

Lease Specifications

TABLE OF CONTENTS

- A. INTRODUCTION
- B. OFFICE LAYOUT DESIGN SPECIFICATIONS
 - 1. WAITING AREA
 - 2. PLAYPEN AREA
 - 3. RECEPTION AREA
 - 4. CONFERENCE & MULTI-PURPOSE ROOM
 - 5. ACCORDION FOLDING PARTITIONS
 - 6. INTERVIEW BOOTHS AREA
 - 7. WORKSTATIONS
 - 8. PRIVATE OFFICES
 - 9. STAFF ROOMS
 - 10. STOCKROOM
 - 11. STOCKROOM SHELVING REQUIREMENTS
 - 12. LUNCHROOM
 - 13. RETIRING ROOM
 - 14. SMOKER'S ROOM
 - 15. COATRACK
 - 16. MAIL DISTRIBUTION UNIT
 - 17. MAIL HANDLING AREA
 - 18. OTHER ELECTRICAL REQUIREMENTS
 - 19. EQUIPMENT AREA
 - 20. HIGH DENSITY FILES
- C. VOICE AND DATA REQUIREMENTS/INCLUDING TELECOMMUNICATIONS EQUIPMENT ROOM & INTERCOM PAGING SYSTEMS
 - 1. GENERAL REQUIREMENTS
 - 2. TELECOMMUNICATIONS EQUIPMENT
 - 3. MAIN CROSS-CONNECT (MC)
 - A. Voice Requirements
 - B. Data Requirements
 - 4. STATION WIRING
 - 5. CONDUITS, POWER POLES AND PLENUM RUNS
 - 6. JACKS
 - 7. CODING, RECORDS, TRAINING
 - 8. TESTING
 - 9. TERMINATIONS & WIRING DIAGRAM
 - 10. ROOM LAYOUT
 - 11. INTERCOM PAGING SYSTEMS
- D. OFFICE DESIGN COLOR COORDINATION
- E. GENERAL SPECIFICATIONS
 - 1. INTERIOR SPECIFICATIONS
 - A. Columns
 - B. Vestibules and Exits
 - C. Windows
 - D. Window Coverings
 - E. Wall Furring
 - F. Interior Partitions
 - G. Interior Walls
 - H. Interior Doors
 - I. Ceiling and Ceiling Tile
 - J. Floor and Floor Coverings
 - K. Cashier Window and Receptionist Counter

F. ENTRANCE AND EXIT SPECIFICATIONS

1. ENTRANCE DOORS AND FRAMES
2. DOOR HARDWARE
3. VESTIBULE DOORS AND FRAMES
4. PASSENGER ELEVATORS

G. EXTERIOR SPECIFICATIONS

1. EXTERIOR WALLS
2. ROOF CONSTRUCTION
3. CONCRETE WALKS AND CURBS
4. ENTRANCES AND APPROACHES
5. PARKING AREA
6. LANDSCAPING AND FINISH GRADING AND SEEDING
7. ICE AND SNOW REMOVAL

H. HEATING, VENTILATION, & AIR CONDITIONING SPECIFICATIONS

I. PLUMBING AND TOILET SPECIFICATIONS

1. GENERAL
2. PIPING
3. FIXTURES
4. TOILET PARTITIONS
5. STAFF RESTROOMS
6. CLIENT RESTROOMS
7. JANITOR'S CLOSET
8. ELECTRIC WATER COOLERS

J. ELECTRICAL SPECIFICATIONS

1. GENERAL
2. LIGHTING
3. POWER
4. SPECIAL SYSTEMS: Security & Fire Alarm

K. CARPENTRY AND MILLWORK SPECIFICATIONS

1. BULLETIN BOARDS
2. FINISH HARDWARE

L. MISCELLANEOUS SPECIFICATIONS

1. PAINTING
2. EQUIPMENT ROOM
3. FIRE PREVENTION - EQUIPMENT
4. TRASH AREA/RECYCLING
5. FINAL CLEAN UP
6. BUILDING IDENTIFICATION
7. INTERIOR ROOM DOORS AND BOOTHS
8. RADON GAS EXPOSURE
9. FINISH SCHEDULE

M. HANDICAP ACTS

1. ACT 235

N. DIAGRAMS

1. RECEPTIONIST AREA
2. FOLDING PARTITION TRACK
3. INTERVIEW BOOTHS
4. WORKSTATION
5. STOCKROOM
6. KITCHEN AREA
7. COATRACK

8. MAIL DISTRIBUTION UNITS
9. MAIL HANDLING AREA
10. BUILDING IDENTIFICATION

**DEPARTMENT OF PUBLIC WELFARE
COUNTY ASSISTANCE OFFICE - LAYOUT SPECIFICATIONS**

A. INTRODUCTION

This document describes the office design and specifications for _____ which will contain _____ net square feet. The material has been prepared to serve as a guide to private developers, and their architects and engineers, regarding the Department of Public Welfare's standards for leased space. In order to facilitate the presentation of a prototype organization, these standards assume optimal conditions; namely, that the office will be located on a single floor in a new structure. However, in some cases, a developer may be proposing the rehabilitation of an existing structure for the proposed office space. The developer shall follow the model office requirements and layout as closely as possible. By reviewing the program requirements the developer should be able to determine if the existing structure can be altered to meet the Department's requirements.

The Department will not consider any proposal for leased office space which is not in compliance with the requirements set forth in this document.

YEAR 2000 COMPLIANT - The Lessor must warrant, test and demonstrate that any hardware, software, or firmware product used under this lease shall be able to process date data (including, but not limited to, calculating, comparing, and sequencing) from, into and between the twentieth and twenty-first centuries, including leap year calculations. This shall include any and all devices (such as elevators, security systems, HVAC, etc.) affected by the millennium change.

B. OFFICE LAYOUT DESIGN SPECIFICATIONS

These specifications are developed to identify the requirements of various areas of the office. Where necessary, detail drawings are included.

A final approved plan will be prepared by the Department of Public Welfare which will show the individual areas, electrical requirements, telephone requirements, and computer related requirements.

NOTE: The final plan may differ from the attached typical plan and may contain more or less in electrical, telephone and computer related requirements. The attached typical plan is for illustration only and is not an approved final plan.

WAITING AREA

An open area inside the main office entrance where clients are seated waiting for service.

- Electrical - **two common duplex outlets** - each perimeter wall.
- **One** Bulletin Board 4' x 8'.
- **One** application counter on one wall - 30" high x 24" wide, approximately 8' to 10' in length.

PLAYPEN AREA

An area for children to play while clients are being served.

- An area approximately 8' x 10', with 36" high railing around the area with a gate opening. The inside face of railing and/or walls surrounding this area will be covered with a material which will not create a potential safety hazard to little children.

RECEPTION AREA

The reception area is the control center of the office where clients make the initial contact with staff for services. A detail of this area is attached. The basic design will be the same for all offices but may increase in size by the number of staff assigned to this area.

The dimension drawing of the reception area shows several file cabinets under both the front counter and the return surfaces on each side. These cabinets will be supplied by Public Welfare. Lessor must provide a clearance of 27" between floor covering and bottom of work surface. Receptacles are to be located so as not to be blocked from use with cabinet installation.

Front Counter Construction

1. Constructed out of a minimum of 45 lb. density core board with a minimum thickness of 1 1/4".

2. High pressure laminated surface with a minimum thickness of 1/16". Must be coordinated with work place furniture in both color and material.
3. Contain a backer sheet with a minimum thickness of 1/16" applied to the underside of the counter to seal out moisture.
4. Provide minimum counter supports every 60". Location of support must not interfere with placement of filing cabinets.

This area has the following electrical and communication requirements.

Front Counter Area

Number of staff assigned to the reception area:

Under the counter surface for each person:

1. **One duplex electrical outlet** on a common circuit.
2. **One duplex communication jack** wired for voice and data.
3. **One duplex electrical outlet** on a dedicated circuit for computer related usage.

Each Return surface

- A. **One duplex outlet** on a dedicated circuit for computer related usage.
- B. **One communication jack** wired for data.

Americans with Disability Act counter

See detail drawings for Reception Area.

CONFERENCE ROOM - MULTI-PURPOSE ROOM

- Whether these rooms are separate rooms within the office, or a combined area separated with an accordion partition, (See Accordion Folding Doors) each shall be constructed as follows:
 - Partitions - ceiling height.
 - Door(s) - with keyed lock and automatic door closures.
 - **One duplex electrical outlet** on a dedicated* circuit and **one duplex communication jack** wired for voice and data shall be installed **every six feet** on each perimeter wall.
 - **One** duplex 120V common electrical outlet installed for a wall clock.
 - **One** duplex 120V common electrical outlet installed on a common circuit.
 - Commercial grade exhaust fan(s) vented to the exterior to be installed in such a manner that when the partitions (See Accordion Folding Doors) are closed there is an exhaust fan in each newly created area. (See specifications for all exhaust systems described in the HVAC requirements).
 - One 4' x 8' cork bulletin board
 - When both rooms are combined into one area, the total area will be divided by an accordion-type, ceiling-hung partition. (See Accordion Folding Partitions)

*NOTE: For purposes of these specifications, a "dedicated circuit" is a computer related circuit containing a maximum of (8) duplex receptacles.

ACCORDION FOLDING PARTITIONS

General Description: The work covered by this section shall include the furnishing of all materials, equipment and labor necessary for the complete installation of all accordion folding partitions indicated on the drawings or specified herein, together with all accessories and parts necessary to complete this work in a first class manner. The work includes, but is not limited to the following:

- Accordion folding partition operated manually.

Manufacturers: For the purpose of establishing a standard of quality for both the product and installation, the below listed model is to be installed. Installation of equivalent models provided by other manufacturers require prior approval from the Bureau of Administrative Services.

- Soundmaster Model SM 8 as manufactured by Modernfold.

Codes and Standards: Product and installation must comply with all pertinent codes and regulations of governmental agencies having jurisdiction over this work. In addition, all hardware must equal or exceed the standards prescribed by the manufacturer to install the partition.

Product Handling:

- Deliver the materials to the job site, and store in a safe area, out of the way of traffic, and shored up off the ground surface.
- Use extreme care in unloading to prevent damage and breaking of materials.
- Keep materials dry during delivery and storage. Protect against exposure to weather and contact with damp or wet surfaces.

Installation:

- Coordinate with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this section.
- Use adequate numbers of skilled persons who are thoroughly trained and experienced in the necessary crafts and who are familiar with the specified requirements and the methods needed for performance of the work in this section.
- Install in strict accordance with the original design, approved shop drawings, pertinent requirements of governmental agencies and as prescribed by the manufacturer including sufficient anchoring of all components for long life under hard use.

INTERVIEW BOOTHS AREA (Modular Furniture to be provided by DPW)

These are areas where staff conduct sit-down interviews with clients.

Each interview booth will be prewired with (2) general duty duplex receptacles and (1) dedicated duplex receptacle listed for 120v-20 amp. A dedicated circuit is provided using an isolated ground and an isolated neutral. The Department of Public Welfare will supply either a prewired power pole or a base power infeed, both of which have an extension of 60" in order to hardwire the electrical system to the building's electrical supply. It is the responsibility of the lessor to review the interview booth configurations and determine the number of circuits required to meet national and local electrical codes. The lessor is also responsible for determining the entry points for bringing the data and voice wiring into the modular work stations as well as the hardwire locations with furniture supplier. In wiring the system into the building's electrical supply, the isolated ground for the dedicated circuit must be a separate ground. The existing ground wires in the furniture system's electrical services must never be connected together.

Telephone and data communications wiring, including all outlet jacks to interview booths, is the responsibility of the lessor. The modular furniture systems are equipped with raceways that allow for installation of the necessary wiring to individual interview booths. These raceways should be used by the lessor for this purpose. A flush mounted faceplate should be used which will recess the data/voice jacks for a cleaner appearance. The location and size of the cutout should be reviewed with the furniture supplier.

- Each interview booth will have one duplex communication jack wired for voice and data. The jacks wired for data will be for computer equipment. The jacks wired for voice will be to provide telephone service to each interview booth.

The position of these jacks in the raceway is shown on the detailed drawing (Interview Booth Communication Drawing).

- A construction schedule must be provided to the furniture vendor allowing 8 weeks for production time once color selections are determined. Color selection for the furniture is coordinated with the colors selected for wall and floor coverings.

It is the responsibility of the lessor to provide elevator use for delivery of the modular systems furniture if not to be located on ground floors.

See Detail Drawing of Interview Booths for Data and Voice location requirements. (See Voice and Data Requirements for wiring.)

NOTE: The walls between the Interview Booths area and other areas will be full height and will be provided by the lessor.

WORKSTATIONS (Modular Furniture to be Provided by DPW)

Each configuration of workstations will be prewired by the furniture manufacturer to provide electrical service to each workstation.

The prewired electrical system is a distribution system consisting of four circuits using 20 AMP 12 gauge wire. A dedicated circuit is included using an isolated ground and an isolated neutral. Each worker requires two general duty duplex receptacles and one dedicated duplex receptacle.

The wiring of the furniture's electrical system into the building's electrical supply is the responsibility of the lessor.

In wiring the system into the building's supply, the isolated ground for the dedicated circuit must be a separate ground. The two existing ground wires in the furniture systems electrical service must never be connected together.

This electrical connection should be made through a power pole or base power infeed to be supplied by the Department of Public Welfare. The pole or base power infeed has a 60" extension to allow for hardwiring. The Department of Public Welfare will provide separate communication poles for voice and data wiring where required.

It is the responsibility of the lessor to communicate to the furniture supplier where the electrical power will be coming from for hardwiring the electrical system to the modular furniture. If it is coming from a wall, column or floor, a base power infeed will be utilized. DPW prefers this whenever possible. If the modular furniture is in an open area and not against columns or walls, then power poles will be utilized and the lessor will hardwire the connections in the ceiling.

It is the responsibility of the lessor to review the workstation configuration and determine the number of circuits required to meet national and local electrical codes. The lessor is also responsible for determining the entry points for bringing the voice and data wiring into the panel system as well as the electrical hardwire locations with the furniture supplier.

It is the responsibility of the lessor to provide elevator use for the delivery of the modular systems furniture if not to be located on the ground floors.

Where modular furniture is being utilized in private offices, it is the responsibility of the lessor to locate the duplex receptacles and voice/data jacks so they are not obstructed by the furniture. The lessor must coordinate this with the furniture supplier.

- A construction schedule must be provided to the furniture vendor allowing 8 weeks for production time once color selections are determined. Color selection for the furniture is coordinated with the colors selected for wall and floor coverings.

When a new lease of space is for the same site as the current lease, it is the lessor's responsibility to disconnect power and communication wiring to modular furniture that is scheduled to be removed/replaced. Telecommunication wiring and other requirements in this area are the responsibility of the lessor and include the following:

- Workstations are to have one duplex communication jack wired for voice and data for each employee.
- One additional data communication jack will be installed at the end of each workstation configuration where printer locations are shown.

All the telecommunication wiring should be installed in the raceway system that is a part of the furniture system provided for this purpose. A flush mounted faceplate should be used which will recess the data/voice jacks for a cleaner appearance. The location and size of the cutout should be reviewed with the furniture supplier.

The location of each jack within the workstations are shown on the attached detailed drawings.

PRIVATE OFFICES

- Partitions - ceiling height.
- Doors with locks
- **Two duplex electrical outlets on a dedicated circuit** for computer related usage.
- **Two duplex telecommunication jacks**, each wired for **voice** and **data**.

- **Three duplex electrical outlets on a common circuit.**
- Locations for electrical outlets and telecommunication jacks are to be reviewed with the furniture vendor to insure ready access whether or not modular furniture is installed at time of construction.

STAFF ROOMS

- Partitioning - ceiling height.
- Door - with door closures and with door locks.
- Electrical and telecommunications requirements:
 - **One** duplex electric outlet on a dedicated circuit* and one duplex communication jack wired for voice and data shall be installed every six feet on each perimeter wall.
 - **One** duplex 120V common electrical outlet on a common circuit.

(See section on Voice and Data Requirements)

(See specifications for all exhaust systems described in the HVAC requirements).

*NOTE: for purpose of these specifications, a "dedicated circuit" is a computer related circuit containing a maximum of 8 duplex receptacles.

(See section on Voice and Data Requirements)

STOCKROOM

- This is a supply storage area.
- Ceiling high partition.
- Lockable door.
- **One duplex electrical outlet on common circuit.**
- **One duplex electrical outlet on dedicated circuit.**
- **One duplex telecommunication outlet** wired for **voice** and **data**.
- See attached detailed drawing.

STOCKROOM SHELVING REQUIREMENTS

- Shelves should be adjustable in height at 1-1/2" intervals.
- Shelving should be accessible from all four sides to maximum accessibility.
- All units should be 84" high with depths available at 12", 18", and 24" in order to facilitate the maximum usage of the room size. DPW will specify depth requirements based on stock room configuration.
- Shelving unit should have a base shelf to assure supplies will not be on the floor. Shelves should also have a top shelf with 4 adjustable shelves in between giving a total of 6 surfaces to utilize on each unit.
- Shelving widths should be no less than 36" wide and no more than 60" wide.
- Shelves minimum weight capacity should be no less than 250 lbs. per shelf.
- Shelving units should be ganged together when set up side by side or back to back.
- Perimeter shelving units are to be anchored to the wall.

LUNCHROOM

- Partitions - ceiling height.
- Door - with lock and door closure.
- **Two duplex electrical outlets on each perimeter wall.**
- **One** 240v electrical receptacle
- A cluster of **four** duplex outlets, 120v, in the area identified as "Vending Machines".
- **One** duplex 120v wall receptacle shall be installed for a wall clock.
- The lessor will provide and install the following:
 - Thermal oven and related electrical requirements
 - Microwave oven and related electrical requirements
 - Refrigerator and related electrical requirements
 - Double deep/bowl stainless steel sink
 - Work surface with overhead and below storage cabinets
 - Paper cup dispenser
 - Paper towel dispenser
 - Soap dispenser
 - Waste receptacle

- The lessor will maintain appliances and replace as required during the term of the lease.
- **One** 4' x 8' bulletin board shall be installed on one wall for staff messages.

(See specifications for all exhaust systems described in the HVAC requirements).

- See attached for details of this kitchen area

RETIRING ROOM

- Ceiling high partitions
- Door with lock
- **One** common duplex electrical outlet

SMOKING ROOM

- Partitions - ceiling height
- Ceiling constructed of gypsum board 1/2" thick and painted
- Walls to be painted and repainted every two years during the term of the lease.
- Doors shall be self-closing equipped with door closures and locks
- **One duplex electrical outlet** on a common circuit.
- **One duplex communication jack** wired for voice and data.
- **One duplex electrical outlet** on a dedicated circuit for computer related usage.
- See "HVAC Specifications" for exhaust requirements: Item 10 - "Smoking Room Requirements"

COATRACK

The area(s) on the detail drawing(s) identified as coatrack(s) shall be 18" deep by the width shown on the drawing. A rod shall extend across the entire width as shown on the drawing and be mounted 60" from the floor. This rod must be of sufficient strength to support the coats hung upon it without bending or sagging. A 12" deep (by the width shown on the drawing) shelf shall be mounted 6" above this rod and flush with the rear wall.

MAIL DISTRIBUTION UNIT (Option Item)

- This is a free standing unit, to be constructed by the lessor, for use in making distribution of mail in one or more locations to various staff members. See drawing attached.
- The basic unit may be installed in several places throughout the office. The total number of bins will be determined by staff in a specific area. The total number of bins in the entire office will be approximately 80% of the total staff.

MAIL HANDLING AREA (Option Item)

- Ceiling high partitions (See detailed drawing)
- Lockable door. (See detail drawing for interior design of area)
- **Electrical and telecommunications requirements area as follows:**
- four duplex outlets on a common electrical circuit
- one duplex telecommunication jack wired for voice and data
- **Construction of L shaped counter**
- main counter 10' x 2'
- return 3' x 2' laminated finish 30" high counter (Subject to CAO approval)
- support shall be full width at each end with an inverted L support at 3' intervals
- extend L portion of counter by 3' if a desktop copier is used instead of a floor copier
- **Construction of processing table**
- construct 5' x 3'
- laminated finish - all surfaces
- 30" high to top of table (Subject to CAO approval)
- storage beneath with cupboard type doors
- **Construction of Pass Through Mail Boxes**
- construct 12" x 12" x 12"
- maximum height from bottom to top is 83" which can be adjusted downward to accommodate number of staff
- width to be adjusted to accommodate number of staff, the total number of bins will be approximately 80% of staff

OTHER ELECTRICAL REQUIREMENTS

- Within the hallways throughout the office, a common duplex electrical outlet will be installed approximately every 20' for use in building maintenance.
- In several areas within the office, additional electrical outlets will be required for such equipment as postage meters, wall clocks, mail handling and photocopying equipment. This requirement should not exceed a total of 10 duplex outlets.
- One duplex receptacle is required for each photocopier location. The wiring must be home run with no more than one receptacle, no intermediate cut downs or splices, with the circuit terminating in the electric panel. Photocopiers may require 120v or 220v electric service.
- All dedicated electrical outlets shall have a color plate or receptacle designating them as such.

NOTE: For purposes of these specifications, a "dedicated circuit" is a computer related circuit containing a maximum of (8) duplex receptacles.

EQUIPMENT AREA

This area typically houses centralized files and photocopy machines.

NOTE: **GENERAL FLOOR LOAD CAPACITY:**

All office areas shall have a minimum live load capacity of 50 pounds per square foot. Storage areas shall have a minimum live load capacity of 125 pounds per square foot.

HIGH DENSITY FILES (Option Item)

These files are located in the **Equipment Area**. The minimum floor load shall be **320 lbs. per square foot**. (See below for clarification of high density filing system floor loads vs. design floor loads required for this area.)

The Uniform Building Code requires that as a minimum, floors be designed to support the dead load of the floor and the required live load. For an office building, the live load is normally a uniform load of 50 PSI over the entire tributary floor area for a framing member or a 2,000 pound load placed upon any space 2-1/2 feet square (6.25 sq. ft.). The load producing the greatest stress in a framing member is the governing load for that member.

The requirement to design a floor for a uniform load of 50 PSF over the entire tributary area for a particular member does not mean that this is the largest load that can be placed on the floor. The load is an average value for typical office space with desks, filing cabinets, aisles, etc. The concentrated load requirement of 2,000 pounds in 6.25 square feet dictates a minimum load capacity of 320 PSF. The high loading assumes the area around the concentrated load is unloaded. This would occur if the heavy object was surrounded by aisle space. Each loading condition must be reviewed individually.

NOTE: The typical floor load for high density filing is 250 PSF. This assumes that every square foot of the floor area, including aisles, is not overloaded if there is four square feet of aisle area for each square foot of file storage area. This standard cannot be used as the standard for this file area. Any variation from the 320 PSF floor load requires an evaluation and approval of a licensed architect or engineer and prior agreement in writing from the Bureau of Administrative Services.

NOTE: **GENERAL FLOOR LOAD CAPACITY:**

All office areas shall have a minimum live load capacity of 50 pounds per square foot. Storage areas shall have a minimum live load capacity of 125 pounds per square foot.

C. VOICE AND DATA REQUIREMENTS

Rev. 05/20/00

The Lessor will be responsible for providing the total voice and data requirements included in this specification. The Lessor will provide and install the entrance conduit bringing the telephone service into the building and any required conduit and feeder cable within the building to bring service to the telecommunications equipment room. The Telecommunications Equipment Room will be used exclusively by the Department of Public Welfare. The local telephone company will be responsible for installing the facilities (cable and/or fiber) from the telephone company's central office (providing dial tone) to the facility where they will terminate the cable and/or fiber at a demarcation point. In Bell territory, the demarcation point shall be referred to as the Network Interface Device (NID) in single tenant buildings only. In the case of multi-tenant buildings and local telephone companies other than Bell territory, the

telephone company's central office will terminate the cable and/or fiber at the RJ21X and then run to the Network Interface Device for the Department of Public Welfare. From this demarcation point the Lessor and/or his designated subcontractor will be responsible for providing and installing all voice and data facilities and material within the building, except for the telephone system and data equipment. This includes, but is not limited to the following:

- A. Telecommunications Equipment Room
- B. Main Cross-Connect (MC), also known as Main Distribution Frame (MDF)
- C. Modular patch panel equipment with associated patch cords
- D. Voice and data wiring and hardware, including cross-connecting blocks
- E. Power poles where required
- F. Modular single and/or duplex jacks as required
- G. Necessary wiring and telephone in each elevator

NOTE: Placement of electrical, voice/data outlets must be located not to interfere with modular furniture placement.

GENERAL REQUIREMENTS

All wiring or cable for this specification will be classified as "Communication Circuits" (voice and data) and will be installed and maintained under the strict guidance of the National Electric Code (NEC) Provision as found in Article 800-Communications Circuits.

The current version, unless otherwise noted, of EIA/TIA-568 Commercial Building Wiring Standard shall be the required installation standards of this specification. Technical Service Bulletins (TSB) 36 & 40 shall be used as the minimum characteristics for category 5 cable installation.

All cable or wiring referred to by this specification **MUST** be **EIA/TIA/TSB-36** compliant for category 5 cable. All four pairs of every station cable, both voice and data, shall be terminated (wired for **T568B** specifications) providing continuity of all pairs from every work station back to the appropriate MC in the telecommunications equipment room.

All hardware **MUST** be **EIA/TIA/TSB-40** compliant for category 5 cable installation. Termination at the MC shall be onto category 5 compliant eight pin (wired for **T568B** specifications) patch panel equipment.

Required voice and data locations are not presented on the typical plans. However, all voice and data jack locations will be identified on the drawings provided by the Department of Public Welfare.

TELECOMMUNICATIONS EQUIPMENT ROOM

The telecommunication equipment rooms shall be as centrally located as possible on each floor. **This requirement is critical to ensure that no voice or data location exceeds the 100 meter rule of the EIA/TIA standards.** The door will be equipped with a lockable passage set.

NOTE: The telecommunications room will be used exclusively for Department of Public Welfare voice and data communications. With the exception of the normal service power requirements identified herein; no electric/power equipment or panels will be housed in this room. No other tenants may use or have access to the Telecommunications Room.

TELECOMMUNICATIONS EQUIPMENT ROOM SIZE

- A. Buildings having up to 10,000 square feet:
 - o Single floor buildings: Room Size 8'x10'
 - o Buildings with more than one floor: Main equipment room size 8'x10'. The Lessor will also provide an 8'x10' equipment room for each of the other floors.
- B. Buildings having **over** 10,000 square feet:
 - o Single floor buildings: Room Size 12'x14'
 - o Buildings with more than one floor: Main equipment room size 12'x14'. The Lessor will also provide an 8'x10' equipment room for each of the other floors.

These rooms shall be constructed and finished the same as the general office area and maintained with the same HVAC and lighting requirements as the general office area.

The Lessor will install either tile or anti-static carpeting on the floor of each telecommunication equipment room.

The Lessor will ensure that a vertical chase (open area for cable runs between floors) is installed between the main telecommunications equipment room and all other telecommunication equipment rooms.

Entrance door shall be 36" wide and key lockable.

Service power shall be 120V, 60HZ, 20 amperes.

There shall be no water or drain pipes located in these rooms.

MAIN CROSS-CONNECT (MC)

The MC will be located in the telecommunications equipment room. If requested, the Lessor will provide and install 66-type, 110-type, or other cross-connecting blocks. The Lessor will also provide and install eight (8) point modular jack patch panel equipment. All equipment must be in compliance with EIA/TIA/TSB-40 for category 5 hardware.

The patch panel equipment shall be no larger than standard size 48 port, no high density space saver patch panels will be used without prior approval from the telecommunications office. The patch panel equipment will be of sufficient size to accommodate all existing voice/data requirements and at least 15% spare patch panel ports for growth. The lessor must provide and install all the patch panel hardware required to make the system operational, including the patch cords and the wire management panels used to dress the patch cords between the patch panels in a neat and orderly fashion.

Also included will be four pair category 5 compliant patch cords (in various lengths) to accommodate the total number of telecommunications jacks installed (both Voice and Data locations) plus 15% spare cords for growth. The patch cords will be sized to insure a neat and orderly appearance.

Voice Requirements

On one wall to the right or left of the entrance door, two 4'x 4' sheets of 3/4" plywood will be attached for mounting the MC in the telecommunications equipment room (or additional floor telecommunication equipment rooms) for voice. The plywood will be attached in such a way that the top of the highest patch panels shall not be higher than six foot two inches (6'2") and the bottom of the lowest patch panel shall be no lower than two foot (2') from the floor.

Where required, the voice MC will consist of category 5 compliant 66-type, 110-type, or other cross-connector blocks and two sets of category 5 compliant eight (8) point modular jack patch panel equipment (wired for T568B specifications). The Lessor will contact the DPW Telecommunications Office to find out whether or not this equipment is required at this location. The maximum size of the patch panel equipment used shall be no larger than standard 48 ports. No high density space saver patch panels will be used without prior approval from the telecommunications office.

The patch panels will be mounted so they are centered on the wall. The top of the highest patch panels shall not be higher than six foot two inches (6'2") and the bottom of the lowest patch panel shall be no lower than two foot (2') from the floor.

The first set of patch panel equipment will be designated as the line side patch panel. Each available port will be connected to the Network Interface Device (NID), RJ21X or, where appropriate, the 66-type, 110-type, or other cross-connecting blocks. From these cross-connecting blocks all existing telephone lines will be cross-connected to the telephone company demarcation point.

The second set of patch panel equipment will be designated as the station side patch panel and will have all four pairs wired to the appropriate station jacks as required.

Two (2) duplex electrical outlets on a dedicated circuit shall be located directly below each piece of plywood.

Data Requirements

The data MC will be installed on a floor mounted frame and located at the opposite end of the wall which is adjacent to the voice MC. Mounted on the frame will be category 5 compliant eight (8) point modular jack patch panel equipment (wired for **T568B** specifications).

Mounted on the extreme lower portion of the data frame will be eight duplex electrical outlets serviced by two (2) dedicated circuits with an isolated ground. The outlets should be arranged to accommodate transformer connections (which frequently are larger than a standard plug) without blocking access to other outlets.

This metal floor mounted data frame will be equipped with a #6 AWG solid copper ground wire attached to an approved water pipe ground. Two (2) duplex electrical outlets on a dedicated circuit shall be located on the wall adjacent to the floor mounted frame for data.

A modular voice jack will be installed in close proximity to the data frame to support a dial-up modem for diagnostic trouble shooting.

One other modular voice jack will be installed in the telecommunications equipment room for use with the intercom paging system.

STATION WIRING

All cable for both voice and data will be (4) pair, category 5 compliant, Type CM communications cable, 24 AWG, solid conductor, unshielded twisted pair, meeting the electrical and corresponding distance requirements of EIA/TIA 568 Commercial Building Wiring Standard and meet or exceed the standards of **EIA/TIA/TSB-36** for category 5 cable.

All station wiring for both voice and data will be home run, no intermediate cut downs or splices, to the appropriate telecommunication room and terminated directly onto category 5 compliant patch panel equipment. All four pair must be physically terminated at the category 5 compliant (8) pin modular telecommunication outlet and at the appropriate patch panel equipment port.

All cable shall be concealed either above a suspended ceiling, in conduit, in wire mold or behind partitions. Enough slack wire will be left at the MC to accommodate terminating wires on their respective voice or data patch panel connectors.

CONDUITS, POWER POLES AND PLENUM RUNS

All wiring not in conduits and run in air handling plenums will have Type CMP communication plenum cable, low-smoke, heat resistant Halar type insulation.

All conduits will be metal (EMT) type conduit or raceways.

All access holes through floors, walls, etc., that must be drilled for the installation of voice and data facilities must be provided by the Lessor. These access holes must be equipped with a sleeve and bushings at both ends.

Wire mold, conduits or power poles will be required to those voice and data locations where the wiring cannot be concealed or readily fished through walls, etc. All exposed voice cable attached to office walls, ceilings or floors will be concealed using approved metal molding.

JACKS

Both voice and data wiring will be terminated on category 5 compliant duplex voice/data jacks, or single voice or data jacks, as required, at the work station location (wired for **T568B** specifications). All station jacks must be in compliance with **EIA/TIA/TSB-40** standards for Unshielded Twisted Pair Connecting Hardware for category 5 cable.

Duplex voice/data connecting blocks will have two (2), eight (8) conductor (wired for T568B specifications) modular jacks labeled by the manufacturer as "voice" & "data," with a single face plate. The inserts of the jacks shall be color coded - blue inserts for voice and orange inserts for data.

CODING, RECORDS AND TRAINING

All eight (8) pin modular locations both at the duplex and single outlets at the voice/data terminal end and at the patch panel equipment will be labeled by the Lessor for identification by Department staff. The numbering scheme should be kept constant and consecutive throughout the entire site.

A cable record of all pairs at the MC will be prepared by the Lessor. One copy of this record must be submitted to the Department's telecommunications office prior to final acceptance of the facility.

The Lessor shall provide training in the proper use of the cable records and the patch panel equipment. The method and depth of the training will be sufficient to train the users to correct deficiencies as rapidly as possible and also allow the user to readily make voice/data station location changes via the patch cords.

TESTING

The Lessor and/or his designated subcontractor will be responsible for performing testing of all voice and data wiring and hardware to assure compliance with equipment specifications. All voice and data wiring and hardware must meet or exceed all the specifications of **EIA/TIA/TSB-36** and **EIA/TIA/TSB-40** for category 5 cable installation. The Lessor and/or his designated subcontractor must provide the telecommunication office a complete copy of all test results prior to final acceptance of the facility.

At a minimum the test results for each jack, voice and data, must contain:

- Jack Number
- Cable Length
- Wire Map
- Attenuation
- NEXT (Near End Cross Talk)
- Cable Impedance

TERMINATIONS

The 8 pin modular connectors for voice\data and the patch panel modular jacks shall be terminated to T568B specifications as follows:

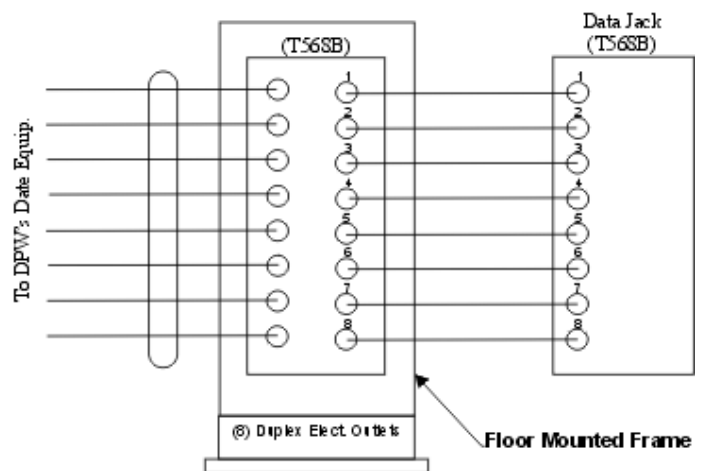
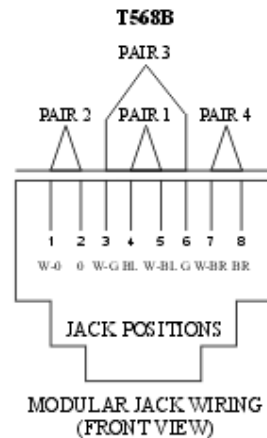
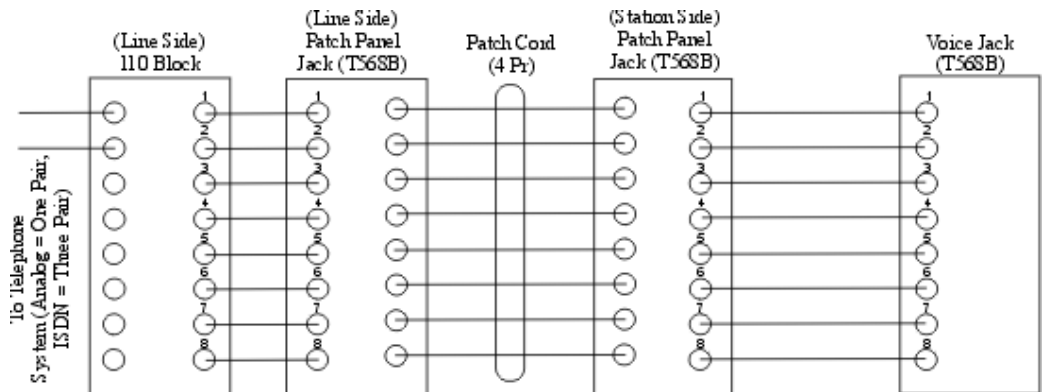
DPW'S CAO WIRING DIAGRAM

Patch Panels, Patch Cords, Cross Connecting Blocks, Station Jacks and Station Cable must be Category 5 compliant.

INTERCOM PAGING SYSTEMS

The lessor will provide and install a paging system consisting of speaker assemblies (speakers, transformers, grills, etc.), speaker backboxes, bridge supports, volume controls, equipment rack and any other accessory required to provide a fully operational system. The amplifier will be of sufficient wattage to ensure that it can adequately power the number of installed speakers with sufficient space wattage to handle a 25% increase in the number of speakers. Most speakers will require 1 watt of power for satisfactory operation.

The paging intercom must include an adequate number of speakers throughout the building to ensure coverage to all areas designated by the facility director. The system must be equipped to provide a maximum of four (4) zones and an all call and



must have the capability of being activated from any designated telephone. Paging speakers located in the conference room and multi-purpose rooms must have volume controls.

All wiring will be 18 gauge stranded, twisted, shielded pair. Steel or aluminum wire molding will be used wherever the cable cannot be concealed.

Maintenance and repair of this paging system will be the responsibility of the lessor.

NOTE: The total number of speakers required should be based on providing one (1) speaker for every three hundred (300) square feet of area provided under this project.

D. OFFICE DESIGN COLOR COORDINATION

Floor covering, wall covering, furniture partitions, counter surfaces and window treatments will be color coordinated within a harmony of color as designated by the Department of Public Welfare.

Lessor will be required to work with the Department's office design color coordinator in developing the integration of the harmony of colors throughout the office.

E. GENERAL SPECIFICATIONS

Three (3) copies of floor plan drawings shall be submitted on which are located all building columns, plumbing supply, service areas, and windows, doors and stairways from which a preliminary office layout can be developed.

Prior to the erection, adaption, remodeling or alteration of any building, three copies of detailed architectural drawings, including but not limited to, elevation drawings, mechanical drawings showing the HVAC system, together with detailed specifications, shall be submitted to the Department of General Services, for final review and approval by the Commonwealth.

After final drawings have been approved, changes can only be made through an approved written Change Order issued by the Commonwealth through the Department of General Services.

No construction shall begin until after the lease has been awarded and a "pre-construction" meeting held.

Lessor will furnish all labor and material necessary to complete construction shown on approved drawings and described in the approved specifications, and for any work not included in approved drawings and specifications but obviously necessary to complete construction and make the space ready for occupancy by the Commonwealth.

All work must be in accordance with applicable American Standards Publications including Bulletin A117.1, of 1961; Act 235 of September 1, 1965, as amended by Act 216 of January 1, 1975, and Act 176; "Making Buildings and Facilities Accessible to and Usable by the Physical Handicapped," all Federal buildings and materials specifications, the latest State and local construction codes and ordinances. (Copies of Acts as shown as Attachments.)

Color selection of all finish materials; i.e., wall coverings, carpet, laminated services, paint Venetian blinds, trim, etc., will be the choice of lessee. Lessor to provide samples.

INTERIOR SPECIFICATIONS

Columns

The building should be free of all interior columns. In the event the columns are deemed necessary, the number and spacing of columns must be approved by the lessee. Columns shall be finished with material to correspond with interior decor complete with one (minimum) duplex electrical outlet.

Vestibules and Exits

Inside walls of vestibules and exits must be covered with scuff-resistant material to be 4' 6" in height. Weather mats must be furnished by lessor and installed in entrances and exits.

Windows

Window locations must be acceptable to lessee. All windows must be operable. Windows must be made square with sound material and be of certification quality for deflection, air and water infiltration tests. All windows must be supplied with thermopane or storm windows, or other acceptable energy conserving installations.

Window Coverings

Window and window areas must be equipped with aluminum Venetian blinds or draperies or approved equal by lessee, color specified and approved by lessee.

Wall Furring

All interior brick, cinder, tile or concrete block walls unless agreed upon otherwise, to be furred out with metal, wood, or other material acceptable and approved by lessee, from the floor to ceiling height and insulated. The furring must be of suitable type and size to support the weight of the interior finishing.

Interior Partitions

All interior partitions and doors must be erected in accordance with the drawing.

Interior Walls

Interior walls and partitions to be constructed of gypsum board 1/2" thick and finished with scuff resistant commercial grade vinyl covering, unless otherwise agreed or specified.

Interior Doors

Solid core wooden doors or equivalent must be at least 36" wide. They must be reinforced and warp resistant, carefully matched grain, and color and must meet all specifications of the National Woodwork Manufacturers Association.

Interior doors require door lites for safety purposes at designated locations; i.e., such as waiting area, lunch room, conference room, staff room, smoke room, and multi-purpose room. Interior entrances/exit door dimensions and lites shall meet requirement of Life Safety Code #101.

Keyless Door Entry

Push button locks are required on _____ interior doors between client waiting area and staff clerical interview area as identified on floor plan.

Note: If proposed space is on two levels, then an additional one or two security locks may be required.

Security Push Button Locks:

Manufacturers, for the purpose of establishing a standard of quality for both the product and installation, the below listed model is to be installed. Installation of equivalent models provided by other manufacturers require prior approval from the Bureau of Administrative Services.

- ILCO Unican 1000 Series, lever type

Ceiling and Ceiling Tile

The ceiling height in Welfare offices shall be:

- Less than 8,000 sq.ft. of space - 8' high
- From 8,000 to 10,000 sq.ft. of space - 9' high
- Over 10,000 sq.ft. of space - 9 2' high

Exceptions to ceiling height specifications require prior approval of the Bureau of Administrative Services.

Shall be "Armstrong Minaboard" lay-in panels (24" x 48" c 5/8") on an exposed grid suspension system or approved equal. Lay-in panels shall have an NRC Range of .50 - .60 and a flame spread of 0 to 25 (ASTM-E84) Class A (Fed Specification SS-S118B). Surface finish shall be a factory-applied white washable material.

Floor and Floor Coverings

For newly constructed buildings, 4" of coarse aggregate is to be spread throughout proposed floor area. Polyethylene waterproofing material, or equivalent, shall be used as a vapor barrier between aggregate and concrete. Floor should be properly insulated against heat, if over boiler, or other highly heated areas. Where no heat is in a basement, appropriate insulation should be installed to minimize cold or dampness coming through the floor. If floor is otherwise constructed or existing floor is used, floor must be leveled and properly insulated prior to installation of covering.

Modular Carpet (Carpet Square) - A commercial grade of modular carpet must be installed in all areas except waiting room, restroom, stockroom and lunchroom. Modular carpet shall meet the following characteristics:

Face Weight:	20 oz. per square yard minimum
Backing:	Hardback module warranted to be dimensionally stable as tested by the AACHEN Test Din 54318 at <0.10%.
Primary Back:	Polypropylene
Constructions:	Tufted multi-color loop
Face Yarn:	100% BCF nylon, Type 6
Dye Method:	Minimum 75% solution dyed
Gauge:	1/10 minimum
Tile Size:	Nominal 18" x 18"
Flammability:	Pass Pill Test (DOC-FF1-70)
Radiant Panel Test:	Pass Class 1 per ASTM E-648
Smoke Density:	<300 per ASTM E-662
Static:	Rated <3.0 KV per AATCC-134
Adhesive:	CR1 "Green Label" certified. Low VOC fully releasable adhesive. Must leave sub-floor in original condition when uplifted. Both face and backing must be recyclable.
Recycleability:	Provide a minimum 15 year warranty that requires no chair pads, will not delaminate, edge ravel, curl or upturn, and loses less than 10% face weight under normal usage.
Warranty:	

Any variation from above must have prior approval from the Bureau of Administrative Services.

Where necessary, all modular carpeting must be vacuumed and shampooed before occupancy as deemed necessary by lessee. All unserviceable modular carpeting will be replaced by the lessor, as necessary, throughout the term of the lease. When during the term of the lease, or if applicable at time of renewal, modular carpet is replaced or repaired, the moving of the lessee's office furniture and equipment shall be the responsibility of the lessor.

Tile - The waiting room, stockroom, and lunchroom shall be covered with a vinyl carbon tile or equal. Tile shall be 12" x 12" - 1/8" gauge. SS-T 312B (1) Type IV, Composition 1 - ASTM E 84 Flame Spread - 75 or less. Load limit 50 PSL. Cove base shall be 4" high vinyl or rubber. All colors and patterns shall be selected by lessee.

Cashier Window and Receptionist Counter

Safety glass will be used for cashier window and protective shields for the receptionist counter. (See Attached) Special attention should be given to provide rigidity for safety glass by using channel frame at top and bottom.

F. ENTRANCE AND EXIT SPECIFICATIONS

ENTRANCE DOORS AND FRAMES

Entrance doors must be provided as shown on drawings, must swing outward and be constructed of metal and glass to conform with Federal/OSHA standards, and must be equipped with kick plates, and push-pull plates and automatic door closing devices. Framework for doors must also be metal.

DOOR HARDWARE

All entrance and exit door hardware must be of suitable type and ample size and weight to perform the service required. The hardware must be of one design and finish. All entrance and exit doors must be keyed alike. Install a delayed action door closer at the handicap entrance. Panic hardware must be installed on emergency exits in accordance with Labor and Industry Regulations. All door operations and hardware must meet ADA Standards.

VESTIBULE DOORS AND FRAMES

Interior vestibule doors must be provided in all public and staff entrances and vestibule doors must match exterior doors and be equipped with kick plates, push-pull plates, and automatic door closing devices. All exit doors must swing outward. Framework must be metal constructed and must match exterior doors.

PASSENGER ELEVATORS

If elevators exist or required by code, they are to be modernized to provide automatic operations and to bring equipment into compliance with the Americans with Disabilities Act.

Licenses and permits shall be provided and the required inspections and tests shall be performed. Elevators shall comply with applicable building and elevator codes, included but not limited to the following:

- ASME A17.1-1996
- National Electric Code / NFPA 70-1996
- PA Department of Labor and Industry Elevator Regulations
- Americans with Disabilities Act
- Uniform Federal Accessibility Standards

The elevators are to be modernized with the following standards as approved by the Lessee:

1. A minimum standard speed of 100 FPM.
2. The lessor shall provide 24 hour, 7 days per week emergency callback service, with a 2-hour response time.
3. Emergency two-way communication system between the elevator and a point outside the hoistway.

The modernization may include complete operational and control systems, new door operators, car operating stations, hall button fixtures, new cab and hoistway doors, complete cab modernization and related repairs.

G. EXTERIOR SPECIFICATIONS

EXTERIOR WALLS

All outside walls must be of credited material normally used for commercial construction and approved by the Lessee. All masonry units must be certification quality for grade, curing and aggregate requirements for non-staining and non-popout materials. All stone must be hard, sound, durable, and exposed face of the stone wall be rock faced with a minimum of patching off and free from stains or other defects.

ROOF CONSTRUCTION

Workmanship and material shall be first class in every respect and sheet metal work erected shall be installed so as to obtain an absolutely watertight job. Suitable provision shall be made for free expansion and contraction without disturbing the metal and causing leaks. The roof must have a first class vapor barrier and insulation which shall be installed in accordance with the current printed recommendations of the manufacturer of the roofing materials.

CONCRETE WALKS AND CURBS

Installation and construction of concrete walks and curbs shall conform to the current requirements of the Pennsylvania Department of Transportation, including the installation of stone fill under sidewalk. All sidewalks shall be reinforced as architecturally designed. Sidewalks shall be constructed in separate slabs, and these slabs shall be separated by one-fourth (1/4") inch thick transverse control joints at 6' intervals.

ENTRANCES AND APPROACHES

Approaches to entrances and exits must be concrete construction and reinforced as architecturally designed. Where ramps are deemed necessary from the entrance or exit to the sidewalk or street level, the maximum grade permissible is 8%. Handrails must be provided along the ramps.

PARKING AREA

Paved parking will be provided adjacent to the building, by the lessor, for _____ vehicles. Out of these spaces, handicapped accessible spaces must be provided as indicated below.* The accessible parking spaces(s) must be configured and appropriately marked in accordance with the Americans with Disabilities Act (ADA) standards. In addition, the spaces(s) must be appropriately identified in accordance with parking regulations contained in Section 3354 (d)(3)(I) of the PA Vehicle Code. Materials and workmanship shall conform to the latest applicable requirements of the Pennsylvania Department of Transportation Specifications. The paved parking area must be striped to provide the number of stalls specified. Cars must have free ingress and egress to parking stalls. Furnish and install in locations as required, precast concrete bumper guards. "DPW Parking Only" sign must be erected at entrance to lot.

__*__ Accessible parking space(s)
__1__ Van Accessible parking space

Provide exterior lighting for parking as appropriate to the site. Exterior lighting shall be high intensity discharge source illumination only. Lighting shall be controlled by time switches and photo cells.

The lessor is responsible for furnishing and replacing all tubes in parking area(s).

LANDSCAPING AND FINISH GRADING AND SEEDING

Furnish all labor, materials, equipment and appliances necessary to complete topsoil spreading, finish grading and lawn and shrubbery planting as required to produce a uniform, weed-free stand of grass and acceptable landscaping. Lessor is responsible for maintaining shrubs, grass, and landscaping.

ICE AND SNOW REMOVAL

Lessor responsible for snow and ice removal of sidewalks and parking areas within twenty-four hours after cessation of snowing, sleet or icy weather, where applicable. It is the lessor's responsibility to correct all unsafe conditions relating to freezing and thawing.

H. HEATING/VENTILATION/AIR CONDITIONING SPECIFICATION

The Department of Public Welfare wants to obtain a quality office space which is quiet, clean, well lighted, adequately air conditioned for all seasons, and efficiently planned to accommodate the Welfare Office operation. To assist the developer in understanding the Department's need, the following outlined specifications have been provided. These specifications are not a complete description of all aspects of the building; rather they deal primarily with the mechanical system requirements for the standard Welfare

Office. It is the mechanical systems of the Welfare Offices which have been the most problematic in the past.

The Department expects the developers to use these specifications as a guide when dealing with their architects and engineers on the design of proposed office space. In most cases this will result in a VAV style system, or in smaller buildings, a split-roof top type of system. All aspects of the proposed building should be of good quality and sound and durable construction while providing the minimum maintenance and operating costs. Mechanical drawings shall be provided to the lessee for review and approval. Drawings to be 1/8" scale. All equipment shall be of a commercial or industrial grade. **Residential grade equipment shall not be used.** The equipment and controls shall be furnished as a complete package and warranted as a factory tested system by the equipment manufacturer. Field assembled systems are not acceptable.

HVAC Requirements

1. **General Description:** The HVAC system for typical Department of Public Welfare Offices should provide adequate capacity, airflow distribution, and control for proper cooling and heating of the various spaces while meeting the design criteria listed herein after.

The quantity of outdoor air during the occupied period shall not be less than 20% of the total maximum air supply nor less than 20 cfm per occupant, whichever is greater. If a variable air volume system is installed, the 20 cfm/occupant of outdoor air shall be maintained at the minimum zone control settings.

2. **Zoning Requirements:** The HVAC system shall be designed to allow for zone control in the manner specified herein.

A. Independently controlled zones shall exist for each lunchroom, training room, conference room, and waiting/lobby/reception area. In addition, separate and independently controlled zones should be used for each of the north and south perimeter walls. Private offices should be zoned and controlled independent of open office areas.

B. No slave controls are to be used except within a single zone as defined previously.

3. **Temperature Control:** The HVAC system shall be designed with an adequate capacity to maintain the space to 74EF during the winter and 75EF during the summer during the occupied times. The control tolerance should not vary by more than 1EF +/- at any given time. The building shall be set to no less than 65EF in winter nor greater than 85EF in summer during the unoccupied times. These unoccupied temperature limits can be eliminated if the controls are furnished with anticipator logic such that the equipment operation for the building is automatically adjusted to allow the building to reach the desired temperatures at the start of the day, regardless of the outdoor temperatures. However, if experience indicates the anticipator logic cannot compensate, then the unoccupied temperature limits will be imposed.

4. **Supply Fan Operation:** In the summer mode, continuous fan operation during the occupied cycle is extremely desirable. Temperature control allowing 50% or more air by-pass prior to shut-off, as well as controlling total capacity by cycling and staging the compressors, or adjusting chilled water temperature, provides optimum comfort to occupants.

In the winter mode, continuous circulation of air at or slightly above room temperature creates a drafty environment and is very uncomfortable. Therefore, the heat shall be staged at the central unit as much as practical to minimize unheated air being circulated. The fan controls shall allow for on/auto/off override capability. The room temperature shall be maintained by modulating the zone damper via the zone thermostat.

5. **Ground Floor Perimeter Heat:** On the ground floor of all buildings, the Department requires perimeter supplemental heat. Installation of either perimeter electric baseboard heat or hot water/fin-tube shall be provided for the full length under windows or 25% of the exterior wall in each room where there are no windows. The baseboard/fin-tube required heat may be controlled by the zone thermostat or an independent thermostat with interlocking to prevent operation in summer.

6. **Ductwork:** All ductwork shall be fabricated of galvanized sheetmetal designed and installed in accordance with the SMACNA HVAC DUCT CONSTRUCTION STANDARDS for 2 inches W.G. static pressure for duct mains, and 1 inch W.G. static pressure for branch ducts.

All supply and return ductwork shall be externally insulated with fiberglass wrap or fiberglass board insulation of not less than 2 inches thick with external foil wrap barrier.

Fiberglass ductboard or internally lined sheetmetal ductwork shall not be used.

The ductwork shall be adequately and properly designed to prevent unobtrusive noise levels in the occupied space using turning vanes on 90 degree turns.

Insulated flex duct up to 8 feet in length may be used from the branch duct to the air diffuser.

For variable air volume systems, slot diffusers should be used throughout the building supply air system to minimize drafts created when using constant volume diffusers in variable air volume systems.

7. Filtration: All heating, ventilation and air conditioning systems shall be a polyester pre-filter of a minimum 2-inch thickness and 30% efficiency installed in the system. The pre-filter shall be installed in the system in a location that all air handled by the system will pass through the pre-filter prior to distribution into the work areas and public areas. Non-ozone generating washable electrostatic synthetic media fibers may be used in lieu of replacement filters. The filters are to be replaced/washed at least every three months or more often as dictated by operating conditions or as recommended by the manufacturer. During replacement/cleaning operations, the HVAC system shall be completely shut off to avoid distribution of unwanted particulate through the system.

8. Economizer - Enthalpy Controlled: The HVAC unit shall be designed to allow for free cooling utilizing 100% outdoor air when the conditions are appropriate. Building air relief shall be provided by a powered vent in the unit to prevent building over pressurization during the economizer cycle.

9. Exhaust Systems: Exhaust systems shall be provided for the ventilation of conference rooms, multi-purpose rooms, staff rooms, lunch rooms, smoking rooms, toilet rooms and janitor closets and telecommunication room.

All exhaust fans shall be of commercial grade and shall discharge outdoors either through roof mounted fans or wall vents. At no time will exhaust fans discharge to the ceiling plenum nor within 10 feet of any air intakes or operable windows. Exhaust fans shall operate **continuously** during office hours.

The Telecommunication Room shall be equipped with an exhaust system being controlled by a reverse acting thermostat set at 80 degrees F.

The fans shall be selected for the design airflow or not less than 0.25 inches static pressure, whichever is greater. An exception to this shall be the Smoking Room exhaust fan which shall be selected at not less than 0.50 static pressure.

At no time shall the sound level of the exhaust system exceed NC 30 when measured from within the room. If ceiling exhausters are used, they shall be selected to operate below four sones at the design conditions. The proper operation of all exhaust fans shall be verified quarterly.

10. Smoking Room Requirements: The smoking room shall be provided with an exhaust system that exhausts air directly to the outdoors. The exhaust shall operate continuously during office hours.

- A. The point of exhaust within the room shall be furthest from the door. In addition, the room supply air diffuser shall be located as close to the door as practical to minimize smoke escaping from the room into other areas of the building. There shall be no return air grills in the room.
- B. The rate of exhaust shall be 150% of the supply air or 3.5 cfm per square foot, whichever is greater. The exhaust fan shall exhaust this quantity at a minimum resistance of 0.50 inches of water column static pressure. Make-up air shall be accomplished by undercutting the door as well as the supply air diffuser.
- C. The preferred installation consists of rooftop exhaust fans. However, at no time shall the sound level of the exhaust system exceed NC 30 when measured from within the room. If ceiling exhausters are used, they shall be selected to operate below four sones at the design conditions.

11. Toilet Room and Janitor Closet Exhaust: The toilet rooms and janitorial closet shall be provided with an exhaust rate equal to 5 air changes per hour or as dictated by local codes, whichever is greater. A common exhaust system for the men=s and women=s toilet rooms shall be provided with a minimum of 4 elbows between exhaust grills to minimize noise carryover. The exhaust grills shall be of the eggcrate variety with minimum 3/8 inch spacing to minimize clogging of the air stream.

12. **Conference Room/Multi-Purpose Room:** Exhaust fans shall be installed in such a manner that when the partitions (see Accordion Folding Doors) are closed there is an exhaust fan in each newly created area.

13. **Lunch Room Exhaust:** Lunch rooms that are equipped with a thermal oven shall also be provided with a hooded exhaust system ducted to the outdoors. This fan will not be required to operate continuously.

14. **Telecommunications Room:** The HVAC environmental comfort shall be maintained the same as the general office area. (See paragraph 3, Temperature Control)

15. **Maintenance Reports:** The lessor is required to perform routine maintenance semi-annually on the HVAC system, unless more stringently required, as per the manufacturer's specifications and to provide DPW with written reports of service rendered within 30 days of completing the service

I. PLUMBING AND TOILET SPECIFICATIONS

GENERAL

All plumbing lines, valves, and equipment shall be high grade institutional quality capable of providing trouble free service for _____ employees. The building shall comply with all local and state plumbing regulations including those which apply to handicapped access.

PIPING

Piping below grade (more than 5' -0" outside building) shall be set in ASCE bedding, with carefully compacted stone bedding and selected compacted backfill to an elevation 6" above top of pipe. Sanitary sewer shall be service weight cast iron hub and spigot, lead and oakum or elastomeric joints, cast iron fittings or PVC gravity sewer pipe conforming with SDR-35 and ASTM D-3034 PVC fittings. Potable water piping shall be ductile cast iron, cement lined, mechanical joint ASTM A-377, Class 150, ANSI A21.51 and cast iron fittings ANSI A21.10 cement lined; or Class 150 ring-title PVC water pipe (SDR 13.5) ASTM D-2241, Product Standard PS 22-70 long term hydro of 4:1; or Type K copper. Storm sewer shall be same as sanitary sewer.

Piping below grade (within 5' -0" of building or under slab) shall be set in bedding and backfilled as specified in paragraph above. The sanitary sewer shall be service weight cast iron hub and spigot with lead and oakum or elastomeric joint.

Piping above grade including sanitary, waste, and vent system shall be cast iron, hub and spigot with lead and oakum or "no hub" or elastomeric compression type. Vents 2" or less may be galvanized steel, copper or PVC DWV system. The hot and cold water piping shall be Type L Hard, with wrought copper fitting.

System shall be equipped with drain at low point and vent at high points. Provide shutoff valves at each cold and/or hot water connection to each fixture and at each branch connection. The water line servicing the building shall be valved and installed in an approved cast iron extension box. Clean outs shall be provided every 50' on horizontal drains and at the end of each horizontal branch.

FIXTURES

Choice of plumbing fixtures and hardware shall be limited to the following manufacturers and shall be water saver type; American Standard; Elver, Kohler. Lavatories shall be enameled cast iron minimum dimension 10" x 17". Hair interceptors shall be installed on all lavatories. Water closets shall be vitreous china, wall hung type and flush valve. Toilet accessories shall be stainless steel, recessed, as manufactured by Bobrick Washroom Equipment Inc., or equal.

Restrooms shall be provided within the leased space for employees and sized in accordance with the Restroom Fixture Schedule within. The toilet fixture schedule specified below shall be determined by the architect by calculating the approximate percentage breakdown of men and women for each floor occupied by the agency, for each gender.

FIXTURE PER FLOOR

Number of Men's*/Women's	Water Closets	Lavatories
1-15	1	1
16-35	2	2
35-55	3	3
56-60	4	3
61-80	4	4
81-90	5	4
91-110	5	5
111-125	6	6
126-150	6	**
Over 150	***	

*In Men's facilities, urinals may be substituted for one-third of the water closet specified. One urinal equals one-third water closet. If urinals are installed, courtesy panel(s) must be installed between urinals and the urinal and lavatory.

**Add one lavatory for each 40 additional employees over 125.

***Add one water closet for each 40 additional employees over 150.

TOILET PARTITIONS

Provide metal toilet partitions as manufactured by Accurate Partitions Division, United States Gypsum Co., American Sanitary Partitions Corp., Global Steel Product Corp., or equal. Sheet steel shall be ASTM A591, Class C. galvanized-bonderized 20 gauge with pilaster shoes AISI Type 302/304, 20 gauge stainless steel, 3" high, finish to match hardware. Furnish shoes at each pilaster. Manufacturer's standard, heavy-duty operating hardware and accessories, non-ferrous cast alloy with satin chrome finish.

STAFF RESTROOMS

Male and Female restrooms must be constructed in compliance with State and local sanitation requirements. Fixtures that must be provided and installed are: metal toilet compartments; metal urinal barriers, all fittings; hardware and fastenings; toilet tissue dispensers for each toilet; paper towel dispensers, one for each toilet room, soap dispensers, self-contained type, one at each lavatory fixture; waste receptacle, one in each toilet room, and one stainless steel edged mirror over each lavatory fixture. A lavatory counter covered with formica or marlite laminate is to be installed in restrooms where one or more lavatories are to be installed. A privacy barrier or partition must be erected at the entrance to all employees' restrooms to restrict view from the outside. Number of stalls and lavatories to comply with the projected staff occupancy. Lessor will provide one coin-operated sanitary napkin dispenser and separate sanitary napkin disposal unit in each ladies restroom. Lessor will furnish napkins and maintain the units. Lessor will furnish and install a "D" type furniture pull **handle** to the handicapped metal toilet compartment doors.

Ceramic tile or equivalent approved by lessee is to be installed on floors and walls to a minimum height of 4'. Purse shelves, manufactured by the Nik-O-loc Co., Equipment Division. Indianapolis, Indiana, or equal, to be installed in all toilet booths in the female restrooms.

CLIENT RESTROOMS

Client toilets for male and female must be provided. A single water closet and lavatory is adequate for the female toilet. Likewise, a single water closet, a urinal, and a lavatory is adequate for the male toilet. These rooms must be constructed and in compliance with State and local sanitation requirements. Other fixtures that must be provided and installed are: all fittings, hardware and fastenings; toilet tissue dispensers, one for each toilet; paper towel dispensers, one for each toilet room; soap dispensers, self-contained type, one at each lavatory fixture; waste receptacle, one in each toilet room; stainless steel or equal edged mirror over each individual lavatory fixture in each toilet room. A lavatory counter covered with formica or marlite laminate is to be installed in restrooms where one or more lavatories are to be installed. Entrance doors will be lockable.

Ceramic tile or equivalent approved by lessee is to be installed on floors and walls to a minimum height of 4'. Purse shelves, manufactured by the Nik-O-lok Co., Equipment Division, Indianapolis, Indiana, or equal, to be installed in all toilet booths in the female restrooms.

The lessor is responsible for providing and installing a baby changing stations in male and female client restrooms.

JANITOR'S CLOSET

Janitor's closet must be equipped with deep slop basin. Open adjustable shelving must be installed adjacent to the slop sink. One section of wall will have a peg board installed. Lessor to provide a variety box of peg board hardware. A minimum of one duplex electrical outlet is required.

Exhaust Systems: Commercial grade exhaust fans, exhausted to the exterior, must be installed in all toilet rooms and janitor's closets.

See "HVAC Specifications" for exhaust requirements: Item 11: "Toilet Room and Janitor Closet Exhaust"

ELECTRIC WATER COOLERS

Electric water coolers shall be installed in the client waiting area and on each floor used by staff as indicated on the proposed floor plan. One water cooler on each occupied floor must comply with Act 235 requirements.

J. ELECTRICAL SPECIFICATIONS

GENERAL

Provide electric service and metering facilities, panels, feeder wiring lighting, controls, receptacles, computer terminal cables, telephone cables and instrument outlets, wiring and connections to mechanical equipment, security system, door signal system, fire alarm system, emergency lighting system.

Electrical service shall be received from the local utility at or be connected to 120/208 volts, 3 phase, 4 wire, 60 hertz. Metering facilities shall conform to local utility requirements.

Distribution and lighting panelboards shall be bolted circuit-breaker type panels with 3-phase main circuit breakers sized to withstand available short circuit currents.

Feeder wiring to panels shall be THHN insulated copper conductors run in electrical metallic tubing, IMC or rigid steel conduit. Set screw-type fittings are not to be used. All electrical panels shall be grounded to a system grounding electrode. When adding any electrical equipment it must be grounded by means of equipment bonding jumper. Branch-circuits must also be connected to a grounding electrode.

Wiring methods must comply with local codes and the National Electric Code. All wiring shall be run concealed above ceilings, in walls and partitions and/or within modular furniture. Circuits shall be provided with a maximum of 1800 watts total on lighting circuits and 8 receptacles maximum on receptacle circuits. All circuits to be 20 Ampere, No. 12 wire minimum. All branch circuit wiring to be copper conductors.

Provide suitable emergency lighting system which is in full compliance with all local and state codes and regulations.

NOTE: For purposes of these specifications, a "dedicated circuit" is a computer related circuit containing a maximum of (8) duplex receptacles.

LIGHTING

Lighting shall be provided for each space with individual space lighting controls. Circuit breakers are not to be used to control lighting units. Generally, a 2'x 4' lift out acoustical tile grid ceiling will be provided. Fluorescent "lay-in" fixtures shall be used using 2' x 4', 1' x 4' and 2' x 2' shapes with acrylic plastic lenses. Use energy efficient watt-saver warm white 35 watt lamps and electrical ballast for all 48" lamps.

Lighting levels shall be 70 FC maintained (using .7 maintenance factor) in all spaces except 25 FC in Toilets and Corridors, 30 FC in mechanical rooms and 35 FC in lunchroom.

Lighting controls shall be specification grade 20A, 120/277 volt quiet toggle switches with finish switch plates. Switches shall be provided, one per space minimum.

Provide exterior lighting for walkways and signs as appropriate to the site. Exterior lighting shall be high intensity discharge illumination only. Lighting shall be controlled by time switches and photo cells.

The lessor is responsible for furnishing, and replacing all tubes/bulbs both inside and outside the building during the term of the lease. This stipulation also includes the parking area(s).

POWER

Receptacles in walls and partitions shall be specification grade 20A, 125 volt, grounded duplex receptacles. Receptacles shall be provided in each room or space and in accordance with floor plan. Receptacles on dedicated circuits for computers will be color coded for easy identification purposes. Wiring to modular furniture is described elsewhere in this specifications.

Receptacles for vending machines in the lunchroom shall be provided as required, but in no case, no less than 4 receptacles shall be provided.

Provide all wiring and disconnect switches, and make all connections to mechanical equipment for heating ventilating, air conditioning, plumbing, sprinkler systems and other related systems and equipment using wiring methods described above.

SPECIAL SYSTEMS

Security: Provide a security system to alarm audibly within the building and annunciate at a central remote station upon unauthorized intrusion into the leased space during specified hours of the week. Provide a seven-day changeable program for this system. Provide, install, and maintain a dedicated voice analogue/digital telephone line. It will be the responsibility of the lessor to assume the ongoing cost of monitoring and maintaining the system during the term of the lease.

Fire Alarm: Provide a fire alarm and evacuation system to alarm audibly and visually within the building in compliance with local and state codes. The alarm system must contain early warning smoke detectors and at least one manual pull station per floor. The alarm system must annunciate at a central remote station upon activation. System to be operational 24 hours a day, 7 days a week. Provide, install, and maintain a dedicated voice analogue/digital telephone line. It will be the responsibility of the lessor to assume the ongoing cost of monitoring and maintaining the system during the term of the lease.

K. CARPENTRY AND MILLWORK SPECIFICATIONS

BULLETIN BOARDS

Install three 4' x 8' cork bulletin boards, one in Lunchroom, and one in Waiting Room and one in the work area. Boards must have frames to match interior decor. Locations to be designated by lessee.

FINISH HARDWARE

Sufficient hardware to cover all necessary requirements of the building shall be provided. It shall be of suitable type and ample size and weight to perform the service requirements. The hardware must be one design and finish. All interior door locks shall be keyed per the Lessee's Specifications.

L. MISCELLANEOUS SPECIFICATIONS

PAINTING

All interior painting (primer and finish coats) must be completed prior to occupancy. Color to be selected by lessee and be washable. Premises must be repainted in accordance with lease and during non-working hours. Moving of furniture is to be the responsibility of the lessor.

EQUIPMENT ROOM

Equipment or utility room (housing boiler and heating equipment) must be constructed to comply with State and local codes.

FIRE PREVENTION - EQUIPMENT

Safety features and fire prevention equipment to comply with State and local codes must be provided and maintained by the Lessor. This requirement is mandatory. Lessor must arrange inspection and recharging of extinguishers as required.

TRASH AREA/RECYCLING

Lessor must provide a designated trash area adjacent to the facility of a sufficient size to accommodate an appropriate size trash container. Should the trash be included in the lease, the Lessor shall be responsible

for complying with State and local codes pertaining to recycling. The Lessor is also responsible for any and all costs relating to recycling.

FINAL CLEAN UP

The Lessor shall restore the area in such a manner that is acceptable to the lessee.

BUILDING IDENTIFICATION

The building shall be designated by a well marked suitable outside sign. The suggested form is a sign 23" x 40" with the county name 4" high, horizontally the lettering will be determined by length of name. Lower line shall be lettered County Assistance Office, and be 2 2" high. In the center of the sign shall be a Keystone with the letters DPW inscribed therein; each letter shall be dropped in a diagonal manner from left to right. The Keystone shall be of a size commensurate with the overall design and size of the sign. The colors to be used are blue and gold. (See Attachment)

INTERIOR ROOM DOORS AND BOOTHS

Interior room doors and booths must be lettered or have name plates attached as required by the lessee. Lessee will provide a "door-lettering" schedule for the interior doors and booths.

This attachment shows the finish required for walls, ceiling, and floors.

RADON GAS EXPOSURE

The site and/or premises shall be evaluated prior to occupancy for radiation level and radon/progeny concentration. If radon/radon progeny levels are above EPA recommended standards, a plan for corrective action in the HVAC specifications shall be required. Any costs associated with such corrective action shall be borne solely by the lessor.

FINISH SCHEDULE

Abbreviations:

ACT - Acoustic Tile

CT - Ceramic Tile

DW – Drywall

B/CMU - Brick or concrete masonry unit

VT - Vinyl Tile

V/DW - Vinyl Drywall

C – Carpet

VB - Vinyl Base

P/DW - Painted Drywall

Space	Walls	Ceiling	Floor	Base	Remarks
Entry Vestibule	B/CMU	ACT	Quarry Tile	Quarry Tile	
Waiting	V/DW	ACT	VT	VB	
Reception Counter	V/DW	ACT	C	VB	
Training Room	V/DW	ACT	C	VB	
Playpen Area	V/DW	ACT	C	VB	
Restrooms	CT*	ACT	CT	CT	*4-0" high Vinyl to Ceiling
Conference/Multi Purpose	V/DW	ACT	C	VB	With moveable partitions
All Private Off.	V/DW	ACT	C	VB	
IMW Area	V/DW	ACT	C	VB	
Mail Handling/Mail Dist./Equip.	V/DW	ACT	C	VB	
Stock Room	P/DW	ACT	VT	VB	
Mechanical Rm.	P/DW	ACT	VT	VB	
Clerical Area	V/DW	ACT	C	VB	
Staff Rooms	V/DW	ACT	C	VB	Sound insulated partitions
Retiring	V/DW	ACT	C	VB	
Lunchroom	V/DW	ACT	VT	VB	
Corridors	V/DW	ACT	C	VB	
Smoking Area	P/DW	DW	VT	VB	
Telecomm. Rm.	P/DW	ACT	VT	VB	