated or folding seating to avoid catching rainwater and spilled liquids.

2.2.2.18 PUBLIC ART

Artwork integrated into the design and development of stations and sites mitigates the adverse impacts related to construction, enhances the environment and promotes public acceptance of and appreciation for the transit system.

▶GUIDELINES

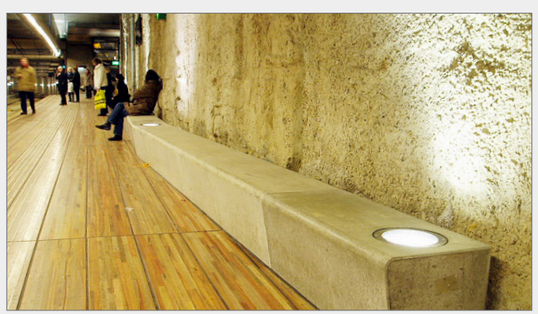
- Use local public art resources to promote city interests. Work with local arts committees and community representatives to review all art. Assist artists in designing technically competent artwork, which can be placed in the public environment. Refer to Metro's Public Art Program for more information.
- Include artists on the station design team to identify opportunities early in the station design process and integrate artwork seamlessly into the design.
- Develop a comprehensive policy toward defining the artwork program as related to the rail system.
- Develop a methodology for estimating the cost of artwork and managing the artwork budget.

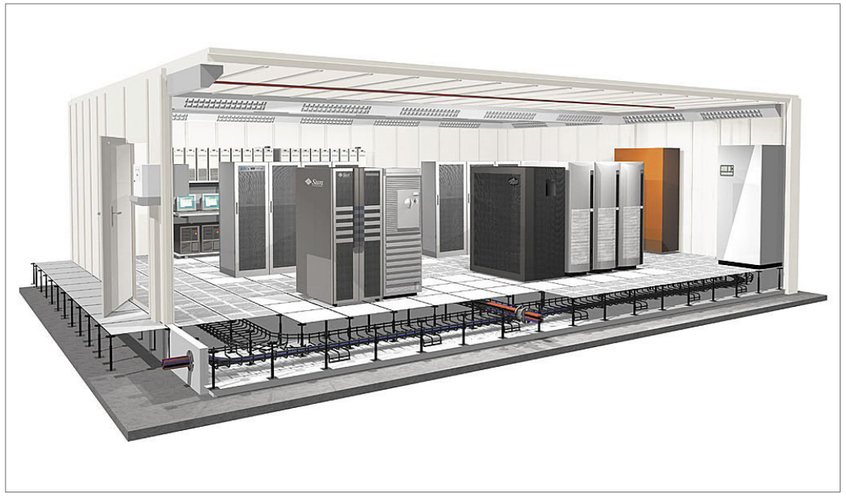
FIG. 10

TECHNICAL CONSIDERATIONS

▶STATION FURNITURE

- Seating
- Leaning Rails
- Trash Receptacles
- Bike Racks / Lockers
- Phone Booths
- Automatic Teller Machines (ATMs)
- Newspaper Dispensers
- Ticket Kiosks
- Advertising Display Framework
- Wind Screens
- Electronic Signage
- Pamphlet Dispensers





◀ Adequate staff and security facilities contribute to a well-managed transit system.

◀ Staff ticket booths should be well-lit, ventilated and comfortable.

2.2.2.19 SUPPORT FACILITIES

Support facilities include all ancillary functions necessary for the operations of the rail transit systems which require physical accommodations (see Fig. 11). Certain functions can be accommodated with standard modules and these can be assigned to specific station locations.

▶GUIDELINES

- Provide requirements for ancillary structures necessary to station and transit system operation.
- Utilize a planning module in designing all support facilities to facilitate standardization of components and furnishings, to save costs and to provide design consistency among stations.
- Ensure the planning module is a minimum 8' × 8' dimension. Depending upon functional requirements, the module may be increased in 4' increments. A standardized module can accommodate a variety of functions.

2.2.2.20 RETAIL / VENDING

A retail facilities plan associated with transit facilities will be established by Metro. Specific vending policies are not established.

FIG. 11

TECHNICAL CONSIDERATIONS

▶SUPPORT FACILITY TYPES

STAFF SECURITY ROOMS
Located at subway stations and specific designated stations. These rooms are located directly off the concourse in an inconspicuous location with a view of the fare vending area.

COMFORT STATIONS
Located at terminus and intermodal transfer stations; these rooms provide toilet facilities for staff and transit operators and will be located at selected stations.

CUSTODIAL ROOMS
Custodial rooms are required at each subway station and selected aerial or at-grade stations.

TRASH ROOMS
Trash rooms are required at each subway station and should be located at the mezzanine level adjacent to the elevator, and (as required), at selected aerial and at-grade stations.