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SECTION A

INTRODUCTION

INTRODUCTION

The *Province of Ontario's Architectural Design Standards for Court Houses* have been revised from the earlier 1991 and 1993 versions to reflect the changes to court house design and structure resulting from the ongoing modernization of the justice system in Ontario.

These standards originally evolved out of conclusions reached in 1987 by Honourable T.G. Zuber, who had completed a year-long inquiry into the Ontario justice system. These conclusions were contained in the *Report of the Ontario Courts Inquiry*.

The inquiry determined that the problems with the justice system were “enormously complex and that there was no easy fix or solution”. Justice Zuber's report recommended a wide range of court reforms, including changes to the physical proportions of the court house. These standards address this area of reform, as expressed in two of the recommendations contained in the report:

It is therefore recommended that all new court house design be based on the model of a consolidated court house, and that, to the extent possible, current facilities should accommodate all courts and court offices.

It is recommended that a complete set of courtroom and court house designs be created to be used whenever new facilities are to be built or present facilities are to be renovated.

Many other recommendations were made that affect court accommodation and they are mentioned in the prefaces of the various sections of these standards when appropriate.

In updating these standards, regular consultations were held with the judiciary, Crown Attorneys and Court Services.

These standards are public information and by 2000 will be available on the World Wide Web for wider dissemination to the public. A CD-ROM version of the Standards can also be made available upon request at nominal charge.

These standards are meant to supplement such hard data as sizes, shapes, engineering requirements, etc., with an explanation of how the court house, in its many parts, is intended to function. Only with this information can architects and engineers understand the buildings they are being asked to design.

These standards must always be read in the context of the functional programs produced for each project. The reader's attention is also drawn to the use of these standards when retrofitting or adding on to existing court houses when it may be necessary to adapt the standards to certain conditions. If such modifications are required, they will only be done with the approval of the Ministry of the Attorney General (MAG).

During the research stage, prior to the production of these court house standards, the standards of many other provinces and countries were studied.

The original format used in these standards, although modified, is based on that used by the Province of Alberta, and the Province of Ontario gratefully acknowledges this assistance.

The standard sizes given in this document generally come within the existing individual area entitlements given in the Ontario Government Manual of Administration. Further, notice has been taken of special area guidelines also given in the Manual of Administration. However, in a very few instances, the areas have been increased, usually because of either functional or security needs or to allow a fire escape route.

Space allocations identified in the Standards shall not be exceeded unless permitted under the written direction of the Director of Facilities Management Branch, Ministry of the Attorney General. Offices for administrative areas are to adhere to the allocations indicated in the Ontario Public Service Space Standards.

Where specific measurements or quantitative requirements are expressed, they are the specifications which must be adhered to.

Cover drawing of the Frontenac County Court House, Kingston, courtesy of Archives of Ontario.

SECTION B

DESIGN CONSIDERATIONS

DESIGN CONSIDERATIONS

The following design standards are developed for the use of the Ministry of the Attorney General to provide detailed information to other ministries and consultants concerning law court operations and facilities.

HUMAN SCALE

The court house should project an image of dignity while being inviting and friendly. This can be achieved by designing a building that relates to the comfort and convenience of its users, whether they be judiciary, staff or public. Although the court house is a building designed to dispense justice, it should not be sterile or oppressive.

SPATIAL PERCEPTION

Many people will visit the court house for business or personal reasons. The spatial organization of the design should, therefore, allow both visitors and staff to perceive and recognize the various parts of the building with ease. The use of legible identification and directional signage should supplement the quality of design.

FLEXIBILITY

The design solution and use of materials should be carefully considered to meet future requirements, generated by legislation or the continued upgrading of court house operations. It should be noted that courtroom fitments, the use of raised flooring and other detailed design considerations forming part of these standards have been included to meet such changes.

The need to accommodate additional courtrooms in the future should also be kept in mind and the floor plate/structure of any new court house should be capable of either vertical or horizontal expansion.

PUBLIC USE

The prime public users of the court house are the witnesses, jurors and litigants who, together with other members of the public, should be accommodated with care and concern when determining the final design solution. As Justice Zuber observed,

Witness rooms, waiting rooms and jury rooms always seem to be the last rooms added to a court house and the first rooms to be cannibalized to make way for a new office or courtroom.

Of course such action impacts directly on the public since they must, therefore, crowd the corridors and overload the waiting spaces, giving rise to difficulties in circulation and increased security problems. New design should avoid such problems.

IMPACT ON COMMUNITY

Most court houses are large enough that they will impact on the urban landscape and even relatively small court houses should make a very positive visual contribution to the areas in which they are located.

Community pride can be created by the dignity, attractiveness and accessibility of the court house. Such pride can be further enhanced by the efficiency of the court system, which is often a reflection of good planning as well as the quality of the staff.

IMAGE

The impact on the community and the dignity of the court house can be reinforced by recognizing the tradition and authority of the court. These design characteristics should be reflected in the building's appearance without extravagance, institutional flavour or ostentation. The image should be one of which the public can be justifiably proud.

EFFICIENCY

Efficient operation and administration of the court house is essential to the orderly support of the judicial system and the most economical use of staff time. It is therefore mandatory that the image and architectural aesthetics be fully supported by good functional planning that contributes to reducing the use of staff time while increasing the productivity of the court house.

CIRCULATION

The secure operation of the court house is dependent on three major circulation routes, hereinafter referred to as private, public and restricted. The private circulation is used by the judges, Ministry staff and jurors when required. Members of the public are not allowed to wander in the private or restricted circulation routes and must stay in the public areas and the courtrooms. Public entry to the private areas is by invitation or appointment, at which time they will be escorted. The restricted circulation areas are for prisoners' use. The defence lawyers, Crown Attorneys, justices of the peace and certain staff are allowed controlled entry into the restricted circulation but only under circumstances clarified in the body of these standards.

The planning of the circulation routes must ensure that the three defined routes never cross.

ACCESSIBILITY

Barrier-free design and accessibility shall be an integral component of the design of all new court houses. Accessibility shall extend to all areas of the facility whether public or staff and shall serve individuals of all ages and levels and types of ability and disability. For example, in all new construction, it is expected that the main and employee entrances of the building shall be built at grade level allowing the building to be accessed without the use of ramps or mechanical lift devices. Within the building, the Barrier-Free Path of Travel shall be the same path of travel as used by the general building population.

INDEPENDENCE OF THE COURTS

It is essential that the public perceives the judicial process to be independent of outside influences or other government ministries and agencies.

The independence of the courts should be reflected in the planning of the building where possible. Justices of the Superior Court of Justice are required to review their Ontario Court of Justice counterparts' decisions through appeals and other "supervisory" activities. Therefore this functional requirement for separate identities must be observed when planning their respective judicial offices. The location of the police and their very limited accessibility to administrative areas are also important factors in preserving the public's perception of independence.

SECTION C

EXPLANATION OF STANDARDS FORMAT

EXPLANATION OF STANDARDS FORMAT

The discussion of activities and their required space and facilities has been divided into five functional components:

- G Standard courtroom and related areas**
- H Judges' chambers and related areas**
- I Law Association, Crown Attorney, and support areas**
- J Holding area and related functions**
- K Administration**

Each component is introduced with an explanation of its function within the facility as a whole, an outline of the major activities and users to be accommodated, plus a summary of spaces to be provided. Following this, a series of individual sections specify the requirements for each space. Where appropriate, these space requirements are accompanied by sketches graphically illustrating required furniture and internal organization. The space requirements and sketch plans represent the most basic set of instructions to the facility planner and designer.

CHECKLIST	NOTES	STANDARD COURTROOM
		AREA
		PROXIMITIES
		INTERNAL ORGANIZATION

- 1** Each space or space type has been assigned a name within each component grouping.
- 2** The area required for each space is identified as net square metres and square feet. Net square area refers to the clear floor area necessary to accommodate the required activity or set of activities. Additional area for corridors, walls, unassigned storage, public lobby, maintenance, mechanical and electrical services are considered over and above the net area. In some cases, the net area is dependent upon the number of people or services to be accommodated.
- 3** Required proximities are expressed in terms of 'adjacent', indicating that the spaces should be joined or very directly connected, or 'close', indicating some distance will be allowed (e.g. a short trip down a hall) but convenience is still paramount.
- 4** The capacity outlines the number of people and/or the amount of material that the space should be able to accommodate. Peak periods as well as normal situations should be considered.
- 5** Where appropriate, brief notes and diagrams are used to explain the factors that will govern the layout of furniture and other elements within a given space.
- 6** Comments concerning the checklist are numbered and printed as notes. Other comments concerning the space may follow. Furnishings, fittings and equipment, both portable and built in, required in the space at move-in time are listed on a separate check sheet titled "Furnishings and Equipment". On a separate sheet titled "Notes on Finishes" a brief description of quality and types of finishes is given.

CHECKLIST

The checklist is comprised of 13 items: zone, traffic, image, functional adaptability, internal flexibility, view out, illumination, quietness, environmental control, ceiling height, storage, services, and security. Each of these items has a series of 3 to 5 response categories. Categories may simply be marked with an asterisk, or a number may be placed next to the most appropriate category. The number refers to a comment in the notes box.

ZONE

The public zone refers to the spaces freely available during open hours. The visitor is not required to go through any control point. In a private zone the visitor must report to a member of the staff to gain entry. Spaces within restricted zones will not allow visitors (except under special circumstances) or staff not assigned to that space to enter. A security rating is required for each of the zones.

TRAFFIC

The volume of people, movement through or into a space is categorized as high, medium, or low. These self-explanatory categories may be augmented with notes discussing peak periods and type of load.

IMAGE

This item on the checklist is an attempt to specify the inexpressible overall quality or feel of a space. Each of the five categories uses words that describe fairly distinct environmental effects. The one or two most appropriate descriptions for each space are marked with an asterisk, often with a note for amplification.

FUNCTIONAL ADAPTABILITY

This item refers to the degree to which each space should be able to respond to the total change of the space. Typical changes would include expansion of the space, use of the space for expansion of an adjacent space and radical change in activities within the space.

INTERNAL FLEXIBILITY

This item is related to functional adaptability but also refers to the interior of the space rather than the space as a whole. Internal flexibility also deals with short-term, day-to-day change rather than occasional major changes. 'Important' indicates that adjustments to changing needs are likely to be frequent and fairly extensive. Spaces likely to experience a moderate amount of physical change, such as rearrange-

ment of furniture, infrequent repainting and the installation of additional portable equipment, indicate internal flexibility is 'desirable'. Space that is more specific and fixed in function will show internal flexibility as 'unimportant'.

VIEW OUT

If it is essential that the spaces have a view out, 'important' will be checked. If 'desirable' is checked, this indicates that it would be preferable if the space had a view, but that other design constraints may justify a space without a view. Optional indicates that there is no important reason why the space should have a view. It will be left to the designer's discretion.

If none is checked, there should be no view. The few situations where views into the space are important are discussed in notes.

ILLUMINATION

The overall illumination levels are categorized as follows:

<u>DEFINITION</u>	<u>TASK OR AREA</u>	<u>NOMINAL LUX</u>	<u>EQUIVALENT LUX</u>
		(Foot-Candle) <u>LEVEL</u>	(Foot-Candle) <u>RANGE</u>
HIGH	COURTROOM JUDICIAL AREA PROLONGED OFFICE WORK AREAS, CRITICAL TASKS	800 (75)	650-960 (60-89)
MEDIUM	NORMAL OFFICE WORK, READING OR WRITING, ETC.	530 (50)	430-650 (40-60)
Low	PUBLIC OR CIRCULATION AREAS IN OFFICE AREAS, WASHROOMS, SERVICE AREAS	320 (30)	250-390 (25-35)

In general, the standard RP24 should be applied to office lighting to ensure reduced glare lighting where computers are installed for continuous use.

Special requirements will be explained in the notes.

QUIETNESS

This requirement is aimed at assisting the designer to determine the degree of sound insulation required between two spaces as well as the acoustic quality of the space itself. If 'important' is checked, it indicates that noises outside the space should not intrude, a low ambient level should be aimed for, and reverberation time should be controlled. 'Desirable' indicates slightly more tolerance of all factors relating to quietness. In spaces checked 'unimportant' the activities are such that acoustics are not a consideration. Consultants and other persons using these standards must refer to Section Q for detailed acoustic requirements. Section Q will prevail at all times.

ENVIRONMENTAL CONTROL

This item refers to a group of concerns about the degree of control required over the temperature, humidity and ventilation. Checking 'high' indicates that one or more of the three aspects of climate control requires substantial attention. This will usually be explained in more detail in a note. 'Normal' indicates the degree of tolerance usually allowed in typical office environments while 'low' indicates that variations in the temperature, humidity and ventilation are relatively unimportant.

CEILING HEIGHT

A normal ceiling height indicates the 2.6 metres usually provided in typical offices. Checking 'high' or 'low' indicates a deviation from the normal space and is discussed in a note.

STORAGE

Storage of files, paper, bulky objects and other material is an important aspect of detailed design. This item on the checklist indicates which type of storage is required and outlines the extent of demand in the notes. Built in refers to storage capacity provided in the design of the facility and its attached fixtures, whereas portable refers to storage

provided in transferable furnishings. In keeping with the overall goal of flexibility, storage fixtures should be easily removed or replaced.

SERVICES

Water refers to the availability of water in the space and would normally be qualified by a comment indicating the required type of fixture. Sewage requirements are assumed to be part of a request for water. Electricity refers to the availability of electrical energy, normally through outlets either in the wall or via raised access floor system. This does not refer to electricity used for overall lighting systems. Telephone indicates that a telephone will be used in the space being discussed, while intercom indicates an intercommunications device. It is possible that the intercom system may work in conjunction with the telephone system. Special services will refer to a note that will explain which special service is required.

SECURITY

The safety of individuals as well as the security of information and exhibits involved in courtroom proceedings is essential to arrive at impartial judgements. The judiciary, court house staff, witnesses and counsel need to feel secure from possible threats or intimidation from members of the public or accused as they perform their duties and responsibilities. The tampering of evidence must also be prevented to avoid wrongful judgements and mistrials.

Note:

The checklists giving details and guidance on furniture, furnishings and finishes are also divided into sections with categories and notes similar to the main checklist described above, but the sections are self-explanatory and do not require further clarification.

SECTION D

COURTROOM ACTIVITIES

COURTROOM ACTIVITIES

Activities to be accommodated within the courtrooms can be divided into four categories, each with a series of subcategories as follows:

CRIMINAL PROCEEDINGS (including young offenders):

- a First appearance
- b Adjournments
- c Bail hearings and bail review (General Division)
- d Remand hearings
- e Guilty-not guilty pleas
- f Preliminary hearings
- g Non-jury trials
- h Jury selection and jury trials
- i Sentencing
- j Appeals (General Division)
- k Appearances in Provincial Offences Court

CIVIL PROCEEDINGS

- a Pre-trial hearings
- b Non-jury trials
- c Jury selection and jury trials
- d Motions hearings (including Small Claims)
- e Judgements (rare - normally written judgements)
- f Small claims trials
- g Small claims hearings on the following:
 - i Proof of damage
 - ii Jurisdictional
 - iii Garnishment
 - iv Examinations
- h Landlord/tenant matters

FAMILY MATTERS

- a Hearings/trials on the following:
 - i Access and custody of child or children
 - ii Support payments
 - iii Division of property
 - iv Garnishment disputes
 - v Variation disputes
- b Divorce trials
- c Motions hearings
- d Child and Family Services Act matters (adoption of children and child protection)
- e Judgements (rare - normally written judgements)

MISCELLANEOUS FUNCTIONS

- a Inquests
- b Mock trials
- c Swearing-in of judges
- d Admitting lawyers to the Bar
- e Selection of Public Institutions Inspections Panels
- f Citizenship hearings
- g Governmental tribunals or hearings
- h Electoral recounts (motions rooms used for this function)

SECTION E

PARTICIPANTS IN COURTROOM ACTIVITIES

PARTICIPANTS IN COURT HOUSE ACTIVITIES

The list of functions to be accommodated has been divided into 5 functional components:

- G Standard courtroom and related areas**
- H Judges chambers and related areas**
- I Law Association, Crown Attorney and support areas**
- J Holding area and related functions**
- K Administration**

Each component is introduced, noting how it fits into the court function as a whole. The major activities are broken down into components to provide more detailed understanding of how the court functions. Each space or space type has been assigned a name within each component grouping. The public areas are the spaces freely available during open hours. Visitors are not required to go through any control point. In a private zone visitors must report to a staff member to gain entry. Spaces within restricted zones will not allow visitors (except under special circumstances) or staff not assigned entry privileges to that space.

Court houses encompass wide variations in volume of traffic, depending on the function housed in the particular part of the building. The volume of people moving through waiting areas and public counter areas is high. In private areas the traffic volume is limited by the number of employees and members of the judiciary. The restricted areas are used by the accused or the police, with variable volume highest during peak court activity, when large numbers of accused are in custody awaiting appearance in court.

With the increasing concern for the safety of court house participants and the need to prevent concealed weapons being brought into the building, metal detection devices may be a requirement at the main entrances and should be reviewed with the police. At the very least provision should be made for the equipment and control barriers should be considered.

Except where noted specifically, the functions described below are carried out during normal office hours.

COMPONENT G - STANDARD COURTROOM AND RELATED AREAS

A consolidated court facility would encompass all levels of court and would therefore include the Superior Court of Justice and the Ontario Court of Justice.

The courtrooms will be of a standard size and can be equipped to handle Superior Court of Justice proceedings or Ontario Court of Justice trials. A few small hearing rooms are provided and will serve for the motions/settlement process as well as for trials of short duration involving limited participants. Apart from the predominant standard courtroom size, a multi-purpose jury courtroom capable of seating 120 persons for ceremonial occasions and special cases should be included in a consolidated facility. A first appearance courtroom capable of seating 120 persons should be included in all large court houses.

At one time or another, most of the users of a court house find themselves in a courtroom. The exception is the administrative staff. The following will serve as an introduction to the participants in courtroom proceedings. Each category of user is identified and a brief description of their activities and requirements as users of the courtroom is provided.

Hours of operation for courtrooms are within the sole jurisdiction of the judge once a case is in progress. Thus, on occasion, proceedings may go well into the night and the building support system must be capable of responding to this unpredictable circumstance.

Judge

The judge has control over courtroom proceedings by deciding all issues of fact, law and procedure. The judge must be able to follow all testimony, read, take notes, make rulings, pass judgements,

examine exhibits and documents and ask questions of witnesses, Crown Attorneys and counsel.

The judge must have a clear view of and hear all participants in the court process and the participants in turn must be able to see and hear the judge. It is important for the judges to have easy access to the private (secure) circulation area behind each courtroom.

The judge represents the dignity, stability and impartiality of the court. These images should be reinforced by the courtroom environment and the judge's station itself.

The judge requires a large work surface and some storage space to accommodate papers, reports, books, files and other material used during court proceedings. Computer requirements shall also be provided for at the judge's bench including an adjustable keyboard tray.

Courtroom Registrar (General Division) Courtroom Clerk (Provincial Division)

The responsibility of the courtroom registrar or courtroom clerk is important to the proceedings. Their functions are very similar in that they provide support to the judge or justice. Prior to appearing in court each day, the registrar/clerk must ensure that complete files and all exhibits are available. Once in court, the registrar/clerk works closely with the judge, calls cases, reads the charges, handles the case files, records pertinent information about proceedings, cares for the exhibits presented as evidence, and administers oaths to witnesses. The courtroom registrar/clerk convenes and adjourns the court once the judge has entered and prior to the judge leaving the courtroom. The courtroom registrar participates actively during the selection of a jury. The registrar also maintains a minute book.

Following the court proceedings, the registrar/clerk must ensure that files, forms, documents and other records are updated and entered and that exhibits are secured.

The registrar/clerk requires considerable work surface and some storage space to accommodate papers, files, books, exhibits and other miscellaneous material.

Court Reporter/Court Monitor

The court reporter/court monitor is responsible for compiling the official record of the proceedings by use of shorthand, stenotype, steno mask, electronic recording, or computerized record keeping.

The court reporter/court monitor must be able to clearly see and hear all persons giving testimony. Microphones must be installed at the desks of the judge, witness, accused, Crown Attorney, legal counsel and court clerk. The court reporter/court monitor station must accommodate the recording equipment with some space for writing, paper storage and equipment.

It is important that the recording equipment be as unobtrusive as possible.

Courtroom Services Officer I (Court Constable)

These courtroom services staff or court constables, as they were formerly known, are responsible for maintaining decorum in the courtroom, calling witnesses into court, monitoring the public area, and run messages for the court. Prior to sittings, they check to see that the courtroom is in order and provide water and drinking glasses. Under the direction of a Courtroom Services Officer II, they attend to sequestered juries. With the responsibility for courtroom security assumed by the police and to prevent confusion with titles, a court constable is now called a Courtroom Services Officer I.

Courtroom Services Officer II (Deputy Sheriff)

Deputy sheriffs, as they were formerly known, accompany general di-

vision judges to and from their offices and attend court. They carry the judges' books into the courtroom and call the court to order. Court Services Officers are required to escort and provide assistance to sequestered juries.

Lawyers, Crown Attorneys and Defense Counsel

With the exception of some minor offences, the accused will most often retain defense counsel. Prosecutions on criminal matters will be conducted by Crown counsel. Often Provincial Prosecutors handle the prosecution of Provincial offenses. In civil matters, trial participants are represented by their own barristers.

Lawyers are the primary occupants of the litigation area. The Crown and defence counsels present their arguments, consult with each other, question witnesses, confer with their clients, present exhibits, address the judge and/or jury and organize their approach to the case.

Possibly the most important aspect in accommodating the lawyers is the quality of the acoustic environment. They must be heard by the judge, the jury, their adversaries, the court reporter and the public.

In order to submit exhibits, the registrar/court clerk, address the judge and frequently enter and exit, lawyers must have easy access to many parts of the courtroom.

Lawyers often refer to many papers in preparing for and presenting their cases. Therefore it is important that a generous amount of table area is available for their use. It is expected that computers will also be referred to for information while arguing a case and will become a standard item at counsels' tables in the near future.

Finally, within the context of the adversary system, it is important that neither party have a preconceived advantage. For example, the Crown counsel should not be perceptibly closer to the judge than the defence counsel, have more space or equipment, nor appear to be in any way of greater or lesser importance. Frequently in criminal matters, the

defense require four chairs and this is reflected in the drawings.

Court Interpreter

When simultaneous interpretation is required, a separate simultaneous interpretation booth is provided to the interpreter.

Witness

Witnesses participate only during the time they testify. They are questioned by the lawyers and the judge. Before they are called to the stand they may remain within the courtroom in the public seating area. Witnesses required for the trial but not giving testimony and not permitted by the judge to be present during the testimony of others are accommodated in witness rooms associated with the courtrooms. A witness may be called to the courtroom by the court clerk via intercom or paging system.

Witnesses require easy access from the entrance or public seating to the witness stand.

The judge, lawyers, court reporter, jurors, accused and, where required, the interpreter should be able to see and hear the witness clearly.

Witnesses may read from notes or exhibits may be handled. Therefore a small work surface should be provided. Although they usually stand when testifying, a space for a seat should be provided. If required, it should be possible for an interpreter to stand near the witness.

The Parties

The parties involved in courtroom proceedings are Crown counsel and the accused (who may be in custody in criminal proceedings). The parties may have counsel or be acting on their own behalf. The accused, if in custody, will be accompanied to the courtroom by the police. If the proceedings result in the payment of fines or retribution, the parties will be instructed to the appropriate administration area to make payment unless time to pay is given.

Police

The police will escort the accused in custody from the holding area to the courtroom and, if required, remain with the accused throughout the courtroom proceedings. The police will also appear from time to time as witnesses or to give evidence.

The police may sit or stand in several locations depending on the situation. Normally they are positioned adjacent to the accused. The officer should be able to move with relative ease to any part of the courtroom and should be able to see the whole courtroom.

A small secure holding area is provided adjacent to the courtroom for the prisoner to be held during breaks.

Spectators

Spectators are passive observers of court proceedings and can include the press, relatives or friends of the litigants, general onlookers, witnesses or school classes. The spectators are located between the court participants' area and the public entrance to the courtroom. Spectators should be able to view the proceedings without creating any distractions to the actual participants in the process. Seating for the spectators should be reasonably comfortable and allow easy movement between the rows for the calling of witnesses and for exit purposes in an emergency. The standard courtroom specifications allow seating for 37-45 persons.

COMPONENT H - JUDGES' CHAMBERS AND RELATED AREAS

The judges' offices must be secure and the design must limit access to those persons with clearance to enter this area of the court house. For purposes of this section the justices of the peace are included. The judicial suites should be on a limited access corridor with admittance gained by a dedicated elevator from the judges' parking area or by entry through the judicial administration area. The judges' elevator would also access the private circulation corridors on the courtroom floors.

The judicial area would include a judges' library, a judges' lounge and meeting room. The lounge should be equipped with a small servery. In the larger court houses, separate lounges and meeting rooms may be required for the General Division justices and the Provincial Division judges. However, there will be one judges' library to be used as a shared facility.

The administration area should be centrally located and include an office supply room, a secure file room and a photocopy room. A reception and waiting area should be the control point for anyone wishing to enter the judicial area.

On the courtroom floors retiring rooms should be situated off the private circulation corridor. These retiring rooms are available to the judges should a short break in proceedings occur in their courtrooms. This obviates time-consuming returns to the judicial suites. In small court-houses, retiring rooms will not be required as the judicial suites would be located close to the courtroom.

COMPONENT I - LAW ASSOCIATION, CROWN ATTORNEY AND SUPPORT AREAS

Law Association

Facilities are provided to the law association to house the library and provide lockers and change rooms. Lawyers serving the courts may be required to gown, depending on the court in which they are to

appear. The Law Association accommodation should have direct access to the street as well as to the public area of the court house. Many lawyers avail themselves of the library in the evenings but should not have access to the court house after hours, except by way of their exclusive access from the street.

Crown Attorney

The Crown Attorney's office requires a high degree of privacy and security since Crown Attorneys are the prosecutors in all criminal trials and must work closely with the police to lay charges and develop trial strategies.

The Crown Attorney's office staff includes Assistant Crown Attorneys and clerical support staff. A library is essential, as is a photocopy/supply office, a considerable space for filing, interview rooms, a lunch room with servery and robing room combined with washroom.

The Crown Attorney should be adjacent to the victim/witness office and in close proximity to the Police Court Services Office.

To function effectively, a court house facility also requires the support and involvement of groups and services other than MAG employee-based administrative units.

Some of these support groups are:

- a) Probation and parole
- b) Police court services
- c) Legal Aid, Children's Aid Society, Salvation Army and other social agencies.

Each of these groups requires accommodation within the courthouse to service the courts and its clients.

- a) The Ministry of Correctional Services supplies the staff for the probation and parole office while MAG supplies the accommodation. Many criminal courts rely heavily on the services of this support. The probation and parole office deals extensively with the court services personnel and should have reasonable access to this group.
- b) The Police Court Services Bureau is an administrative office requiring public access and proximity to the Crown Attorney's area. Depending on design considerations, it may include the lunchroom and washroom/locker areas for police staff operating the holding facilities and providing court security.
- c) The judiciary refers many accused and sentenced persons to a variety of social agencies such as Legal Aid, the Salvation Army and others. Shared office space is required for these agencies. These support groups deal with the public as well as the court offices and should be situated close to public areas.

The need and space requirements for the support groups will be identified in the planning stage of the court house. Their space may be shared and/or available on an as required basis.

COMPONENT J - HOLDING AREA AND RELATED FUNCTIONS

The court house requires secure facilities to house accused persons brought to the courts daily by police departments serving the area. An accused person in custody is housed in a detention facility and brought to the court house by the police department having jurisdiction in the case. Depending on the outcome of his/her trial, the accused may beurisdiction in the case. Depending on the outcome of his/her trial, the accused may be returned to the detention facility, ordered to be sent to a provincial or federal institution, released on probation or granted bail.

Prisoners or accused in custody are delivered to the court house via the sally port, led into the holding area and placed in cells. As the accused's trial begins s/he is escorted by the police through the prisoner circulation corridor to the appropriate courtroom.

If a break in proceedings occurs, the prisoner is usually held in an individual cell adjacent to each courtroom. If there is more than one accused, the prisoners may have to be returned to the cell block until court resumes.

The holding facilities are divided into separate areas for males and females. Within each of these areas, adult prisoners are segregated from young offenders. This separation creates distinct and separate areas under the control of a custodian for males and a matron for females.

Since prisoners are generally delivered to the court in the morning and not returned to detention centres until later in the day, it is usually necessary to provide lunch for the detainees. A small servery should be provided for this purpose in the custodian area.

Within the holding area, a separate room should be provided for use by a justice of the peace as a bail office. Cubicles should be provided for consultations between lawyers and accused.

COMPONENT K - ADMINISTRATION

The following describes how a court house administration will function.

General Structure

A court operations manager will oversee all of the services described below. Section managers or supervisors will manage the component functions.

Information Booth

The starting point for the public may be an information kiosk inside the entrance to the court house. This service will provide direction to those seeking specific court functions, information on courtroom schedules and locations as well as assistance to those who require further direction concerning services. The required information may be provided by an individual or via monitors listing courtroom schedules or a combination of the two. Touch screen monitors may also be considered.

Court Counter Services

The majority of administrative interaction with the public takes place at long counters. Here documents are received and filed and information on the status of cases is provided. Fines are paid and bail is deposited. Traditionally each level of court has had a separate office with its own administration and counter. Under the integrated system of management, a single area will provide customer services for the General Division and Provincial Division courts which shall be clearly identified. Counter space shall be sub-divided to separate the services associated with civil (non-family), criminal, and family matters. The public will be directed to the appropriate wickets based on the type of court matter and will be able to receive all services at that counter, except those provided by the enforcement group (see next page).

Enforcement

This area is involved in service and searching of documents and seizure of property. It encompasses some of the functions currently performed by sheriffs, officers and bailiffs. It is a specialized public service, with the users tending to be legal and paralegal practitioners. It does not require the same degree of public accessibility as the court counter services.

Support and Services to Courtrooms and Judiciary

This administrative function does not involve regular access by the general public. It encompasses the scheduling, management of clerk support, court reporting and interpretation and other related functions in the service and operation of courtrooms. The judiciary, as the major user of this service, may determine its location.

Finance and Administration

This is a support function that involves no regular public contact. It includes purchasing, accounts payable and accounts receivable. It should be accessible to the counter services, but does not require public access.

Victim/Witness Program

This is a public service function that works closely with the office of the Crown Attorney. It requires a location with good public access.

SECTION F

SIZE OF COURTROOMS

SIZE OF COURTROOMS

These standards reflect a standard courtroom of a given size that will accommodate the present Superior Court of Justice courts and the Ontario Court of Justice courts. In general, a single integrated facility will avoid the inefficiencies of unused courtrooms which occur because courtroom capacity is dictated by peak load requirements of each separate level of court. Standard courtrooms located in an integrated facility will mean a scheduling approach can be established for the facility, which will maximize court utilization.

In the larger court houses a courtroom capable of holding 120 persons for first appearances should be provided.

The standard courtroom has been sized to accommodate either a jury courtroom or non-jury courtroom with appropriate millwork constructed of modular components.

It should also be noted that the judge's bench dais, court clerk's and court reporter's millwork are also designed as modular units, without reducing the traditional perception of quality. The component feature will facilitate the use of computers in the immediate future and allow for unknown change in the long term.

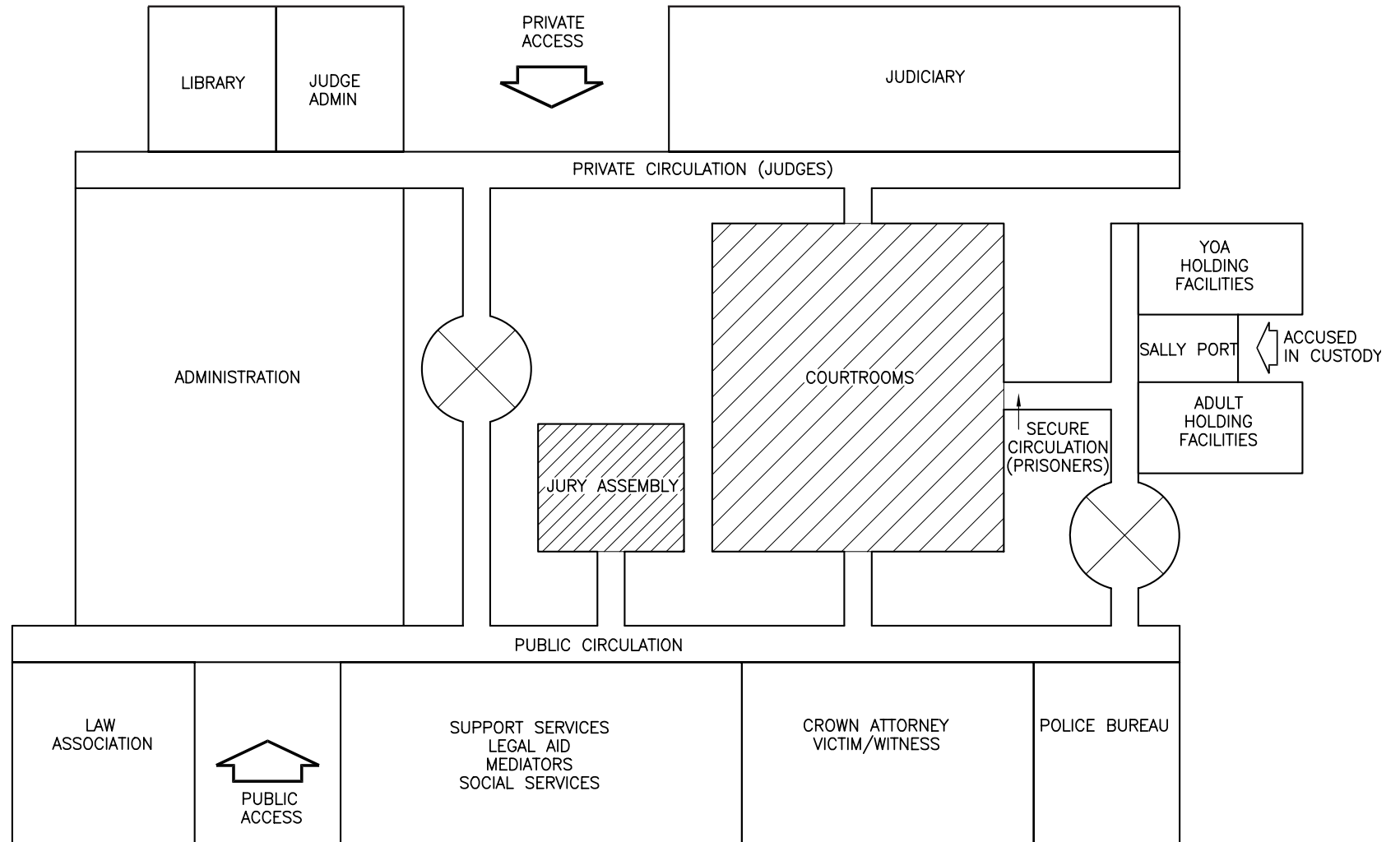
Further flexibility has been introduced by the use of raised flooring in designated areas.

A multi-purpose jury courtroom has been designed for use as a special courtroom for jury selection, swearing in of judges and other ceremonial occasions, as well as high profile cases where demand for seating is high.

The new standard courtroom does not depart drastically from the recognized plan that has been so successful over many years. It recognizes the relationship of the various participants, which has been said to reflect society's view of the appropriate relationship between a person accused of committing a crime and judicial authority.

SECTION G

STANDARD COURTROOM AND RELATED AREAS



STANDARD JURY COURTROOM
 119.00sm (1281sq ft)

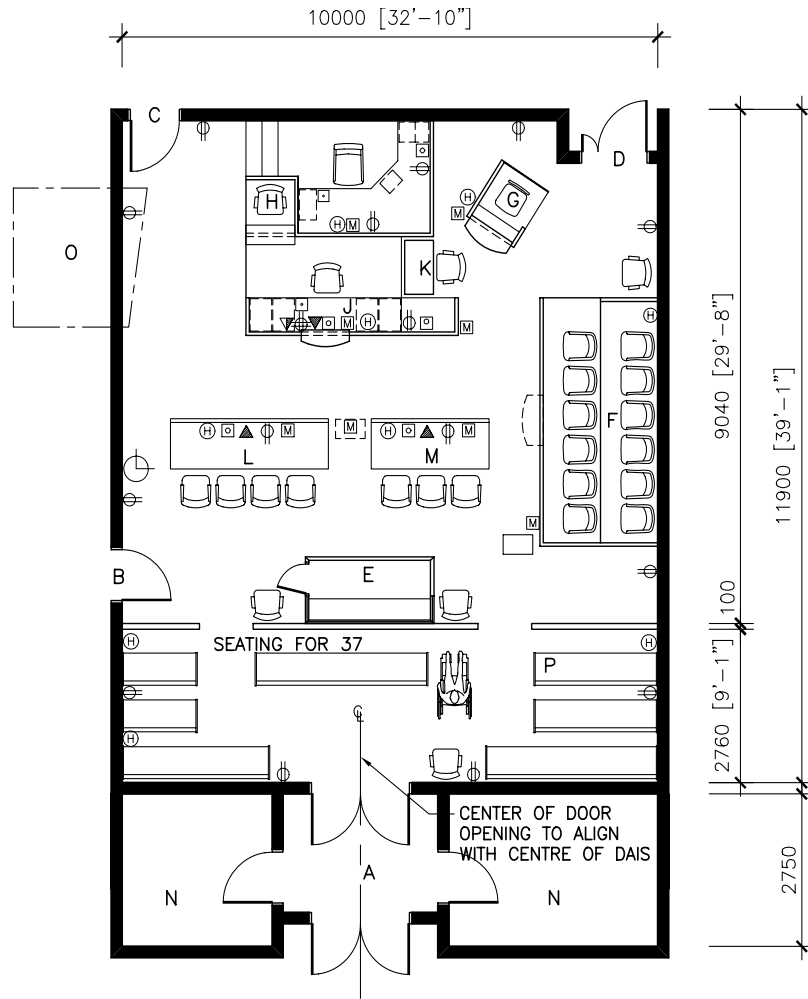


FIG: G2 A - STANDARD JURY COURTROOM



FIG. G2A

A PUBLIC ENTRY: From public circulation. This entry will be used by general public, Crown Attorneys, defence lawyers, witnesses and accused persons not in custody. Note entry is through a sound lobby.

It may be necessary to provide one or more high security courtrooms. The public will be required to pass through a security check before entering the secure courtroom area.

B PRISONER ENTRY: This entry will be used by accused persons in custody and escort officers. Entry will be from a dedicated prisoner's circulation corridor leading to the holding cells. A local holding cell should be planned adjacent to the courtroom for use by the accused during short court recesses.

C JUDGE'S ENTRY: From a dedicated judges' corridor (can also be used by jury and necessary staff).

D JURY ENTRY: Used by the jury for travel to and from the jury deliberation room. This route can be through the judges' corridor but the attendants will ensure that the jury is not in the corridor at the same time as the judge. If the planned access to the storeroom is also through this door, install a narrow 300mm second leaf flush bolted top and bottom, leading edge of the narrow leaf to be rebated as door stop.

E PRISONER'S BOX

F JURY BOX: Will be on two levels i.e. 150mm and 300mm above courtroom floor.

G WITNESS BOX (PORTABLE)

H COURTROOM SERVICES OFFICER II (DEPUTY SHERIFF)

J COURT REGISTRAR

K COURT REPORTER (MONITOR)

L DEFENCE LAWYERS' TABLE

M CROWN ATTORNEYS' TABLE

N INTERVIEW ROOMS

O SIMULTANEOUS INTERPRETATION BOOTH (ELEVATED): Only when required

P PRESS AREA

Note : One standard jury courtroom shall be equipped with a dias to accommodate three judges. Detail dimensions and minor variances to the standard jury courtroom are provided in Section L.

LEGEND

- | | | | | | |
|---|---------------------|---|--------------------------|---|---------------|
| ☐ | COMPUTER OUTLETS | ▣ | DURESS BUTTON | ⊙ | CLOCK |
| Ⓜ | COURTMICROPHONE | ▲ | COURT PAGING OUTLET | ⊕ | DUPLEX OUTLET |
| ▲ | TELEPHONE OUTLET | ⊕ | QUADPLEX OUTLET | | |
| ♿ | WHEELCHAIR LOCATION | ⊕ | HEARING-IMPAIRED STATION | | |

ALTERNATE JURY COURTROOM
 136.0sm (1464sq ft)

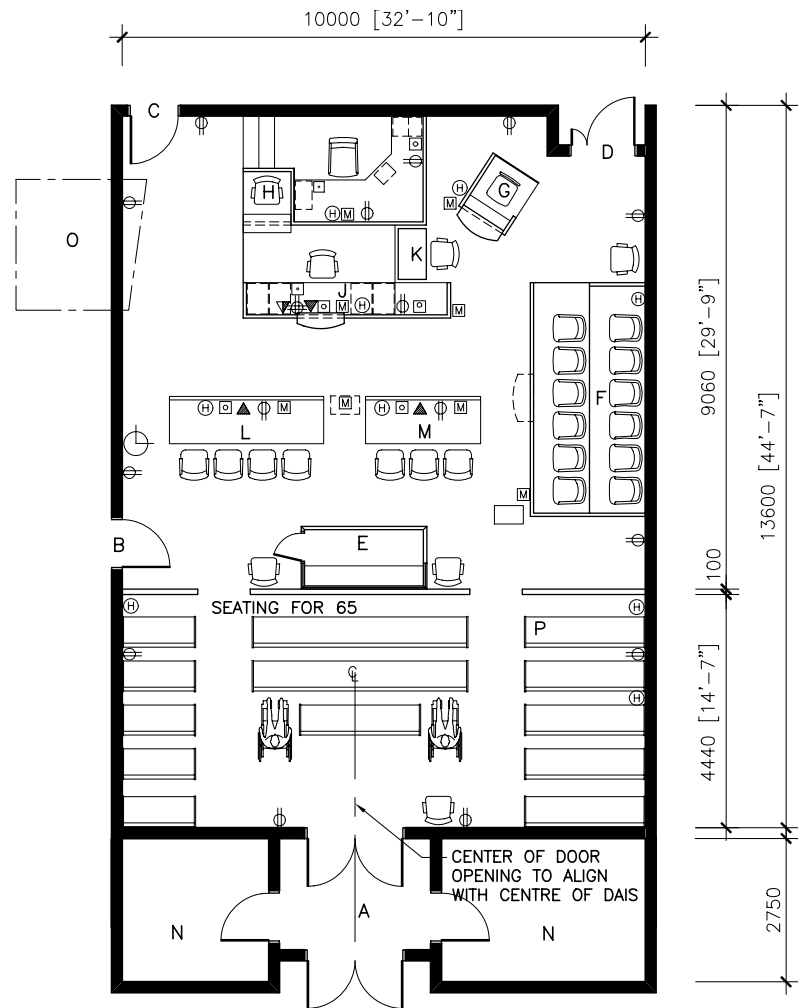
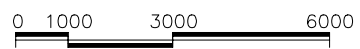


FIG. G2B
 In some centres, such as Toronto and Brampton, where jury selection is on-going and is conducted in the standard jury courtroom, it may be necessary to increase the standard courtroom to accommodate the 80 jurors required for this selection process. The larger standard jury courtroom with seating capacity for 65 persons is shown in Fig. G2B.

FIG: G2 B - ALTERNATE JURY COURTROOM



ALTERNATE JURY COURTROOM
 148.5sm (1598sq ft)

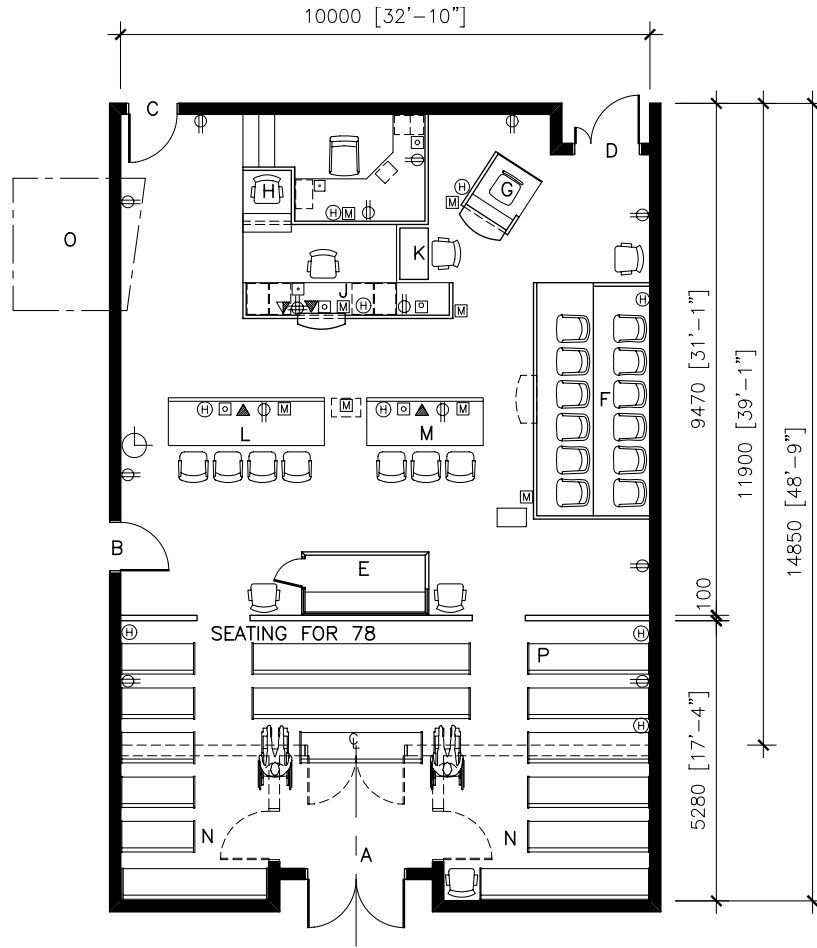
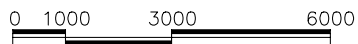


FIG. G2C

As an alternative to the larger standard jury courtroom in the previous Fig. G2B, it would also be possible to achieve the requisite public seating by taking the Standard Jury Courtroom and incorporating the adjunct interview rooms into the courtroom. This modification will result in a seating capacity of 78 persons and is illustrated in the drawing labelled as Fig. G2C. The displaced interview rooms could be provided across the corridor or nearby. This approach to creating a larger standard jury courtroom might be adopted as the result of the stacking of courtrooms one above the other in a multi-level facility.

FIG: G2 C - ALTERNATE JURY COURTROOM



STANDARD CIVIL JURY COURTROOM
 104.7sm (1127sq ft)

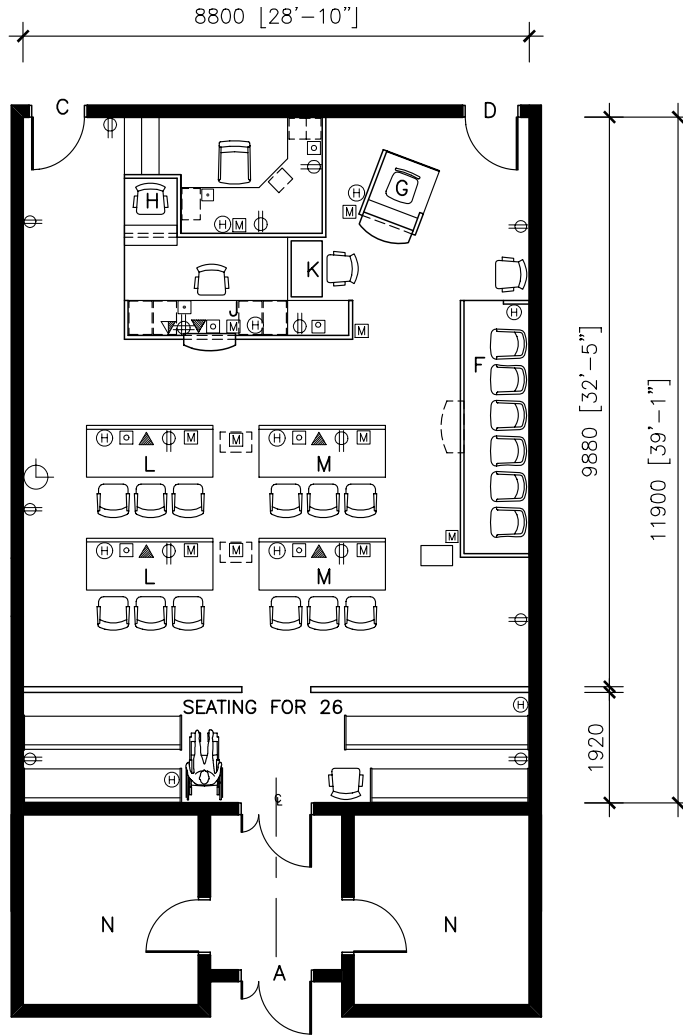
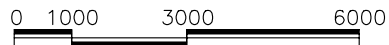


FIG. G2D

In locations such as Toronto and other large urban centres where a high demand for courtrooms dedicated to civil cases can be identified, a standard courtroom for civil proceedings shall be employed. Jury courtroom Fig. G2D illustrates the standard civil jury courtroom. Because of the number of litigants and the vast amounts of paper exhibits, the well area has been increased to accommodate a second set of counsel tables at the expense of the public gallery which, in most cases, requires limited seating.

Note In the selection of the jury courtroom type and size, it is important to keep in mind the need for flexibility in courtroom use. In the smaller centres where program requirements indicate the need for one or two jury courtrooms, it would be prudent to select the Standard Jury Courtroom Fig. G2A or Fig. G2B dependent upon public seating needs whereas in the larger urban centres, courtrooms could be assigned for civil use, and others for criminal use, and the appropriate mix could then be developed.

FIG: G2 D – STANDARD CIVIL JURY COURTROOM



STANDARD NON-JURY COURTROOM

104.7sm (1127sq ft)

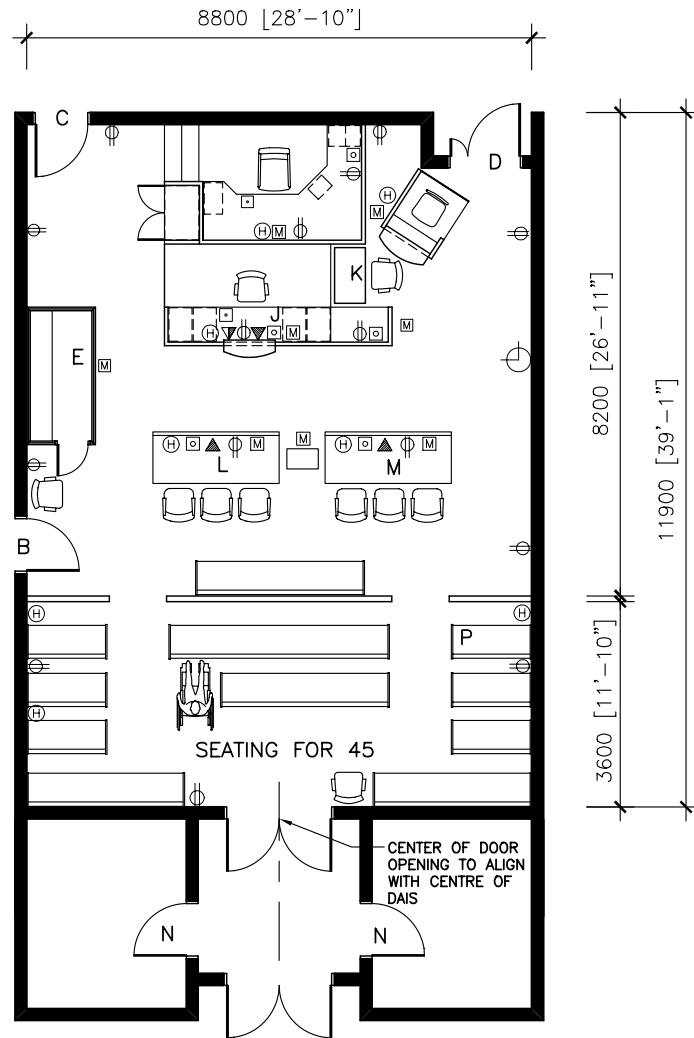


FIG G2E

A PUBLIC ENTRY: From public circulation. This entry will be used by general public, Crown Attorneys, defence lawyers, witnesses and accused persons not in custody. Note entry is through a sound lobby.

As unpredictable acts of violence within the courtroom are on the increase, it may be necessary to provide one or more high security courtrooms. The public will be required to pass through a security check before entering the secure courtroom area.

B PRISONER ENTRY: This entry will be used by accused persons in custody and escort officers. Entry will be from a dedicated prisoner's circulation corridor leading to the holding cells. A local holding cell should be planned adjacent to the courtroom for use by the accused during short court recesses.

C JUDGE'S ENTRY: From a dedicated judges' corridor (can also be used by the necessary staff). If the planned access to the storeroom is through this door, install a narrow 300-mm second leaf flush bolted top and bottom, leading edge of the narrow leaf to be rebated as door stop.

D FIRE EXIT DOOR AS REQUIRED

E PRISONER'S BOX

G WITNESS BOX (PORTABLE)

J COURT CLERK

K COURT REPORTER (MONITOR)

L DEFENCE LAWYERS' TABLE

M CROWN ATTORNEYS' TABLE

N INTERVIEW ROOMS

O SIMULTANEOUS INTERPRETATION BOOTH (ELEVATED): Only when required

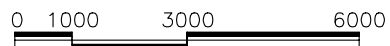
P PRESS AREA

Note: Detail dimensions and minor variances to the standard non-jury courtroom are provided in Section L.

LEGEND

- | | | | | | |
|--|---------------------|--|---------------------|--|---------------------------|
| | COMPUTER OUTLETS | | DURESS BUTTON | | CLOCK |
| | COURT MICROPHONE | | COURT PAGING OUTLET | | DUPLEX OUTLET |
| | TELEPHONE OUTLET | | QUADPLEX OUTLET | | HEARING-IMPAIRED STATIONS |
| | WHEELCHAIR LOCATION | | | | |

FIG: G2 E - STANDARD NON JURY COURTROOM



ALTERNATE NON-JURY COURTROOM

136.0sm (1464sq ft)

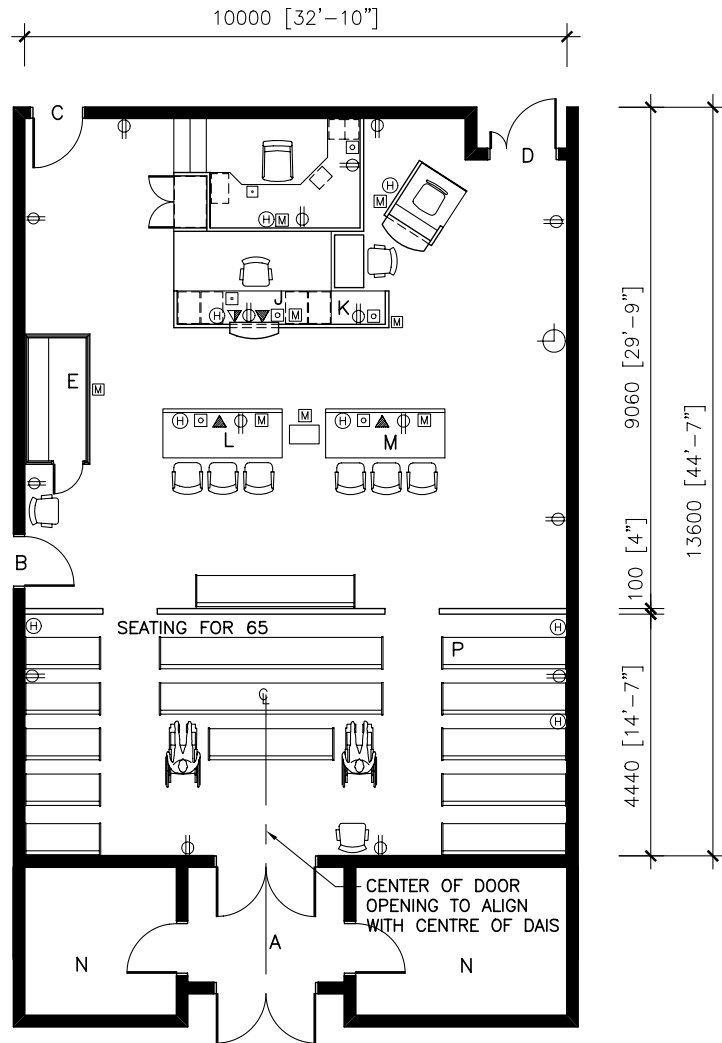
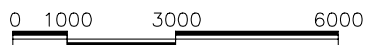


FIG.G2F

Most non-jury courtrooms will consist of the standard size of 104.7sm as shown in Fig. G2E. However there may be a demonstrated requirement for one or more non-jury courtrooms, with a larger seating capacity to serve the public's needs. Fig. G2F illustrates the larger non-jury courtroom with seating capacity for 65 persons in the public area.

This requirement for the larger courtroom shall be reviewed on a court-house by court-house basis during the planning phase.

FIG: G2 F - ALTERNATE NON JURY COURTROOM



FAMILY COURTROOM
 104.7sm (1127sq ft)

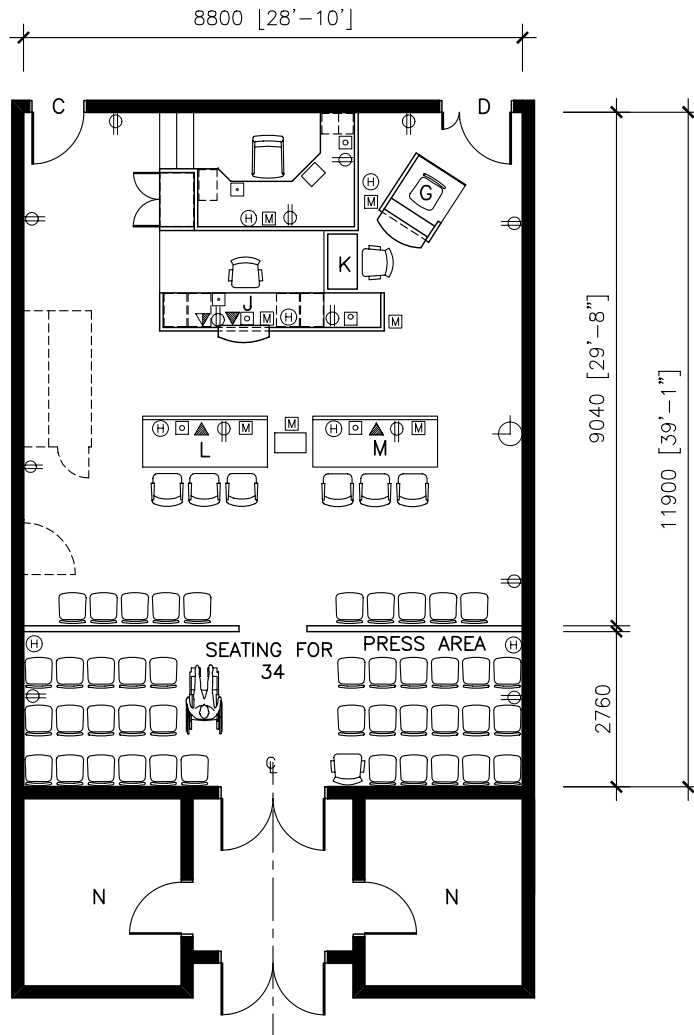


FIG: G2 G - FAMILY COURTROOM



FIG. G2G

The Family courtroom size is identical to the standard non-jury courtroom. With the increasing number of family members involved in family matters, it is important to ensure adequate space in the well area for the participants. The public seating shall consist of upholstered chairs in lieu of bench seating to create a less formal setting. The chairs shall be ganged together to maintain a neat and orderly appearance.

Dedicated entries are provided for the judge and the public with participants and support staff assuming positions similar to that in a typical courtroom. Power, voice and data requirements are as for typical courtroom.

Where young offender cases are handled by the Family Courts there will be a need to provide an accused box within the well of the courtroom. The dotted outline illustrates that an accused box can be accommodated in the typical Family courtroom by adjusting the location of the counsel tables and providing the requisite entry door for the accused from a dedicated prisoner's circulation corridor.

ALTERNATE FAMILY COURTROOM
104.7sm (1127sq ft)

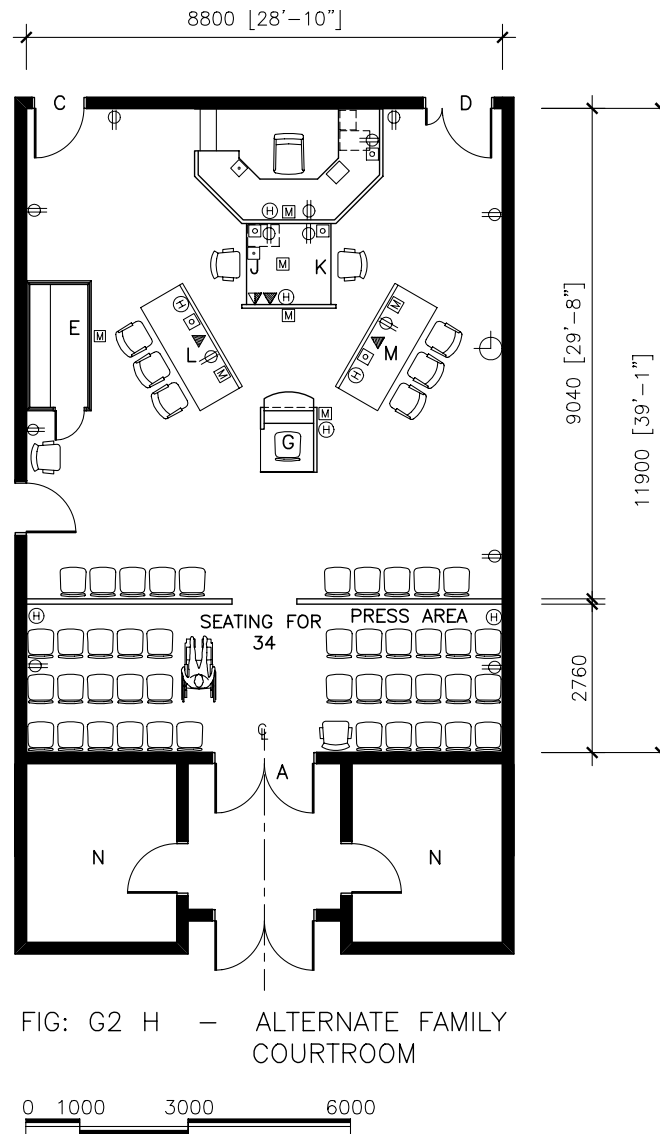


FIG. G2H

A dais arrangement adopted by the family bench at some court locations is illustrated in Fig. G2H. This layout is often referred to as the Quebec-style.

With the less formal arrangement and dais height reduced to 2 risers from the standard 3 risers, advocates of this alternative feel the results create an environment more suited to dealing with family matters.

Like the typical courtroom, power, voice and data requirements shall be provided with modifications made as required to suit the new arrangement.

CHECKLIST	
ZONE	<p>NOTE 1 public</p> <p>NOTE 1 private</p> <p>restricted</p>
TRAFFIC	<p>NOTE 2 high</p> <p>medium</p> <p>low</p>
IMAGE	<p>* dignified</p> <p>* orderly</p> <p>friendly</p> <p>bold</p> <p>peaceful</p>
FUNCTIONAL ADAPTABILITY	<p>NOTE 3 important</p> <p>desirable</p> <p>unimportant</p>
INTERNAL FLEXIBILITY	<p>NOTE 3 important</p> <p>desirable</p> <p>unimportant</p>
VIEW OUT	<p>important</p> <p>desirable</p> <p>optional</p> <p>NOTE 4 none</p>
ILLUMINATION	<p>bright</p> <p>moderate</p> <p>subdued</p> <p>NOTE 5 special</p>
QUIETNESS	<p>NOTE 6 important</p> <p>desirable</p> <p>unimportant</p>
ENVIRONMENTAL CONTROL	<p>NOTE 7 high</p> <p>low</p> <p>normal</p>
CEILING HEIGHT	<p>NOTE 8 high</p> <p>normal</p> <p>low</p>
STORAGE	<p>NOTE 9 room</p> <p>none</p> <p>built-in</p>
SERVICES	<p>water</p> <p>NOTE 10 electricity</p> <p>NOTE 11 telephone</p> <p>NOTE 12 intercom</p> <p>NOTE 13 special</p>
SECURITY	<p>NOTE 14 high</p> <p>medium</p> <p>low</p>

NOTES
<p>1. THREE CIRCULATIONS MEET IN THE COURTROOM. THE INNER AREA OR WELL OF THE COURTROOM IS FOR THE USE OF THE PARTICIPANTS IN THE PROCEEDINGS WHILE THE AREA ON THE OTHER SIDE OF THE RAIL IS OPEN TO THE PRESS AND PUBLIC.</p> <p>2. IT MUST BE POSSIBLE TO PAGE THE REQUIRED COURTROOM PARTICIPANTS FROM THE CLERK'S DESK.</p> <p>3. CONTINUING COURT REFORM AND NEW LEGISLATION DEMANDS MAXIMUM ADAPTABILITY AND FLEXIBILITY. THE INNER COURT AREA WILL BE CARPETED RAISED (COMPUTER) FLOORING TO ALLOW MAXIMUM FLEXIBILITY TO CHANGE ALL WIRING. NOTE: FLOOR OF INNER COURT WILL BE AT THE SAME LEVEL AS THE REMAINDER OF COURTROOM, THEREFORE DEPRESS THE CONCRETE SLAB IN THE INNER COURT AREA.</p> <p>4. EXTERNAL WINDOWS ARE A SECURITY RISK, CAUSE HEAT BUILD UP AND MAY BE DISTRACTING ESPECIALLY WHEN ATTEMPTING TO CONTROL LIGHT LEVELS IN THE COURTROOM FOR VIEWING SLIDE PRESENTATIONS AND VIDEOS. SMALL VIEWING WINDOW IN ENTRANCE DOOR IS IMPORTANT TO CHECK THE COURTROOM IF EMERGENCY BUTTON IS ACTIVATED AND FOR PERSONS ABOUT TO ENTER.</p> <p>5. THE PRIME CONSIDERATION IS TO PROVIDE ADEQUATE FUNCTIONAL LIGHTING WITH A HIGH VISUAL COMFORT LEVEL (VCL), REDUCED GLARE AND FLEXIBLE SWITCHING. PUBLIC AREA COULD BE AT A SLIGHTLY LOWER LEVEL OF ILLUMINATION. VARIABLE LIGHTING LEVELS SHALL BE INCORPORATED FOR VIDEO AND SLIDE PRESENTATIONS AS WELL AS FOR POSSIBLE FUTURE VIDEO TAPING OF COURT PROCEEDINGS. THE SPECIAL ATTENTION GIVEN TO LIGHTING SHOULD BE BALANCED AGAINST COST AND EASE OF MAINTENANCE.</p> <p>6. IT IS ESSENTIAL THAT NOISE FROM OTHER SPACES SHOULD BE AT LEAST 5 TO 10dB BELOW THE AMBIENT NOISE LEVEL WITHIN THE COURTROOM. THE USE OF A SOUND VESTIBULE IS A REQUIREMENT IN COURTROOM DESIGN. IT IS ALSO A FUNCTIONAL REQUIREMENT THAT THE RECORDING OF THE COURT PROCEEDINGS—WHETHER BY TAPE RECORDING, STENOMASK, OR COMPUTER—BE CLEAR AND AUDIBLE. ALL PERSONS IN THE COURTROOM MUST BE ABLE TO HEAR THE PROCEEDINGS. THEREFORE THE USE OF MICROPHONES, SPEAKERS FOR SOUND REINFORCEMENT AND HEARING-IMPAIRED OUTLETS IS ESSENTIAL. SOUND SYSTEM FEEDBACK CAUSING DISTORTION MUST BE AVOIDED. SEE OUTLINE OF SOUND SYSTEMS IN SECTION Q.</p> <p>7. THE OCCUPANTS OF THE COURTROOMS ARE OFTEN SUBJECTED TO STRESSFUL SITUATIONS. THEREFORE THE HEATING, VENTILATION AND AIR CONDITIONING (HVAC) MUST BE OF HIGH QUALITY WITH INDEPENDENT CONTROL EQUIPMENT CAPABLE OF RESPONDING ACCURATELY TO THE LARGE FLUCTUATIONS OF PEOPLE AS REQUIRED. THE AIR HANDLING SYSTEM MUST BE DESIGNED TO HANDLE MAXIMUM OCCUPANCY AS AIR QUALITY IS VITAL FOR ALL PARTICIPANTS TO PERFORM THEIR FUNCTIONS WELL. IT SHOULD BE KEPT IN MIND THAT A COURTROOM PROCEEDING CAN OFTENTIMES CONTINUE PAST "NORMAL" HOURS WHEN THE REST OF THE COURT HOUSE IS CONSIDERED CLOSED FOR THE DAY. THE FINE CONTROL OVER THE COURTROOM ENVIRONMENT SHOULD BE SUPPLEMENTED BY A QUIET, DIGNIFIED AMBIENCE USING HARMONIOUS, LOW-KEY COLOURS AND MATERIALS.</p> <p>8. THE CEILING HEIGHT SHOULD BE A MINIMUM OF 3.6 METRES CLEAR FROM FLOOR FINISH TO THE UNDERSIDE OF THE CEILING.</p>

AREA
<p>STANDARD COURTROOM</p> <p>119.0sm (1281sq ft)</p> <p>104.7sm (1127sq ft)</p>
<p>PROXIMITIES</p> <p>ADJACENT:</p> <p>PRIVATE CIRCULATION</p> <p>PUBLIC CIRCULATION</p> <p>PRISONER CIRCULATION</p> <p>CLOSE TO PRIVATE CIRCULATION:</p> <p>JUDGES' OFFICES, RETIRING ROOMS</p> <p>JUDGES' SECRETARIES</p> <p>JUDGES' LIBRARY & BOARDROOM</p> <p>JURY ROOM</p> <p>CLOSE TO PUBLIC CIRCULATION:</p> <p>WITNESS/INTERVIEW/LEGAL AID ROOMS</p> <p>PUBLIC COUNTERS</p> <p>PUBLIC WASHROOMS</p> <p>PUBLIC WAITING AREA</p> <p>CROWN ATTORNEYS (RESTRICTED ACCESS)</p> <p>LAW ASSOCIATION SUITE</p> <p>PUBLIC ENTRANCE</p> <p>CLOSE TO PRISONER CIRCULATION:</p> <p>MAIN HOLDING AREA</p> <p>HOLDING CELLS ADJACENT TO COURTROOMS</p> <p>PRISONER INTERVIEW CUBICLES</p> <p>JUSTICE OF THE PEACE BAIL OFFICE</p> <p>NOTE: JURY ROOMS SHOULD BE CLOSE TO COURTROOMS.</p>
<p>INTERNAL ORGANIZATION</p> <p>THE INNER COURT OR WELL AREA ACCOMMODATES THE JUDGE, CROWN ATTORNEY, DEFENCE LAWYER, WITNESSES AND THE JURY WHEN REQUIRED. IN ADDITION TO THESE ESSENTIAL PLAYERS, THE INNER COURT ALSO ACCOMMODATES THE COURT REPORTER, COURT CLERK, PRISONER, COURT ATTENDANTS OR POLICE AND INTERPRETERS WHEN REQUIRED. THE REMAINDER OF THE COURTROOM ACCOMMODATES THE PRESS AND THE PUBLIC, i.e. RELATIVES, STUDENTS AND OTHER INTERESTED PARTIES.</p>

CHECKLIST		
ZONE	NOTE 1 NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	* *	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 3	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	NOTE 9	built-in room none
SERVICES	NOTE 10 NOTE 11 NOTE 12 NOTE 13 NOTE 14	water electricity telephone intercom special
SECURITY	NOTE 15	high medium low

NOTES 2
<p>9. STORAGE FOR EXHIBITS INCLUDING FIREARMS AND OTHER DANGEROUS MATERIAL IS REQUIRED (SEE SECTION ENTITLED ADMINISTRATION). A CENTRAL SECURE STORAGE SHALL BE PROVIDED TO SERVE ALL COURTROOMS.</p> <p>10. ALTHOUGH THE PROVISION OF WATER IS NOT A DIRECT REQUIREMENT WITHIN THE COURTROOM, PITCHERS OF CHILLED OR ICE WATER ARE PROVIDED TO THE PARTICIPANTS IN THE WELL AREA. COURT ATTENDANTS SEE TO THIS NECESSITY AND SHARED STATIONS FOR FILLING THE PITCHERS SHOULD BE APPROPRIATELY LOCATED IN ALCOVES OFF THE PRIVATE CORRIDOR SERVING THE COURTROOMS AND MOTIONS ROOMS. GENERALLY ONE LOCATION PER FLOOR SHOULD SUFFICE IN A MULTI-LEVEL FACILITY BUT THE REQUIREMENT SHOULD BE REVIEWED BY STAFF.</p> <p>11. ELECTRICAL OUTLETS SHALL BE PROVIDED TO ACCOMMODATE RECORDING EQUIPMENT, PROJECTION AND VIDEO EQUIPMENT. ELECTRICAL OUTLETS SHALL ALSO BE PROVIDED FOR JANITORIAL NEEDS. AS THE FLOOR OF THE INNER COURT IS RAISED, AT LEAST SEVEN FLOOR PANELS SHALL BE FITTED WITH INSERTS FOR CABLE PASSTHROUGHS TO MULTIPLE ELECTRICAL OUTLETS ON THE SLAB BELOW. BATTERY POWERED EMERGENCY LIGHTING SHALL BE PROVIDED TO HIGHLIGHT THE PRISONERS' BOX.</p> <p>12. TELEPHONES AND COMPUTER JACKS SHALL BE INSTALLED AS SHOWN ON FIGS. G2A TO G2H.</p> <p>13. PAGING (ZONED) SHALL BE PROVIDED AT THE CLERK'S STATION.</p> <p>14. PROVIDE MICROPHONES LOCATED AS FOLLOWS: JUDGE'S BENCH, COURT CLERK, CROWN ATTORNEY'S TABLE(S), DEFENCE LAWYER'S TABLE(S), WITNESS BOX, LECTERN, AND PRISONER'S BOX IN NON-JURY COURTROOMS. AN ADDITIONAL MICROPHONE SHALL BE PROVIDED FOR THE COURT INTERPRETER. ALL MICROPHONES SHALL FEED TO THE COURT REPORTERS' STATIONS. (SEE OUTLINE OF SOUND SYSTEM SPECIFICATION IN SECTION Q). SOUND REINFORCEMENT TO ENSURE HEARING CAPABILITY OVER THE WHOLE COURTROOM SHALL BE INSTALLED. SPECIAL ATTENTION SHALL BE GIVEN TO THE DESIGN TO AVOID FEEDBACK FROM THE SPEAKERS TO THE MICROPHONES.</p> <p>NOTE:</p> <ul style="list-style-type: none"> WHERE SIMULTANEOUS INTERPRETATION IS REQUIRED THE MICROPHONES SHALL ALSO BE FED INTO THE TRANSLATION BOOTH. SEE SECTION ON TRANSLATION BOOTH. BOTH SOUND REINFORCEMENT AND STATIONS FOR THE HEARING IMPAIRED SHALL BE PROVIDED ON EITHER SIDE OF THE PUBLIC AREA IN ALL COURTROOMS. A DURESS BUTTON SHALL BE PROVIDED AT THE JUDGE'S BENCH AND AT THE COURT CLERK'S DESK. COMPUTER OUTLETS AS SHOWN ON FIGS. G2A TO G2H. THE MICROPHONE LOCATED FOR USE BY PERSONS IN THE WITNESS BOX WILL HAVE ITS JACK UNDER THE RAISED FLOOR. THEREFORE THE WITNESS BOX CAN BE MOVED TO THE EXTENT OF THE MICROPHONE CABLE. A GENEROUS LENGTH SHOULD BE ALLOWED WHEN INTERPRETATION TAKES PLACE ON THE COURTROOM FLOOR (SHORT TRIALS OR APPEARANCES ONLY). A SEPARATE MICROPHONE SHALL BE PROVIDED FOR THE USE OF THE INTERPRETER. THE WALLS OF THE COURTROOM ARE TO BE CONSTRUCTED FROM FLOOR SLAB TO THE UNDERSIDE OF THE SLAB ABOVE. THEREFORE EACH COURTROOM SHALL HAVE ITS OWN ELECTRICAL CIRCUITS FED TO THE AREA UNDER THE RAISED FLOOR. IF COURTROOMS ARE LINKED ELECTRICALLY, ALL HOLES IN WALLS ETC. TO ACCEPT CONDUIT SHALL BE SEALED AIR-TIGHT AS PER THE CONCEPTS OF SECTION Q. <p>15. THE COURTROOM IS THE MEETING PLACE OF THE ACCUSED, THE PROSECUTOR AND THE JUDGE. IT IS OFTEN NECESSARY TO PROVIDE SECURITY BY THE PRESENCE OF THE POLICE. THE JUDGE'S BENCH AND COURT REGISTRAR/CLERK'S DESK SHALL BE EQUIPPED WITH DURESS BUTTONS. REFER ALSO TO NOTE 3 UNDER FURNISHINGS & EQUIPMENT.</p>

AREA
<p>STANDARD COURTROOM</p> <p>119.0sm (1281sq ft) 104.7sm (1127sq ft)</p>
PROXIMITIES
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST	
CHAIRS	NOTE 1 sled base side chairs
	NOTE 1 tilt
	NOTE 1 swivel/tilt
TABLES	NOTE 2 movable standard special
	NOTE 3 modular movable fixed special design
SEATING PUBLIC	NOTE 4 fixed (bench) fixed (gang)
	NOTE 4 upholstered
	NOTE 4 wood
COUCH	full size
	small
BOOKCASE	full height
	low
	doors
SIDE TABLES	decorative
	functional
DESK	plain
	single or double
	pedestal
	computer
	executive
	secretarial system
DAIS & PLATFORMS	NOTE 5 fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
<p>1. THE JURY, WHICH SHOULD BE LOCATED ON TWO LEVELS, ABOVE THE MAIN FLOOR LEVEL, SHALL HAVE 12 SWIVEL-TILT MEDIUM BACK UPHOLSTERED CHAIRS WITH ARMS AND FIXED BASE. THE JUDGE SHALL BE FURNISHED WITH FULLY ADJUSTABLE SWIVEL-TILT HIGH BACK WIDE CHAIR WITH UPHOLSTERED ARMS. GREAT CARE SHALL BE TAKEN IN THE SELECTION OF THE JUDGE'S CHAIR. THE CHAIR SHALL HAVE THE PROPER ORTHOPEDIC SUPPORT AND APPROPRIATE DIMENSIONS TO PROVIDE THE LEVEL OF COMFORT REQUIRED FOR A JUDGE WHO MUST SIT LONG HOURS. SOME JUDGES MAY HAVE SPECIAL SUPPORT REQUIREMENTS. THE CLERK SHALL HAVE A LOW BACK ERGONOMIC ARMCHAIR AND THE COURT REPORTER A STENO ERGONOMIC ARMLESS CHAIR. BASES SHALL BE FIVE PRONG WITH CARPET CASTERS. CHAIRS FOR CROWN ATTORNEYS AND DEFENCE LAWYERS SHALL BE LOW BACK, SLED BASE ARMCHAIRS. COURT ATTENDANTS TO HAVE SLED BASE CHAIRS WITHOUT ARMS.</p> <p>2. TABLES FOR CROWN ATTORNEYS AND DEFENCE LAWYERS SHALL BE 900mm X 2200mm IN ALL COURTROOMS WITH THE EXCEPTION OF DEFENCE LAWYERS' TABLES IN JURY COURTROOMS, WHICH SHALL BE 900mm X 2950mm.</p> <p>3. MILLWORK FITMENTS FOR THE JUDGE, COURT CLERK, COURT REPORTER, PRISONER'S BOX, WITNESS STAND, JURY BOX AND RAILS ARE SPECIAL DESIGN. ONE STANDARD JURY COURTROOM SHALL HAVE A DAIS FOR DIVISIONAL COURT SITTINGS ie. DESIGNED TO SEAT THREE JUDGES AT THE BENCH. PROVIDE PULL-OUT ADJUSTABLE KEYBOARD TRAY AT JUDGE'S BENCH FOR EACH JUDGE. LECTERNS, THOUGH NOT SHOWN IN ILLUSTRATIONS, SHOULD ALSO BE PROVIDED IN EACH COURTROOM.</p> <p>THE JUDGE'S BENCH SHALL BE DESIGNED TO ACT AS A SHIELD AGAINST BULLETS DISCHARGED FROM HANDGUNS. INCORPORATE BULLET RESISTANT MATERIAL WITHIN THE VERTICAL COMPONENT OF THE JUDGE'S BENCH. THE TYPE OF HANDGUN THAT COULD BE USED SHOULD BE REVIEWED WITH POLICE.</p> <p>PORTABLE STORAGE UNITS MAY BE REQUIRED TO ACCOMMODATE BOOKS, BRIEFS, DOCUMENTS AND EXHIBITS FOR CASES INVOLVING A LARGE AMOUNT OF PAPER. THE REQUIREMENTS SHOULD BE REVIEWED WITH THE JUDICIARY AND COUNSEL.</p> <p>THE NEED FOR VISUAL AIDS SUCH AS CHALKBOARDS, PROJECTION SCREENS, EASELS, ETC. SHOULD BE REVIEWED WITH THE JUDICIARY AND COUNSEL. THEY MAY BE MULTI-PURPOSE WALL MOUNTED UNITS OR PORTABLE ITEMS.</p> <p>4. PUBLIC SEATING SHALL BE CONSTRUCTED OF PLYWOOD 21mm THICK WITH UPHOLSTERED SEATS OF MINIMUM 80mm FOAM. END PANELS AND SUPPORTS OF 32mm PLYWOOD. FRONT EDGE OF SEAT AND TOP OF BACK TO BE FINISHED IN SOLID MATERIAL. SEE SECTION L.</p> <p>INCLUDE FOR TABLET ARMS AT PRESS AREA.</p> <p>5. THE DAIS FOR THE JUDGE SHALL BE THREE RISERS HIGH CONSTRUCTED WITH CARPET ADHERED TO THE WALKING SURFACE. INCLUDE FOR MOVABLE INCLINED FOOT REST AT JUDGE'S BENCH. IN EACH COURT HOUSE AT LEAST ONE BARRIER-FREE COURTROOM SHALL BE PROVIDED. STEPS TO JUDGE'S DAIS TO BE REPLACEABLE WITH A RAMP OR SHORT RISE ELECTRICAL LIFT IF NEEDED FOR A JUDGE USING A WHEELCHAIR. NOTE: NOT ALL COURTROOMS WILL BE FITTED WITH THIS DEVICE. AT LEAST ONE COURTROOM SHALL HAVE AN EXTENDED JURY BOX TO ACCOMMODATE A WHEELCHAIR JUROR OR TWO ALTERNATE JURORS. HANDICAPPED PRISONERS WILL BE LOCATED IMMEDIATELY OUTSIDE THE PRISONER'S BOX IF CONFINED TO A WHEELCHAIR. THE DIMENSIONS OF THE JURY BOX SHOULD BE REVIEWED WITH THE SELECTED CHAIRS TO ENSURE THAT THE APPROPRIATE CLEARANCES FOR SEATING ARE PROVIDED.</p>

AREA
STANDARD COURTROOM
119.0sm (1281sq ft) 104.7sm (1127sq ft)
CAPACITY
FIGS. G2A TO G2H SHOW DIMENSIONS OF THE COURTROOM, WHICH MUST NOT BE REDUCED OR EXCEEDED.
INTERNAL ORGANIZATION
SEE PLAN OF COURTROOM, FIGS. G2A TO G2H
REFER ALSO TO DRAWINGS IN SECTION L FOR DETAIL DIMENSIONS

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 1	special
CEILING	NOTE 2	drywall sheet
	NOTE 2	drywall lathe & sprayed acoustic finish
	NOTE 2	paint
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet
	NOTE 3	acoustic panels
	NOTE 3	wood marble ceramic
	NOTE 3	sheet vinyl
	NOTE 3	paint
	NOTE 3	paint
DOORS		standard fire rated
	NOTE 4	* secure * acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE FLOOR OF THE COURTROOM SHALL BE CARPETED THROUGHOUT WITH MINIMUM 28-OZ. CARPET. THE INNER COURT SHALL BE A RAISED FLOOR COVERED WITH CARPET TILES TO MATCH THE PUBLIC AREA OF THE COURTROOM.
2. THE CEILING SHOULD BE CONSIDERED AS PART OF THE ACOUSTIC PROBLEM RELATED TO COURTROOMS. THE RESOLUTION TO THIS PROBLEM WOULD ENSURE GOOD HEARING IN ANY PART OF THE COURTROOM. ALL THE LISTED MATERIALS ARE ACCEPTABLE AS PART OF THE ACOUSTIC SOLUTION. DUE CONSIDERATION SHOULD BE GIVEN TO THE NEED TO ACCESS THE CEILING IN THE FUTURE FOR ADDITIONAL ELECTRICAL SERVICES TO FACILITATE VIDEO RECORDING AND SURVEILLANCE EQUIPMENT IN ADDITION TO ANY MAINTENANCE REQUIREMENTS. THE CEILING MUST BE COORDINATED WITH NON-GLARE COMFORTABLE LIGHTING AND ALL REQUIRED SPEAKERS.
3. ALL THE MATERIALS MARKED ARE ACCEPTABLE WITHIN THE ACOUSTIC SOLUTION AND THE BUDGET. HOWEVER, THE AMBIENCE OF THE COURTROOM SHOULD BE LIGHT AND COMFORTABLE WITHOUT OSTENTATION ALTHOUGH THE MORE EXPENSIVE MATERIALS CAN BE USED AS ACCENTS TO THE OVERALL SCHEME.
4. ALL DOORS SHALL BE GIVEN SPECIAL ATTENTION TO MEET CERTAIN FUNCTIONS AS LISTED AND ALSO MEET THE REQUIREMENTS OF THE ONTARIO BUILDING AND FIRE CODES.

JUDGES' DOOR: LOCKED. TIED IN TO FIRE ALARM SYSTEM.

PRISONERS' DOOR: SECURE LOCK.

JURY DOOR: LOCKED IF IT LEADS INTO JUDGES' CORRIDOR OR IMMEDIATELY ADJACENT DELIBERATION ROOM. IF THE LATTER, TWO CONSECUTIVE DOORS ARE REQUIRED 6" APART AND SOUND STRIPPED. DOORS SHALL BE CONNECTED TO FIRE ALARM SYSTEM. JURY DOORS, ONE 914mm AND ONE 457mm LEAF.

PUBLIC ENTRY DOORS: DOUBLE DOORS, TWO SETS WITH SOUND LOBBY BETWEEN. NARROW VIEWING WINDOW IN ONE LEAF. ALL DOORS SOUND STRIPPED. SEE NOTE 1 BELOW.

NOTE 1: WALLS SHALL BE CONSTRUCTED FROM FLOOR SLAB TO UNDERSIDE OF CONCRETE SLAB ABOVE WITH STC RATINGS GIVEN IN SECTION Q. PROPOSED DUCTWORK LAYOUT, SEALING OF WALL PENETRATIONS, AND DETAILED INFORMATION ON SOUNDSTRIPPING OF DOORS IS GIVEN IN SECTION Q.

AREA

STANDARD COURTROOM

119.0sm (1281sq ft)
 104.7sm (1127sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

STANDARD MOTIONS ROOM

80.7sm (869sq ft)

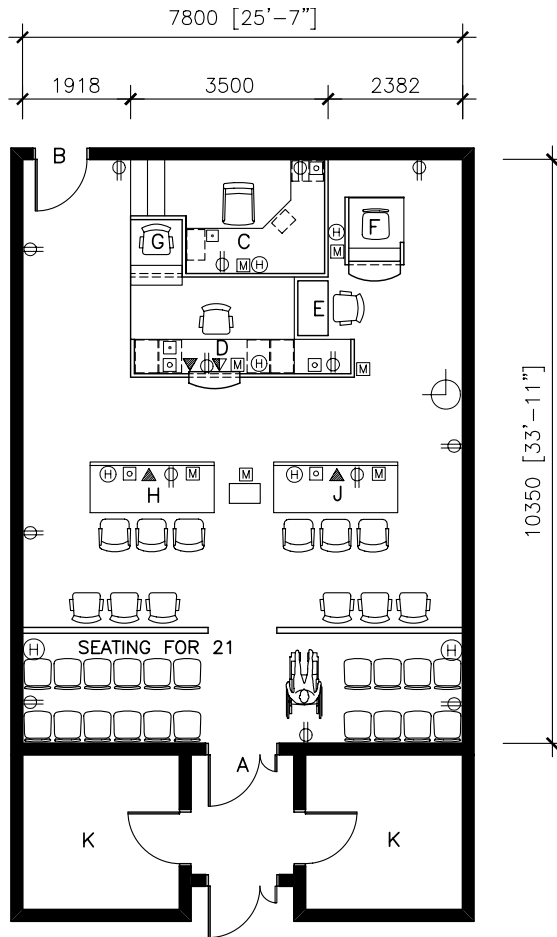


FIG: G3

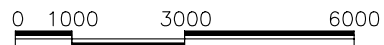


FIG. G3

The standard motions room has been designed to accommodate up to 21 lawyers in the public area to handle the 30-60 motions occurring in a day. Additional seating for lawyers can be provided in front of the bar. With the incorporation of the normal dais and a witness box, the motion room can also serve as a courtroom for civil proceedings when required.

Fig. G3 opposite is the layout of the standard motions room.

- A PUBLIC ENTRY:** From public circulation this entry will be used by the general public, the Crown Attorneys, defence lawyers, witnesses and accused persons not in custody. Note the inclusion of two small interview rooms (to increase the motions room's flexibility) allows a sound lobby to be planned, thereby upgrading the sound isolation from the public corridor as for the standard courtroom.
- B JUDGE'S ENTRY:** From a dedicated corridor.
- C JUDGE'S BENCH:** Located three risers above the general floor level.
- D COURT REGISTRAR/COURT CLERK**
- E COURT REPORTER (MONITOR)**
- F WITNESS BOX (PORTABLE)**
- G COURTROOM SERVICES OFFICER II (DEPUTY SHERIFF) (IF NECESSARY)**
- H DEFENCE LAWYERS' TABLE**
- J CROWN ATTORNEYS' TABLE**
- K INTERVIEW ROOMS**

Space has been planned for 21 members of the public. The whole floor area of the motions room will be a raised floor at least 6" above a depressed slab.

LEGEND

- | | | |
|---------------------|--------------------------|------------|
| COMPUTER OUTLETS | DURESS BUTTON | CLOCK |
| COURT MICROPHONE | DUPLEX OUTLET LOCATION | WHEELCHAIR |
| TELEPHONE OUTLET | QUADPLEX OUTLET | |
| COURT PAGING OUTLET | HEARING-IMPAIRED STATION | |

ALTERNATE MOTIONS ROOM CONFIGURATION
 80.7sm (869sq ft)

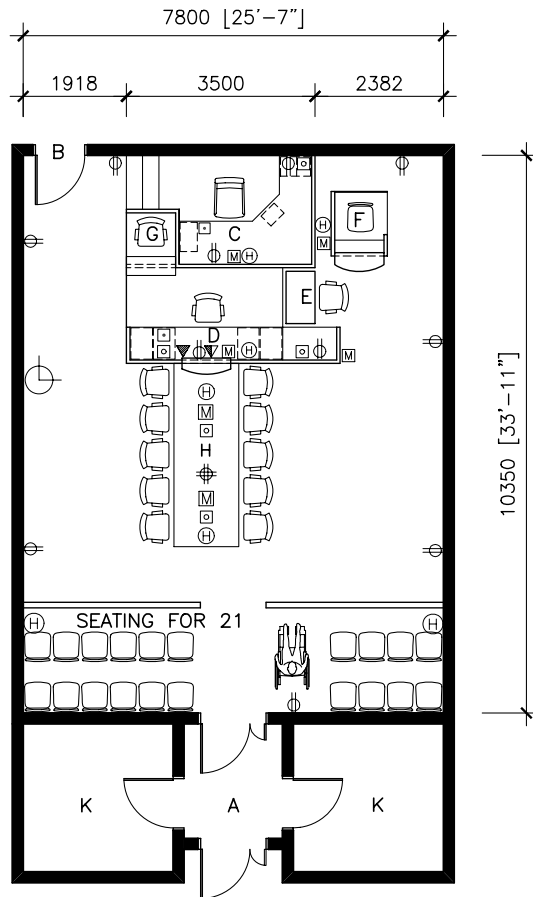


FIG: G3 A

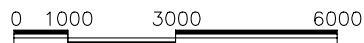


FIG. G3A

As an alternate to the courtroom style illustrated in Fig. G3, local requirements may result in the traditional "masters" style arrangement of a motions room and this configuration is shown in Fig. G3A opposite. A long double-width boardroom type table is used to accommodate more counsel in lieu of two separate tables.

- A PUBLIC ENTRY**
- B JUDGE'S ENTRY:** From a dedicated corridor.
- C JUDGE'S BENCH:** Located three risers above the general floor level.
- D COURT REGISTRAR/COURT CLERK**
- E COURT REPORTER (MONITOR)**
- F WITNESS BOX (PORTABLE)**
- G COURTROOM SERVICES OFFICER II (DEPUTY SHERIFF) (IF NECESSARY)**
- H TABLE:** For use by Crown Attorneys, lawyers, accused (not in custody), families and children
- K INTERVIEW ROOMS**

The whole floor area of the motion room will be a raised floor at least 6" above a depressed slab.

LEGEND

- | | | |
|---------------------|--------------------------|---------------------|
| COMPUTER OUTLETS | DURESS BUTTON | CLOCK |
| COURT MICROPHONE | DUPLEX OUTLET | WHEELCHAIR LOCATION |
| TELEPHONE OUTLET | QUADPLEX OUTLET | |
| COURT PAGING OUTLET | HEARING-IMPAIRED STATION | |

Standard Settlement Room

26.7sm (287sq ft)

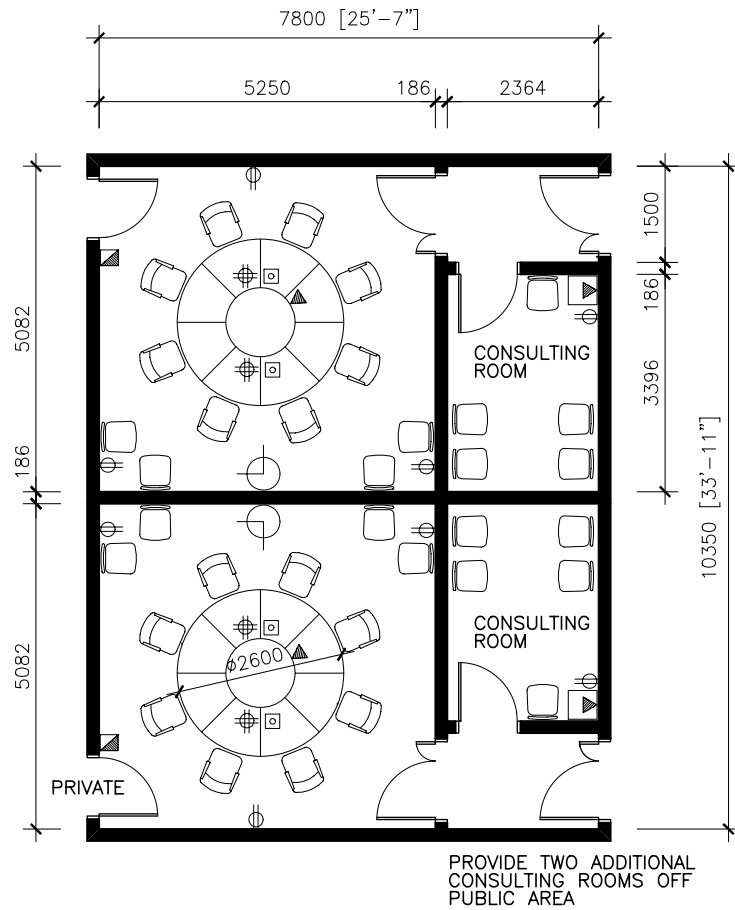


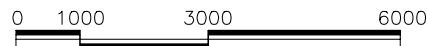
FIG. G4

At the option of the users (judiciary) the standard motions room can be subdivided to form two pre-trial/conference/settlement rooms capable of accommodating 8 persons in each room. With the increased use of case management procedures, the option to subdivide creates the long term flexibility necessary to respond to changing attitudes and requirements. As the pre-trial/conference rooms are of a less formal nature than the courtroom setting a circular table can assist in providing desired results. It is also important to have 2 small consulting rooms per settlement room adjacent or close by for counsel to retire to to have private discussions. The removal of the partition separating the two settlement rooms shown in the illustration will produce a settlement room for more participants and the circular table will have to be replaced with a rectangular one. Fig. G4 opposite illustrates how the standard motions room can be subdivided to form the settlement rooms as indicated above.

LEGEND

- ☐ COMPUTER OUTLET
- ⌚ CLOCK
- ⊕ DUPLEX OUTLET
- ▲ TELEPHONE OUTLET
- ⊕ QUADPLEX OUTLET

FIG: G4



CHECKLIST		
ZONE	NOTE 1 NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	* *	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 3	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	*	built-in room none
SERVICES	NOTE 9 NOTE 10 NOTE 11 NOTE 12	water electricity telephone intercom special
SECURITY	NOTE 13	high medium low

NOTES
<p>1. UNLIKE THE COURTROOM, THE ACCUSED IN CUSTODY DO NOT APPEAR IN A MOTIONS ROOM. THEREFORE ONLY TWO OF THE CIRCULATIONS MEET - THE PRIVATE AND THE PUBLIC. SIMILAR TO THE LAYOUT OF THE COURTROOM, THE ROOM HAS TWO DISTINCT AREAS, ONE FOR THE PARTICIPANTS AND ONE FOR THE PUBLIC WITH A RAIL SEPARATING THE TWO. IN THE SETTLEMENT ROOM, THE PUBLIC EXCEPT FOR THE PARTICIPANTS, ARE NOT INVOLVED AND THE REQUIREMENT IS FOR A LESS FORMAL SPACE WHERE NEGOTIATIONS CAN BE FACILITATED.</p> <p>2. OWING TO THE CONCENTRATED USE THAT CAN BE MADE OF THIS SPACE, ESPECIALLY AS ITS USE HAS EXPANDED, THE TRAFFIC COULD BE QUITE HIGH.</p> <p>3. SEE COURTROOM NOTE 3. SIMILAR TO THE COURTROOM, THE MOTION ROOM COULD BE SUBJECTED TO FURTHER CHANGE IN THE FUTURE AND THIS SHOULD BE KEPT IN MIND IN THE DESIGN OF ALL MILLWORK FITTINGS. IN BOTH THE MOTIONS ROOM AND SETTLEMENT ROOMS, THE FLOOR SHALL BE CONSTRUCTED OF RAISED CARPET COVERED PANELS 6" ABOVE A DEPRESSED SLAB. NOTE: ENTRANCE DOOR HAS NARROW HINGED PANEL TO WIDEN DOOR OPENING AS REQUIRED.</p> <p>4. EXTERNAL WINDOWS CAN BE A SECURITY RISK.</p> <p>5. THE LIGHTING SHOULD HAVE A HIGH VCL, LOW GLARE AND FLEXIBLE SWITCHING. SEE ALSO STANDARD COURTROOM NOTES.</p> <p>6. NOISE FROM OTHER SPACES SHOULD BE AT LEAST 5 TO 10 dB BELOW THE AMBIENT NOISE LEVEL WITHIN THE MOTIONS ROOM. USE OF A VESTIBULE AS A SOUND LOBBY, SOUND STRIPPING OF DOORS (SEE SECTION Q) AND PROPER CONSTRUCTION OF WALLS IS ESSENTIAL. IN THE MOTIONS ROOM, THE RECORDING SYSTEM MUST NOT BE COMPROMISED BY UNWANTED NOISE OR FEEDBACK IN THE SOUND SYSTEM. ALSO SEE SPECIAL NOTE FOR COURTROOM REGARDING CONSTRUCTION OF WALLS AND ELECTRICAL CIRCUITRY.</p> <p>7. THE STRESSFUL SITUATIONS FREQUENTLY ENCOUNTERED NECESSITATE A CONSTANT COMFORTABLE ENVIRONMENT NOT SUBJECT TO CHANGE AND VARIATION. LIKE THE COURTROOM, INDEPENDENT CONTROLS SHOULD BE PROVIDED FOR THE MOTIONS ROOM TO ACCOMMODATE THE LARGE FLUCTUATIONS OF PEOPLE. A MOTIONS COURT COULD EASILY START WITH WELL OVER 40 PEOPLE IN THE ROOM CREATING A SUBSTANTIAL DEMAND ON THE AIR HANDLING SYSTEM FOR THE SIZE OF THE ROOM.</p> <p>8. THE CEILING HEIGHT SHOULD BE A MINIMUM OF 3.2 METRES FROM FINISHED FLOOR TO UNDERSIDE OF CEILING IN A MOTIONS ROOM. THE SETTLEMENT ROOM CAN BE PROVIDED WITH A LOWER CEILING HEIGHT TO PRODUCE A MORE INTIMATE ENVIRONMENT.</p> <p>9. PITCHERS OF CHILLED WATER ARE PROVIDED FOR COURT PARTICIPANTS. REFER TO STANDARD COURTROOM NOTES.</p> <p>10. IN THE MOTIONS ROOM, ELECTRICAL OUTLETS ARE REQUIRED AS SHOWN ON FIG. G3 FOR THE RECORDING EQUIPMENT AND FOR JANITORIAL NEEDS. A MINIMUM OF FOUR FLOOR PANELS SHALL BE FITTED WITH FLAT-HINGED GROMMETS TO ALLOW CABLE PASS-THROUGH TO MULTIPLE OUTLETS ON THE SLAB BELOW.</p> <p>11. PAGING (ZONED) SHALL BE PROVIDED AT THE COURT CLERK'S DESK IN THE MOTIONS ROOM.</p> <p>12. PROVIDE FIVE MICROPHONES LOCATED ON JUDGE'S DESK, COURT CLERK, LAWYERS' TABLE (2) AND WITNESS STAND. A SEPARATE MICROPHONE JACK SHALL BE PROVIDED FOR THE USE OF THE INTERPRETER. MICROPHONES SHALL FEED TO THE COURT REPORTERS' STATION AND THE SOUND REINFORCING SYSTEM. HEARING-IMPAIRED STATIONS SHALL BE SUPPLIED WHERE SHOWN ON FIG. G3. PROVIDE TELEPHONE TO THE COURT CLERK'S DESK WHICH IS ALSO TO BE USED FOR PAGING AND INSTALL COMPUTER JACKS AS SHOWN ON FIG. G3.</p> <p>13. AS THE MOTIONS ROOM CAN ALSO SERVE AS A COURTROOM, IT IS NECESSARY TO ENSURE THE INSTALLATION OF DURESS BUTTONS AT THE JUDGE'S BENCH AND COURT REGISTRAR/CLERK'S DESK.</p>

AREA
<p>MOTIONS/SETTLEMENT ROOM</p> <p>MOTIONS ROOM 80.7sm (869sq ft) SETTLEMENT ROOM 26.7sm (287sq ft)</p>
PROXIMITIES
<p>ADJACENT: PRIVATE CIRCULATION PUBLIC CIRCULATION</p> <p>CLOSE TO PRIVATE CIRCULATION: JUDGES' OFFICES, RETIRING ROOMS JUDGES' SECRETARIES JUDGES' LIBRARY & BOARDROOM</p> <p>CLOSE TO PUBLIC CIRCULATION: INTERVIEW ROOMS, LEGAL AID PUBLIC WAITING AREA CROWN ATTORNEYS' OFFICES LAW ASSOCIATION SUITE PUBLIC ENTRANCE</p>
INTERNAL ORGANIZATION
<p>THE INNER COURT AREA ACCOMMODATES THE JUDGE AND COUNSEL. WHEN WITNESSES ARE CALLED, THE MOVABLE WITNESS BOX IS USED. THE PUBLIC AND PRESS ARE LOCATED ON THE PUBLIC SIDE OF THE BAR.</p>

CHECKLIST	
CHAIRS	NOTE 1 sled base
	NOTE 1 side chairs
	NOTE 1 tilt
	NOTE 1 swivel/tilt
TABLES	NOTE 2 movable standard special
FITMENTS	modular movable fixed
	NOTE 3 special design
SEATING PUBLIC	fixed (bench)
	NOTE 4 fixed (gang) upholstered wood
COUCH	full size
	small
BOOKCASE	full height
	low doors
SIDE TABLES	decorative
	functional
DESK	plain
	single or double
	pedestal
	computer
	executive secretarial system
DAIS & PLATFORMS	NOTE 5 fixed i.e. built in place
	sectional (movable)

FURNISHINGS & EQUIPMENT
<p>1. MOTIONS ROOMS</p> <p>THE JUDGE SHALL BE PROVIDED WITH A HIGH BACK WIDE CHAIR WITH UPHOLSTERED ARMS AND SWIVEL TILT CAPABILITY. CARE SHALL BE TAKEN IN THE SELECTION OF THE JUDGE'S CHAIR. THE CHAIR SHALL HAVE THE PROPER ORTHOPEDIC SUPPORT AND APPROPRIATE DIMENSIONS TO PROVIDE THE LEVEL OF COMFORT REQUIRED FOR A JUDGE WHO MUST SIT LONG HOURS. THE CLERK SHALL HAVE A LOW BACK MANAGEMENT ERGONOMIC ARMCHAIR WHILE THE COURT REPORTER SHALL HAVE A STENO ERGONOMIC ARMLESS CHAIR. COURT ATTENDANTS SHALL HAVE ARMLESS SLED BASE UPHOLSTERED CHAIRS. COUNSEL CHAIRS SHALL BE LOW BACK ARMCHAIRS WITH SLED BASE.</p> <p style="text-align: center;">SETTLEMENT ROOMS</p> <p>THE JUDGE SHALL BE PROVIDED WITH A HIGH BACK CHAIR WITH UPHOLSTERED ARMS, SWIVEL TILT ON FIVE-LEG BASE WITH CARPET CASTERS. ALL OTHER CHAIRS TO BE SIMILAR BUT WITH LOW BACKS AND SLED BASE.</p> <p>2. THE SETTLEMENT ROOM TABLE SHALL BE CIRCULAR WITH AN OUTSIDE DIAMETER OF 2600mm TO ACCOMMODATE 8 PERSONS COMFORTABLY. THE TABLE SHALL BE CONSTRUCTED OF SECTIONAL PIECES WHICH ARE SELF SUPPORTING AND INTERLOCK TO EACH OTHER.</p> <p>THE LONG TABLE IN THE "MASTERS" STYLE ARRANGEMENT OF THE MOTIONS ROOM SHALL BE SPECIAL DESIGN.</p> <p>3. IN THE MOTIONS ROOM'S MILLWORK FITMENTS FOR THE JUDGE, COURT REPORTER, COURT CLERK, WITNESS BOX (MOVABLE), COUNSEL TABLES AND RAILS (BARRIERS) SHALL BE SPECIAL DESIGN. PROVIDE PULL-OUT COMPUTER KEYBOARD TRAY AT JUDGE'S BENCH. A MOVABLE FOOT REST IS ALSO TO BE INCLUDED. THE NEED FOR WALL MOUNTED OR PORTABLE VISUAL AIDS SHOULD BE REVIEWED. REFER ALSO TO NOTES UNDER STANDARD COURTROOM.</p> <p>4. PUBLIC SEATING IN THE MOTIONS ROOM SHALL BE UPHOLSTERED CHAIRS GANGED TOGETHER TO MAINTAIN AN ORDERLY APPEARANCE. THE CHAIRS SHOULD BE CAPABLE OF BEING REMOVED AND RELOCATED TO FACILITATE CHANGES TO THE WELL OF THE COURTROOM.</p> <p>5. THE JUDGE'S DAIS IN THE MOTIONS ROOM SHALL BE THREE RISERS HIGH AND CARPETED. SUBSTITUTE RAMP FOR STEPS WHEN NEEDED FOR JUDGE USING WHEELCHAIR.</p>

AREA
<p>MOTIONS/SETTLEMENT ROOM</p> <p>MOTIONS ROOM 80.7sm (869sq ft) SETTLEMENT ROOM 26.7sm (287sq ft)</p>
CAPACITY
<p>FIG. G3 DO NOT ALTER MOTIONS ROOM DIMENSIONS EXCEPT FOR INTERVIEW ROOMS WHICH CAN BE ALTERED TO ACCOMMODATE PLANNING NEEDS.</p> <p>FIG. G4 THE PARTITION SEPARATING THE TWO SETTLEMENT ROOMS COULD BE REMOVED TO PROVIDE A ROOM WITH GREATER CAPACITY.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 1	
CEILING	NOTE 2	drywall sheet drywall lathe & sprayed acoustic finish
	*	paint acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels
	*	wood marble ceramic
	*	sheet vinyl paint
DOORS		standard
	NOTE 4	fire rated
	NOTE 4	secure
	NOTE 4	acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE ENTIRE FLOOR OF THE MOTIONS ROOM OR SETTLEMENT ROOM SHALL BE A RAISED FLOOR (COMPUTER) WITH A 28-OZ. CARPET TILE FINISH. THE DAIS IN THE MOTIONS ROOM SHALL BE REMOVABLE BY CONSTRUCTING IT OF MOVABLE LIGHT-WEIGHT PANELS WITH CARPET ADHERED TO ALL VISIBLE SURFACES. THE CARPET TILES USED FOR THE REMAINDER OF THE ROOM SHALL BE INSTALLED ON THE FLOOR UNDER THE DAIS.
 2. SEE NOTES FOR COURTROOM. THE SAME REQUIREMENT APPLIES TO MOTIONS ROOMS AND SETTLEMENT ROOMS.
 3. SEE NOTES FOR COURTROOM. MOTIONS ROOMS AND SETTLEMENT ROOMS HAVE THE SAME REQUIREMENTS.
 4. ALL DOORS SHALL BE GIVEN SPECIAL ATTENTION AND SHALL MEET THE REQUIREMENTS OF ONTARIO BUILDING AND FIRE CODES AND BE SOUND STRIPPED.
- JUDGE'S DOOR:**
 LOCKED AT ALL TIMES. TIED IN TO FIRE ALARM SYSTEM.
- PUBLIC ENTRANCE DOORS:**
 SHALL BE ONE 914mm WIDE DOOR WITH A HINGED LEAF 300mm WIDE. BOLTED TOP AND BOTTOM. TO BE USED TO MOVE FURNITURE AND FITMENTS AS REQUIRED. DOORS TO HAVE SMALL VIEWING WINDOWS. BOTH INNER AND OUTER DOORS OF SOUND LOBBY INCLUDING BOLTED LEAVES SHALL BE SOUND STRIPPED (SEE SECTION Q).

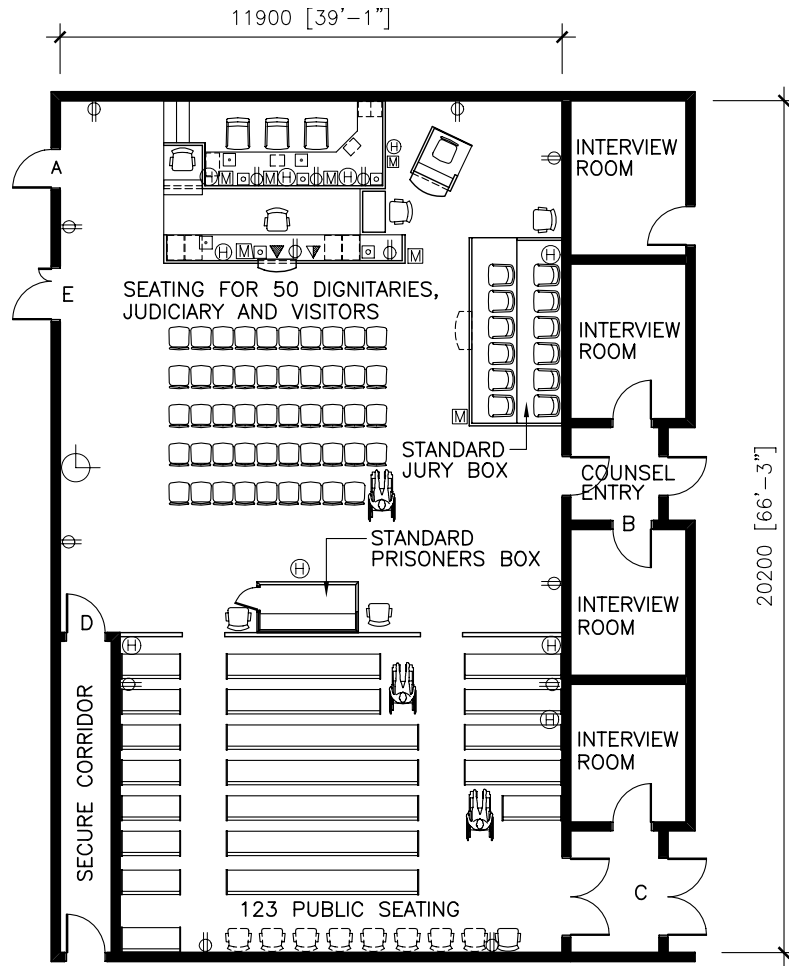
AREA

MOTIONS/SETTLEMENT ROOM
 MOTIONS ROOM 80.7sm (869sq ft)
 SETTLEMENT ROOM 26.7sm (287sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

MULTI-PURPOSE JURY COURTROOM
 240.4sm (2588sq ft)



CEREMONIAL COURTROOM ARRANGEMENT (FIG. G5)

- A JUDGES' ENTRY FROM JUDGES' DEDICATED CORRIDOR WOULD ALSO BE USED BY VISITING JUDGES AND DIGNITARIES
- B COUNSEL ENTRY
- C PUBLIC ENTRY
- D PRISONER'S ENTRY FROM DEDICATED PRISONER'S CIRCULATION CORRIDOR
- E JURY ENTRY AND ACCESS TO COURTROOM STORE ROOM

Upholstered seats for the visiting judiciary and dignitaries will be brought in from a nearby storeroom and will be exchanged for the counsel tables shown in Fig. G6. At least one multi-purpose jury courtroom shall be provided with a Divisional Court Judges' bench and dais as shown.

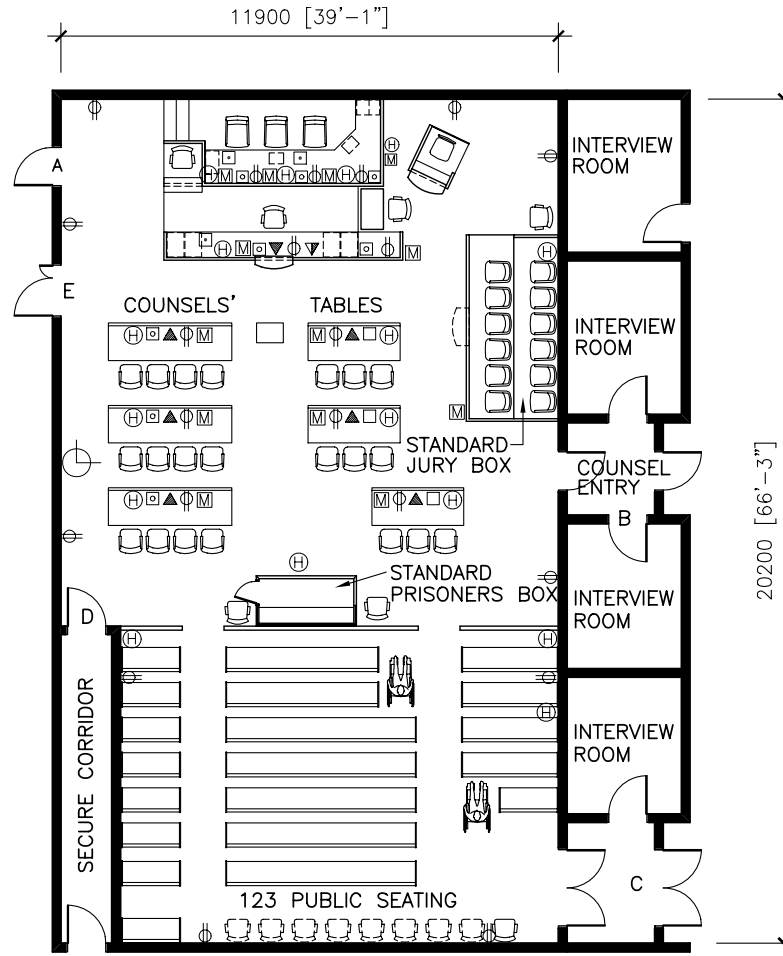
Note: Nearest door to storeroom shall be sized to allow easy access for furniture.

LEGEND

- | | | |
|--------------------|-----------------------------|-----------------------|
| ☐ COMPUTER OUTLETS | ☐ DURESS BUTTON | ⌚ CLOCK |
| Ⓜ COURT MICROPHONE | ▲ COURT PAGING OUTLET | ♯ WHEELCHAIR LOCATION |
| ▲ TELEPHONE OUTLET | ⚡ QUADPLEX OUTLET | |
| Ⓜ DUPLEX OUTLET | Ⓜ HEARING-IMPAIRED STATIONS | |

FIG: G5
 0 1000 3000 6000

MULTI-PURPOSE JURY COURTROOM
 240.4sm (2588sq ft)



SPECIAL AND HIGH-PROFILE COURT-CASE ARRANGEMENT (Fig. G6)

- A JUDGES' ENTRY FROM JUDGES' DEDICATED CORRIDOR
- B COUNSEL ENTRY
- C PUBLIC ENTRY
- D PRISONERS' ENTRY FROM DEDICATED PRISONERS' CIRCULATION CORRIDOR.
- E JURY ENTRY AND ACCESS TO COURTROOM STORE ROOM

This arrangement allows for a battery of lawyers in the inner court area which may be necessary to argue special cases. 18 or more lawyers can be accommodated in such an arrangement.

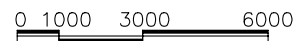
To facilitate the requisite electrical requirements for the necessary counsel tables, raised flooring shall be provided in the inner court area and extend from the judge's dais to the public barrier. Hook-up to the electrical wiring shall be provided via special recessed floor boxes.

The electrical outlets illustrated in the typical courtroom layout (Fig. G2A) shall also be provided in the courtroom.

LEGEND

- ⊕ COMPUTER OUTLETS
- ⊠ DURESS BUTTON
- ⌚ CLOCK
- ⊞ COURT MICROPHONE
- ▲ COURT PAGING OUTLET
- ♯ WHEELCHAIR LOCATION
- Ⓜ TELEPHONE OUTLET
- ⊕ QUADPLEX OUTLET
- ▲ DUPLEX OUTLET
- Ⓜ HEARING-IMPAIRED STATIONS

FIG: G6



FIRST APPEARANCE COURTROOM (NON-JURY)
 211.8sm (2280sq ft)

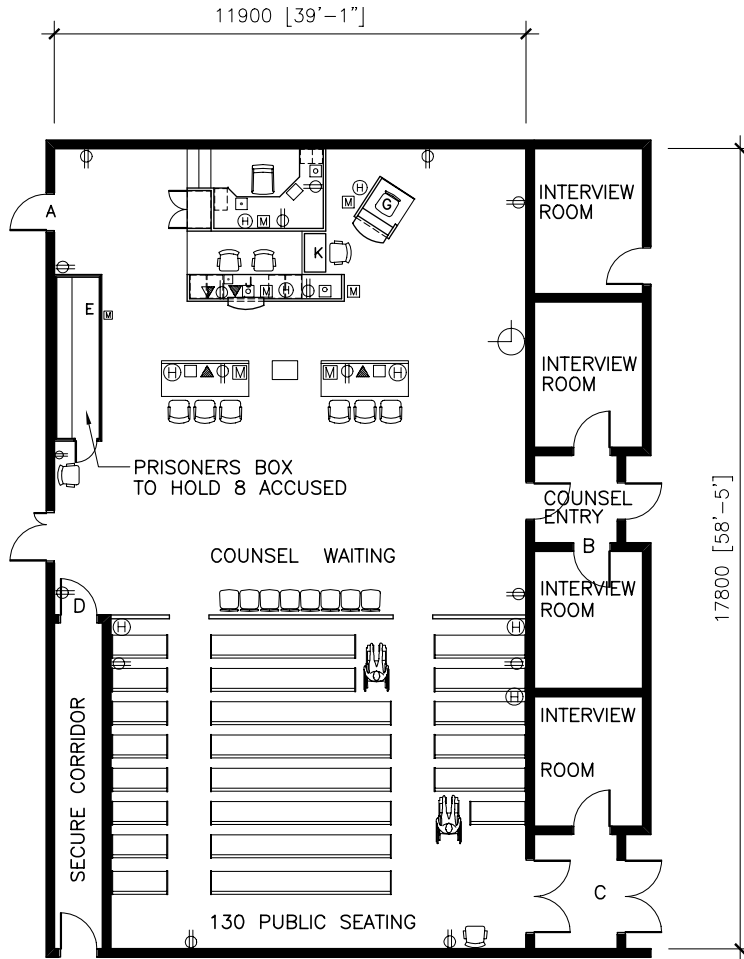


FIG. G7

- A** JUDGES' ENTRY FROM JUDGES' DEDICATED CORRIDOR
- B** COUNSEL ENTRY
- C** PUBLIC ENTRY
- D** PRISONERS' ENTRY FROM DEDICATED PRISONERS' CIRCULATION CORRIDOR
- E** EMERGENCY EXIT AND ACCESS TO COURTROOM STORE ROOM

In the larger centres, the Provincial Division courts will require a larger courtroom to handle the many accused, counsel, family and friends for first appearances. The inner court area can be equipped with a larger prisoners' box as required with additional seating in front of the rail for lawyers waiting to be called to represent their clients before the presiding judge.

LEGEND

- | | | | | | |
|--|---------------------|--|--------------------------------|--|-------|
| | COMPUTER OUTLETS | | DURESS BUTTON | | CLOCK |
| | COURT MICROPHONE | | COURT PAGING OUTLET | | |
| | TELEPHONE OUTLET | | QUADPLEX OUTLET (PULL STATION) | | |
| | DUPLEX OUTLET | | HEARING-IMPAIRED STATION | | |
| | WHEELCHAIR LOCATION | | | | |

FIG: G7



CHECKLIST		
ZONE	NOTE 1 NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3 NOTE 3	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 5	important desirable unimportant
VIEW OUT	 NOTE 6	important desirable optional none
ILLUMINATION	 NOTE 7	bright moderate subdued special
QUIETNESS	NOTE 8	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 9	high normal low
CEILING HEIGHT	NOTE 10	high normal low
STORAGE	NOTE 11	built-in room none
SERVICES	NOTE 12 NOTE 12 NOTE 12 NOTE 12 NOTE 12	water electricity telephone intercom special
SECURITY	NOTE 13	high medium low

NOTES
<p>1. THE PRIME USE OF THIS SPACE IS AS A COURTROOM AND WILL REQUIRE ALL THREE LEVELS OF ACCESS. NOTE: SOME DOORS WOULD BE KEPT LOCKED BUT MUST BE TIED INTO THE BUILDING FIRE ALARM SYSTEM SO THEY OPEN IN THE EVENT OF AN EMERGENCY. WHEN USED AS A CEREMONIAL COURTROOM, THE JUDGES AND DIGNITARIES WOULD ENTER FROM DOOR A (SEE FIG. G5).</p> <p>2. THE ROOM WILL BE IN CONSTANT USE AS A COURTROOM.</p> <p>3. BECAUSE OF THE MULTIPLE USE OF THE ROOM, CARE MUST BE TAKEN TO ENSURE THAT THE IMAGE OF THE SPACE SUITS THE MAIN USES.</p> <p>4. THE SPACE IS EASILY CONVERTED TO A SPECIAL COURTROOM BY PUTTING IN PLACE ADDITIONAL COUNSEL TABLES AND CHAIRS AS REQUIRED.</p> <p>5. THE SPACE IS PLANNED TO FACILITATE A QUICK CONVERSION FROM A STANDARD COURTROOM TO A CEREMONIAL COURT OR SPECIAL COURT AND BACK TO A STANDARD COURTROOM.</p> <p>6. A VIEW OUT WOULD NORMALLY BE UNACCEPTABLE WHEN USED AS A COURTROOM. HOWEVER, AS THE COURTROOM ACTIVITY COULD BE CEREMONIAL AS WELL AS TRIAL, WINDOWS COULD BE CONSIDERED PROVIDED THE ORIENTATION IS NORTH OR NORTHEAST AND THE PLACEMENT IS LOCATED TO MINIMIZE THE SECURITY RISK.</p> <p>7. ILLUMINATION SHOULD BE DESIGNED FOR COURTROOM USE. SEE NOTES ON COURTROOM.</p> <p>8. THE ACOUSTICS OF THE SPACE INCLUDING THE ATTENUATION OF EXTERNAL SOUND SHALL BE OF COURTROOM DESIGN. SEE NOTES ON COURTROOM IN SECTION Q.</p> <p>9. THE SPACE COULD BE OCCUPIED BY MORE THAN 200 PERSONS, THEREFORE THE HEATING AND COOLING SHALL BE DESIGNED ACCORDINGLY. OCCUPANTS COULD BE UNDER EXTREME STRESS AND MAY OCCUPY THE SPACE FOR A LONG TIME.</p> <p>10. CEILING HEIGHT SHALL BE IN PROPORTION TO THE SIZE OF THE ROOM. (MINIMUM 5200)</p> <p>11. THE EXTRA CHAIRS AND COUNSEL TABLES ALL HAVE TO BE STORED TOGETHER WITH OTHER MILLWORK. SEE FIG. G16 AND NOTES FOR STOREROOM (COURT'S USE).</p> <p>12. WHEN BEING USED AS A COURTROOM MOST OF THE NOTED SERVICES WILL BE IN USE. SEE COURTROOM NOTE AND LEGEND FIG. G6.</p> <p>13. NORMAL USE OF THE SPACE AS A COURTROOM REQUIRES HIGH SECURITY.</p>

AREA
<p>MULTI-PURPOSE/FIRST APPEARANCE COURTROOM</p> <p>240.4sm (2588sq ft) 211.8sm (2280sq ft)</p>
PROXIMITIES
<p>ADJACENT: PRIVATE CIRCULATION PUBLIC CIRCULATION PRISONER CIRCULATION</p> <p>CLOSE TO PRIVATE CIRCULATION: JUDGES' OFFICES, RETIRING ROOMS JUDGES' SECRETARIES JUDGES' LIBRARY & BOARDROOM JURY ROOM</p> <p>CLOSE TO PUBLIC CIRCULATION: WITNESS/INTERVIEW/LEGAL AID ROOMS PUBLIC COUNTERS PUBLIC WASHROOMS PUBLIC WAITING AREA CROWN ATTORNEYS (RESTRICTED AREA) LAW ASSOCIATION SUITE PUBLIC ENTRANCE</p> <p>CLOSE TO PRISONER CIRCULATION: MAIN HOLDING AREA HOLDING CELLS ADJACENT TO COURTROOMS PRISONER INTERVIEW CUBICLES JUSTICE OF THE PEACE BAIL OFFICE</p> <p>NOTE: JURY ROOMS SHOULD BE CLOSE TO JURY COURTROOMS</p>
INTERNAL ORGANIZATION
<p>THE INNER COURT AREA, WHEN USED AS A CEREMONIAL COURTROOM, WILL ACCOMMODATE THE PRESIDING JUDGES, VISITING JUDGES AND DIGNITARIES. THE REMAINDER OF THE COURTROOM WILL BE OCCUPIED BY THE PUBLIC.</p> <p>SEE ALSO STANDARD COURTROOM.</p>

CHECKLIST	
CHAIRS	NOTE 1 sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed NOTE 2 special design
SEATING NOTE 3 PUBLIC	fixed (bench) fixed (gang) NOTE 3 upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	NOTE 4 fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
<p>1. THE JUDGE SHALL HAVE A HIGH BACK SWIVEL TILT CHAIR WHILE THE COURT CLERK SHALL BE FURNISHED WITH A LOW BACK ERGONOMIC ARMCHAIR. CARE SHALL BE TAKEN IN THE SELECTION OF THE JUDGE'S CHAIR. THE CHAIR SHALL HAVE THE PROPER ORTHOPEDIC SUPPORT AND APPROPRIATE DIMENSIONS TO PROVIDE THE LEVEL OF COMFORT REQUIRED FOR A JUDGE WHO MUST SIT LONG HOURS. THE COURT REPORTER WILL HAVE A STENO ERGONOMIC ARMLESS CHAIR. ALL CHAIRS SHALL HAVE 5-LEGGED BASE WITH CASTERS SUITABLE FOR CARPET FLOORING.</p> <p>COUNSEL CHAIRS SHALL BE LOW-BACK ARMCHAIRS WITH SLED BASE.</p> <p>2. SEE COURTROOM, FURNITURE & EQUIPMENT FOR NOTES ON SPECIAL MILLWORK.</p> <p>3. SEATING FOR VISITING JUDGES AND DIGNITARIES SHALL BE UPHOLSTERED CHAIRS OF THE GANGING TYPE BUT SHALL <u>NOT</u> BE BOLTED DOWN OR FIXED IN OTHER WAYS TO THE FLOOR FOR EASE OF MOVEMENT IN AND OUT OF THE COURTROOM. SEE NOTES FOR PUBLIC BENCH SEATING IN STANDARD COURTROOM.</p> <p>4. THE JUDGES (THREE) PRESIDING OVER THE CEREMONIAL COURT WILL BE ON A DAIS ELEVATED THREE RISERS. THE FRONT AND BACK ROWS OF THE JURY BOX ARE THE STANDARD PLATFORMS USED IN THE TYPICAL COURTROOM AS IS THE PRISONER'S BOX.</p>

AREA
<p>MULTI-PURPOSE/FIRST APPEARANCE COURTROOM</p> <p>240.4sm (2588sq ft) 211.8sm (2280sq ft)</p>
CAPACITY
<p>FIGS. G5, and G6 SHOW THE ALTERNATE LAYOUTS FOR THE MULTI-PURPOSE ROOM. WHEN USED AS A CEREMONIAL COURTROOM THE SEATING CAPACITY CAN BE AS HIGH AS 185 PERSONS EXCLUDING THE PRESIDING JUDGES AND COURT STAFF. WHEN IN USE AS A COURTROOM FOR SPECIAL CASES AS MANY AS 156 PERSONS CAN BE ACCOMMODATED.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING	NOTE 2	drywall sheet drywall lathe & sprayed acoustic finish * painted * acoustic tile
WALLS	NOTE 3	drywall sheet * acoustic panels * wood * marble ceramic * sheet vinyl * paint
DOORS		standard fire rated
	NOTE 4	secure * acoustic
WINDOWS		sun control decorative drapes
	NOTE 5	full drapes

NOTES ON FINISHES

1. THE FLOOR OF THE SPACE SHALL HAVE 28-OZ CARPET THROUGHOUT THE PUBLIC SEATING AREA OF FIG. G5. THE WELL AREA OF THE COURTROOM SHALL HAVE A CARPET TILE RAISED FLOOR. BOTH FLOOR AND DAIS SHALL BE FINISHED AS FOR A STANDARD COURTROOM.
2. THE NOTES ON FINISHES FOR THE STANDARD COURTROOM CEILING WILL BE THE SAME FOR THIS SPACE. NOTE ACOUSTIC REQUIREMENTS.
3. THE WALLS OF THIS SPACE SHALL BE TREATED SIMILARLY TO THE STANDARD COURTROOM WITH THE SAME ACOUSTIC PROPERTIES.
4. DOORS SHALL BE SOLID WOOD CORE AS SPECIFIED IN SECTION Q WITH KEYED LOCKING DEVICES. ENTRY DOORS SHALL HAVE A NARROW VIEWING WINDOW IN ONE LEAF.
5. IF WINDOWS ARE INSTALLED ON NORTH OR NORTHEAST WALLS, DRAPES SHALL BE INSTALLED FOR THE FULL WINDOW HEIGHT.

AREA

**MULTI-PURPOSE/FIRST APPEARANCE
 COURTROOM**
 240.4sm (2588sq ft)
 211.8sm (2280sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

CHILD-FRIENDLY COURTROOM

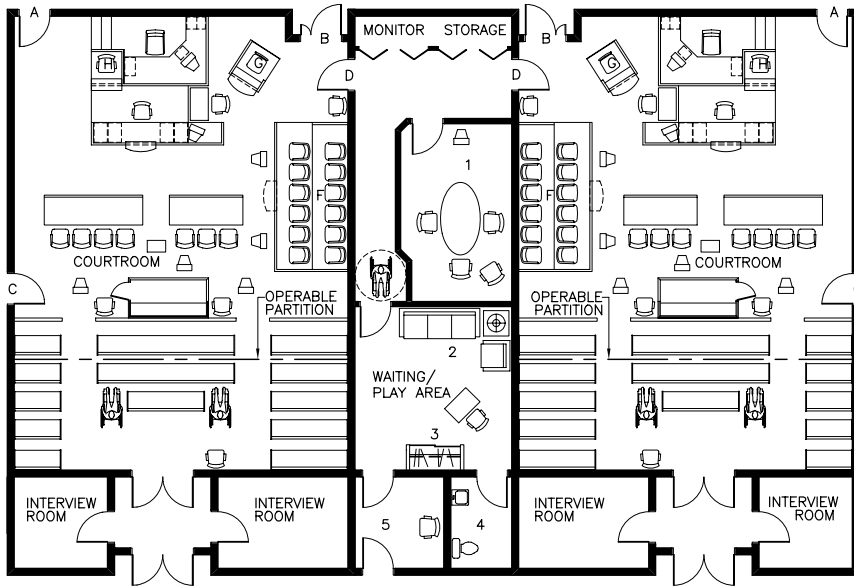


FIG: G8 - CHILD-FRIENDLY JURY COURTROOMS

0 1000 3000 6000

- | | |
|------------------------|------------------------------|
| A JUDGE'S ENTRY | 1 REMOTE TESTIMONY ROOM |
| B JURY ENTRY | 2 CHILD WITNESS WAITING ROOM |
| C ACCUSED'S ENTRY | 3 COATS AND TOY STORAGE |
| D CHILD WITNESS' ENTRY | 4 WASHROOM |
| □ MONITOR | 5 SECURITY VESTIBULE |

FIG. G8

The child-friendly courtroom developed out of a need to make the court process less intimidating and more comfortable for child witnesses when they are required to testify. Child witnesses can be easily frightened and overwhelmed by the number of participants and the formality of the courtroom. There is also the stress of having to face the accused with whom they may have had a traumatic experience and the fear of retaliation from the accused. Child witnesses may become confused when required to answer numerous questions about often embarrassing events in the presence of a number of strangers.

It is generally accepted that the evidence given is more reliable when child witnesses are allowed to testify from a location other than the courtroom. Child witness experts firmly believe that remote testimony is the only appropriate method for a child to give evidence.

The remote testimony room should be sized to accommodate the child witness, the crown attorney and two to three defense counsel around a non-directional table. A child support person will also, in all likelihood, be seated close by the child witness but not at the table. A video monitor is located opposite the child witness so that the judge in the courtroom can be seen and provide the necessary comfort and assurance to the child. A small inconspicuous camera is located at the monitor to view the child witness and counsel located on either side of the child. In the courtroom, the judge, jury, accused and public hear and view the child witness and counsel via several monitors on portable stands or a single large screen located for all to observe. As counsel are required to move from the courtroom to the remote testimony room when the child is ready to testify, it is important to locate the remote testimony room close to the courtroom. Oftentimes, the judge may also wish to conduct an enquiry as to the suitability of the child testifying in court by having the child swear to an oath or promise to tell the truth.

As with all witnesses, a child witness is required to wait until s/he is called to testify. During this time, it is important that the child remain relaxed and occupied and any fears of testifying are mitigated. A separate waiting room is provided for playing and reading. The child witness is normally accompanied by a support person and may also receive a visit from crown counsel. A private washroom and security station is also included as part of the suite. In a multiple child abuse case, 2 or 3 child witnesses, each with a support person, may be in the waiting room at the same time.

The use of remote testimony is discretionary in a criminal case and must be balanced by the accused's right to face the accuser. In the instances when the child witness is required to testify in the courtroom, a modified witness box shall be provided. The witness box should be capable of seating children at varying heights to allow the child to sit close to and feel protected by the judge. A portable witness screen can be located either at the witness box or at the prisoner's box to shield the child witness from viewing the accused. Children's voices are often low and good sound amplification is a prerequisite. The witness box microphone should be as

unobtrusive as possible. A separate chair placed close to and slightly behind the witness is provided for the child-witness support person. The walk through the public area of a courtroom and past the accused to reach the witness box can be a traumatic experience for children. To abate this fear, an entry door into the courtroom is located close to the witness box and accessed from the witness waiting area (See diagram). This door will also be used by counsel and the judge to reach the remote testimony room.

The size of the courtroom also contributes to the child's anxiety and a smaller or more intimate space is desirable. However, the appropriate distance between the accused and child witness must be maintained. In the illustration, an operable wall is employed to limit the public gallery, resulting in a friendlier environment for child witness testimonies. The use of an operable wall will allow the courtroom to function as a standard courtroom when not required for child-testimony cases.

Fig. G8 illustrates the ideal arrangement of a child-friendly courtroom. The child-witness area and remote testimony room is accessed from the public area and is located to serve two courtrooms. Although the drawing shows jury courtrooms, non-jury courtrooms would be handled in a similar manner. With the increasing number of child abuse cases, a child-friendly courtroom should be provided for both jury and non-jury courtrooms in court houses.

CHECKLIST		
ZONE	NOTE 1 NOTE 1 & 2	public private restricted
TRAFFIC	NOTE 1 NOTE 3	high medium low
IMAGE	NOTE 1. NOTE 4 NOTE 5 NOTE 5	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	NOTE 1 NOTE 6	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 1	important desirable unimportant
VIEW OUT	NOTE 7 NOTE 1	important desirable optional none
ILLUMINATION	NOTE 8 NOTE 1	bright moderate subdued special
QUIETNESS	NOTE 1 & 9	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 1 *	high normal low
CEILING HEIGHT	NOTE 1 *	high normal low
STORAGE	NOTE 10 NOTE 1	built-in room none
SERVICES	NOTE 11 NOTE 1 & 12 NOTE 1 & 13 NOTE 1 NOTE 1 & 14	water electricity telephone intercom special
SECURITY	NOTE 1 & 15	high medium low

NOTES
<p>1. AS THE CHILD-FRIENDLY COURTROOM MUST ALSO FUNCTION AS A TYPICAL COURTROOM, THE NOTES FOR JURY AND NON-JURY COURTROOMS SHOULD BE REFERRED TO.</p> <p>2. THE REMOTE TESTIMONY ROOM IS LIMITED TO THE CHILD WITNESS, A SUPPORT PERSON, DEFENCE AND CROWN COUNSEL. ON OCCASION, THE JUDGE MAY VISIT PRIOR TO TESTIMONY, TO REASSURE AND COMFORT THE CHILD.</p> <p>3. AS INDICATED IN NOTE 2 ABOVE, THE NUMBER OF PARTICIPANTS IN THE REMOTE TESTIMONY ROOM ARE LIMITED.</p> <p>4. THE REMOTE TESTIMONY ROOM SHOULD APPEAR ORDERLY AND BE SIMPLY FURNISHED WITH NO DISTRACTIONS FOR THE CHILD WITNESS.</p> <p>5. UNLIKE THE REMOTE TESTIMONY ROOM, THE CHILD-WITNESS WAITING AREA SHOULD APPEAR BOTH FRIENDLY AND RELAXING TO THE CHILD TO HELP MITIGATE ANY FEARS OF TESTIFYING.</p> <p>6. AS THE REMOTE TESTIMONY ROOM SERVES A SPECIAL REQUIREMENT, IT APPEARS UNLIKELY TO BE USED FOR OTHER PURPOSES THAN PERHAPS CONSULTATIONS BETWEEN A JUDGE AND COUNSEL.</p> <p>7. A WINDOW IN THE REMOTE TESTIMONY ROOM WOULD PROVE TO BE DISTRACTING TO THE CHILD WITNESS AS WELL AS POSING PROBLEMS FOR THE VIDEO CAMERA AND MONITOR. A VIEW TO THE EXTERIOR FROM THE CHILD-WITNESS WAITING AREA WOULD ASSIST IN CREATING A MORE CHEERFUL ENVIRONMENT BUT MAY BE DIFFICULT TO ACHIEVE GIVEN THE LOCATION AND RELATIONSHIPS OF THE ROOMS.</p> <p>8. ALTHOUGH NOTED AS MODERATE, THE ILLUMINATION LEVEL IN THE REMOTE TESTIMONY ROOM SHOULD BE SUFFICIENT FOR THE JUDGE AND JURY IN THE COURTROOM TO CLEARLY SEE THE CHILD WITNESS' FACIAL EXPRESSIONS AND MANNERISMS.</p> <p>9. MOST CHILDREN, WHEN UNCOMFORTABLE WITH THEIR SURROUNDINGS, TEND TO SPEAK IN A SOFT AND LOW VOICE. IT IS ESSENTIAL THAT THERE BE NO BACKGROUND NOISE TO HINDER THE WITNESS' REMARKS. GOOD SOUND AMPLIFICATION IS A PREREQUISITE. THE MICROPHONE FOR THE CHILD WITNESS SHOULD BE UNOBTRUSIVE.</p> <p>10. PROVIDE BUILT-IN STORAGE FOR GAMES AND TOYS AS WELL AS COATS AND BOOTS IN WITNESS WAITING AREA.</p> <p>11. AN ENSUITE TWO PIECE WASHROOM SHOULD BE INCLUDED AS PART OF THE WITNESS WAITING AREA SO THAT THE CHILD WOULD NOT BE REQUIRED TO WALK PAST STRANGERS IN THE PUBLIC AREAS. IT IS IMPORTANT TO KEEP THE CHILD RELAXED WHILE WAITING AND NOT HEIGHTEN THE LEVEL OF ANXIETY.</p> <p>12. AS WELL AS THE COURTROOM, ELECTRICAL OUTLETS SHOULD BE PROVIDED FOR A VIDEO MONITOR IN THE REMOTE TESTIMONY ROOM AND A TV MONITOR IN THE WITNESS WAITING ROOM.</p>

AREA
CHILD-FRIENDLY COURTROOM
PROXIMITIES
<p>ADJACENT: PUBLIC CIRCULATION PUBLIC CIRCULATION PRISONER CIRCULATION</p> <p>CLOSE TO PUBLIC CIRCULATION: JUDGES' OFFICES, RETIRING ROOMS JUDGES' SECRETARIES JUDGES' LIBRARY AND BOARDROOM JURY ROOM</p> <p>CLOSE TO PUBLIC CIRCULATION: WITNESS/INTERVIEW/LEGAL AID ROOMS PUBLIC COUNTERS PUBLIC WASHROOMS PUBLIC WAITING AREA CROWN ATTORNEYS (RESTRICTED AREA) LAW ASSOCIATION SUITE</p> <p>CLOSE TO PUBLIC CIRCULATION: MAIN HOLDING AREA HOLDING CELLS ADJACENT TO COURTROOMS PRISONER INTERVIEW CUBICLES JUSTICE OF THE PEACE BAIL OFFICE</p>
INTERNAL ORGANIZATION

CHECKLIST		
ZONE	NOTE 1 NOTE 1 & 2	public private restricted
TRAFFIC	NOTE 1 NOTE 3	high medium low
IMAGE	NOTE 1. NOTE 4 NOTE 5 NOTE 5	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	NOTE 1 NOTE 6	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 1	important desirable unimportant
VIEW OUT	NOTE 7 NOTE 1	important desirable optional none
ILLUMINATION	NOTE 8 NOTE 1	bright moderate subdued special
QUIETNESS	NOTE 1 & 9	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 1 *	high normal low
CEILING HEIGHT	NOTE 1 *	high normal low
STORAGE	NOTE 10 NOTE 1	built-in room none
SERVICES	NOTE 11 NOTE 1 & 12 NOTE 1 & 13 NOTE 1 NOTE 1 & 14	water electricity telephone intercom special
SECURITY	NOTE 1 & 15	high medium low

NOTES (CONT'D)
<p>13. A TELEPHONE SHALL BE PROVIDED IN THE WITNESS WAITING ROOM FOR PAGING PURPOSES.</p> <p>14. IN ADDITION TO THE NORMAL COURTROOM REQUIREMENTS, AN INCONSPICUOUS HIGH RESOLUTION CAMERA, MICROPHONES AND VIDEO MONITOR IS REQUIRED IN THE REMOTE TESTIMONY ROOM. IN THE COURTROOM THE JUDGE, JURY, ACCUSED AND PUBLIC WILL HEAR AND VIEW THE CHILD WITNESS VIA MONITORS ON PORTABLE STANDS OR A SINGLE LARGE SCREEN LOCATED FOR ALL TO OBSERVE. THE CHILD WITNESS AND COUNSEL IN TURN MUST BE ABLE TO OBSERVE THE JUDGE WITH THE JURY VISIBLE IN THE INSET ON THE SCREEN. CONTROLS FOR TURNING OFF THE AUDIO AND VIDEO SYSTEM AT ANY TIME DURING THE PROCEEDINGS SHOULD BE PROVIDED AT THE JUDGE'S BENCH AND CLERK/REGISTRAR'S STATION. AN UNOBTRUSIVE MICROPHONE SHOULD BE LOCATED AT THE SPECIAL CHILD-WITNESS BOX.</p> <p>15. INTERRUPTIONS BY OTHERS DURING WAITING PERIODS CANNOT BE TOLERATED AS CHILD WITNESS COULD BECOME NERVOUS OR CONFUSED. A SECURITY STATION IS REQUIRED AS A BUFFER BETWEEN THE PUBLIC CORRIDOR AND THE CHILD WITNESS WAITING AREA.</p>

AREA
CHILD-FRIENDLY COURTROOM
PROXIMITIES
<p>ADJACENT: PUBLIC CIRCULATION PUBLIC CIRCULATION PRISONER CIRCULATION</p> <p>CLOSE TO PUBLIC CIRCULATION: JUDGES' OFFICES, RETIRING ROOMS JUDGES' SECRETARIES JUDGES' LIBRARY AND BOARDROOM JURY ROOM</p> <p>CLOSE TO PUBLIC CIRCULATION: WITNESS/INTERVIEW/LEGAL AID ROOMS PUBLIC COUNTERS PUBLIC WASHROOMS PUBLIC WAITING AREA CROWN ATTORNEYS (RESTRICTED AREA) LAW ASSOCIATION SUITE</p> <p>CLOSE TO PUBLIC CIRCULATION: MAIN HOLDING AREA HOLDING CELLS ADJACENT TO COURTROOMS PRISONER INTERVIEW CUBICLES JUSTICE OF THE PEACE BAIL OFFICE</p>
INTERNAL ORGANIZATION

CHECKLIST		
CHAIRS	NOTE 1&2 NOTE 2 NOTE 1 NOTE 1	sled base side chairs tilt swivel/tilt
TABLES	NOTE 1 & 3	movable standard special
FITMENTS	NOTE 1 & 4	modular movable fixed special design
SEATING PUBLIC	NOTE 1 NOTE 1 NOTE 1	fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES	NOTE 5	decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	NOTE 1	fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
<p>1. REFER TO NOTES ON FURNISHINGS AND EQUIPMENT FOR JURY AND NON-JURY COURTROOMS.</p> <p>2. THE CHILD WITNESS WAITING AREA SHOULD BE FURNISHED WITH 3 SEATER SOFAS AND ARMCHAIRS FOR THE PURPOSES OF WAITING FOR INDEFINITE TIMES. CHILD WITNESSES, SUPPORT PERSON AND CROWN COUNSEL COULD ALL BE MAKING USE OF THE SEATING AT ANY ONE TIME. SLED BASE CHAIRS WITH ARMS SHALL BE PROVIDED IN THE REMOTE TESTIMONY ROOM FOR THE CHILD-WITNESS SUPPORT PERSON, CROWN ATTORNEY AND TWO TO THREE DEFENCE COUNSEL. THE CHILD WITNESS' CHAIR SHOULD BE EQUIPPED WITH AN ADJUSTABLE SEAT HEIGHT AND ADJUSTABLE FOOT REST BUT WITH NO SWIVELLING OR TILT FEATURES. A SIMILAR CHAIR WITH SEAT HEIGHT ADJUSTABILITY ONLY IS REQUIRED FOR THE WITNESS BOX IN THE COURTROOM. A SLED BASE ARMCHAIR SHALL BE PROVIDED CLOSE TO THE WITNESS BOX WHEN THE CHILD WITNESS IS REQUIRED TO GIVE TESTIMONY IN THE COURTROOM. A SLED BASE ARMCHAIR SHOULD ALSO BE LOCATED IN THE SECURITY STATION.</p> <p>3. THE TABLE IN THE REMOTE TESTIMONY ROOM SHALL BE NON-DIRECTIONAL (CIRCULAR) IN SHAPE SO THAT THE CHILD WITNESS IS MADE TO FEEL EQUAL TO THE OTHER PARTICIPANTS. A SMALL DESK LIKE TABLE AND CHAIR SHALL BE PROVIDED IN THE WITNESS WAITING AREA FOR THE CHILD WITNESS TO DRAW AND PLAY.</p> <p>4. SPECIAL CONSIDERATION SHALL BE GIVEN TO THE WITNESS BOX IN THE COURTROOM FOR CHILD WITNESS NEEDS, THE PHYSICAL SIZES OF THE VARYING CHILD WITNESSES MUST BE ACCOMMODATED NOT ONLY TO BE SEEN BY ALL PARTICIPANTS BUT ALSO TO ALLOW THE CHILD TO SIT AT A HIGHER LEVEL AND BE "CLOSER" TO THE JUDGE FOR COMFORT AND SECURITY. ADJUSTABLE SEAT HEIGHTS AND FOOT REST ARE A NECESSITY. A PORTABLE WITNESS SCREEN TO SHIELD THE CHILD WITNESS FROM VIEWING THE ACCUSED WHILE TESTIFYING IN THE COURTROOM IS REQUIRED. IT SHALL BE DESIGNED AND CONSTRUCTED TO BE PLACED ON THE WITNESS BOX IN FRONT OF THE WITNESS. AN ALTERNATIVE LOCATION FOR THE PORTABLE WITNESS SCREEN IS AT THE PRISONER'S BOX DIRECTLY IN FRONT OF THE DEFENDANT AND PROVISION FOR THIS LOCATION SHALL ALSO BE MADE.</p> <p>5. A LOW END TABLE WITH TABLE LAMP SHALL FORM PART OF THE SEATING AREA IN THE WITNESS WAITING ROOM TO CREATE A MORE DOMESTIC AMBIENCE.</p>

AREA
CHILD-FRIENDLY COURTROOM
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1 & 2	carpet
	NOTE 2	vinyl ceramic wood rubber special
	NOTE 1	
CEILING	NOTE 1	drywall sheet
	NOTE 1	drywall lathe & sprayed acoustic finish
	NOTE 1&3	painted acoustic tile
WALLS	NOTE 1	drywall sheet
	NOTE 1	acoustic panels
	NOTE 1	wood marble ceramic
	NOTE 1&4	sheet vinyl
	NOTE 1&4	paint
DOORS		standard
	NOTE 1	fire rated
	NOTE 1 &5	secure
	NOTE 1 &5	acoustic
WINDOWS		sun control
		decorative drapes
		full drapes

NOTES ON FINISHES

1. REFER TO NOTES ON FINISHES FOR JURY AND NON-JURY COURTROOMS.
2. THE REMOTE TESTIMONY ROOM AND CHILD WITNESS WAITING ROOM SHALL BE CARPETED WHILE THE ENSUITE WASHROOM SHALL RECEIVE SHEET VINYL FLOORING.
3. ACOUSTIC TILE APPEARS TO BE THE MOST APPROPRIATE CEILING-FINISH IN THE REMOTE TESTIMONY ROOM AND CHILD-WITNESS WAITING AREA.
4. WALL FINISHES SHALL BE VINYL WITH PAINT EMPLOYED TO MEET BUDGET CONSTRAINTS. ACOUSTIC REQUIREMENTS FOR WALLS OF REMOTE TESTIMONY ROOM SHALL MATCH COURTROOM REQUIREMENTS.
5. AS REMOTE TESTIMONY IS AN INTEGRAL PART OF THE COURT PROCEEDINGS APPROPRIATE ATTENTION SHOULD BE PAID TO THE DOOR INTO THE REMOTE TESTIMONY ROOM AND THE DOOR PROVIDING ACCESS INTO THE COURTROOM FROM THE WITNESS WAITING AREA.

AREA

CHILD-FRIENDLY COURTROOM

PROXIMITIES

INTERNAL ORGANIZATION

JURORS' ASSEMBLY ROOM AND LOUNGE

230.05sm (2475sq ft)
 for 125 persons @ 1.0sm
 per person plus auxiliary
 spaces plus circulation factor

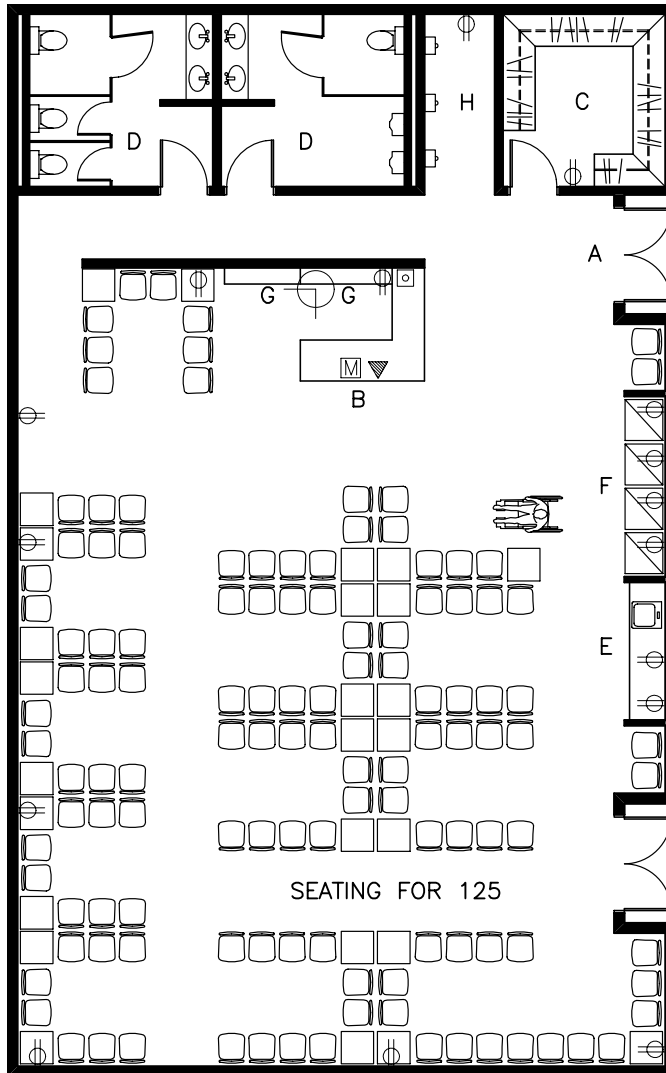


FIG. G9

In large court houses with jury courtrooms a private room is required for prospective jurors to assemble when requested to appear for jury duty. Dependent on the number of jury cases and the time required for the selection of each jury, in the large court house it is not uncommon for prospective jurors to be waiting in the assembly room for a whole week. To be rejected from one jury may not relieve an individual from jury duty, and s/he must remain available for selection until the requisite number of juries has been chosen.

As the jurors' assembly room is immediately off the public circulation system and the possible jurors must not be influenced or intimidated in any way, the space should be designed to be self-contained and provision for coats, washrooms, telephones, reading material, drinks and snack foods should be included. A dedicated space with a desk and chairs for registration and announcement purposes is also a requirement. When the jurors' assembly room is not occupied by jurors, the room could also function as a large meeting, training or reception room and the room shape and furniture selection shall provide for this flexibility.

Court houses located in large cities or large regions may require the space of two jurors' assembly rooms to accommodate the number of people requested to appear for jury duty at any one time.

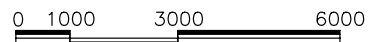
Fig. G9 opposite illustrates the above requirements in plan.

- A JURORS' ENTRY: FROM PUBLIC CIRCULATION**
- B REGISTRATION AREA AND COURT ATTENDANTS' STATION: 7.0sm**
- C COAT CLOSET: 10sm (0.08sm/person)**
- D WASHROOMS: 2 @ 12.0sm**
- E COFFEE SERVERY: 3.5sm**
- F VENDING MACHINES: 5.5sm**
- G BOOKSHELVES: 3.0sm**
- H TELEPHONES: 2.0sm**

LEGEND

- ▲ TELEPHONE OUTLET
- ⊠ COMPUTER OUTLET
- ⊕ DUPLEX OUTLET
- ⊙ CLOCK
- Ⓜ MICROPHONE

FIG: G9



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
	NOTE 2	
IMAGE	NOTE 3	dignified orderly friendly bold relaxing
	*	
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 4	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 8	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	NOTE 10	built-in room none
SERVICES	NOTE 11	water electricity telephone intercom special
	*	
	*	
SECURITY	NOTE 12	high medium low

NOTES
<p>1. ACCESS TO THE JURORS' ASSEMBLY ROOM IS FROM THE PUBLIC CORRIDOR. AS THE CALL FOR JURY DUTY MAY BE THE FIRST OCCASION FOR MANY INDIVIDUALS TO VISIT A COURT HOUSE, IT IS IMPORTANT THAT THE ROOM BE RELATIVELY EASY TO LOCATE.</p> <p>2. TRAFFIC WILL BE HIGH ON THE FIRST DAY AS ALL PROSPECTIVE JURORS MUST REPORT IN AND REGISTER FOR JURY DUTY. AFTER MOVEMENT TO COURTROOMS FOR JURY SELECTION PROCESS, THE TRAFFIC WILL BE LIMITED TO INDIVIDUALS WHO HAVE BEEN REJECTED FROM A JURY BUT MUST REMAIN TO BE SELECTED FOR ANOTHER JURY OR UNTIL ALL THE JURIES HAVE BEEN SELECTED.</p> <p>3. BECAUSE OF THE NUMBER OF PEOPLE TO BE ACCOMMODATED IN THE FIRST INSTANCE THE ROOM SHOULD BE ORDERLY AS WELL AS RELAXING AND COMFORTABLE FOR THOSE WHO ARE REQUIRED TO WAIT FOR LONG HOURS.</p> <p>4. ALTHOUGH THE ROOM'S PRIMARY USE WILL BE FOR THE ASSEMBLY OF JURORS, IT WOULD BE ADVANTAGEOUS IF THIS SPACE COULD BE SET UP FOR LARGE MEETINGS IF REQUIRED.</p> <p>5. BECAUSE OF THE LENGTH OF WAITING REQUIRED WITHIN THE ROOM IT IS IMPORTANT TO PROVIDE WINDOWS FOR RELIEF AND RELAXATION. WAITING FOR LONG HOURS COULD BECOME VERY BORING AND DEPRESSING IN A ROOM WITH NO CONTACT TO THE OUTSIDE.</p> <p>6. GOOD COMFORTABLE LIGHTING WITHOUT GLARE ALLOWING FOR EASE OF READING TO PASS THE TIME. HOWEVER CARE SHOULD BE TAKEN TO ENSURE LIGHTING LEVELS ARE CONDUCIVE TO A RELAXED ATMOSPHERE.</p> <p>7. AS INDICATED IN NOTE 6 ABOVE, INDIVIDUALS MAY WISH TO READ OR RELAX IN THOUGHT AND DISTRACTIONS FROM NOISES OF OTHER INDIVIDUALS SHOULD BE KEPT TO A MINIMUM.</p> <p>8. LIGHTING, AIR QUALITY, ACOUSTICS AND GENERAL AMBIENCE SHOULD ALL BE CONSIDERED WITH THE THOUGHT OF LONG WAITS KEPT IN MIND. THE HVAC MUST BE CAPABLE OF HANDLING THE CAPACITY CROWD EXPECTED THE FIRST DAY.</p> <p>9. ALTHOUGH NO SPECIAL CEILING HEIGHT IS RECOMMENDED, IT SHOULD BE APPROPRIATE TO THE SIZE OF THE ROOM.</p> <p>10. BUILT-INS ARE REQUIRED FOR OVERCOATS AND OVERSHOES, COFFEE SERVERY, MAGAZINES AND BOOKSHELVES.</p> <p>11. HOT AND COLD WATER SERVICE TO THE COUNTER SINK WITH DRAINAGE PIPING, ALL PLUMBING SERVICES TO THE VENDING MACHINES AND WASH-ROOMS, ELECTRICAL OUTLETS AS SHOWN IN PLAN, TELEPHONES RESTRICTED TO LOCAL DIALLING FOR PUBLIC USE AND A TELEPHONE AT ATTENDANT'S DESK FOR COMMUNICATION WITH COURTROOMS. A SOUND REINFORCEMENT SYSTEM WITH MICROPHONE SHALL BE PROVIDED FOR THE ATTENDANT TO ADDRESS THE ASSEMBLED PERSONS. THE NECESSARY WIRING AND EQUIPMENT SHOULD BE PROVIDED TO ALLOW PRERECORDED VIDEO PRESENTATIONS TO BE MADE TO EXPLAIN THE JURY SELECTION PROCESS AND THE RESPONSIBILITIES AND DUTIES OF JURORS. MONITORS FOR THIS VIDEO RECORDING COULD BE CEILING HUNG IN VARIOUS LOCATIONS OR PORTABLE UNITS. THE CAPABILITY TO CONNECT THE MONITORS TO FUTURE CAMERAS IN THE JURY SELECTION COURTROOM SHOULD ALSO BE PROVIDED FOR.</p> <p>12. THE ROOM IS RESTRICTED TO PERSONS IMPANELLED FOR JURY DUTY AND A COURT ATTENDANT IS PRESENT AT ALL TIMES.</p>

AREA
<p>JURORS' ASSEMBLY ROOM AND LOUNGE</p> <p>230.0sm (2475sq ft) for 125 persons 1.0sm per person plus auxiliary spaces, plus circulation factor</p>
PROXIMITIES
<p>ADJACENT: PUBLIC CIRCULATION</p> <p>CLOSE TO PUBLIC CIRCULATION: COURTROOMS FOR JURY SELECTION PUBLIC ENTRANCE PUBLIC WASHROOMS PUBLIC WAITING AREA</p>
INTERNAL ORGANIZATION
<p>ALTHOUGH PRIMARILY USED AS AN ASSEMBLY ROOM FOR JURORS, THE SPACE SHOULD BE ADAPTABLE FOR LARGE MEETINGS SHOULD THE NEED ARISE. CAREFUL ATTENTION SHOULD BE PAID TO THE TYPE OF SEATING AND ARRANGEMENT TO PERMIT EASE OF CREATING A FORMAT FOR MEETINGS.</p>

CHECKLIST	
CHAIRS	NOTE 1 sled base side chairs tilt
	NOTE 1 swivel/tilt
TABLES	NOTE 2 movable standard special
FITMENTS	modular movable fixed
	NOTE 3 special design
SEATING PUBLIC	fixed (bench)
	NOTE 4 fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	NOTE 5 full height low doors
SIDE TABLES	NOTE 6 decorative functional
DESK	NOTE 7 plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
1. LOW BACK SWIVEL TILTER ARM CHAIR WITH 5 LEG BASE AND CARPET CASTER AT REGISTRATION DESK. ALSO ONE SIDE CHAIR WITH ARMS AND SLED BASE.
2. WORK TABLES SHOULD BE CONSIDERED IN THE LAYOUT OF THE ROOM TO ALLOW INDIVIDUALS TO PERFORM SOME PERSONAL WORK WHILE WAITING TO BE CALLED FOR JURY SELECTION.
3. COUNTER AND CUPBOARDS AS WELL AS COAT HANGING SPACE SHALL BE PURPOSE MADE.
4. COMFORTABLE SEATING WITH ARMS CAPABLE OF GANGING TOGETHER TO MAINTAIN AN ORDERLY APPEARANCE AND FOR EASE OF REARRANGEMENT TO MEETING TYPE SEATING.
5. BOOKCASES SEVEN SHELVES HIGH SHALL BE PROVIDED TO ACCOMMODATE READING MATERIAL. MODIFY TO TAKE PERIODICALS AND MAGAZINES.
6. SIDE TABLES ARE DECORATIVE TO ACCOMMODATE MAGAZINES AND PROVIDE A SURFACE TO REST PERSONAL READING MATERIAL ON ON A TEMPORARY BASIS.
7. REGISTRATION DESK SHALL BE 1524 MM X 762 MM WITH A SINGLE PEDESTAL AND PENCIL DRAWER. LAMINATE FINISH.

AREA
<p>JURORS' ASSEMBLY ROOM AND LOUNGE</p> <p>230.0sm (2475sq ft) for 125 persons 1.0sm per person plus auxiliary spaces, plus circulation factor</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet
	NOTE 1	vinyl ceramic wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish
		paint * acoustic tile
WALLS	NOTE 2	drywall sheet acoustic panels wood marble ceramic
		* sheet vinyl paint
DOORS		standard fire rated
	NOTE 3	secure * acoustic
WINDOWS	NOTE 4	sun control decorative drapes full drapes

NOTES ON FINISHES

1. CARPET SHALL BE 28 OZ. WITH SHEET VINYL OR RUBBER FLOORING IN THE WASHROOMS.
2. IN ALL PROBABILITY, WALLS WILL BE DRYWALL OVER METAL STUDS WITH PAINT FINISH OR VINYL COVERED. AS THE ROOM COULD BE USED FOR MEETINGS AT OTHER TIMES THE STC RATING SHOULD NOT BE OVERLOOKED.

WASHROOM WALLS SHOULD BE FINISHED IN A SIMPLE AND DURABLE MANNER. CERAMIC TILE TO 4'0" AND PAINTED ABOVE 4'0" IS AN ACCEPTABLE FINISH.
3. LOCKABLE, SOUNDSTRIPPED SOLID CORE WOOD DOORS. LAMINATE FACED DOORS AT WASHROOMS.
4. SUN CONTROL MAY BE REQUIRED DEPENDENT ON ORIENTATION OF WINDOWS.

AREA

**JURORS' ASSEMBLY ROOM
AND LOUNGE**

230.0sm (2475sq ft)
 for 125 persons 1.0sm per
 person plus auxiliary spaces,
 plus circulation factor

PROXIMITIES

INTERNAL ORGANIZATION

JURY ROOM
 51.4sm (553sq ft)

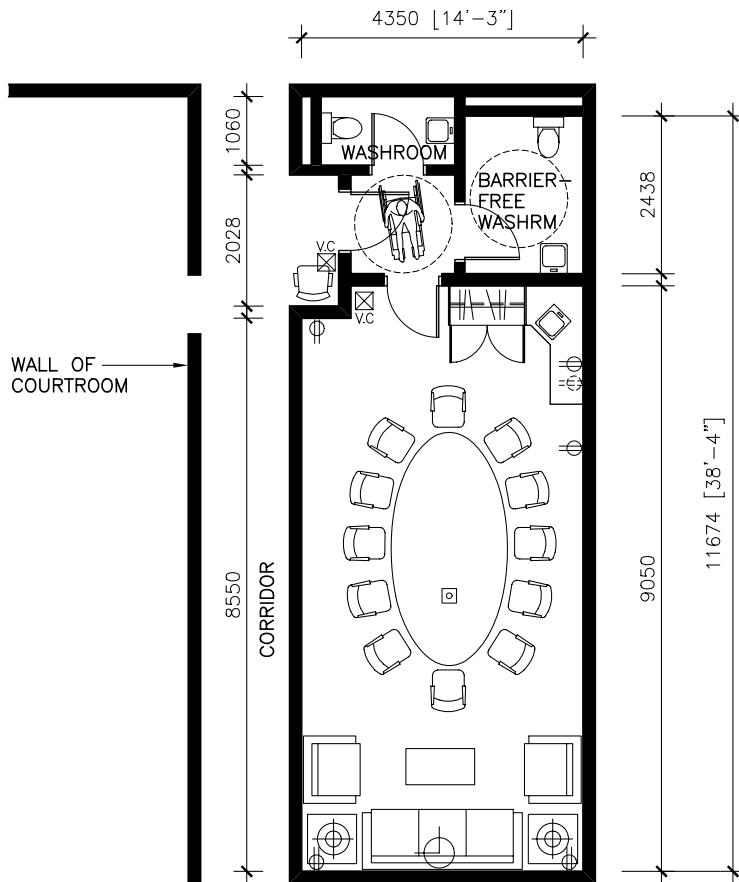


FIG: G10

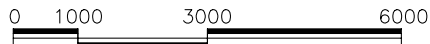


FIG. G10

The location of the jury room is important for the following reasons:

1. It must be easily accessible from the courtroom
2. There must not be any contact with public or staff other than the attendants who are responsible for the jury
3. Access from the courtroom may be through the judges' corridor or a separate dedicated corridor as shown on Fig. G10. It must be possible to exit without going through the courtroom.

The jury room is to accommodate 12 jurors with separate washrooms for men and women, coat-hanging space and a counter/sink/cupboard unit. Only one entry door is to be provided. This is to be kept locked while the room is occupied by the jury. Courtroom Services Officers (one female and one male) are to be stationed outside the jury room and communication between the jury and attendants will be by a dedicated intercom system located at the side of the entrance door. The relationship of the jury room and the courtroom as shown is not mandatory but expresses an ideal principle. The final planning solution should not deviate too far from this principle or ignore the location guidelines given above.

It is permissible to vary the shape of the jury room if it assists in the overall planning solution for the court house but the square metre area shall not be increased more than 5% unless it can be clearly demonstrated that the overall planning solution is more efficient and the extra space used can be recovered within the overall plan.

The ratio of jury rooms to jury courtrooms shall be established during the programming stage for a particular facility based on a statistical analysis of juried trials as compared to the total number of trials handled by the judiciary in that location.

This ratio has been demonstrated to vary somewhat amongst the 8 regional areas in the province, but is generally found to be in the 1 to 4 ratio of jury trials to the total number of trials.

In a court facility with a requirement for civil jury courtrooms and in the interest of space efficiencies, consideration should be given to providing jury rooms for civil cases. It has been demonstrated that a room for 6 jurors, with shared washroom, can be accommodated within the same floor area as a judge's retiring room.

LEGEND

- ⊕ DUPLEX
- ⊗
vc INTERCOMSTATION
- ⊕
UNDER COUNTER DUPLEX FOR SMALL REFRIGERATOR
- ⊖ COMPUTER OUTLET
- ⊕ CLOCK

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE		dignified orderly friendly bold relaxing
	NOTE 3	
	*	
FUNCTIONAL ADAPTABILITY		important desirable unimportant
	NOTE 4	
INTERNAL FLEXIBILITY		important desirable unimportant
	NOTE 4	
VIEW OUT		important desirable optional none
	NOTE 5	
ILLUMINATION		bright moderate subdued special
	NOTE 6	
	NOTE 6	
QUIETNESS		important desirable unimportant
	NOTE 7	
ENVIRONMENTAL CONTROL		high normal low
	NOTE 8	
CEILING HEIGHT		high normal low
	NOTE 9	
STORAGE		built-in room none
	NOTE 10	
SERVICES		water electricity telephone intercom special
	NOTE 11	
	*	
	*	
SECURITY		high medium low
	NOTE 12	

NOTES
<ol style="list-style-type: none"> ACCESS TO THE JURY ROOM IS RESTRICTED TO JURY MEMBERS AND ATTENDANT RESPONSIBLE. ACCESS CAN BE THROUGH JUDGES' CORRIDOR. JURY ONLY. THE FUNCTION OF THE JURY IS TO ARRIVE AT A VERDICT WITH OR WITHOUT QUALIFICATION OR RECOMMENDATIONS. TO SATISFY THIS FUNCTION, THE ROOM SHOULD BE ORDERLY BUT RELAXING AND COMFORTABLE. JURY SITTINGS CAN BE OF LONG DURATION WITH CONSIDERABLE STRESS. AN AREA FOR RELAXATION DURING BREAKS IN THE DELIBERATION PROCESS IS IMPORTANT. BECAUSE OF THE NEED FOR WASHROOMS WITHIN THE ROOM, IT WOULD BE A MAJOR ALTERATION TO CONVERT THE SPACE TO ANOTHER USE. HOWEVER, THE ROOM IS AN IDEAL CONFERENCE SPACE WHEN NOT IN USE AS A JURY ROOM. WINDOWS ARE DESIRABLE BUT NOT MANDATORY. WHERE WINDOWS ARE PROVIDED THE GLASS SHALL BE OF THE OBSCURE TYPE TO ENSURE PRIVACY AND PREVENT THE CHANCE OF A MISTRIAL. INDIVIDUALS SHALL NOT BE ABLE TO VIEW IN OR OUT AT ANY TIME. GOOD LIGHTING (HIGH VCL) WITHOUT GLARE IS REQUIRED. LAY-IN CEILING LIGHT TROFFERS WITH PARABOLIC LENSES IS ONE WAY OF ACHIEVING THE DESIRED RESULT. A MORE SUBDUED LEVEL OF LIGHTING SHOULD BE PROVIDED FOR THE RELAXATION AREA. QUIETNESS IS IMPORTANT FOR CONCENTRATION. INDEPENDENT ENVIRONMENTAL CONTROL IS ESSENTIAL TO ENSURE A COMFORTABLE PLACE IN WHICH TO PERFORM AN IMPORTANT FUNCTION. THE ACCURACY OF THE JURY'S DELIBERATIONS WILL OBVIOUSLY IMPACT ON THEIR VERDICT AND THE LIVES OF OTHERS. JURIES OFTEN SIT FOR LONG HOURS INTO THE EVENING AND MEALS ARE SERVED IN THE ROOM. THE HVAC SYSTEM MUST BE CAPABLE OF REMOVING THE RESULTANT FOOD ODOURS AND MAINTAIN A HIGH LEVEL OF AIR QUALITY AT ALL TIMES. THE ENVIRONMENT MUST INCLUDE LIGHTING, AIR QUALITY, ACOUSTICS AND GENERAL AMBIENCE. THE CEILING HEIGHT MUST BE IN PROPORTION TO THE SIZE OF THE ROOM (GENERALLY 2.74M). STORAGE IS REQUIRED TO HANG COATS AND STORE OVERSHOES. CUPBOARDS ARE NECESSARY FOR 12 CUPS AND SAUCERS, SUGAR, CUTLERY, ETC., COFFEE MACHINE AND TEAPOT. SMALL UNDER-COUNTER REFRIGERATOR. HOT AND COLD WATER SERVICE TO THE COUNTER SINK WITH DRAINAGE, VENTPIPE, ETC. ALL PLUMBING SERVICE TO WASHROOMS, ELECTRICAL OUTLETS AS SHOWN ON FIG G10. THE REQUIRED SECURITY IS TO ENSURE THAT THE JURY'S VERDICT IS NOT COMPROMISED BY OUTSIDE INFLUENCES OF ANY TYPE. THE LOCKING DEVICE SHOULD BE OF GOOD QUALITY AND COMMUNICATION WITH THE JURY SHALL BE BY AN INDEPENDENT SELF-CONTAINED TELEPHONE HANDSET LOCATED BOTH INSIDE AND OUTSIDE THE JURY ROOM. THE LOCK SHALL BE MANUALLY OPERATED BY THE ATTENDANTS.

AREA
<p>JURY ROOM</p> <p>51.4sm (553sq ft)</p>
PROXIMITIES
<p>ADJACENT: PRIVATE CIRCULATION</p> <p>CLOSE TO PRIVATE CIRCULATION: COURTROOM - PRIVATE ACCESS OR JUDGES' CORRIDOR</p> <p>CLOSE TO PUBLIC CIRCULATION: THERE SHOULD BE REASONABLE ACCESS TO PUBLIC CIRCULATION SO THE JURY CAN DISPERSE AFTER DUTY WITHOUT EXITING THROUGH THE COURTROOM OR JUDGES' ENTRANCE</p>
INTERNAL ORGANIZATION
<p>SIMPLE NEED OF TABLE, 12 COMFORTABLE CHAIRS, COUNTER WITH SINK, ELECTRICAL DUPLEX FOR MAKING BEVERAGES AND UNDER-COUNTER REFRIGERATOR. RELAXATION AREA OF COUCH, ARMCHAIRS AND END TABLES.</p>

CHECKLIST	
CHAIRS	sled base side chairs tilt NOTE 1 swivel/tilt
TABLES	movable standard NOTE 2 special
FITMENTS	modular movable NOTE 3 fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 4 full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative NOTE 5 functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. ERGONOMIC LOW BACK SWIVEL TILT ARMCHAIRS WITH FIVE-LEG BASES AND CARPET CASTERS. 2. ELLIPTICAL OR CIRCULAR TABLE DESIGNED TO ACCOMMODATE 12 JURORS COMFORTABLY. TABLES SHALL BE APRONLESS AND FINISHED WITH PLASTIC LAMINATE. TABLES SHALL BE DESIGNED TO FACILITATE MOVE-IN THROUGH DOORS. TWO WASTE-PAPER BASKETS SHALL BE PROVIDED. 3. INCLUDE FOR BASE COUNTER WITH SINK AND CUPBOARDS OVER FOR MAKING COFFEE AND TEA. SMALL UNDER-COUNTER REFRIGERATOR TO BE INCLUDED. PROVIDE WALL MOUNTED MULTI-PURPOSE VISUAL AID CABINET. 4. THREE-SEATER COUCH WITH MATCHING ARMCHAIRS. 5. TWO END TABLES AND COFFEE TABLE. <p>NOTE: ONE OR TWO TABLE LAMPS SHOULD BE PROVIDED TO CREATE THE PROPER AMBIENCE FOR RELAXING BREAKS.</p>

AREA
<p>JURY Room 51.4sm (553sq ft)</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet
	NOTE 1	vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish
		paint acoustic tile
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet
	NOTE 3	acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure
	NOTE 4	acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE FLOOR OF THE JURY ROOM SHALL BE CARPETED WITH 28 OZ. CARPET WHILE THE WASHROOMS SHALL BE FINISHED WITH SHEET VINYL.
2. CEILINGS SHALL HAVE AN ACOUSTIC ABSORPTION QUALITY OF NOISE REDUCTION CO-EFFICIENT (NRC) AS SPECIFIED IN SECTION Q. LAY-IN LIGHT TROFFERS FLUSH WITH THE CEILING SHOULD BE PROVIDED WITH PARABOLIC OR SIMILAR LENS TO AVOID SEVERE GLARE PROBLEMS.
3. THE WALLS SHOULD BE DRYWALL SHEET FINISHED WITH SHEET VINYL. HOWEVER, AS THE ACOUSTIC QUALITY OF THE ROOM IS IMPORTANT, SOUND ABSORBENT PANELS CAN BE INSTALLED TO ACHIEVE THE DESIRED ACOUSTIC VALUES. AS CONFIDENTIALITY IS ESSENTIAL, THE WALLS SHALL BE BUILT FLOOR TO UNDERSIDE OF SLAB ABOVE AND ALL PENETRATIONS SHALL BE SEALED AIRTIGHT AS PER THE CONCEPTS OF SECTION Q. DUCT WORK LINKED WITH ADJACENT ROOMS SHALL BE ATTENUATED AND DESIGNED TO THE PRINCIPLES DESCRIBED IN SECTION Q. THE STC VALUE OF WALLS SHALL REFLECT THE REQUIREMENT FOR QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q. ACOUSTIC PANELS COVERED WITH PERFORATED VINYL SHALL BE SUCH THAT EYE STRAIN DOES NOT OCCUR DUE TO PATTERN OF PERFORATIONS.
4. DOORS SHALL BE SOLID CORE AND SOUND STRIPPED. BOTH DOOR THICKNESS AND SOUND STRIPPING SHALL BE AS SPECIFIED IN SECTION Q. LOCKING DEVICE TO BE HIGH QUALITY.
5. SEE NOTE 5 UNDER JURY ROOM NOTES RE PRIVACY REQUIREMENTS.

AREA

JURY Room

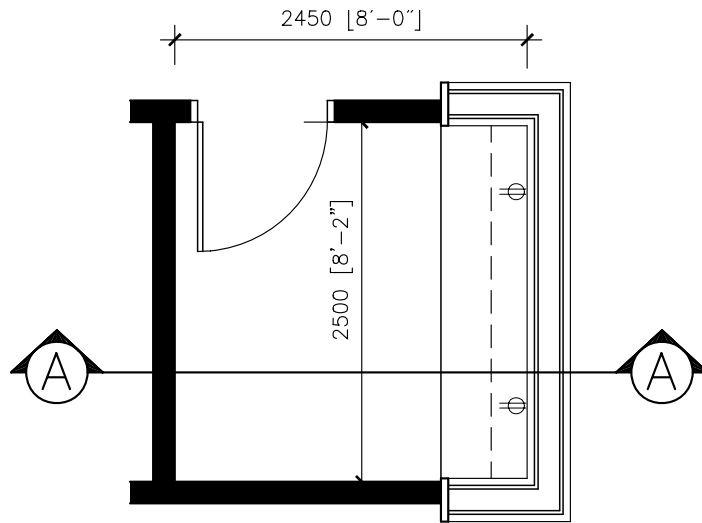
 51.4sm (553sq ft)

PROXIMITIES

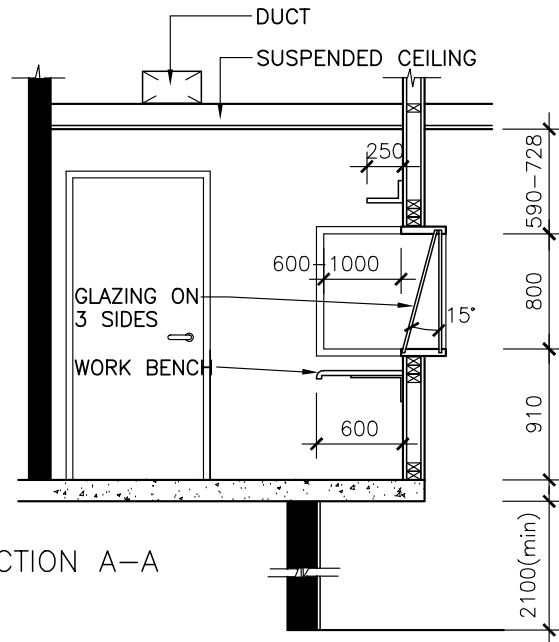
INTERNAL ORGANIZATION

SIMULTANEOUS INTERPRETATION ROOM

6.1sm (66sq ft)



PLAN



SECTION A-A

FIG: G11

FIG. G11

The location of the interpretation room relative to the courtroom is critical to its proper functioning. The following criteria must be met:

1. The interpreter must be able to see all the participants in the well of the courtroom.
2. Access shall not be from the courtroom.
3. The interpretation room shall not use any of the floor area of the standard courtroom.

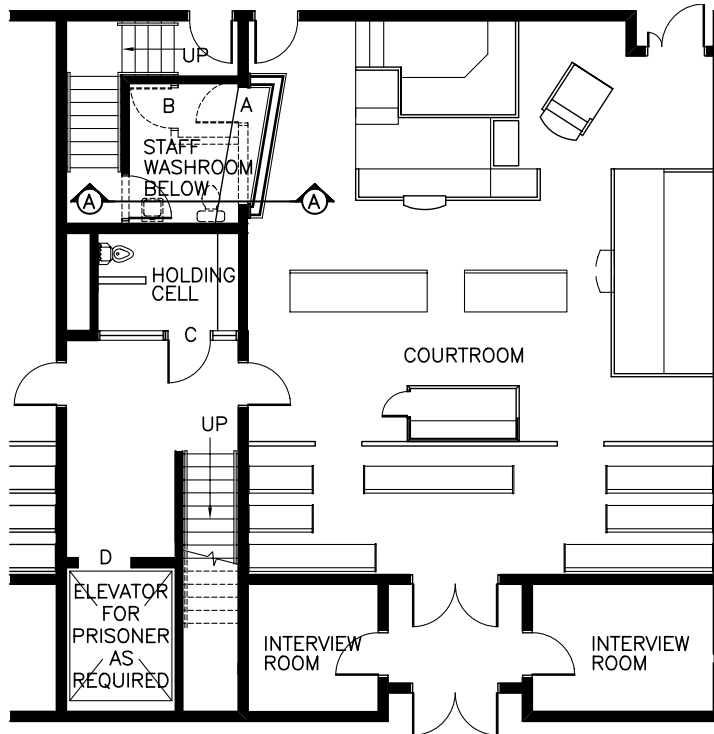
To meet the above criteria, the room should be located outside the courtroom area at a high level with only the three-sided viewing window projecting into the side wall of the well of the courtroom. See Fig. G11. A possible planning solution combining location, height and access is shown on Fig. G12.

The equipment used by the interpreters is sophisticated and expensive. Therefore, the room shall be dedicated to interpretation and be securely locked with restricted access.

Close attention must be given to the acoustic, electrical and HVAC systems. See detailed information on the checklists but under no circumstances shall the interpretation booths be designed below the standard set out in CAN/CGSB-131.1 M88 (latest edition). Permanent simultaneous interpretation systems (physical facilities) and the electronic equipment and electrical service shall comply with CAN/CGSB-131.2 M88 (latest edition), electro-acoustic performance of simultaneous interpretation systems.

Fig. G12 shows a possible plan to include booth, accused cell, accused stair and secure elevator. Other planning solutions are possible to meet different planning needs. Fig. G12 is included for guidance only.

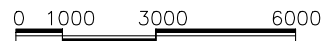
SIMULTANEOUS INTERPRETATION ROOM



PLAN OF ACCUSED ACCESS, LOCATION OF SIMULTANEOUS INTERPRETATION ROOM(S), HOLDING CELL AND PRISONER ELEVATOR

- A** SECOND DOOR REQUIRED IN COURTROOM IF THIS TYPE OF PLANNING IS DESIRABLE TO MEET COURT HOUSE REQUIREMENTS.
- B** STAFF OR JUDGES' WASHROOMS ARE LOCATED ON THE PRIVATE CIRCULATION ROUTE. NORMALLY, A WASHROOM FOR MEN AND WOMEN WILL BE LOCATED AT EITHER END OF THE COURTROOM ACCESS CORRIDOR. FIG. G12 SHOWS A SINGLE WASHROOM IN A SMALL COURT HOUSE. ANOTHER SINGLE WASHROOM COULD BE LOCATED ADJACENT TO ANOTHER COURTROOM.
- C** PRISONERS' HOLDING CELL IS USED FOR SHORT RECESSES. SEE FIG. G14.
- D** SECURE ELEVATOR MAY BE REQUIRED TO SERVE HANDICAPPED.

FIG: G12



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE		dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	NOTE 3	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	NOTE 9	built-in room none
SERVICES	*	water electricity telephone intercom special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. ACCESS IS RESTRICTED TO INTERPRETERS ONLY, EXCEPT MAINTENANCE, CLEANING, ETC. DEPENDENT ON PLANNING, ACCESS COULD BE FROM THE JUDGES' CORRIDOR OR DIRECTLY FROM THE PUBLIC AREA. BECAUSE OF THE LOCATION OF THE ROOM, THE LATTER ACCESS COULD BE DIFFICULT.</p> <p>2. INTERPRETERS ONLY.</p> <p>3. THE AREA IS SMALL AND SHOULD BE WELL DESIGNED (SEE FIG. G11). THERE IS NO REQUIREMENT FOR FLEXIBILITY OR ADAPTABILITY. IT IS RECOMMENDED THAT THE FLOOR BE A CARPETED RAISED FLOOR WHICH WILL FACILITATE THE RUNNING OF CABLES, ETC.</p> <p>4. THE VIEW OUT IN THIS INSTANCE APPLIES TO THE VIEW OVER THE COURTROOM IN THREE DIRECTIONS. WINDOW FRAMING TO BE KEPT TO A MINIMUM SECTION TO AVOID IMPEDING THE VIEW.</p> <p>5. THE LIGHTING SHALL BE INDEPENDENT OF THE COURTROOM WITH LOCAL SWITCHING. THE MAIN LIGHT SOURCE SHALL ILLUMINATE THE WORK SURFACE WITH A UNIFORM INTENSITY OF AT LEAST 300 LUX BUT PREFERABLY WITH AN INTENSITY RANGE FROM 100 LUX TO 1000 LUX. THE TILTING RANGE OF THE REFLECTOR SHOULD BE LIMITED TO AVOID GLARE INTO THE COURTROOM. SWITCH FOR WORKING LIGHT TO BE ADJACENT TO THE OPERATOR. OVERHEAD GENERAL LIGHTING FOR CLEANING, ETC. SHALL BE SWITCHED FROM A LOCATION ADJACENT TO THE DOOR.</p> <p>6. QUIETNESS AND ACOUSTIC DESIGN ARE EXTREMELY IMPORTANT. SEE CHECKLIST FOR NOTES ON FINISHES AND SECTION 4.4 OF CAN/CGSB-131.1 M88 (LATEST EDITION).</p> <p>7. THE INTERPRETERS OPERATE UNDER CONTINUOUS PRESSURE WITH THE SPEED OF INTERPRETATION DICTATED BY OTHERS. IT IS IMPORTANT THAT THE ENVIRONMENT BE COMFORTABLE. TOTAL AIR SUPPLY SHALL PROVIDE 20 CFM PER PERSON. SUPPLY AND RETURN GRILLES SHALL BE LOCATED TO AVOID DRAUGHTS. EACH INTERPRETER'S ROOM SHALL BE PROVIDED WITH A SEPARATE THERMOSTAT. FOR DETAILED INFORMATION AND PERFORMANCE CRITERIA WHICH MUST FORM THE BASIS OF THE MECHANICAL DESIGN, SEE SECTION 4.5 OF CAN/CGSB-131.1 M88.</p> <p>8. HEIGHT OF ROOM SHALL NOT BE LESS THAN 2300mm (7'7") BUT PREFERABLY 2438mm (8'0"). HEIGHT OF ROOM IS RELATED TO FLOOR LEVEL ABOVE PRISONER'S BOX AND HEIGHT OF WINDOW AND WALL ABOVE IN RELATION TO THE HEIGHT OF THE COURTROOM.</p> <p>9. WITH THE INSTALLATION OF SECURE, RESTRICTED LOCKING, THE ROOM BECOMES ITS OWN STORAGE AREA.</p> <p>10. AS PREVIOUSLY NOTED, THE REQUIRED SECURITY IS RELATED TO THE VALUE OF THE EQUIPMENT AND THE MEANS TO PROPERLY SECURE IT.</p>

AREA
<p>SIMULTANEOUS INTERPRETATION ROOM</p> <p>6.1sm (66sq ft)</p>
PROXIMITIES
<p>ADJACENT: PRIVATE CIRCULATION</p> <p>CLOSE TO PRIVATE CIRCULATION: JUDGES' CORRIDOR FOR ACCESS</p> <p>CLOSE TO PUBLIC CIRCULATION: INTERPRETERS' WAITING ROOM</p>
INTERNAL ORGANIZATION
<p>THE INTERNAL ORGANIZATION IS TO BE AS SHOWN ON FIG. G11</p>

CHECKLIST	
CHAIRS	sled base side chairs tilt NOTE 1 swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable NOTE 2 fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)

FURNISHINGS & EQUIPMENT
<p>1. CHAIRS SHALL BE ADJUSTABLE IN HEIGHT, WITH ADJUSTABLE BACK REST, 5 LEGS, NOISELESS CASTERS, UPHOLSTERED IN HEAT DISSIPATING MATERIAL.</p> <p>2. THE BUILT-IN WORKING SURFACE SHALL EXTEND ACROSS THE FULL WIDTH OF THE ROOM WITH A MINIMUM DEPTH OF 600mm AND 750mm TO 850mm ABOVE THE FINISHED FLOOR LEVEL. THE SURFACE SHALL BE FLAT WITH 3mm THICK COMPRESSED CORK UNDERLAY WITH A VINYL WRITING SURFACE. THE UNDERSIDE SHALL BE CLEAR OF BOOK SHELVES AND/OR DRAWERS. A SHELF WITH A DEPTH OF 250mm - 350mm SHALL BE INSTALLED IMMEDIATELY ABOVE THE WINDOW WITH THE CAPABILITY OF SUPPORTING A MINIMUM LOAD OF 90kg WITH A MAXIMUM DEFLECTION OF 5mm. SUPPLY WASTE PAPER BASKET.</p>

AREA
<p>SIMULTANEOUS INTERPRETATION ROOM</p> <p>6.1sm (66sq ft)</p>
CAPACITY
Empty space for capacity
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 2	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS		standard fire rated secure
	NOTE 3	acoustic
WINDOWS		sun control decorative drapes full drapes
	NOTE 4	special

NOTES ON FINISHES

1. INTERPRETATION ROOM FLOOR WHICH SHOULD BE RAISED 152mm CLEAR TO FACILITATE THE RUNNING OF CABLES SHALL BE COVERED WITH ANTI-STATIC CARPETING. RAISED FLOOR TO BE CONSTRUCTED TO AVOID DRUMMING OR HOLLOW SOUNDS WHEN WALKING.
2. THE ROOM SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF STANDARD CAN/CGSB-131.1 M88.
3. DOOR SHALL BE SOLID CORE. SOUND STRIPPED AS REQUIRED BY SECTION Q AND SHALL NOT BE LESS THAN 762mm WIDE.
4. WINDOWS SHALL RUN THE FULL WIDTH OF THE ROOM AND RETURN A MINIMUM OF 600mm AT EACH END. THE MINIMUM HEIGHT OF THE WINDOW PANES SHALL BE 800mm AND THE LOWER EDGE 150mm ABOVE THE WORK SURFACE.

THE WINDOWS SHALL BE OF ONE WAY GLASS AND SHALL SATISFY THE SOUND REQUIREMENTS OF NOTE 2 ABOVE. THE TOP EDGE OF THE INNER PANE SHALL BE INCLINED AWAY FROM THE ROOM TO AVOID MIRROR EFFECTS AND ASSIST THE ACOUSTICS. THE OUTER PANE SHALL BE VERTICAL. THICK FRAMES AND MULLION POSTS SHALL BE AVOIDED TO ENSURE MAXIMUM VISIBILITY.

AREA

SIMULTANEOUS INTERPRETATION ROOM

6.1sm (66sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

JUDGES' RETIRING ROOM
 22.5sm (242sq ft)

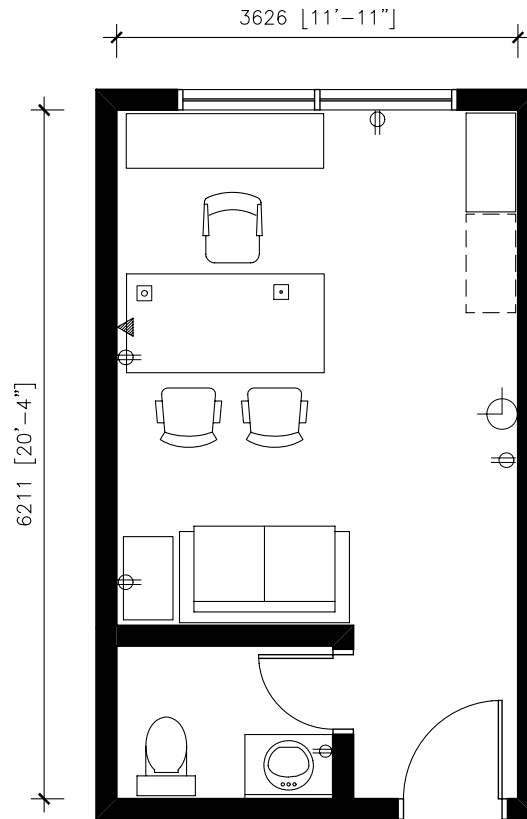


FIG: G13



FIG. G13

Judges' retiring rooms are allocated one to every two jury courtrooms and one to every three non-jury courtrooms. They are used when the judge decides to recess the court for a short period of time to consult with the Crown Attorney and defence lawyer, research a legal point or other similar reason. The retiring room allows the judge to recess court without having to travel a long distance to his own office. In a small court house where the judges' offices are located near the courtrooms, retiring rooms will not be included in the facilities program. The retiring room shall always be accessed from the judges' private corridor.

As the retiring room can also function as a visiting judge's office or a supernumerary/per diem judge's office, an en suite washroom shall be provided within the 22.5sm allocation. It shall be similar to a judge's private washroom.

For civil trials, the retiring room can serve as an adjunct working office where large numbers of exhibits are referred to while the case is being reviewed.

Note: the configuration shown is a guideline only, recognizing that the overall plan will dictate the final shape and that more than one configuration will no doubt be used by the consultant to achieve an economical plan. It must, however, be understood that the area shall not be exceeded and the furniture and function must be accommodated.

LEGEND

- ◻ DURESSBUTTON
- ◻ COMPUTEROUTLET
- ⌚ CLOCK
- ⊕ DUPLEXOUTLET
- ▲ TELEPHONE

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	* dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in room none
SERVICES	*	water electricity telephone intercom special
	NOTE 9	
SECURITY	NOTE 10	high medium low

NOTES
1. JUDGES' RETIRING ROOMS ARE TO BE LOCATED NEAR THE COURTROOMS ENTERED OFF THE PRIVATE CIRCULATION.
2. THE CIRCULATION IS CONFINED TO JUDGES, THEIR SECRETARIAL STAFF, CROWN ATTORNEYS AND DEFENCE LAWYERS BY INVITATION, COURT ATTENDANTS AND OTHER SELECTED STAFF.
3. THE RETIRING ROOM IS USED FOR CONSULTATION WITH THE CROWN ATTORNEYS AND DEFENCE LAWYERS AND OTHER MATTERS REQUIRING SHORT COURT RECESSES. ALTHOUGH SMALLER THAN NORMAL JUDGES' OFFICES AND SHARED BY THE JUDGES SITTING IN ADJACENT COURTROOMS, THE RETIRING ROOM SHOULD REFLECT THE DIGNITY OF THE BENCH AND BE ORDERLY IN LAYOUT.
4. SPACE IN THE PRIVATE AREA IS USUALLY AT A PREMIUM WITH LIMITED EXTERNAL WALL. AS THE RETIRING ROOM IS ONLY USED INTERMITTENTLY, OTHER SPACES WITH HIGH USAGE SHOULD BE LOCATED ON EXTERNAL WALLS. HOWEVER, WINDOWS ARE ACCEPTABLE.
5. GOOD NON-GLARE LIGHTING (HIGH VCL) SHOULD BE PROVIDED.
6. THE ROOM MUST BE ACOUSTICALLY PRIVATE FROM OVERHEARING OR INTRUDING NOISE.
7. THE HEATING AND COOLING SHOULD BE ACCURATE WITHOUT OVERHEATING OR COLD TEMPERATURES.
8. STATIONERY NOTE PADS FOR COMMON USE TO BE STORED IN DESK RUN-OFF.
9. TELEPHONE AND ELECTRICAL OUTLETS AND A COMPUTER OUTLET ARE REQUIRED AND A DURESS BUTTON MUST BE INSTALLED AT THE DESK. HOT AND COLD WATER WILL BE REQUIRED FOR THE WASHROOM.
10. THE SECURITY IS SIMILAR TO THAT DESCRIBED FOR JUDGES' OFFICES. HOWEVER, THE REQUIRED SECURITY MAY BE SLIGHTLY MORE DIFFICULT TO OBTAIN AS THE JUDGES' RETIRING ROOMS ARE NOT QUITE AS ISOLATED AS THE JUDGES' OFFICES. PRIVATE CIRCULATION MUST BE CAREFULLY PLANNED AND MONITORED.

AREA
JUDGES' RETIRING ROOM
22.5sm (242sq ft)
PROXIMITIES
THE JUDGES' RETIRING ROOMS SHALL BE LOCATED ON THE PRIVATE CIRCULATION ROUTE ADJACENT TO THE COURTROOMS.
INTERNAL ORGANIZATION
THE RETIRING ROOM IS NOT RESERVED FOR THE USE OF ONE JUDGE. VARIOUS JUDGES WILL PRESIDE OVER THE COURTROOMS DEPENDENT SOLELY ON NEED AND WILL USE THE NEAREST RETIRING ROOM AS REQUIRED.

CHECKLIST	
CHAIRS	sled base * side chairs tilt NOTE 1 swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size NOTE 2 small
BOOKCASE	NOTE 3 full height low doors
SIDE TABLES	decorative * functional
DESK	NOTE 4 plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	NOTE 4 plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> JUDGE'S CHAIR SHALL BE AN ERGONOMICALLY DESIGNED SWIVEL TILT HIGH BACK CHAIR. TWO SIDE CHAIRS WITH ARMS ON SLED BASE OR STRAIGHT LEGS SHALL ALSO BE PROVIDED. A SMALL UPHOLSTERED COUCH FOR RELAXATION SHALL BE INSTALLED. 1 OR 2 UNITS OF 7 SHELVES HIGH BOOKCASES SHALL BE PROVIDED. THE DESK SHALL BE 762mm X 1524mm WITH OR WITHOUT A FLUSH RUN-OFF. THE RUN-OFF SHALL BE FITTED WITH A PEDESTAL CONTAINING THREE DRAWERS FOR STATIONERY AND TELEPHONE DIRECTORIES WHILE THE DESK SHALL BE FITTED WITH A PENCIL DRAWER ONLY. AS AN ALTERNATE TO THE RUN-OFF, A CREDENZA MAY BE PROVIDED. IF A COMPUTER IS TO BE USED A SUITABLE DESK AND LAYOUT WILL HAVE TO BE SELECTED. THE DESK SHALL BE EQUIPPED WITH A KEYBOARD PULL OUT TRAY.

AREA
<p>JUDGES' RETIRING ROOM</p> <p>22.5sm (242sq ft)</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl spaint
DOORS		standard fire rated
	NOTE 4	secure
	NOTE 4	acoustic
WINDOWS		sun control decorative drapes full drapes
	NOTE 5	

NOTES ON FINISHES

1. 32-OZ. CARPET. ENSURE CARPET SELECTED IS SUITABLE FOR WHEEL-CHAIR MOVEMENT.
2. ACOUSTIC TILE WOULD HELP ACHIEVE THE REQUIRED ACOUSTIC DESIGN AND FACILITATE ACCESS TO SERVICES. THE USE OF LAY-IN LIGHT FIXTURES SHOULD BE SUPPLEMENTED WITH NON-GLARE LENSES.
3. DRYWALL ON METAL STUD PARTITIONS IS ACCEPTABLE BUT MUST MEET THE ACOUSTIC AND PRIVACY REQUIREMENTS SPECIFIED IN SECTION Q. WALLS SHOULD BE BUILT FROM STRUCTURAL FLOOR TO UNDERSIDE OF SLAB. VINYL FINISH IS ACCEPTABLE STANDARD.
4. DOORS SHALL BE WOOD, ACOUSTICALLY SOUND STRIPPED AND OF A THICKNESS SPECIFIED IN SECTION Q. SECURE LOCKING SHALL BE INSTALLED.
5. IF THE JUDGES' RETIRING ROOM IS LOCATED WHERE THERE ARE WINDOWS, THEY SHALL BE FITTED WITH FULL-LENGTH DRAPES.

AREA

JUDGES' RETIRING ROOM

22.5sm (242sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

HOLDING CELL ADJACENT TO COURTROOM

4.2sm (45.5sq ft)
 (HOLDING CELL ONLY, 2.58sm)

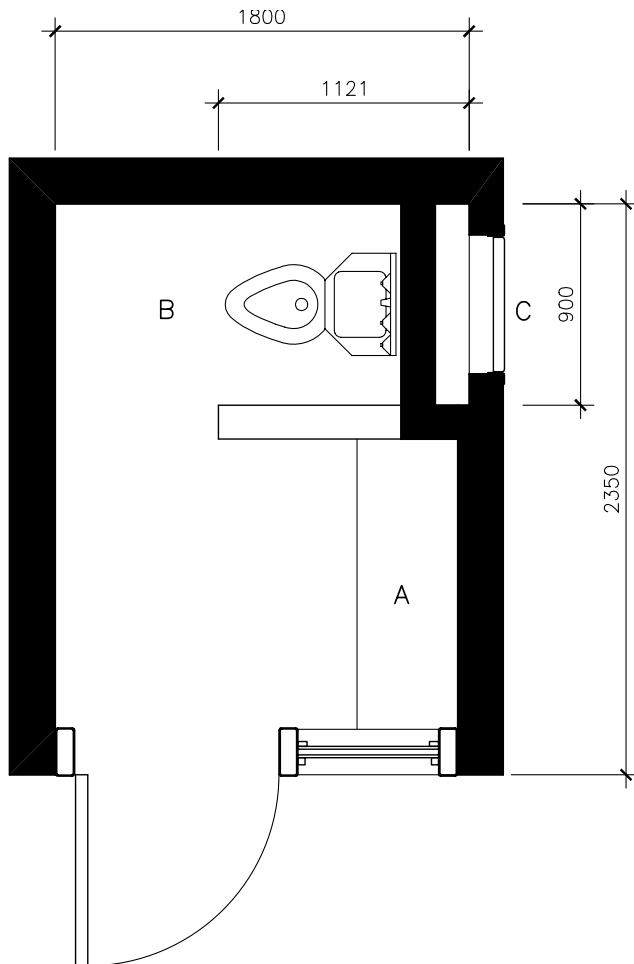


FIG: G14

FIG. G14

The holding cells in this location, which are allocated one to every courtroom, are for the short-term security of prisoners during short court recesses to avoid having to return them to the main holding area.

The plan shown is for a small court house with only one cell where the toilet is part of the cell. It may be acceptable and more economical to provide a cell only and a separate toilet to serve two cells in the larger court house. In this instance the cell would only be 2.58sm and the toilet sized to accommodate a combined stainless steel security toilet and hand basin. This arrangement should be reviewed with the escort staff. Details of the dwarf privacy wall and security door are shown in Section L.

Shatterproof glazing shall be provided in the door and sidelight to allow escort officers to visually monitor the accused at all times.

It is essential that no sound from the cell or toilet reaches the courtroom. See Section Q for acoustic specification and design criteria.

The cells and toilets are usually located between courtrooms with direct access from the prisoners' circulation. If planning is tight because of site restrictions, the toilets only may be located on the prisoners' circulation (one floor up).

LEGEND

- A CONCRETE BENCH (SEE DETAILS)
- B STAINLESS STEEL COMBINATION LAVATORY AND TOILET
- C ACCESS PANEL

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE		dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY		important desirable unimportant
INTERNAL FLEXIBILITY		important desirable unimportant
VIEW OUT	NOTE 2	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	NOTE 3	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT		high normal low
STORAGE		built-in room none
SERVICES	*	water electricity telephone intercom special
SECURITY	NOTE 4 AND GENERAL NOTE	high medium low

NOTES
<ol style="list-style-type: none"> 1. THE HOLDING CELL MUST BE LOCATED IN THE RESTRICTED CIRCULATION ROUTE ADJACENT TO THE COURTROOMS (SEE FIG. G12). 2. SURVEILLANCE WINDOWS ARE TO BE INSTALLED IN THE CELL DOOR AND SIDELIGHT AND SHALL BE GLAZED WITH SHATTERPROOF GLASS. 3. SEE SECTION Q FOR ACOUSTIC DESIGN. 4. ALL PRISONER CIRCULATION FROM CELLS TO COURTROOM SHALL HAVE CORRIDORS A MINIMUM 1524mm WIDE AND AUDIO SURVEILLANCE AT 6000mm CENTRE TO CENTRE. AUDIO SURVEILLANCE IN THE HOLDING AREA SHALL BE CAREFULLY REVIEWED AS USE OF THE SYSTEM BY ESCORT OFFICERS AS AN INTERCOM COULD DISRUPT THE COURTROOM. <p>GENERAL NOTE:</p> <p>THE HOLDING CELL IS A SECURE AREA CONSTRUCTED WITH MASONRY WALL AND A STEEL CEILING. THE BENCH IS FORMED IN CONCRETE AND THE DOOR IS MANUFACTURED OF STEEL WITH A HIGH SECURITY LOCK. CONSTRUCTION DETAILS ARE INCLUDED IN SECTIONS L AND P.</p> <p>LIGHT FIXTURES AND AIR DIFFUSERS MUST BE HIGH SECURITY TYPE, SPECIALLY MANUFACTURED FOR USE IN HOLDING CELLS. COMBINED TOILET AND HAND BASIN ARE TO BE STAINLESS STEEL AND TAMPER PROOF.</p>

AREA
<p>HOLDING CELL ADJACENT TO COURTROOM</p> <p>4.2sm (45.5sq ft)</p>
PROXIMITIES
<p>PRISONER CIRCULATION AND COURTROOM</p>
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	carpet vinyl ceramic wood rubber special NOTE 1
CEILING	drywall sheet drywall lathe & sprayed acoustic finish NOTE 2 painted acoustic tile
WALLS	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint NOTE 3 special
DOORS	standard fire rated NOTE 4 secure acoustic
WINDOWS	sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR SHALL BE PAINTED CONCRETE OR SEAMLESS EPOXY FLOORING WITH INTEGRAL COLOUR.
2. THE CEILING SHALL BE PAINTED STEEL ACCORDING TO DETAIL.
3. WALLS SHALL BE EPOXY COATED CONCRETE BLOCK.
4. DOOR SHALL BE PAINTED STEEL WITH HIGH SECURITY LOCK AND SHATTERPROOF SURVEILLANCE WINDOW.

AREA

HOLDING CELL
 ADJACENT TO COURTROOM

4.2sm (45.5sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

INTERVIEW ROOM (ADJACENT TO COURTROOM)

9.0sm (97sq ft)

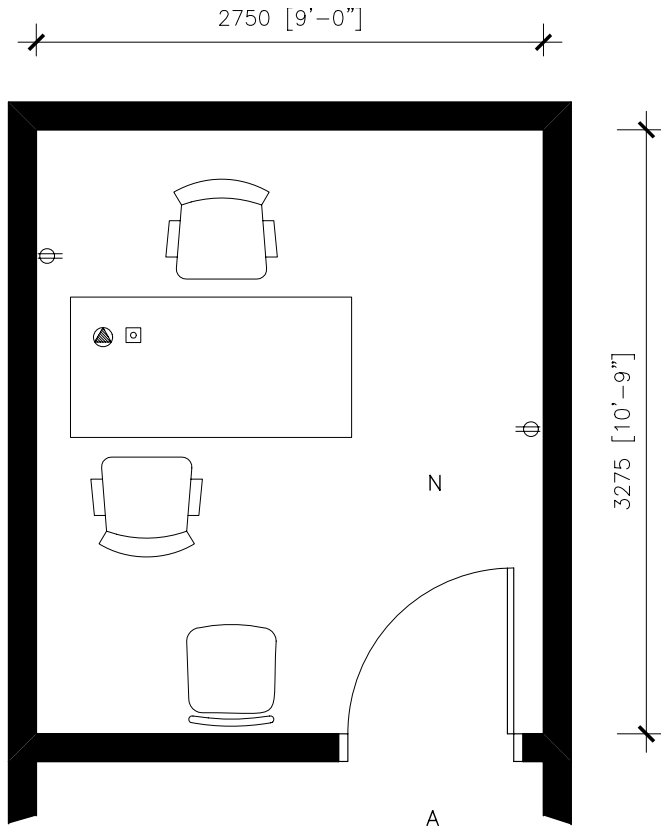


FIG: G15

FIG. G15

A SOUND LOBBY AT ENTRY TO COURTROOM. SEE FIGS. G2A AND G2E.

N INTERVIEW ROOM used by defence lawyers and Crown Attorneys to interview and brief witnesses or accused not held in custody. When not being used by the Crown or defence, these interview rooms can be used by other courtroom participants such as Legal Aid or social agencies, but only at such times as their allocated space is overloaded or a local private room is required during a courtroom recess.

A telephone restricted to local dialling shall be installed.

A computer jack is to be installed for future use by the Crown or defence for communication to their offices by modem. The computer outlet shall not be capable of entering the court house computer system thereby giving access to confidential information. There shall be two interview rooms per courtroom or motions room.

The door into the interview room shall have a small viewing window.

LEGEND

▲^R TELEPHONE (RESTRICTED DIALLING AREA)

□ COMPUTER JACK

⊕ DUPLEX OUTLET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2 NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 4	bright moderate subdued special
QUIETNESS	NOTE 5	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 6	high normal low
CEILING HEIGHT	NOTE 7	high normal low
STORAGE	*	built-in room none
SERVICES	NOTE 8 NOTE 8 NOTE 8 NOTE 8	water electricity telephone intercom special
SECURITY	*	high medium low

NOTES
<p>1. FOR USE BY WITNESSES, ACCUSED NOT IN CUSTODY (ESPECIALLY IN FAMILY COURT), CROWN ATTORNEYS, DEFENCE LAWYERS AND OCCASIONALLY BY SOCIAL AGENCIES, LEGAL AID OR MEDIATORS. LOCATED ADJACENT TO THE COURTROOM AND PUBLIC WAITING AREAS, ITS USE CAN BE EXPANDED PROVIDED THE SPACE IS NOT BEING USED BY THE CROWN OR DEFENCE.</p> <p>2. THE TRAFFIC WILL VARY, WITH MAXIMUM USE PRIOR TO EACH CASE BEING HEARD. GENERALLY THE TRAFFIC IS HIGH TO MEDIUM, BECOMING LOW TOWARDS THE END OF THE DAY.</p> <p>3. THE ROOM SHOULD BE WELL ORDERED AND BUSINESSLIKE. HOWEVER, COLOURS USED IN THE ROOM SHOULD BE SELECTED TO CREATE A FRIENDLY IMAGE CONDUCIVE TO PUTTING WITNESSES ETC. AT EASE DURING THE DISCUSSION OR GIVING OF INSTRUCTIONS PRIOR TO ENTERING THE COURTROOM.</p> <p>4. THE ILLUMINATION SHALL BE NON GLARE, LARGELY CONFINED TO THE WORK AREA.</p> <p>5. IT IS EXTREMELY IMPORTANT THAT THE SUBJECT OF DISCUSSION OR VOICES CANNOT BE HEARD OUTSIDE THE INTERVIEW ROOM WHETHER IN THE SOUND LOBBY, THE PUBLIC AREA OR ADJACENT INTERVIEW ROOM.</p> <p>6. AS AN INTERNAL ROOM THE TEMPERATURE AND QUALITY OF AIR SHOULD BE WELL MAINTAINED, BUT NORMALLY ONLY TWO OR THREE PERSONS WILL OCCUPY THE SPACE FOR RELATIVELY SHORT PERIODS OF TIME. NORMAL CONTROL IS THEREFORE ALL THAT IS REQUIRED.</p> <p>7. A NORMAL HEIGHT OF 2500mm TO 2590mm IS REQUIRED.</p> <p>8. LIGHTING AND POWER SHALL BE INSTALLED WITH A TELEPHONE (RESTRICTED TO LOCAL DIALLING) AND A COMPUTER JACK. A PAGING SPEAKER SHALL ALSO BE INSTALLED.</p>

AREA
<p>INTERVIEW ROOM (ADJACENT TO COURTROOM)</p> <p>9.0sm (97sq ft)</p>
PROXIMITIES
<p>ADJACENT: COURTROOM PUBLIC WAITING WASHROOMS</p>
INTERNAL ORGANIZATION
<p>THE INTERVIEW ROOM REQUIRES ONLY A DESK, DESK CHAIR AND TWO SIDE CHAIRS.</p>

CHECKLIST	
CHAIRS	<p>NOTE 1 sled base side chairs tilt swivel/tilt</p>
TABLES	<p>movable standard special</p>
FITMENTS	<p>modular movable fixed special design</p>
SEATING PUBLIC	<p>fixed (bench) fixed (gang) upholstered wood</p>
COUCH	<p>full size small</p>
BOOKCASE	<p>full height low doors</p>
SIDE TABLES	<p>decorative functional</p>
DESK	<p>NOTE 2 plain single or double pedestal computer executive secretarial system</p>
DAIS & PLATFORMS	<p>fixed i.e. built in place sectional (movable)</p>
CREDENZA	<p>plain cupboards file drawers</p>

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. THE CHAIRS SHOULD ALL BE THE SAME E.G. 3 FOUR-LEGGED SIDE CHAIRS WITH ARMS. 2. THE TABLE SHALL BE 1524mm X 762mm (5'0" X 2'6"), APRONLESS, NO PEDESTALS. 3. INCLUDE FOR 4 COAT HOOKS ON 4" X 3'-4" WOOD STRIP MOUNTED ON WALL.

AREA
<p>INTERVIEW ROOM (ADJACENT TO COURTROOM)</p> <p>9.0sm (97sq ft)</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted *acoustic tile
WALLS	NOTE 2	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS		standard fire rated secure
	NOTE 3	acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. CARPET TO BE THE SAME WEIGHT (28-OZ.) AND QUALITY AS THE COURTROOM.
2. THE STC VALUE OF THE WALLS SHALL REFLECT THE REQUIREMENTS FOR QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q. MASONRY WALLS WOULD ALSO MEET THE REQUIRED STC RATING. WALL SHALL BE TAKEN UP TO THE SLAB ABOVE AND ALL PENETRATIONS SHALL BE ACOUSTICALLY SEALED. CARE SHOULD BE TAKEN TO PREVENT SOUND SHORT CIRCUITING THROUGH THE DUCTWORK SERVING THE INTERVIEW ROOM.
3. DOORS SHALL BE SOLID CORE WOOD WITH THE THICKNESS AND SOUND STRIPPING AS SPECIFIED IN SECTION Q. A SMALL 100mm X 125mm VIEWING WINDOW SHALL BE INSTALLED IN THE DOOR.

AREA

**INTERVIEW ROOM
 (ADJACENT TO COURTROOM)**

9.0sm (97sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

COURTROOM AREA STORAGE ROOM
 VARIES

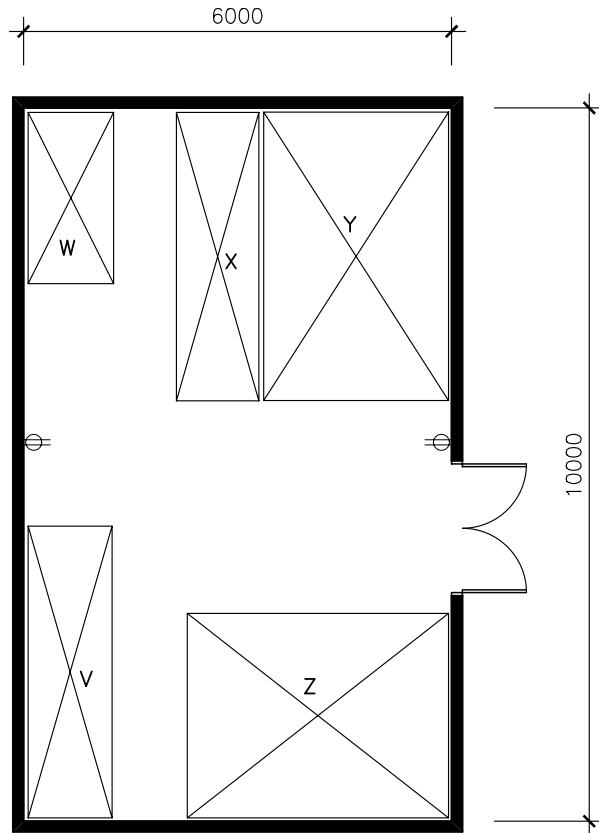


FIG: G16

FIG. G16

The storage room should be located near the courtrooms with access from a wide corridor or public area. The room is required to store extra chairs to furnish the ceremonial courtroom, extra jury chairs, space for a spare prisoner's box or witness stands, lecterns etc. Fig. G16 shows a space of 60sm which is required for the furniture noted below with open space to manoeuvre the furniture.

The size of the storage room can be increased or decreased dependent on the needs of the court house.

LEGEND

- V CLEAR SPACE TO STORE VIDEO MONITORS ON PORTABLE STANDS, PROJECTION SCREENS AND DRAWING EASELS.
- W SPACE FOR SPARE PRISONER'S BOX
- X SPACE FOR SEVERAL LECTERNS, SPARE WITNESS BOX, PORTABLE WHEEL-CHAIR LIFT OR RAMPS
- Y STORAGE SPACE FOR EXTRA JURY CHAIRS
- Z STORAGE FOR STACKING CEREMONIAL COURTROOM CHAIRS
- Ⓢ DUPLEX OUTLET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL		high normal low
CEILING HEIGHT	*	high normal low
STORAGE		built-in room none
SERVICES		water electricity telephone intercom special
SECURITY	NOTE 2	high medium low

NOTES
<p>1. ACCESS SHOULD BE FROM A PUBLIC AREA TO TAKE ADVANTAGE OF LARGE SPACES TO MANOEUVRE THE LARGE PIECES OF MILLWORK OR TROLLEYS CARRYING CHAIRS, ETC.</p> <p>2. SECURITY IS REQUIRED TO GUARD AGAINST THEFT. DOORS SHOULD BE LOCKABLE.</p>

AREA
<p>COURTROOM AREA STORAGE ROOM</p> <p>VARIES</p>
PROXIMITIES
Empty space for Proximities
INTERNAL ORGANIZATION
Empty space for Internal Organization

CHECKLIST

FLOOR	carpet vinyl ceramic wood NOTE 1 rubber special
CEILING	drywall sheet drywall lathe & sprayed acoustic finish painted *acoustic tile
WALLS	NOTE 2 drywall sheet acoustic panels NOTE 2 wood marble ceramic sheet vinyl paint
DOORS	NOTE 3 standard fire rated secure acoustic
WINDOWS	sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE FLOOR SHALL BE COVERED IN RUBBER TO REDUCE THE POSSIBILITY OF GENERATING NOISE WHEN COURT IS IN SESSION.
2. WALLS SHALL BE CONSTRUCTED OF DRYWALL ON METAL STUDS BUT THE AREA SHALL BE LINED WITH PAINTED 12.7mm PLYWOOD 1219mm HIGH TO PREVENT DAMAGE TO THE WALLS WHILE MOVING THE FURNISHINGS. THE STC-RATING OF THE WALLS SHALL BE AS SPECIFIED IN SECTION Q.
3. DOORS SHALL BE TWO 762mm WIDE LEAVES WITH STAINLESS STEEL PLATES TO 1000mm HIGH BOTH SIDES.

AREA

COURTROOM AREA STORAGE ROOM

 VARIES

PROXIMITIES

INTERNAL ORGANIZATION

COURTROOM AND MOTIONS ROOM WAITING AREAS

1.0sm PER SEAT (10.76sq ft)
 CIRCULATION SPACE ADDITIONAL

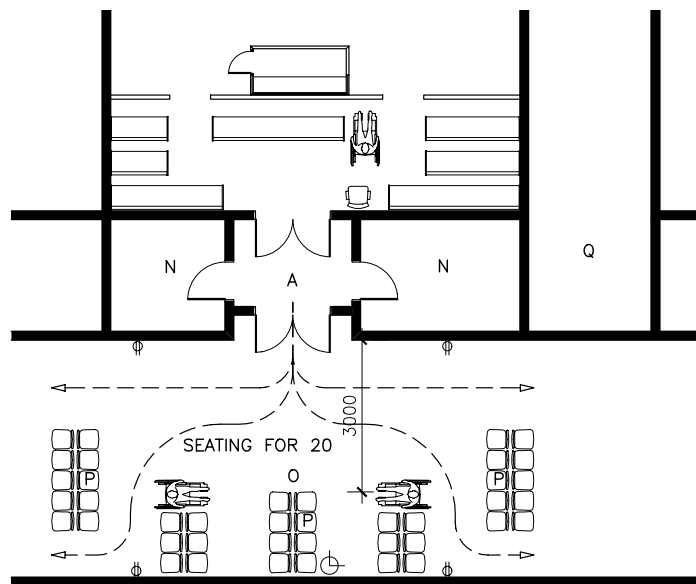


FIG: G17



FIG. G17

For security reasons and to give a reasonable level of comfort to the public, waiting areas should not be crowded. The area also has to accommodate the circulation of staff, lawyers, Crown Attorneys and police moving to and from the courtrooms. All clearances between seating blocks and between seating and walls must facilitate the rapid exit of the staff and public in the event of emergencies. In this regard a suggested minimum distance of 3000mm in front of the courtroom doors must be kept clear of seating.

Circulation is for public and staff.

NOTE:

Depending on the overall planning of the courtrooms and motions rooms and their relationship to other elements of the court house, the configuration of the waiting area can vary from that shown in FIG. G17. However, the principles of the plan shall be adhered to and the allocation of 1.0sm per seat shall be used. An allowance for circulation space is additional to the basic 20.0sm. The passageway or corridor directly in front of the courtroom shall not be included in the waiting area.

FIG. G17 shows the entrance to a courtroom on one side of the waiting area only. Where the waiting area is between two rows of courtrooms, additional clearances will be required for passageways. The standard courtroom shall include a waiting area based on seating for 20 persons. The motions room shall include a waiting area for 12 persons.

Waiting area requirements for larger courtrooms shall be determined during the programming stage based on the allocation of 1.0sm per seat.

LEGEND

- A ENTRANCE TO COURTROOM
- N INTERVIEW ROOMS
- O WAITING SPACE
- P SEATING
- Q AREA BETWEEN COURTROOM TO ACCOMMODATE PRISONERS' STAIR, CELL AND WASHROOM AND/OR SIMULTANEOUS INTERPRETATION
- Φ DUPLEX OUTLET
- ⊕ ELECTRIC CLOCK
- ♿ WHEELCHAIR LOCATION

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold
	NOTE 3	relaxing
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	*	built-in room none
SERVICES		water
	NOTE 9	electricity
	NOTE 9	telephone
	NOTE 9	paging special
SECURITY	NOTE 10	high medium low

NOTES
1. THE WAITING AREA IS FOR PUBLIC USE PRIOR TO ENTERING COURT. IT IS ALSO USED AS A CIRCULATION SPACE BY CROWN ATTORNEYS, DEFENCE LAWYERS AND POLICE. WITNESSES, UNDER CERTAIN CIRCUMSTANCES, MAY ALSO USE THE WAITING AREA.
2. TRAFFIC IS HIGH PRIOR TO COURT SITTING BUT DIMINISHES WHEN THE PUBLIC ENTERS THE COURTROOM. TRAFFIC IS MEDIUM AS THE COURT RECESSES FOR LUNCH OR CLOSES AT THE END OF EACH DAY. THE AREA OUTSIDE COURTROOMS USED FOR FIRST APPEARANCE WILL HAVE CONTINUOUS HIGH TRAFFIC DURING COURT SITTING.
3. THE IMAGE OF THE WAITING AREA MUST ALWAYS BE ORDERLY, REFLECTING THE DISCIPLINE AND DIGNITY OF THE COURT. HOWEVER, A LARGE NUMBER OF THE WAITING PUBLIC WILL BE UNDER STRESS AND THEREFORE A DEGREE OF RELAXATION SHOULD BE INTRODUCED BY FURNITURE, MATERIALS AND COLOUR.
4. THE WAITING AREA MUST REFLECT THE NEEDS OF THE COURTROOM OR MOTIONS ROOM.
5. NON-GLARE MODERATE LIGHTING IS REQUIRED THAT IS GOOD FOR READING AND SECURITY.
6. DUE TO THE NUMBER OF PERSONS INVOLVED, ESPECIALLY WHERE A NUMBER OF COURTROOMS SURROUND THE WAITING AREA, ATTENTION MUST BE GIVEN TO SOUND-ABSORBING MATERIALS ABOVE 1370- AND THE ATTENUATING PROPERTIES OF THE SURROUNDING BUILDING MATERIALS TO MITIGATE THE PENETRATION OF SOUND INTO OTHER SPACES, ESPECIALLY THE COURTROOMS.
7. SIMILAR TO ALL ASSEMBLY AREAS WITH A HIGH PEOPLE LOAD THE HVAC CONTROL IS VERY IMPORTANT, AS THE PEOPLE LOAD CAN FREQUENTLY CHANGE.
8. DUE TO THE LARGE AREA AND PEOPLE LOAD THE ROOM HEIGHT SHOULD NOT BE LESS THAN 2.75m.
9. PAY TELEPHONES SHOULD BE AVAILABLE TO THE PUBLIC AND BE LOCATED IN BANKS AWAY FROM COURTROOM ENTRANCES. EACH BANK OF TELEPHONES SHOULD PROVIDE FACILITIES FOR PEOPLE WITH HEARING IMPAIRMENTS AS WELL AS PEOPLE IN WHEELCHAIRS. PAGING SPEAKERS SHALL BE LOCATED IN A MANNER THAT COVERS THE WHOLE WAITING AREA. LOCATE FIRE ALARM STATIONS TO CODE. ALL WAITING AREAS SHALL HAVE CENTRALLY CONTROLLED CLOCKS. CONDUIT SHALL BE INSTALLED FOR FUTURE ELECTRONIC ANNOUNCEMENT VIA TV MONITOR TO SHOW TRIALS, COURTROOM NUMBERS, PARTICIPANTS' NAMES, DATE, TIME CHANGES AND SCHEDULES ETC. THIS COULD TAKE THE FORM OF ELECTRONIC DOCKETS AT EACH COURTROOM AS WELL AS MONITORS LOCATED MORE CENTRALLY.
10. THE PUBLIC IS USUALLY A MIXTURE OF PERSONS RANGING FROM DISTRAUGHT RELATIVES TO MILITANT FRIENDS AND ASSOCIATES. THE LATTER COULD WELL BE CARRYING WEAPONS OF DIFFERENT TYPES AND UNDER GIVEN CIRCUMSTANCES COULD BE CONSIDERED DANGEROUS, ESPECIALLY TO CROWN WITNESSES AND CROWN ATTORNEYS/PROSECUTORS.

AREA
<p>COURTROOM AND MOTIONS ROOM WAITING AREAS</p> <p>1.0sm per seat (10.76sq ft) Circulation Space Additional</p>
PROXIMITIES
<p>THE WAITING AREAS ARE ON THE PUBLIC CIRCULATION ROUTES BUT ALWAYS ADJACENT TO THE COURTROOMS. THE ROUTES TO THE ADMINISTRATION AREAS SHOULD BE EASY AND CLEARLY SIGNED. IF COFFEE AREAS ARE INCLUDED IN THE PROGRAM, ACCESS SHOULD AGAIN BE EASY AND CLEARLY SIGNED.</p> <p>WASHROOMS SHALL BE LOCATED WITH EASY ACCESS FROM WAITING AREAS. THE PROVISION OF A UNISEX TYPE BARRIER-FREE WASHROOM IN ADDITION TO THE REGULAR FACILITIES REQUIRED IN GENERAL PUBLIC WASHROOMS ON THE MOST HEAVILY POPULATED PUBLIC FLOORS IS RECOMMENDED.</p>
INTERNAL ORGANIZATION
<p>CLEAR, WIDE, DEFINED CIRCULATION ROUTES SHALL FORM PART OF THE PLANNING. DEAD ENDS BECAUSE OF FURNITURE PLACEMENT MUST BE AVOIDED. ALL CIRCULATION ROUTES MUST BE WIDE ENOUGH FOR WHEELCHAIR ACCESS.</p>

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	NOTE 1 fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	NOTE 2 decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1 FIXED GANG SEATING SHALL NOT EXCEED SIX SEATS IN ONE GANG UNLESS THEY ARE BACK TO BACK, WHEN TWELVE SEATS ARE ALLOWED. 2 NO SIDE TABLES SHALL BE SUPPLIED. 3 <u>NO</u> ASHTRAYS TO BE PROVIDED. 4 ARTWORK FOR PUBLIC AREAS IS CHOSEN BY AN ART COMMITTEE AND SELECTED FROM THE GOVERNMENT ART SELECTION EXCEPT WHEN AN ART ALLOWANCE IS INCLUDED AND THE SELECTED ART WILL BE PURCHASED.

AREA
<p>COURTROOM AND MOTIONS ROOM WAITING AREAS</p> <p>1.0sm per seat (10.76sq ft) Circulation Space Additional</p>
CAPACITY
Empty space for capacity
INTERNAL ORGANIZATION
Empty space for internal organization

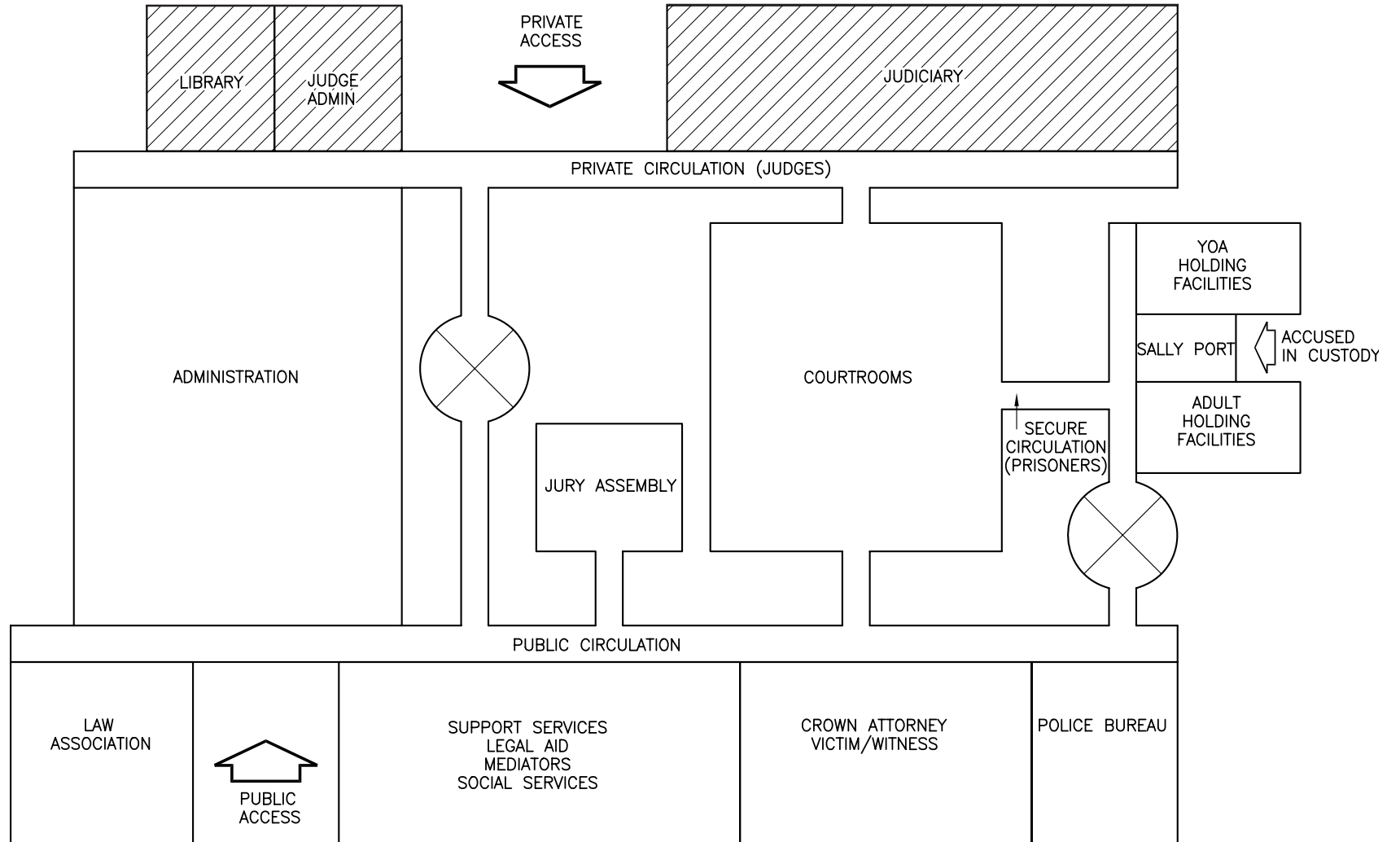
CHECKLIST	
FLOOR	NOTE 1 carpet vinyl ceramic
	NOTE 1 wood rubber special
CEILING	drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2 acoustic tile
WALLS	NOTE 3 drywall sheet
	NOTE 3 acoustic panels wood marble ceramic sheet vinyl spaint
DOORS	standard
	NOTE 4 fire rated secure NOTE 4 acoustic
WINDOWS	NOTE 5 sun control decorative drapes full drapes

NOTES ON FINISHES
<p>1. A HARD WEARING 28-OZ. CARPET OR LOW PROFILE PATTERNED RUBBER FLOORING SHALL BE USED. IF CARPET IS SELECTED, AREAS ADJACENT TO BUILDING ENTRANCES SHALL HAVE EITHER RUBBER SEAMLESS SHEET VINYL OR CERAMIC TILES WITH FOOT MATS FOR EASY CLEANING IN THE WINTER MONTHS. FOOT MATS SHALL BE ABSORBENT TYPE CAPABLE OF BEING FREQUENTLY CLEANED.</p> <p>2. AN ACOUSTIC TILE CEILING AS SPECIFIED IN SECTION Q SHALL BE INSTALLED.</p> <p>3. THE WALLS SHALL BE CONSTRUCTED WITH A HIGH RESISTANCE TO DAMAGE AT THE LOW LEVEL I.E. DAMAGE FROM FOOTWEAR. AT A HIGHER LEVEL, ACOUSTIC PANELS CAN BE INSTALLED. IF WALLS ARE EXPOSED BRICK, CARE MUST BE TAKEN TO REDUCE THE NOISE REFLECTION.</p> <p>4. DOOR TO EXIT, CORRIDORS, STAIRS ETC. TO MEET CODE REQUIREMENTS. DOOR TO ADJACENT SPACES SHALL BE SOLID CORE AND SOUND STRIPPED, AS SPECIFIED IN SECTION Q.</p> <p>5. IF WINDOWS ARE PLANNED FOR THE WAITING AREA, SUN CONTROL SHALL BE INSTALLED.</p> <p>NOTE: HANDRAILS TO MEZZANINE AREAS SHALL BE A MINIMUM OF 1.22m HIGH.</p>

AREA
<p>COURTROOM AND MOTIONS ROOM WAITING AREAS</p> <p>1.0sm per seat (10.76sq ft) Circulation Space Additional</p>
PROXIMITIES
Empty space for Proximities
INTERNAL ORGANIZATION
Empty space for Internal Organization

SECTION H

JUDGES' CHAMBERS AND RELATED AREAS



JUDGE'S OFFICE

31.5sm (339sq ft)

SUPERIOR COURT OF JUSTICE, ONTARIO COURT OF JUSTICE AND MASTERS

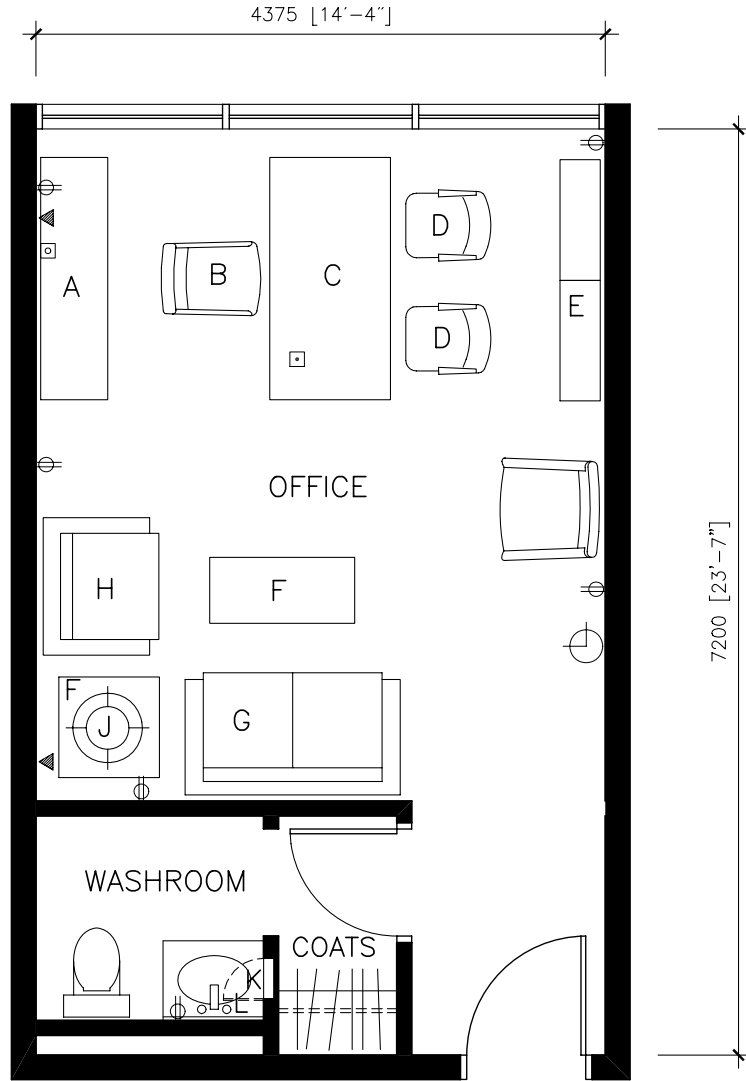


FIG. H2

A judge's office is always located in a private area with private access from the judges' entry to the judge's office and from the office to the courtroom.

The office shall have an en suite washroom with an area for changing and hanging clothes.

The office should be planned with a defined work area and a space for relaxation, discussion and meeting guests. In a court house where the judges' offices are located near the courtroom, there will be no requirement for judges' retiring rooms. See Section G, Standard Courtroom and Related Areas.

The washroom shall be fitted with a toilet and a vanity with a storage cupboard underneath. A mirror can be installed over the vanity combined with a small medicine cabinet. All washrooms should not be sized for barrier-free requirements but it is important to provide one or more as appropriate. The layout shown on Fig. H2 shows one solution only. The planning can be varied providing the square metre area is not increased or reduced and the relationships maintained.

The furniture layout shown in Fig. H2 is diagrammatic in the sense that it illustrates an acceptable plan and the furniture entitlement. The plan can be varied; personal items can be incorporated as requested by individual judges.

LEGEND

- A CREDENZA 457MM X 1828MM
- B HIGH BACK SWIVEL TILT DESK CHAIR
- C DESK 1828MM X 914MM
- D SIDE CHAIRS WITH ARMS - SLED OR LEGS
- E BOOKCASES
- F LOW TABLE - SQUARE, CIRCULAR, ELLIPTICAL
- G COUCH - CAN BE TWO- OR THREE-SEATER UNIT
- H COUCH/ARMCHAIR
- J TABLE LAMP
- K MEDICINE CABINET
- L MIRROR

- DURESS BUTTON
- ⊞ COMPUTER OUTLET
- ⊕ DUPLEX OUTLET
- ▲ TELEPHONE
- ⌚ CLOCK

FIG: H2



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	NOTE 2	dignified orderly friendly relaxing
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	*	built-in portable none
SERVICES	NOTE 8	water electricity telephone intercom special
SECURITY	NOTE 9	high medium low

NOTES
<p>1. THE JUDGES' OFFICES MUST BE LOCATED RELATIVE TO OTHER COURT HOUSE ELEMENTS THAT WILL ALLOW PRIVATE ACCESS ON ALL ROUTES OF TRAVEL TO AND FROM CAR PARK, COURTROOM, LIBRARY, LOUNGE AND SECRETARIES' AREA. THE PRIVATE CIRCULATION WILL ONLY BE USED BY JUDGES EXCEPT FOR AUTHORIZED STAFF AND SUPERVISED ACCESS BY JURIES TO AND FROM JURY ROOMS.</p>
<p>2. DEPENDING ON THE JUDGE, ONE OR ALL OF THE ALTERNATIVES ON THE CHECKLIST WILL BE THE END RESULT OF THE DESIGN. THE JUDGES WILL MEET THE PUBLIC IN THEIR OFFICES AND THEREFORE THE STATUS OF THE JUDGE MUST BE REFLECTED (DIGNIFIED). ON THE OTHER HAND, THE OFFICE IS A PLACE OF WORK (ORDERLY) AND REST FROM THE RIGOURS OF THE COURTROOM (RELAXING).</p>
<p>3. AS EACH JUDGE WILL WANT A FURNITURE LAYOUT TAILORED TO HIS/HER WORK PREFERENCES AND TASTE, INTERNAL FLEXIBILITY IS CERTAINLY DESIRABLE.</p>
<p>4. THE ABILITY TO SEE OUT WILL CONTRIBUTE TO THE REQUIREMENTS DESCRIBED IN NOTE 2. OFFICES WITH WINDOWS SHOULD NOT BE LOCATED ON THE GROUND FLOOR FOR SECURITY REASONS.</p>
<p>5. AS THE OFFICE IS A PLACE OF DEEP CONCENTRATION, JUDGES ARE VERY CONSCIOUS OF PROPER ILLUMINATION. THE LIGHTING SHOULD BE ZONED WITH NON-GLARE BUT ADEQUATE LIGHTING OVER THE DESK AND MORE SUBDUED LIGHTING IN THE RELAXATION AREA. UNUSUAL LIGHTING INSTALLATIONS SHOULD BE AVOIDED AS THE JUDGES OCCUPYING THE OFFICES CAN CHANGE. FLEXIBILITY IS MORE IMPORTANT. POT TYPE LIGHT FIXTURES CAN BE CONSIDERED IN THE LAYOUT.</p>
<p>6. A JUDGE'S OFFICE IS ALSO A STUDY WHERE S/HE READS TRIAL NOTES, RESEARCHES LEGAL MATTERS AND WRITES TRIAL SUMMARIES ETC. THEREFORE THE AMBIENT NOISE LEVEL SHOULD BE CONDUCIVE TO THESE FUNCTIONS.</p>
<p>7. JUDGES ARE SENSITIVE TO POOR ENVIRONMENTAL CONDITIONS. ALTHOUGH NORMAL CONTROL WOULD BE GENERALLY ACCEPTABLE, CARE MUST BE TAKEN TO ENSURE THE RELIABILITY AND ACCURACY OF THE SYSTEM. INDIVIDUAL OFFICE CONTROL IS DESIRABLE.</p>
<p>8. OTHER THAN THE SERVICES MARKED WITH AN ASTERISK, A DURESS BUTTON MUST BE LOCATED UNDER THE DESK. THIS WILL RING IN THE POLICE AREA AND COURT SERVICES MANAGER'S OFFICE.</p>
<p>9. LOCKING DEVICES ON DOORS IN THE CIRCULATION CORRIDORS, JUDGES' BUILDING ACCESS, CAR PARK AND INTERCOMMUNICATING DOORS WITH THE REMAINDER OF THE COURT HOUSE MUST BE SECURE TYPE, I.E. DEDICATED KEYING, BUTTON PAD, ELECTRIC ETC.</p>

AREA
<p>JUDGES' OFFICE</p> <p>31.5sm (339sq ft) SUPERIOR COURT OF JUSTICE, ONTARIO COURT OF JUSTICE AND MASTERS</p>
PROXIMITIES
<p>ADJACENT: DEDICATED CIRCULATION COURTROOMS JUDGES' LIBRARY/LOUNGE SECRETARIES</p>
INTERNAL ORGANIZATION
<p>OFFICE HAS SINGLE OCCUPANT WITH A GIVEN FURNITURE AND FURNISHINGS ENTITLEMENT WHICH TOGETHER WITH PRIVATELY OWNED ITEMS WILL BE PLANNED TO SUIT THE WORK PATTERN AND TASTE OF EACH JUDGE.</p>

CHECKLIST	
CHAIRS	* sled base side chairs tilt NOTE 1 swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 2 full size small
BOOKCASE	NOTE 3 full height low doors
SIDE TABLES	* decorative functional
DESK	plain single or double pedestal computer NOTE 4 executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	NOTE 5 plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. JUDGE'S CHAIR SHALL BE AN ERGONOMICALLY DESIGNED SWIVEL TILT HIGH-BACKED CHAIR. TWO SIDE CHAIRS WITH ARMS WILL ALSO BE SUPPLIED. THEY CAN BE EITHER SLED BASE OR LEGS.</p> <p>2. COUCH CAN BE TWO- OR THREE-SEATER COMPLEMENTED BY A MATCHING ARMCHAIR.</p> <p>3. BOOKCASES WILL VARY WITH EACH JUDGE. HOWEVER, THE COST SHOULD NOT EXCEED GOVERNMENT STANDARDS.</p> <p>4. 1828mm X 914mm DESK WITH OR WITHOUT PEDESTALS TO SUIT OCCUPANT. FIG. H2 SHOWS ONE LAYOUT. IF COMPUTER IS TO BE USED A SUITABLE DESK AND LAYOUT WILL HAVE TO BE DESIGNED OR SELECTED. ALTERNATIVELY A SEPARATE COMPUTER TABLE CAN BE ADDED IF REQUESTED.</p> <p>5. CREDENZA CAN BE FORMAL WITH END DRAWERS AND CENTRE CUPBOARDS OR OTHER CONFIGURATIONS TO SUIT THE JUDGE, WITHIN THE LIMITS OF GOVERNMENT STANDARDS.</p> <p>GENERAL NOTE: (a) TABLE LAMPS AND/OR A STANDARD LAMP FORM PART OF THE JUDGE'S FURNITURE ENTITLEMENT. (b) GOVERNMENT STANDARDS WITH A RESTRICTED SELECTION AND PRICE RANGE WILL CONTROL ALL PURCHASES OF JUDGES' FURNITURE.</p>

AREA
<p>JUDGES' OFFICE 31.5sm (339sq ft) SUPERIOR COURT OF JUSTICE, ONTARIO COURT OF JUSTICE AND MASTERS</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST	
FLOOR	NOTE 1 carpet vinyl ceramic wood rubber special
CEILING	drywall sheet drywall lathe & sprayed acoustic finish NOTE 2 painted acoustic tile
WALLS	* drywall sheet acoustic panels wood marble ceramic NOTE 3 sheet vinyl paint
DOORS	NOTE 4 standard fire rated secure * acoustic
WINDOWS	* sun control decorative drapes NOTE 5 full drapes

NOTES ON FINISHES
<p>1. 36-OZ. ENSURE CARPET IS SUITABLE FOR WHEELCHAIR MOVEMENT</p> <p>2. ALTHOUGH A PAINTED DRYWALL CEILING MAY GIVE A HIGHER QUALITY FINISH, AN ACOUSTIC CEILING MAY BE MORE DESIRABLE. HOWEVER, SOME LEEWAY IS GIVEN IN CHOICE PROVIDED THE ROOM IS DESIGNED IN ACCORDANCE WITH SECTION Q, I.E. NC 30. LAY-IN CEILING WILL GIVE GREATER FLEXIBILITY TO MOVE LIGHTS TO REFLECT FURNITURE LAYOUT.</p> <p>3. GENERALLY THE JUDGES' OFFICES IN NEW BUILDINGS WILL BE DRYWALL TAPED WALLS, VINYL COVERED WITH A GOOD QUALITY 15-OZ. VINYL. OTHER FINISHES ARE ACCEPTABLE WITHIN THE SAME PRICE RANGE AND DURABILITY. WALLS SHALL BE BUILT FROM FLOOR TO SLAB ABOVE. THE STC VALUE OF THE WALLS SHALL REFLECT THE REQUIREMENTS FOR QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q.</p> <p>4. WOOD, SOLID-CORE DOOR, LOCKABLE, SOUND STRIPPED ALL IN ACCORDANCE WITH SECTION Q.</p> <p>5. DEPENDING ON ORIENTATION OF THE ROOM, SUN CONTROL MAY BE REQUIRED. FULL DRAPES FORM PART OF THE FURNISHING ENTITLEMENT.</p>

AREA
<p align="center">JUDGES' OFFICE</p> <p align="center">31.5sm (339 sq ft) SUPERIOR COURT OF JUSTICE, ONTARIO COURT OF JUSTICE AND MASTERS</p>
PROXIMITIES
Empty space for Proximities
INTERNAL ORGANIZATION
Empty space for Internal Organization

JUDGES' BOARDROOM/LOUNGE AND RESEARCH LIBRARY

FIG. H3

In order to respect the requirement for separate identities for the two jurisdictions of the Court of Ontario, it will be necessary to provide boardroom/lounge facilities for the Superior Court of Justice as well as the Ontario Court of Justice. Each boardroom/lounge should then be combined with the judges' offices and support staff to form their respective suites with separate public entrances. A research library shall also be provided but it is to be a shared facility and located appropriately. The efficiency of planning one library for all judges will reduce the duplication of certain books and will assist in reducing assignable space to the judicial areas. It is recognized that within the boardroom/lounge area of their respective suites, additional shelving may be required at the perimeter walls for each division's limited collection of reference books. One or more computer connections should also be provided for future use.

The planning of the boardroom/lounge suite will also be dependent on the size of the court house or number of judges. In a small court house it may be more practical for both divisions to combine the boardroom/lounge with the library in one area as shown in Fig. H4. Separate public entrances to each division shall still be provided. In larger court houses separate rooms can be provided for each of the divisions. As shown in Fig. H3 within the suite a kitchenette equipped with a domestic refrigerator, conventional range c/w hood, double compartment sink, domestic dishwasher, microwave oven, and toaster shall be provided. The dishwasher shall only be installed where the kitchenette serves 10 or more full time judges on a regular basis. In the smaller court house the kitchenette requirements shall be appropriately reduced to suit the users' needs.

Since all the judges will use the provided spaces and to encourage collegiality, they should ideally be located on one floor. An exception to this arrangement will occur if the floor plate of the building is not large enough to accommodate all the judges' offices, the lounge, boardroom and shared research library. This situation could occur in a high-rise court house with a very large number of judges. In such instances, the Superior Court of Justice suite may be on a separate floor from the Ontario Court of Justice suite.

The sizes for the lounge and boardroom spaces shall be based on the following allocations:

- Boardroom - 2.3sm per person for first 10 persons plus 1.4sm for each additional person up to 20.
- Lounge - 2.0sm per person . As not all judges may wish to use the lounge at any one time, consultation with the judiciary will be required to establish the appropriate capacity.

The research library shall be a shared facility and the formula of 14sm per 1000 books plus reading/study space of 2sm per seat shall be used to determine its size. Computer outlets shall be provided in the library for future use when sections of the library could be stored in the computer memory. At that time, the memory could also be accessed from the judges' offices.

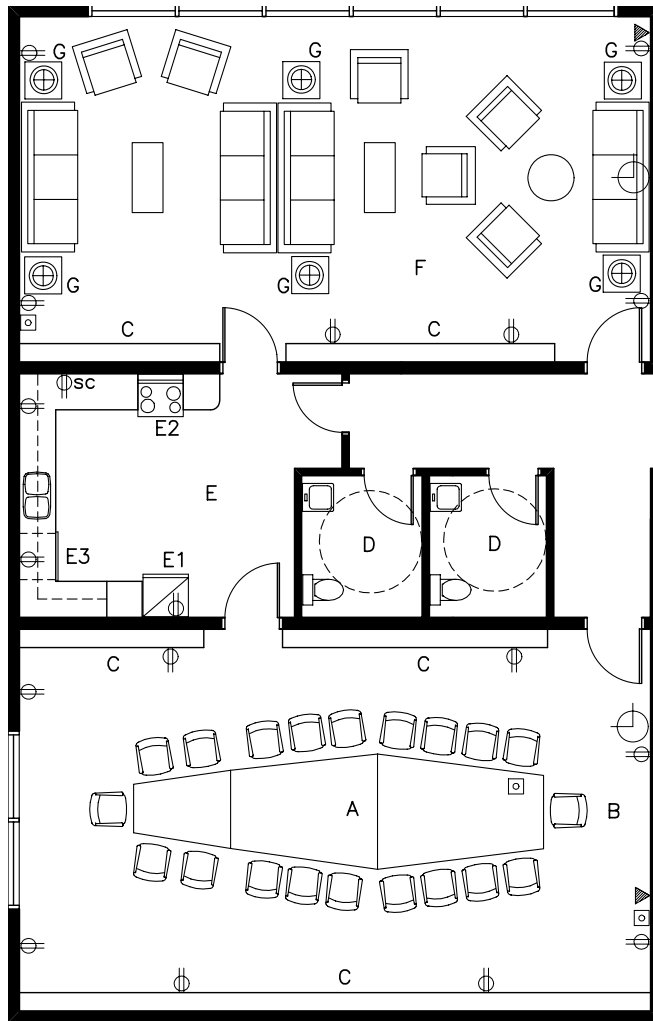
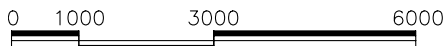





FIG: H3



JUDGES' BOARDROOM/LOUNGE AND RESEARCH LIBRARY

Fig. H3 shows a possible planning solution for a suite of separate rooms. Note that the kitchenette is located to serve both the lounge and the boardroom. Depending on the distance of the furthest judge's office from the shared areas, small washrooms may also be required to complete the suite.

LEGEND

A	BOARDROOM TABLE (in 3 sections)	E1	REFRIGERATOR
B	BOARDROOM	E2	STOVE
C	BOOKSHELVES	E3	DISHWASHER
D	BARRIER-FREE WASHROOMS	F	LOUNGE
E	KITCHENETTE	G	TABLE & STANDARD TABLE LAMPS
	DUPLEX OUTLET		DUPLEX SPLIT CIRCUIT
	COMPUTER OUTLET		CLOCK
	TELEPHONE		

JUDGES' BOARDROOM/LIBRARY COMBINED

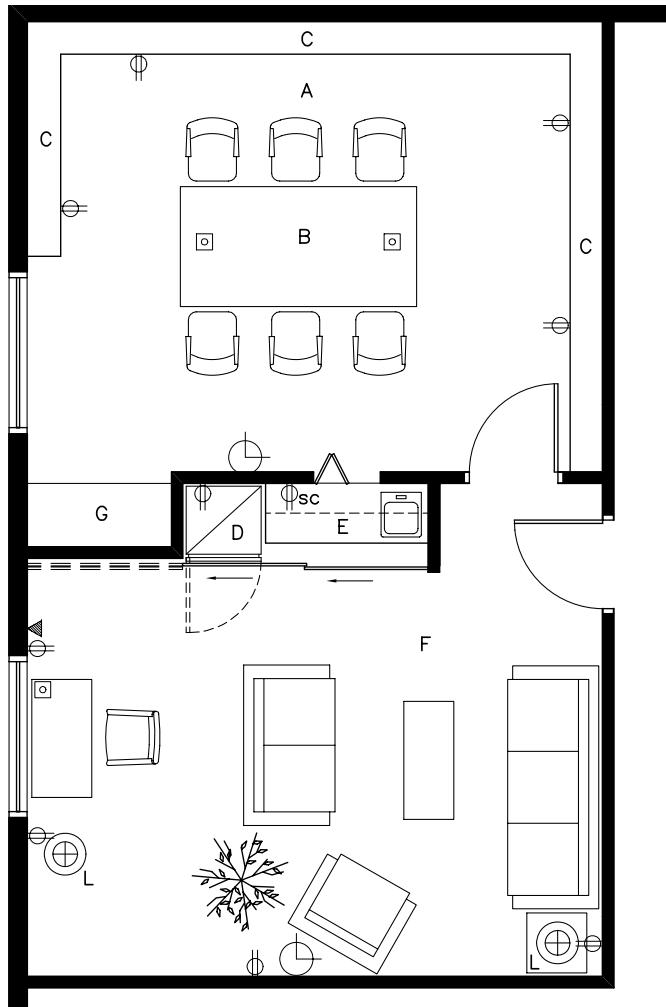


FIG. H4

Fig. H4 illustrates a simple planning solution to meet the needs of six judges. The boardroom is also the library which is separated from the lounge by a counter unit that serves both the boardroom/library and the lounge. Although the total space allocation cannot be changed, the configuration of the space can be altered to meet different requirements. For example it would be acceptable to combine the boardroom with the lounge and separate the library. A single open space would also be acceptable and in fact may be the only logical solution with only three judges.

LEGEND

- | | | | |
|-------------|---|-----------|-------------------------------------|
| A | LIBRARY | E | KITCHEN COUNTER WITH CUPBOARDS OVER |
| B | COMBINED BOARDROOM TABLE AND STUDY AREA | F | LOUNGE |
| C | BOOK SHELVES | G | TEA COUNTER IN LIBRARY/BOARDROOM |
| D | REFRIGERATOR | L | TABLE & FLOOR LAMPS |
| Φ | DUPLEX OUTLET | \square | COMPUTER JACK (ON FLOOR) |
| Φ_{sc} | DUPLEX SPLIT CIRCUIT | \odot | CLOCK |

FIG: H4



CHECKLIST

ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 1	high medium low
IMAGE	NOTE 2 NOTE 2 NOTE 2	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 3	important desirable optional none
ILLUMINATION	NOTE 4 NOTE 4	bright moderate subdued special
QUIETNESS	NOTE 5	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 6	high normal low
CEILING HEIGHT	NOTE 7	high normal low
STORAGE	NOTE 8	built-in portable none
SERVICES	NOTE 9 NOTE 9 NOTE 9 NOTE 9	water electricity telephone paging computer
SECURITY	NOTE 10	high medium low

NOTES

1. THIS AREA IS ON THE PRIVATE CIRCULATION AND SHOULD ONLY BE ACCESSED BY JUDGES AND DESIGNATED STAFF.
2. THE AREA HAS COMBINED USES THAT EMBRACE STUDY, BUSINESS AND RELAXATION. THE LIBRARY AND BOARDROOM, WHETHER INDIVIDUAL ROOMS OR COMBINED, SHOULD BE ORDERLY, AND HAVE A DEGREE OF DIGNITY. THE LOUNGE, ON THE OTHER HAND, SHOULD BE RELAXING BUT STILL HAVE A SENSE OF ORDER. IN SMALL COURT HOUSES WHERE THE AREAS ARE COMBINED IN ONE ROOM, THE IMAGE MUST BE ORDERLY AND RELAXING.
3. IT IS NOT ABSOLUTELY NECESSARY TO HAVE WINDOWS IN THE LIBRARY OR BOARDROOM. HOWEVER, IF LOCATED ON AN EXTERNAL WALL WITH ENOUGH LENGTH OF WALL AFTER ACCOMMODATING THE BOOKCASES, WINDOWS SHOULD BE INSTALLED. THE LOUNGE SHOULD HAVE WINDOWS. VIEWING IS PART OF THE REQUIRED RELAXATION ESPECIALLY AFTER SPENDING MANY HOURS IN A WINDOWLESS COURTROOM.
4. AS STATED ABOVE THE USE OF THE THREE SPACES DIFFER AND THIS SHOULD BE REFLECTED IN THE ILLUMINATION. THE BOARDROOM SHOULD HAVE A SPECIAL GLARE-FREE FIXTURE DESIGNED OVER THE BOARDROOM TABLE. THE LIBRARY SHOULD HAVE SHIELDED TUBE LIGHTING AT THE TOP OF THE SHELVING WHILE THE STUDY AREA SHOULD HAVE TOP LIGHTING WITH PARABOLIC LENSES. THE LOUNGE SHOULD BE LIT WITH TABLE AND STANDARD FLOOR LAMPS WITH SHIELDED CEILING LIGHTS WHEN REQUIRED. COMBINED AREAS WILL REQUIRE IMAGINATIVE LIGHTING SOLUTIONS BUT THE PRINCIPLES OUTLINED SHOULD BE ADHERED TO.
5. THE ROOMS SHOULD BE DESIGNED WITH SOUND ABSORBING FINISHES IN SUFFICIENT AREA TO REDUCE REVERBERATION. THE WALLS MUST HAVE AN STC LEVEL, AS DESIGNED IN SECTION Q, WHERE THEY SEPARATE OTHER ROOMS OR CORRIDORS.
6. AN ACCURATE MEANS OF CONTROLLING THE TEMPERATURE AND AIR QUALITY IS ESSENTIAL. THE KITCHENETTE SHALL BE EQUIPPED WITH AN APPROPRIATE EXHAUST FAN FOR VENTILATION OF ODOURS.
7. THE ROOMS ARE RELATIVELY LARGE AND SHOULD HAVE A MINIMUM HEIGHT OF 2743mm.
8. FULL HEIGHT BOOKCASES SHALL BE INSTALLED IN THE RESEARCH LIBRARY AND A SUFFICIENT AMOUNT TO ACCOMMODATE REFERENCE MATERIAL IN THE LOUNGE AND BOARDROOM. A COUNTER WITH SINK AND CUPBOARD BOTH UNDER THE COUNTER AND ABOVE SHALL BE PROVIDED IN THE KITCHENETTE.
9. WATER (HOT AND COLD), LIGHTING, ELECTRICAL POWER AND TELEPHONE JACKS SHALL BE INSTALLED. PAGING WITH VOLUME CONTROL SHALL BE INSTALLED TOGETHER WITH DURESS BUTTONS IN THE BOARDROOM AND LIBRARY.
10. SECURITY SHALL BE THE SAME LEVEL AS JUDGES' OFFICES.

AREA**JUDGES' BOARDROOM/LIBRARY COMBINED**

BOARDROOM	- 2.3sm PER PERSON FOR FIRST 10 + 1.4sm PER EACH ADDITIONAL PERSON
LOUNGE	- 2sm PER PERSON
LIBRARY	- 14sm PER 1000 BOOKS PLUS 2sm PER STUDY SEAT

PROXIMITIES

ON PRIVATE CIRCULATION

INTERNAL ORGANIZATION

SEE NOTES ON ALTERNATIVES AND FIGS. H3 AND H4.

CHECKLIST

CHAIRS		sled base side chairs tilt
	NOTE 1	swivel/tilt
TABLES	NOTE 2	movable standard
	NOTE 2	special
FITMENTS	NOTE 3	modular movable
	NOTE 3	fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 4	full size small
BOOKCASE	NOTE 5	full height low doors
SIDE TABLES	NOTE 6	decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers
LAMPS	NOTE 7	table
	NOTE 7	floor

FURNISHINGS & EQUIPMENT

- CHAIRS FOR THE BOARDROOM AND LIBRARY SHALL BE SWIVEL TILT.
 - STUDY TABLES SHALL BE 1829mm X 1066mm WITHOUT SKIRTS OR PEDESTALS. THE BOARDROOM TABLE WILL BE EITHER A STANDARD TABLE OR A SPECIALLY DESIGNED TABLE DEPENDING ON THE SIZE. IF LARGE IT SHOULD BE SECTIONAL WITH SECURE DEVICES FOR LOCKING THE SECTIONS TOGETHER.
 - SEE NOTE 8 ON PREVIOUS PAGE.
 - THE LOUNGE SHALL BE FURNISHED WITH COUCHES AND ARM CHAIRS.
 - FULL HEIGHT LIBRARY SHELVING (SEVEN SHELVES HIGH) SHALL BE INSTALLED IN THE LIBRARY TO ACCOMMODATE THE NECESSARY REFERENCE MATERIAL. THE LOUNGE AND BOARDROOM MAY ALSO BE PROVIDED WITH BOOK CASES AT THE PERIMETER WALLS.
 - PROVIDE SIDE TABLES TO 60% OF COUCHES AND 3'0" DIAMETER TABLES TO GROUPING. COFFEE TABLE SHALL ALSO BE PROVIDED AS REQUIRED TO COMPLEMENT ARRANGEMENT OF COUCHES.
 - TABLE AND FLOOR LAMPS SHALL BE PROVIDED AS READING ILLUMINATION AND TO COMPLEMENT GENERAL LIGHTING.
- NOTE:**
 QUANTITIES OF FURNITURE WILL VARY WITH THE SIZE OF THE FACILITY.

AREA

JUDGES' BOARDROOM/LIBRARY COMBINED

BOARDROOM	- 2.3sm PER PERSON FOR FIRST 10 + 1.4sm PER EACH ADDITIONAL PERSON
LOUNGE	- 2sm PER PERSON
LIBRARY	- 14sm PER 1000 BOOKS PLUS 2sm PER STUDY SEAT

CAPACITY

INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 2	drywall sheet drywall lathe & sprayed acoustic finish painted acoustic tile
	NOTE 3	drywall sheet
	NOTE 3	acoustic panels
CEILING	NOTE 3	wood marble ceramic sheet vinyl paint
	NOTE 3	sheet vinyl paint
	NOTE 4	standard fire rated secure acoustic
WALLS	NOTE 5	sun control decorative drapes full drapes
DOORS	NOTE 5	full drapes
WINDOWS		

NOTES ON FINISHES

1. 32-OZ. CARPET. ENSURE CARPET SELECTED SUITABLE FOR WHEELCHAIR MOVEMENT.
2. THE ARCHITECT MAY SELECT AN APPROPRIATE CEILING WHILE KEEPING IN MIND THE SPECIAL LIGHTING REQUIREMENTS, ACCESS AND THE QUALITY OF THE SPACE.
3. THE WALLS SHOULD BE SUFFICIENTLY SOUND ABSORBING TO AVOID REVERBERATION. WOOD FINISH CAN BE USED AS ACCENT AREAS BUT VINYL WALL COVERING IS ACCEPTABLE. AN APPROPRIATE STC LEVEL SHALL BE ACHIEVED IN ALL WALLS SEPARATING THE SUITES FROM CIRCULATION AREAS, AS SPECIFIED IN SECTION Q.
4. STANDARD SOLID CORE WOOD DOORS SHOULD BE INSTALLED WITH SOUND STRIPPING ON MAIN ENTRY DOOR TO THE AREA, AS SPECIFIED IN SECTION Q.
5. WINDOWS SHALL HAVE FULL DRAPES AND SUN CONTROL IF FACING SOUTH OR WEST.

AREA

JUDGES' BOARDROOM/LIBRARY COMBINED

BOARDROOM - 2.3sm PER PERSON FOR FIRST 10
 + 1.4sm PER EACH ADDITIONAL PERSON

LOUNGE - 2.0sm PER PERSON

LIBRARY - 14.0sm PER 1000 BOOKS PLUS 2sm PER STUDY SEAT

PROXIMITIES

INTERNAL ORGANIZATION

JUDGES' SECRETARIAL STAFF

SECRETARY	- 7.0sm (75.3sq ft)
WAITING AREA	- 0.50sm/SEAT (5.38sq ft)
FILING	- 0.50sm/FILING CABINET (5.38sq ft)

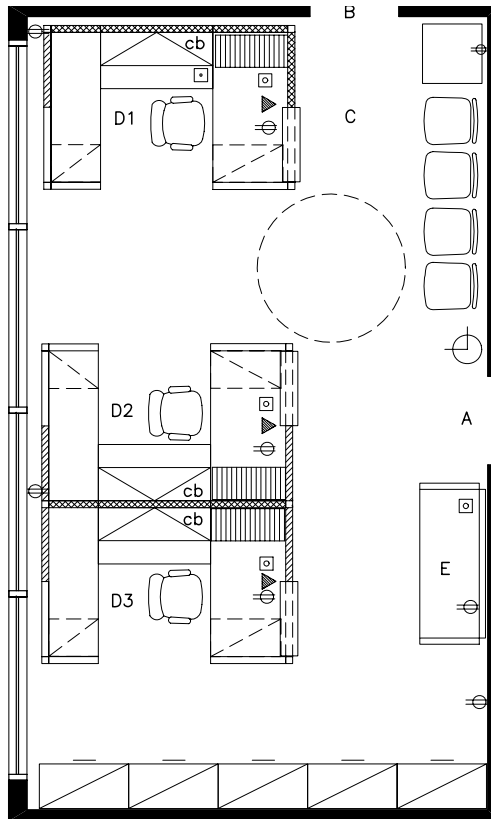


FIG. H5

In order to preserve the independence of the courts, the reception/waiting area and the support staff for the two divisions of the judiciary shall be kept separate.

The area of this space is dependent on the number of judges and whether there should be a separate waiting area. In a large court house the waiting area should be separate. Fig. H5 shows a possible solution for eight to nine judges with a space allowance as follows:

JUDGES' SECRETARIES	3 @ 7.0 sm each	21.0sm
UNSTAFFED WORK STATION	1 @ 5.0 sm each	5.0sm
FILING CABINETS	5 @ .50sm each	2.5sm
WAITING AREA	4 @ .50sm each	2.0sm

Total: 30.5sm

Fig. H5 illustrates a very economical but acceptable plan where the circulation has been included in the floor area. Using the example given here, the total space allocation of 30.5sm can be increased by 30% to arrive at the usable square metres of 39.7. The area of the room is 8.15m x 4.8m = 38.9sm which falls within the acceptable area of 39.7sm.

Fig. H5 shows one secretary for three judges and this is the present ratio for the Superior Court of Justice judges. For the Ontario Court of Justice, the ratio is one secretary for every five judges.

The planning arrangement shown is to illustrate the principles of the planning requirement only. The screen and furniture system is proprietary. Other manufacturers' systems will alter the space requirements slightly.

FIG: H5



LEGEND

	64" high screen		49" high screen
	42" high screen		closed overhead file cabinet with task light
	paper organizer		file cabinet

Note: Services shown for D1 will also be installed for D2 & D3

LEGEND

A	PUBLIC ENTRANCE	B	ENTRANCE TO JUDGES' OFFICES
C	WAITING AREA	D	SECRETARIAL WORK STATION
E	UNMANNED WORK STATION		
	DUPLEX OUTLET		TELEPHONE
	COMPUTER JACK		DURESS BUTTON
	CLOCK		

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 4	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 8	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 9	built-in room none
SERVICES	NOTE 10 NOTE 10 NOTE 10	water electricity telephone intercom special
SECURITY	NOTE 11	high medium low

NOTES
1. THE JUDGES' SECRETARIAL AREA SHOULD BE LOCATED AS A BUFFER BETWEEN AN ACCESS CORRIDOR OR WAITING AREA USED BY THE PUBLIC AND THE PRIVATE CIRCULATION USED BY THE JUDGES.
2. THE TRAFFIC IN A SMALL- OR MEDIUM-SIZED COURT HOUSE IS RELATIVELY LOW. HOWEVER, IN A LARGE COURT HOUSE WITH NUMEROUS JUDGES, THE LEVEL OF TRAFFIC COULD BE RAISED TO MEDIUM.
3. THE IMAGE PRESENTED TO THE VISITING PUBLIC SHOULD BE ONE OF DIGNITY AND ORDER BUT THE ENVIRONMENT FOR THE SECRETARIES MUST ALSO BE CONSIDERED. THEREFORE A DEGREE OF FRIENDLINESS CAN BE INTRODUCED THROUGH THE INTERIOR DESIGN.
4. THE INTERNAL FLEXIBILITY IS OBTAINED BY THE USE OF A FURNITURE SCREEN SYSTEM WHICH IS INTERNALLY WIRED WITH AN ELECTRICAL PICK-UP FROM THE PERIMETER OF THE ROOM.
5. EVERY EFFORT SHOULD BE MADE TO ENSURE A VIEW OUT FOR THE OCCUPANTS OF THIS AREA.
6. AN OVERALL LIGHTING SCHEME MUST BE DESIGNED TO COMPLEMENT THE FLEXIBILITY OF THE AREA. HOWEVER, THE LIGHTING SHOULD HAVE A HIGH VCL ENSURING THE ELIMINATION OF GLARE. THE GENERAL LIGHTING LEVEL SHOULD BE REINFORCED BY TASK LIGHTING IN THE SCREEN SYSTEM.
7. THE AREA SHOULD BE PROTECTED FROM THE INTRUSION OF NOISE FROM ADJOINING AREAS AND, AS CONVERSATIONS CAN TAKE PLACE BETWEEN JUDGES AND SECRETARIES, THE SPACE SHOULD BE PROTECTED FROM OVERHEARING. AN NC LEVEL SPECIFIED IN SECTION Q MUST BE ACHIEVED. THE USE OF CIRCULATION SPACES TO BUFFER SOUND FROM PUBLIC AREAS SHOULD BE CONSIDERED.
8. THE ABILITY TO MAINTAIN AN APPROPRIATE LEVEL OF HEATING OR COOLING TOGETHER WITH AN ACCEPTABLE NUMBER OF AIR CHANGES IS IMPORTANT.
9. ADJACENT TO THE SECRETARIES' AREA PROVIDE A PHOTOCOPY ROOM WITH BUILT-IN LOCKABLE CUPBOARDS TO STORE STATIONERY AND SUPPLIES. IN A LARGE COURT HOUSE THE STORAGE OF SUPPLIES SHOULD BE IN A SEPARATE ROOM ADJACENT TO THE PHOTOCOPY ROOM WITH A LOCKABLE CONNECTING DOOR.
10. ELECTRICAL POWER, TELEPHONE AND COMPUTER JACKS ARE REQUIRED IN THIS AREA. DURESS BUTTONS ARE ALSO TO BE INSTALLED AS THIS IS THE PUBLIC ENTRY TO THE JUDGES' AREA.
11. SECURITY IS HIGH FOR THE REASON STATED IN NOTE 10 ABOVE. SECURE DOOR LOCKING. REMOTE DOOR RELEASE AND INTERCOM ARE REQUIRED. ONE-WAY VIEWING PANEL SHOULD BE INSTALLED.

AREA
JUDGES' SECRETARIAL STAFF
7.0sm (75.3sq ft) PER SECRETARY PLUS ALLOWANCES FOR FILING, STORAGE AND WAITING
PROXIMITIES
DIRECT ENTRANCE TO JUDGES' CORRIDOR, I.E. PRIVATE CIRCULATION ACCESSED BY CORRIDOR OR SOUND BARRIER LOBBY FROM PUBLIC AREA.
INTERNAL ORGANIZATION
EFFICIENT OFFICE LAYOUT

CHECKLIST

CHAIRS		sled base side chairs
	NOTE 1	secretarial swivel/tilt
TABLES		movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES		decorative functional
	NOTE 2	
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers
SYSTEM FURNITURE		total system screens only
	NOTE 3	

FURNISHINGS & EQUIPMENT

1. INSTALL ADJUSTABLE ARMRESTS ERGONOMIC FIVE-LEG SWIVEL STENO CHAIRS WITH ADJUSTABLE SEAT HEIGHT AND BACK. THE SEATING FOR PERSONS WAITING SHALL BE UPHOLSTERED SIDE CHAIRS WITH WOOD ARMS.
2. SMALL SIDE TABLE CAPABLE OF ACCOMMODATING MAGAZINES SHALL BE INSTALLED IN THE WAITING SECTION.
3. THE FURNITURE SHALL BE A TOTAL SYSTEM ACCEPTABLE TO PURCHASING AT THE TIME OF ORDERING. SYSTEM SHALL CONSIST OF SCREENS, WORK TOP STORAGE CUPBOARDS, ORGANIZERS, PEDESTALS ETC. TO CREATE A TOTAL WORKING AREA.

AREA

JUDGES' SECRETARIAL STAFF

7.0sm (75.3sq ft)
 PER SECRETARY
 PLUS ALLOWANCES FOR FILING, STORAGE AND WAITING

CAPACITY

INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 2	acoustic tile
CEILING		gyproc sheet gyproc lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	gyproc sheet
	NOTE 3	acoustic panels wood marble ceramic sheet vinyl spaint
DOORS	NOTE 4	standard fire rated
	NOTE 4	secure
	NOTE 4	acoustic
WINDOWS	NOTE 5	sun control
	NOTE 5	decorative drapes full drapes

NOTES ON FINISHES

- 28-OZ. CARPET SHALL BE INSTALLED.
- ACOUSTIC TILE IS THE PREFERRED CEILING FINISH, HOWEVER, THE PATTERNS OF CEILING CAN BE UPGRADED IN THIS AREA.
- THE STC VALUE OF THE WALLS SHALL REFLECT THE REQUIREMENTS FOR QUIETNESS OUTLINED IN THIS SECTION AND DESCRIBED IN SECTION Q. THE WALL SHALL BE FINISHED WITH VINYL SHEET TO REDUCE MAINTENANCE. HOWEVER THE NC LEVEL OF THE ROOM MUST CONFORM TO SECTION Q.
- DOORS TO BOTH PUBLIC AND PRIVATE AREAS SHALL BE SOLID CORE, SOUND STRIPPED IN ACCORDANCE WITH SECTION Q, WITH BUTTON PAD LOCKING (CODE TO BE FREQUENTLY CHANGED). LOCKS SHALL HAVE A KEY OVERRIDE. IF SOUND LOBBY IS USED AS A SEPARATION DEVICE AT PUBLIC ENTRANCE THE SOUND STRIPPING CAN BE OMITTED.
- SUN CONTROL SHALL BE INSTALLED ON WINDOWS WITH DECORATIVE SIDE DRAPES.

AREA

JUDGES' SECRETARIAL STAFF

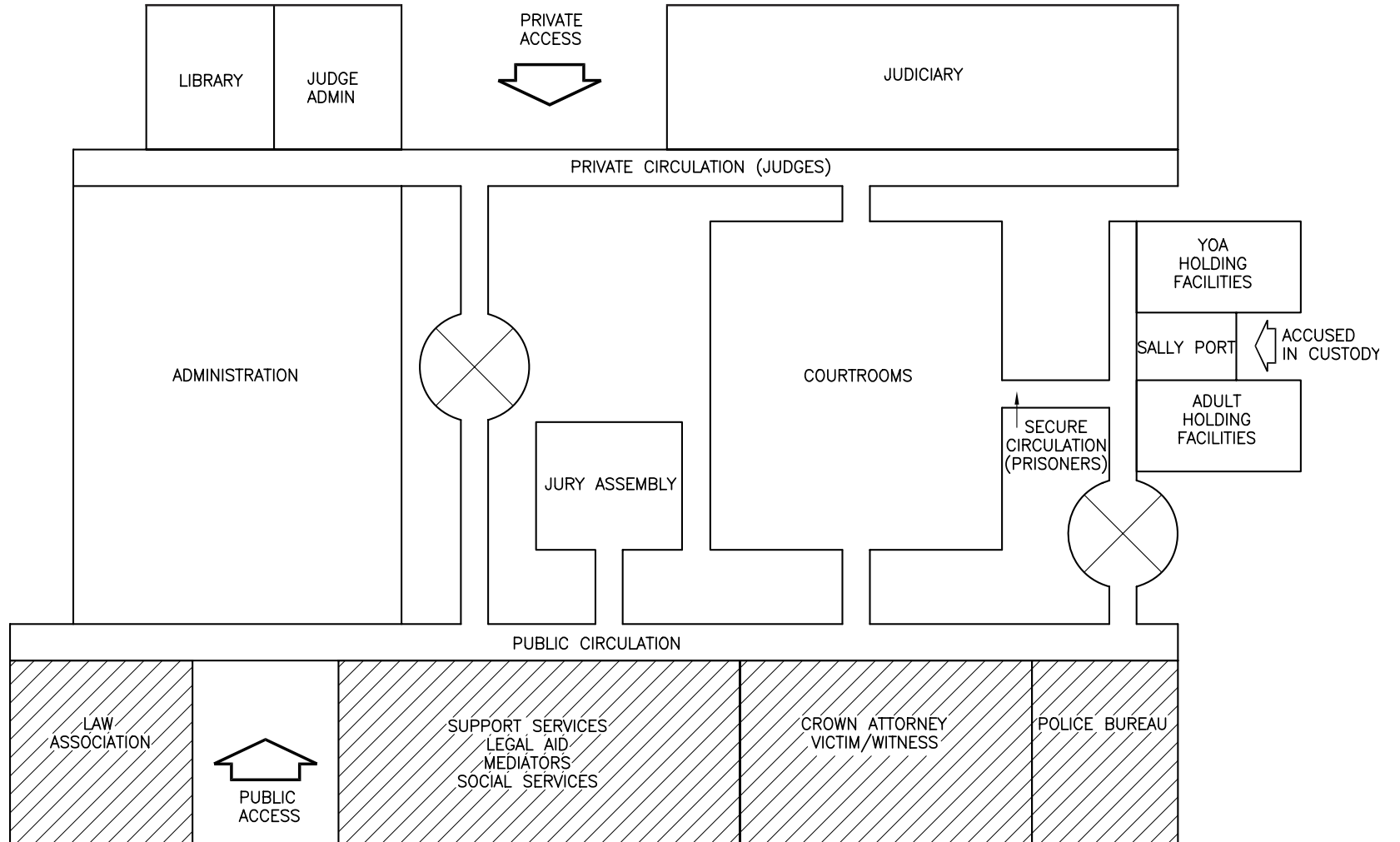
7.0sm (75.3sq ft)
 PER SECRETARY
 PLUS ALLOWANCES FOR FILING, STORAGE AND WAITING

PROXIMITIES

INTERNAL ORGANIZATION

SECTION I

LAW ASSOCIATION, CROWN ATTORNEY AND SUPPORT AREAS



LAW ASSOCIATION - LIBRARY & LOUNGE

LIBRARY	-14sm PER 1000 BOOKS (150.7sq ft) PLUS 2.0sm PER STUDY SEAT (21.5sq ft)
LOUNGE	- 2.0sm PER PERSON (21.5sq ft)

ft)

FIG. I 2

Law libraries and lounges will vary in size dependent on the size of the court house, the number of books and whether the number of books justifies a full-time or part-time librarian. The formula to be used in calculating the required space is as follows.

Library:

14sm per 1000 books plus study seating at 2.0sm per study seat. The librarian's space, if required, is to be 10.0sm.

The library is not meant to be an archive for historical books as they should be located elsewhere. Library space is to be used as a working library. With increased computerization and usage of legal databases, library space will be continually reduced and the need for data outlets in the library will increase.

Lounge:

The size of the lounge shall be calculated by allowing 2sm per lawyer for 50% of the anticipated number of lawyers appearing in court at any one time (allow 2 per courtroom including motions room) plus an additional 25% to accommodate other situations and overlap).

Fig. I 2 is a plan of 82.0sm for a library and lounge (with a part-time librarian) for a law association requiring space for 1500 books and lounge seating for 18 members.

1500 BOOKS REQUIRES	21.0sm
SEATING - 8 MEMBERS @ 2.0sm PER MEMBER	16.0sm
SPACE FOR LIBRARIAN	<u>10.0sm</u>
TOTAL SPACE FOR LIBRARY	47.0sm
LOUNGE - 2.0sm FOR 18 MEMBERS	<u>36.0sm</u>
	83.0sm

Note: the space calculation formula given above assumes inclusion of all lawyer associations in the particular town, city or area in which the court house is located.

LEGEND

A LIBRARY	G ACCESS CORRIDOR	M INDEX CABINETS
B STUDY TABLE	H COMMUNICATING DOOR (LOCAL DIALLING)	▲ TELEPHONE
C BOOKCASES (7 SHELVES HIGH)	I DOOR TO ROBING ROOMS & WASHROOMS	□ COMPUTER OUTLET (NOT MAG COMPUTER)
D WINDOW SEAT	J ROBING ROOMS (SEE FIG. I3)	⊕ CLOCK
E LOUNGE	K LIBRARIAN	
F ENTRANCES	L FLOOR & TABLE LAMPS	

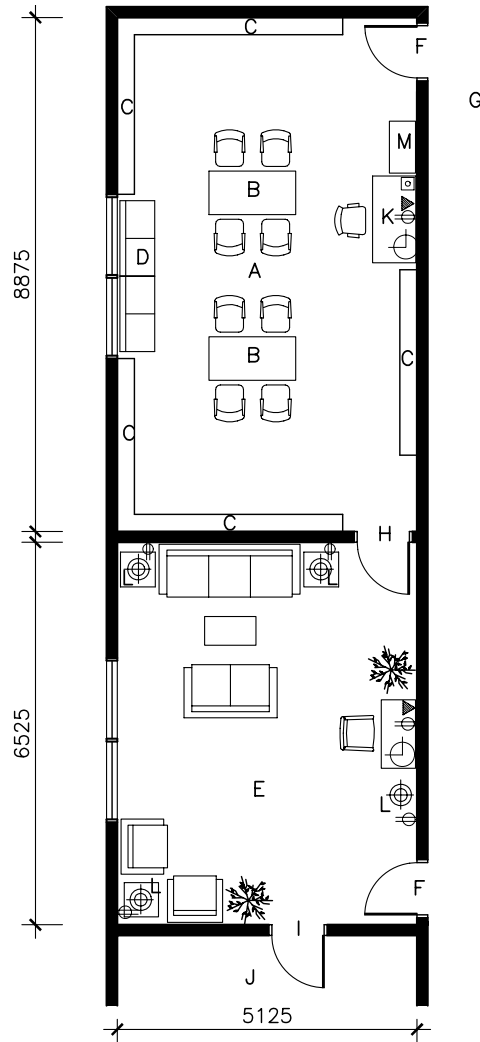


FIG: I 2

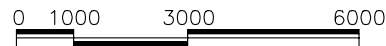


Fig. I 2 illustrates a possible planning solution. However, the dimensions can be varied to meet the requirements of the total plan provided the area calculations are not increased.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold
	NOTE 3	relaxing
FUNCTIONAL ADAPTABILITY		important desirable unimportant
	NOTE 4	
INTERNAL FLEXIBILITY		important desirable unimportant
	*	
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright
	NOTE 6	moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL		high normal low
	*	
CEILING HEIGHT	NOTE 8	high normal low
STORAGE		built-in portale none
	NOTE 9	
SERVICES	NOTE 10	water
	NOTE 10	electricity
	NOTE 10	telephone intercom
	NOTE 10	special
SECURITY	NOTE 11	high medium low

NOTES
<p>1. THE LOCATION OF THE LAW ASSOCIATION SUITE AS SHOWN ON FIGS. I 2 AND I 3 SHOULD BE DETERMINED BY THE NEED FOR AFTER-HOURS ACCESS WITHOUT ACCESS TO THE REMAINDER OF THE COURT HOUSE. THE SUITE CAN BE ACCESSED FROM A PUBLIC CIRCULATION, PREFERABLY FROM A MAIN ENTRANCE OR A PRIVATE ENTRANCE.</p> <p>2. TRAFFIC WILL DEPEND ON THE NUMBER OF COURTROOMS IN USE AND TO SOME EXTENT, ON MEMBERSHIP, BUT IT IS EXPECTED THAT THE USE OF THE LIBRARY WILL CONTINUE TO EXPAND. IT IS USED BY ALL MEMBERS, NOT JUST THOSE APPEARING IN COURT ON ANY GIVEN DAY.</p> <p>3. THE LIBRARY AND LOUNGE ARE AREAS FOR RESEARCH, STUDY AND RELAXATION AND SHOULD REFLECT THESE PURSUITS WHILE MAINTAINING AN ORDERLY APPEARANCE.</p> <p>4. IT IS DOUBTFUL THAT THE SPACE FOR THE LAW ASSOCIATION WILL BE USED FOR OTHER PURPOSES. IT IS POSSIBLE THAT DUE TO FUTURE COMPUTERIZATION THE LIBRARY MAY BE REDUCED IN SIZE.</p> <p>5. LOCATING THE SUITE ON AN EXTERNAL WALL WILL ALLOW NATURAL LIGHT AND A VIEW. THE ROBINING ROOMS SHOWN AS AREA J IN FIG. I 2 COULD BE LOCATED ON THE OPPOSITE SIDE OF CORRIDOR G SO THEY DO NOT USE UP EXTERNAL WALL SPACE.</p> <p>6. THE LIBRARY AND LOUNGE REQUIRE DIFFERENT LIGHTING. THE LIBRARY LIGHTING SHOULD BE GOOD WITH A HIGH VCL, NON GLARE WITH STACK LIGHTING ALLOWING FOR EASY READING OF BOOK TITLES. THE LOUNGE SHOULD HAVE ZONE LIGHTING, I.E. AREA LIGHTING WITH NON-GLARE LENSES AND/OR COVE LIGHTING COMPLEMENTED BY A FEW TABLE AND FLOOR LAMPS. POT LIGHTING SHOULD BE AVOIDED.</p> <p>7. THE LIBRARY, A PLACE OF STUDY AND RESEARCH, MUST BE PROTECTED FROM NOISE PENETRATING THE SPACE. THE LOUNGE IS A SPACE FOR RELAXATION AND DISCUSSION THAT COULD BE CONFIDENTIAL. PRECAUTIONS SHOULD THEREFORE BE TAKEN TO PREVENT OVERHEARING ON THE OUTSIDE OF THE SUITE.</p> <p>8. THE HEIGHT OF THE ROOMS SHOULD BE IN PROPORTION TO THEIR SIZE. THE MINIMUM HEIGHT SHALL BE 2590mm.</p> <p>9. STORAGE WILL BE IN FILING CABINETS, ETC.</p> <p>10. ELECTRICAL POWER, TELEPHONE AND COMPUTER JACK SHALL BE PROVIDED. THE TELEPHONE SHALL BE PAID FOR BY THE LAW ASSOCIATION AND SHALL HAVE A RESTRICTED DIALLING DISTANCE (LOCAL CALLS ONLY). THE COMPUTER JACK WILL NOT ACCESS THE COURT HOUSE COMPUTER, BUT COULD ACCESS FUTURE LIBRARY COMPUTERIZATION.</p> <p>11. SECURITY IS MEDIUM ONLY AND IS LARGELY TO PREVENT THEFT. THERE DOES NOT APPEAR TO BE A NEED FOR SECURITY AGAINST PHYSICAL INJURY.</p>

AREA
<p>LAW ASSOCIATION - LIBRARY & LOUNGE</p> <p>VARIES DEPENDENT ON SIZE OF COURT HOUSE AND NUMBER OF BOOKS.</p> <p>LIBRARY - 14sm PER 1000 BOOKS (150.7sq ft) PLUS 2.0sm PER STUDY SEAT (21.5sq ft) LOUNGE - 2.0sm PER PERSON (21.5sq ft)</p>
PROXIMITIES
<p>SEE NOTE 1</p>
INTERNAL ORGANIZATION
<p>SHOULD BE PLANNED AS A SELF-CONTAINED SUITE (INCLUDING ROBINING ROOMS, SEE FIG. I 3), WITH PROTECTED ACCESS I.E. BUTTON KEY PADS.</p>

CHECKLIST	
CHAIRS	sled base side chairs secretarial swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers
LAMPS	table floor

FURNISHINGS & EQUIPMENT

NOTE: OTHER THAN FOR BUILT-IN ITEMS WHICH FORM PART OF THE CONSTRUCTION CONTRACT, FURNITURE AND FURNISHINGS WILL BE THE RESPONSIBILITY OF THE LAW ASSOCIATION.

AREA

LAW ASSOCIATION - LIBRARY & LOUNGE

VARIES DEPENDENT ON SIZE OF COURT HOUSE AND NUMBER OF BOOKS.

LIBRARY - 14sm PER 1000 BOOKS (150.7sq ft)
PLUS 2.0sm PER STUDY SEAT (21.5sq ft)

LOUNGE - 2.0sm PER PERSON (21.5sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING	NOTE 2	drywall sheet drywall lathe & sprayed acoustic finish painted NOTE 2 acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood
	NOTE 3	masonry ceramic
	NOTE 3	sheet vinyl paint
DOORS		standard fire rated
	NOTE 4	secure
	NOTE 4	acoustic
WINDOWS	*	sun control decorative drapes full drapes

NOTES ON FINISHES

1. CARPET SHALL BE 28-OZ. ENSURE CARPET SELECTED ALLOWS FOR WHEELCHAIR MOBILITY.
2. EITHER DRYWALL WITH SPRAYED ACOUSTIC FINISH, OR UPGRADED LAY-IN TILE CAN BE USED, BUT IF THE FORMER IS USED, SPECIAL ATTENTION MUST BE GIVEN TO ACCESS FOR HVAC ADJUSTMENTS, REPAIRS ETC.
3. INTERNAL WALLS CAN BE DRYWALL SHEET ON METAL STUD OR MASONRY WALLS. STUD WALLS SHALL BE BUILT TO AN STC VALUE TO REFLECT THE REQUIREMENTS OF QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q. MASONRY WALLS SHALL BE PLASTERED OR DRYWALL FINISHED. EXTERNAL WALLS SHALL BE FINISHED WITH PLASTER OR DRYWALL. ALL WALLS SHALL BE FINISHED WITH VINYL WALL COVERING. MORE EXPENSIVE MATERIALS SUCH AS WOOD ETC. CAN BE USED IN SMALL AREAS IF REQUIRED BY THE INTERIOR DESIGNER TO ENHANCE THE INTERIOR DESIGN.
4. WOOD DOORS, SOUND STRIPPED IN ACCORDANCE WITH SECTION Q, WITH SECURE PUSH BUTTON PAD LOCKS (WITH KEY OVERRIDE) SHALL BE INSTALLED ON ENTRANCE DOORS TO THE SUITE. COMMUNICATING WOOD DOORS SHALL BE 45mm BUT WITHOUT SOUND STRIPPING OR KEY PAD LOCKS.

AREA

LAW ASSOCIATION - LIBRARY & LOUNGE
 VARIES DEPENDENT ON SIZE OF COURT HOUSE AND NUMBER OF BOOKS
 LIBRARY - 14sm PER 1000 BOOKS (150.7sq ft)
 PLUS 2.0sm PER STUDY SEAT (21.5sq ft)
 LOUNGE - 2.0sm PER PERSON (21.5sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

LAW ASSOCIATION ROBING ROOMS & WASHROOMS

1.85sm PER LOCKER FOR FIRST 10 LOCKERS
 PLUS 0.3sm PER ADDITIONAL LOCKER
 WASHROOMS ADDITIONAL

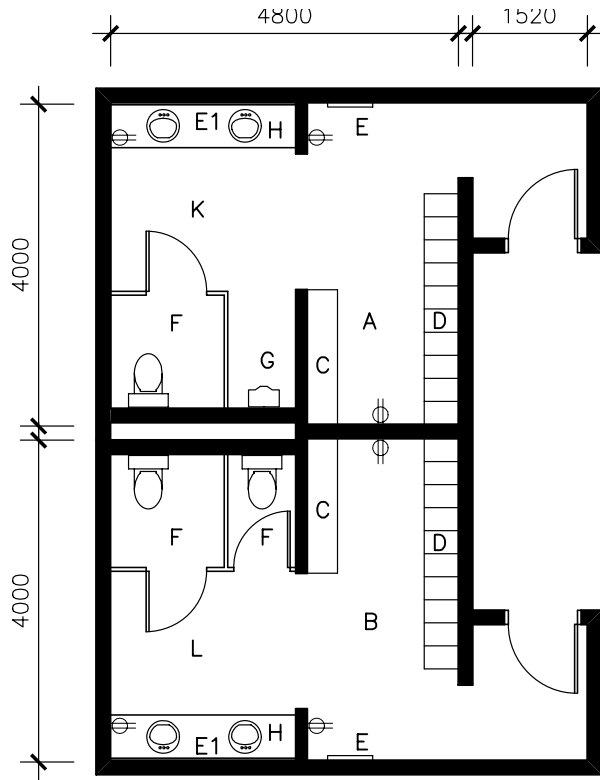


FIG. I 3

The size of robing rooms and the number of lockers is dependent on the number of Superior Court of Justice trials and hence the percentage of the total number of courtrooms where lawyers will be robed. The number of lockers could change drastically if eventually all lawyers appearing in court have to be robed. However, as the number of lockers is based on the number of robed lawyers, the formula given below will not change. The unknown factor is the ratio of male to female lawyers. On the basis that the number of female lawyers is rapidly growing, the ratio used is 1:1. Robing room size shall be calculated as follows:

1.85sm per lawyer for the first 10 lawyers that have to robe plus an additional 0.3sm for each additional lawyer who robes.

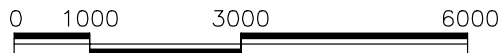
The number of lockers is calculated on the basis of two defence lawyers appearing at a single trial plus 25% to accommodate situations where more than two defence lawyers appear at a trial or a courtroom is used for more than one trial requiring robed lawyers in one day. Locker size to be 305mm wide x 457mm deep x 1829mm high.

Lockers should also be provided for the safe storage of overcoats and overshoes of lawyers attending to matters in the provincial courts. A similar formula of 2 lawyers per non-jury courtroom plus 25% to accommodate for other situations and overlap would accommodate the coat requirements over and above the robing requirements.

Washrooms are additional to robing room requirements and should be sized to include non robed lawyers (Ontario Court of Justice trials) as well as meeting Ontario Building Code regulations.

Fig. I 3 illustrates robing areas and washrooms for 20 lawyers.

FIG: I 3



LEGEND

- | | | | |
|----------------|---------------------|---|-----------------|
| A | MALE ROBING | F | TOILETS |
| B | FEMALE ROBING | G | URINALS |
| C | SEATING | H | HAND BASINS |
| D | LOCKERS | K | MALE WASHROOM |
| E | FULL LENGTH WALL | L | FEMALE WASHROOM |
| E ₁ | MIRROR ABOVE VANITY | ⊕ | DUPLEX OUTLET |

Note: Fig. I 3 is only an example of required relationships. Plan configuration can be changed, but not the area.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE		dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 4	built-in portable none
SERVICES	NOTE 5 NOTE 5 NOTE 5	water electricity telephone paging special
SECURITY	*	high medium low

NOTES
1. THIS AREA IS DEDICATED TO THE USE OF THE LAW ASSOCIATION.
2. DEPENDENT ON SIZE OF COURT HOUSE.
3. WASHROOMS CANNOT EASILY BE CHANGED TO ALTERNATIVE USES.
4. LOCKERS MUST BE INSTALLED FOR MEMBERS WHO HAVE TO ROBE AND ARE TO BE ASSIGNED FOR DAY USE ONLY.
5. ELECTRICITY, HOT AND COLD WATER, PLUMBING, DRAINAGE AND PAGING SPEAKERS ARE REQUIRED. SPEAKERS TO HAVE VOLUME CONTROL DUE TO SMALL AREA AND HARD SURFACES.

AREA
LAW ASSOCIATION ROBING ROOMS & WASHROOMS
1.85sm PER LOCKER FOR FIRST 10 LOCKERS PLUS 0.3sm PER ADDITIONAL LOCKER DEPENDENT ON NUMBER OF LAWYERS ROBING WASHROOMS ADDITIONAL
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST		
CHAIRS		sled base side chairs tilt swivel/tilt
TABLES		movable standard special
FITMENTS	NOTE 1 NOTE 1	modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES		decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
1. STEEL LOCKERS IN BANKS ON RAISED BASES. WOOD STOOLS OR FIXED WOOD BENCHES AT LOCKERS.

AREA
<p>LAW ASSOCIATION ROBINING ROOMS & WASHROOMS</p> <p>1.85sm PER LOCKER FOR FIRST 10 LOCKERS PLUS 0.3sm PER ADDITIONAL LOCKER DEPENDENT ON NUMBER OF LAWYERS ROBINING WASHROOMS ADDITIONAL</p>
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet
	NOTE 1	vinyl (sheet)
	NOTE 1	ceramic
		wood
	NOTE 1	rubber
		special
CEILING		drywall sheet
		drywall lathe &
		sprayed
		acoustic
		finish
	*	acoustic tile
WALLS	NOTE 2	drywall sheet
		acoustic panels
		wood
		marble
	NOTE 2	ceramic
	sheet vinyl	
		paint
DOORS	NOTE 3	standard
		fire rated
		secure
		acoustic
WINDOWS		sun control
		decorative
		drapes
		full drapes

NOTES ON FINISHES

1. FLOOR CAN BE SHEET VINYL, SHEET RUBBER OR CERAMIC TILE.
2. WALLS TO BE DRYWALL ON METAL STUDS (WATERPROOF QUALITY), FINISHED WITH CERAMIC TILE TO 4'0" AND PAINTED ABOVE 4'0". NOTE: DEPENDENT ON THE ARCHITECT'S DESIGN, CONCRETE BLOCK WITH DRYWALL OR PLASTER FINISH IS ACCEPTABLE. RESTRICTED WALL AREAS OF FACE BRICKS ARE ALSO ACCEPTABLE.
3. LAMINATE-FACED ENTRANCE DOOR SHOULD BE INSTALLED. TOILET PARTITIONS AND DOOR CAN BE EITHER ENAMELLED METAL OR LAMINATED FINISH.

AREA

LAW ASSOCIATION ROBING ROOMS & WASHROOMS

1.85sm PER LOCKER FOR
 FIRST 10 LOCKERS
 PLUS 0.3sm PER ADDITIONAL LOCKER
 DEPENDENT ON NUMBER OF
 LAWYERS ROBING
 WASHROOMS ADDITIONAL

PROXIMITIES

INTERNAL ORGANIZATION

CROWN ATTORNEY'S OFFICE

31.5sm (339sq ft)

INCLUDING WASHROOM AND DRESSING AREA

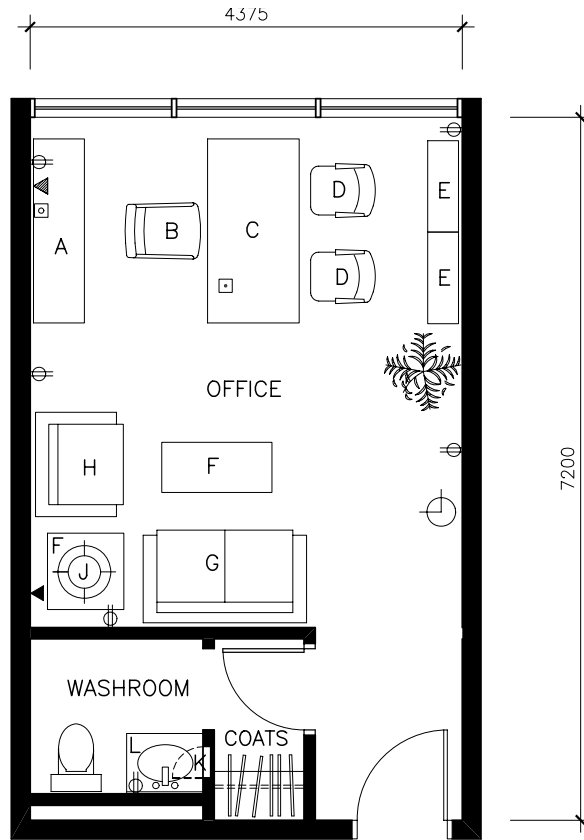


FIG: I 4

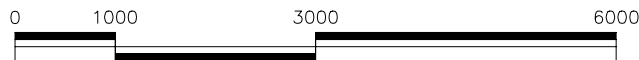


FIG. I 4

The Crown Attorney is the most senior staff member of the Ministry of the Attorney General in the field. The Crown's office is the same size as that of a judge of the Ontario Court of Justice and should be designed with an en suite washroom with an area for robing.

The Crown's office shall be located with the Assistant Crowns' and prosecutors' adjacent to and interconnected with the victim witness area. The whole area shall be located near the public area but access by the public shall be monitored by a secretary/receptionist protected by a glass screen and a door with a remote operated lock (see Fig. I 6).

The furniture layout shown in Fig. I 4 is diagrammatic, illustrating an acceptable plan and approved furniture entitlement. The layout can be varied to meet the requirements of a particular Crown, but the furniture entitlement cannot be exceeded. Personal items owned by the Crown can be incorporated into the plan if requested.

The washroom shall be fitted with a toilet and a vanity with a cupboard underneath. A mirror shall be fitted over the vanity with a small medicine cabinet.

LEGEND

- A CREDENZA 457mm X 182mm
- B DESK CHAIR, SWIVEL TILT
- C DESK 1828mm X 914mm
- D VISITORS' CHAIRS
- E BOOKCASES
- F LOW TABLE (SHAPE CAN BE CHANGED)
- G COUCH
- H ARMCHAIR
- J LAMP
- K MEDICINE CABINET
- L MIRROR

- I DURESS BUTTON
- M COMPUTER OUTLET

- ⊕ DUPLEX OUTLET
- ▲ TELEPHONE

- ⌚ CLOCK

NOTE: A MORE FUNCTIONAL FURNITURE SELECTION FOR COMPUTER USE IS ACCEPTABLE.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in room none
SERVICES	NOTE 9 NOTE 9 NOTE 9	water electricity telephone intercom special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. THE PUBLIC REQUIRES ACCESS TO THE CROWN ATTORNEY AND HIS/HER ASSISTANT. THE PUBLIC IN THIS INSTANCE WOULD BE CROWN WITNESSES AND THE VICTIM WITNESS AREA WHICH IS LOCATED ADJACENT TO THE CROWN ATTORNEY. PUBLIC ACCESS MUST BE CONTROLLED.</p> <p>2. THE TRAFFIC IS CONFINED TO THE PUBLIC AS DESCRIBED IN NOTE 1 ABOVE AND THE POLICE.</p> <p>3. THE SENIOR CROWN ATTORNEY IS RESPONSIBLE FOR HIS/HER STAFF OF ASSISTANT CROWN ATTORNEYS AND PROSECUTORS AS WELL AS THE PREPARATION AND PROSECUTION OF HIS/HER OWN CASES. IT IS A SENIOR POSITION EQUIVALENT TO JUDGES OF THE PROVINCIAL COURT OF ONTARIO AND THEREFORE THE OFFICE SHOULD PROJECT AN ORDERLY IMAGE THAT HAS DIGNITY AND AUTHORITY BUT IS APPROACHABLE.</p> <p>4. THE ABILITY TO VIEW OUT AND WORK IN NATURAL LIGHT IS EXTREMELY IMPORTANT.</p> <p>5. THE LIGHTING SHOULD BE DESIGNED TO ACHIEVE FLEXIBILITY TO MEET THE PLANNING REQUIREMENTS OF DIFFERENT CROWN ATTORNEYS. HOWEVER, THE OFFICE IS CLEARLY DIVIDED INTO A WORKING AREA AND A MORE RELAXING AREA WHICH MAY ALSO BE USED FOR MEETINGS. THE LIGHTING REQUIREMENTS OF THESE AREAS ARE QUITE DIFFERENT. THE FLEXIBILITY OF THE LIGHTING DESIGN MUST RESPOND TO THESE REQUIREMENTS. A HIGH VCL IS REQUIRED AT ALL TIMES.</p> <p>6. THE ATTENUATION OF SOUND BETWEEN OFFICES IS IMPORTANT. THE DESIGN OF THE PERIMETER WALLS OF A CROWN ATTORNEY'S TOTAL AREA IS EXTREMELY IMPORTANT AND SHOULD HAVE AN STC VALUE REFLECTING THE REQUIREMENTS OF THIS NOTE (6) AND DETAILED IN SECTION Q.</p> <p>7. THE CROWN ATTORNEY'S OFFICE AND THE WHOLE AREA UNDER HIS/HER DIRECTION SHALL HAVE A HIGH STANDARD OF ENVIRONMENTAL CONTROL. THE STRESS LEVEL IS VERY HIGH AND IT IS NOT UNCOMMON FOR LONG HOURS TO BE WORKED, INCLUDING WEEKENDS.</p> <p>8. DEPENDENT ON THE SIZE OF THE COURT HOUSE EITHER FILE CABINET STORAGE OR A STOREROOM SHALL BE PROVIDED. A STOREROOM SHALL BE LOCKABLE AND LARGE ENOUGH TO CONTAIN A COPYING MACHINE. A WELL PLANNED 1828mm X 3000mm ROOM WOULD NORMALLY BE LARGE ENOUGH, BUT IN A LARGE COURT HOUSE (EIGHT COURTROOMS OR MORE) THE STOREROOM SIZE SHALL BE INCREASED TO 2500mm X 3800mm.</p> <p>9. WATER (HOT AND COLD) WITH DRAINAGE IS REQUIRED IN THE WASH ROOM. ELECTRICAL POWER, TELEPHONE, COMPUTER JACK, DURESS BUTTON ARE ALL REQUIRED.</p> <p>10. SECURITY, OTHER THAN DURESS BUTTONS, SHALL CONSIST OF CONTROLLED MONITORED ACCESS WITH THE LOCKING DEVICE OF THE ACCESS DOOR CONTROLLED BY THE RECEPTIONIST.</p>

AREA
<p>CROWN ATTORNEY'S OFFICE</p> <p>31.5sm (339sq ft)</p> <p>INCLUDING WASHROOM AND DRESSING AREA</p>
PROXIMITIES
<p>CLOSE TO PUBLIC CIRCULATION, ADJACENT AND WITH DIRECT ACCESS TO THE VICTIM WITNESS AREA.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

CHAIRS	*	sled base side chairs tilt swivel/tilt
	NOTE 1	
TABLES		movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 2	full size small
BOOKCASE	NOTE 3	full height low doors
SIDE TABLES	*	decorative functional
DESK	NOTE 4	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA	NOTE 5	plain cupboards file drawers

FURNISHINGS & EQUIPMENT

1. THE CROWN ATTORNEY'S CHAIR SHALL BE A HIGH BACK SWIVEL TILT. TWO SIDE CHAIRS SHALL ALSO BE PROVIDED. THEY CAN BE EITHER SLED BASE OR LEGS.
2. COUCH CAN BE TWO- OR THREE-SEATER COMPLEMENTED BY A MATCHING ARMCHAIR.
3. BOOKCASES WILL VARY WITH EACH CROWN ATTORNEY. HOWEVER, THE COST SHALL NOT EXCEED GOVERNMENT STANDARDS.
4. DESK SHALL BE 1828mm X 914mm WITH OR WITHOUT PEDESTALS TO SUIT THE CROWN. FIG. 14 SHOWS A POSSIBLE LAYOUT WHICH IS TRADITIONAL. A DESK WITH A COMPUTER RUN-OFF IS ALSO ACCEPTABLE. THE RUN-OFF WITH THE COMPUTER CORNER WOULD REPLACE THE CREDENZA.
5. THE CREDENZA CAN BE ANY AVAILABLE CONFIGURATION TO SUIT THE CROWN ATTORNEY, WITHIN THE LIMITS OF GOVERNMENT STANDARDS.

NOTE:

- (A) FLOOR LAMPS OR TABLE LAMPS FORM PART OF THE CROWN ATTORNEY'S ENTITLEMENT.
(B) GOVERNMENT STANDARDS WITH A RESTRICTED SELECTION AND PRICE RANGE WILL CONTROL ALL PURCHASES OF A CROWN ATTORNEY'S FURNITURE.

AREA**CROWN ATTORNEY'S OFFICE**

31.5sm (339sq ft)
INCLUDING WASHROOM AND DRESSING AREA

PROXIMITIES**INTERNAL ORGANIZATION**

CHECKLIST	
FLOOR	<p>NOTE 1 carpet vinyl ceramic wood rubber special</p>
CEILING	<p>drywall sheet drywall lathe & sprayed acoustic finish painted NOTE 2 acoustic tile</p>
WALLS	<p>NOTE 3 drywall sheet acoustic panels wood marble ceramic sheet vinyl paint</p> <p>*</p>
DOORS	<p>standard fire rated NOTE 4 secure NOTE 4 acoustic</p>
WINDOWS	<p>NOTE 5 sun control decorative drapes full drapes</p>

NOTES ON FINISHES
<p>1. 36-OZ. CARPET OF CHOICE. ENSURE CARPET IS SUITABLE FOR WHEEL-CHAIR MOVEMENT.</p> <p>2. ALTHOUGH A PAINTED DRYWALL CEILING MAY GIVE A HIGHER QUALITY FINISH, AN ACOUSTIC CEILING MAY BE MORE DESIRABLE. HOWEVER, SOME LEEWAY IS GIVEN IN CHOICE PROVIDED THE ROOM IS ACOUSTICALLY ACCEPTABLE. LAY-IN CEILING WILL GIVE GREATER FLEXIBILITY TO MOVE LIGHTS TO REFLECT FURNITURE LAYOUT.</p> <p>3. GENERALLY THE CROWN ATTORNEY'S OFFICE IN NEW BUILDINGS WILL BE GYPROC TAPED WALLS, VINYL COVERED WITH A GOOD QUALITY 15-OZ. VINYL. OTHER FINISHES ARE ACCEPTABLE WITHIN THE SAME PRICE RANGE AND DURABILITY. WALLS SHALL BE BUILT FROM FLOOR TO SLAB ABOVE. STC VALUE OF WALLS SHALL BE AS SPECIFIED IN SECTION Q.</p> <p>4. WOOD SOLID CORE DOOR, LOCKABLE AND SOUND STRIPPED IN ACCORDANCE WITH SECTION Q.</p> <p>5. DEPENDENT ON ROOM ORIENTATION, SUN CONTROL MAY BE REQUIRED. FULL DRAPES FORM PART OF THE FURNISHING ENTITLEMENT.</p>

AREA
<p>CROWN ATTORNEY'S OFFICE</p> <p>31.5sm (339sq ft) INCLUDING WASHROOM AND DRESSING AREA</p>

PROXIMITIES
Empty space for Proximities

INTERNAL ORGANIZATION
Empty space for Internal Organization

ASSISTANT CROWN ATTORNEYS AND PROSECUTORS

13.5sm (145.3sq ft)

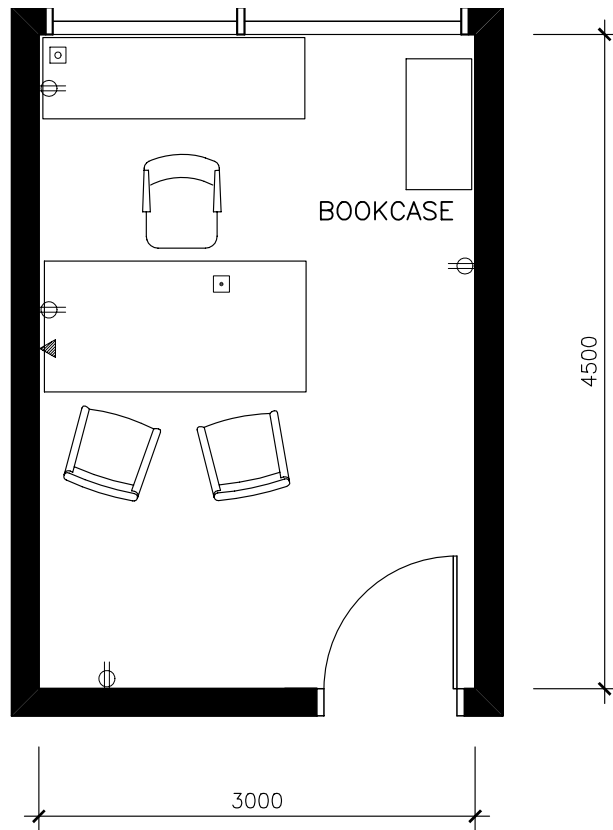


FIG. 15

Each assistant Crown Attorney's offices and Crown Prosecutor's office shall be 13.5sm in area based on functional needs.

The assistant Crown Attorneys are located en suite with the senior Crown Attorney, secretaries and library. Access shall be controlled through a remotely operated locking device (from secretarial desk) on the entrance door.

LEGEND

- | | | | |
|--|----------------|--|---------------|
| | DUPLEX OUTLETS | | TELEPHONE |
| | DURESS BUTTON | | COMPUTER JACK |

FIG: 1 5



NOTE: PLAN FIG. 15 SHOWN IS FOR GUIDANCE ONLY. ROOM CONFIGURATION MAY BE CHANGED BUT ROOM AREA MAY NOT.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 * *	dignified orderly friendly relaxing peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 4	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in room none
SERVICES	NOTE 9 NOTE 9 NOTE 9 NOTE 9	water electricity telephone paging special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. ALTHOUGH THE ZONE FOR CROWN ATTORNEYS AND PROSECUTORS IS DESIGNATED PUBLIC, IT MUST BE UNDERSTOOD THAT THEY ARE EQUALLY AT RISK AS THE JUDGES. HOWEVER, IT IS NECESSARY FOR THE CROWN ATTORNEYS' SUITE TO BE LOCATED TO GIVE THE PUBLIC ACCESS AS REQUIRED BY THE CROWNS. SUCH ACCESS MUST BE THROUGH A LOCKED DOOR WITH REMOTE CONTROL FROM THE SECRETARY'S DESK.</p> <p>2. TRAFFIC CAN VARY THROUGHOUT THE DAY FROM HIGH TO LOW. PRIOR TO COURT SITTING, TRAFFIC CAN BE HIGH.</p> <p>3. THE CROWN ATTORNEYS' OFFICES OFTEN SUPPLEMENT INTERVIEW ROOMS LOCATED ADJACENT TO THE COURTROOM AND ARE VISITED BY THE PUBLIC. THEREFORE, THE PROJECTED IMAGE SHOULD BE ONE OF ORDERLINESS WHILE BEING TO A DEGREE FRIENDLY AND RELAXING.</p> <p>4. INTERNAL FLEXIBILITY IS DESIRABLE ONLY TO MEET THE NEED OF FUTURE EXPANSION.</p> <p>5. GOOD NON-GLARE LIGHTING (HIGH VCL). IF LAY-IN TROFFERS ARE USED, PARABOLIC LENSES SHALL BE INSTALLED.</p> <p>6. STC VALUE OF THE WALLS SHALL REFLECT THE REQUIREMENTS OF THIS NOTE AND DESCRIBED IN SECTION Q TO ENSURE PRIVACY WHEN DISCUSSING MATTERS WITH WITNESSES OR OTHER PERSONS WHERE OVERHEARING COULD BE DETRIMENTAL TO A TRIAL.</p> <p>7. GOOD SOUND-RESPONSIVE CONTROLS SHALL BE SPECIFIED. SOUND LEVELS GENERATED BY AIR MOVEMENT MUST BE KEPT WITHIN THE VALUES SPECIFIED IN SECTION Q.</p> <p>8. THE CROWN ATTORNEYS' SUITES SHALL HAVE A PHOTOCOPY AND STATIONERY STORAGE ROOM. ALLOWANCE IN TOTAL FLOOR AREA SHALL BE MADE TO ACCOMMODATE FILING CABINETS ON THE BASIS OF .50sm PER FILING CABINET. THE PHOTOCOPY STATIONERY ROOM SHALL NOT EXCEED GOVERNMENT SPACE STANDARDS.</p> <p>9. EACH CROWN ATTORNEY'S SUITE SHALL HAVE A DESIGNATED ROBINING/WASHROOM FOR MALES AND FEMALES. NUMBER OF PLUMBING FIXTURES SHALL BE THE MINIMUM IN COMPLIANCE WITH THE OBC. ALL OFFICES AND SECRETARIAL AREAS SHALL HAVE DUPLEX OUTLETS, TELEPHONES, COMPUTER JACKS, AND DURESS BUTTONS.</p> <p>10. AS MENTIONED IN NOTE 1, ACCESS SHALL BE BY A REMOTE CONTROL LOCKED DOOR, AND ALL OFFICES AND SECRETARIAL STATIONS SHALL BE FITTED WITH A DURESS BUTTON.</p>

AREA
<p>ASSISTANT CROWN ATTORNEYS AND PROSECUTORS 13.5sm (145.3sq ft)</p>
<p>PROXIMITIES</p> <p>THE CROWN ATTORNEYS' SUITE SHALL BE LOCATED ADJACENT TO THE POLICE BUREAU WITH LOCKABLE COMMUNICATING DOOR. THE SUITE SHALL ALSO BE LOCATED WITH ACCESS FROM THE PUBLIC AREA AND CIRCULATION.</p> <p>A SECONDARY CIRCULATION SHALL ALLOW A LOCKABLE ACCESS TO THE ADMINISTRATION AREA.</p> <p>THE VICTIM WITNESS AREA (SEE FIG. I 6) SHALL FORM PART OF THE CROWN ATTORNEYS' SUITE BUT SEPARATED VISUALLY AND AUDIBLY. HOWEVER, THE SECRETARY/RECEPTIONIST COULD SERVE AND CONTROL BOTH THE CROWN ATTORNEYS' AND THE VICTIM WITNESS AREAS.</p>
<p>INTERNAL ORGANIZATION</p>

CHECKLIST

CHAIRS	NOTE 1	sled base
	NOTE 1	side chairs tilt
	NOTE 1	swivel/tilt
TABLES		movable standard special
FITMENTS		modular movable
		fixed
		special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered
		wood
COUCH		full size
		small
BOOKCASE	NOTE 2	full height
		low doors
SIDE TABLES		decorative
		functional
DESK	NOTE 3	plain
		single or double
		pedestal
		computer
		executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place
		sectional (movable)
CREDENZA		plain
		cupboards
		file drawers

FURNISHINGS & EQUIPMENT

1. DESK CHAIRS SHALL BE SWIVEL TILT WITH FIVE LEGS AND CARPET CASTERS. SIDE CHAIRS CAN BE EITHER SLED BASED OR FOUR STRAIGHT LEGS WITH ARMS.
2. BOOKCASE SHALL BE 914mm WIDE, 2133mm HIGH.
3. THE DESK IN FIG. I 5 SHALL BE 1524mm X 762mm WITH A FLUSH RUN-OFF. RUN-OFFS CAN BE ANGLED TO SUIT COMPUTER INSTALLATION. DESK SHALL HAVE CENTRE DRAWER AND ONE PEDESTAL DRAWER EACH.

AREA

**ASSISTANT CROWN ATTORNEYS
AND PROSECUTORS**

13.5sm (145.3sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

CHECKLIST	
FLOOR	<p>NOTE 1 carpet vinyl ceramic wood rubber special</p>
CEILING	<p>drywall sheet drywall lathe & sprayed acoustic finish painted NOTE 2 acoustic tile</p>
WALLS	<p>NOTE 3 drywall sheet acoustic panels wood marble ceramic NOTE 3 sheet vinyl paint</p>
DOORS	<p>standard fire rated secure NOTE 4 acoustic</p>
WINDOWS	<p>NOTE 5 sun control decorative drapes full drapes</p>

NOTES ON FINISHES
<p>1. 28-OZ. CARPET SHALL BE INSTALLED THROUGHOUT EXCEPT THE SENIOR CROWN ATTORNEY'S OFFICE.</p> <p>2. LAY-IN ACOUSTIC TILE IS ACCEPTABLE.</p> <p>3. WALLS SHALL BE BUILT FROM SLAB TO SLAB USING STEEL STUDS AND PLASTERBOARD. WALLS SHALL BE FINISHED WITH SHEET VINYL WALLCOVERING. STC OF WALLS SHALL BE AS SPECIFIED IN SECTION Q.</p> <p>4. DOOR TO THE SUITE SHALL BE SOLID CORE WOOD WITH THE LOCKING DEVICE RELEASED FROM THE SECRETARY'S DESK. LOCK SHALL HAVE A MANUAL OVERRIDE FROM THE SUITE SIDE. DOOR SHALL HAVE SHATTER RESISTANT GLASS PANEL. ALL DOORS TO OFFICES SHALL BE SOLID CORE WOOD. SEE SECTION Q.</p> <p>5. ALL SOUTH AND WEST WINDOWS SHALL BE PROTECTED WITH SUN CONTROL BLINDS.</p>

AREA
<p>ASSISTANT CROWN ATTORNEYS AND PROSECUTORS</p> <p>13.5sm (145.3sq ft)</p>
PROXIMITIES
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

**VICTIM/WITNESS, INTERVIEW, COORDINATOR,
WAITING, SECRETARY, RECEPTION,
CROWN ATTORNEY'S ROBING ROOMS**

COORDINATOR	13.5sm	145.3 sq ft	SECRETARY	7.0sm	75.3sq ft
RECEPTIONIST	5.0sm	53.8 sq ft	WAITING (8)	4.0sm	43.1sq ft
TYPISTS (3)	21.0sm	226.0 sq ft	INTERVIEW (2)	27.0sm	290sq ft
FILING	6.5sm	70.0 sq ft (0.5sm per cabinet plus work area)			

FIG. I 6

Fig. I 6 illustrates acceptable relationships of the various areas which are part of the Crown Attorney's suite and the victim witness area. The plan shown can be changed provided the relationship of victim witness and Crown Attorneys is maintained and the area allocations are not exceeded. Areas of Crown's office are shown in Figs. I 4 and I 5.

Dependent on the size of the victim/witness office, it may be planned as a separate suite with its own waiting area and located adjacent to the Crown Attorney's office. An extra level of security could be achieved by separating the waiting area from the reception counter with appropriate glazing. Internal access from the Crown's office to the victim/witness office should be provided.

Fig. I 6 does not show the whole suite. Therefore the number of typists and filing cabinets must be adjusted to suit the ratio of 0.4 support staff per Assistant Crown and two 3'0" wide, five-drawer lateral filing cabinets per Assistant Crown Attorney. Interview rooms of 13.5sm are ideal as they can be used for interviewing families and provide for future planning flexibility. Combined Assistant Crown Attorneys' robing/washrooms for each gender shall be provided. Area allocations shall be the same as Law Association, ie. 1.85sm for the first 10 lockers plus 0.3sm for every additional locker plus circulation and washrooms. Locker size to be 305mm wide x 457mm deep x 1829mm high.

It is essential that Crowns can enter separately to the victim witness area.

LEGEND

- | | |
|--|--|
| A VICTIM WITNESS WAITING | B VICTIM WITNESS COORDINATOR |
| C RECEPTIONIST | C ₁ SENIOR CROWN ATTORNEY'S SECRETARY |
| C ₂ TYPIST/SECRETARY AREA | E ASSISTANT CROWN ATTORNEY |
| D SENIOR CROWN ATTORNEY | G CROWN ATTORNEYS' LIBRARY |
| F ASSISTANT CROWN ATTORNEY | H INTERVIEW ROOM |
| H INTERVIEW ROOM | H ₁ VICTIM WITNESS INTERVIEW ROOM |
| J FILING AREA | K COAT HANGING |
| L CORRIDOR TO CROWN'S OFFICES, ROBING ROOMS, PHOTOCOPY/STORAGE, POLICE | M CORRIDOR LINKING CROWNS WITH ADMIN |
| N INTERVIEW ROOM FOR LEGAL AID | O PUBLIC AREA |
| P DOOR WITH SHATTER RESISTANT GLAZING & LOCK OPERATED FROM RECEPTIONIST DESK | Q DOOR FROM ADMIN, KEY PAD LOCK |
| | R DOOR WITH KEY PAD LOCKS |
| | S BOOK SHELVES (7 SHELVES HIGH) |

- | | |
|--------------------------|--------------------|
| ⊙ CLOCK | ⊠ COMPUTER JACK |
| ⊕ DUPLEX ELECTRIC OUTLET | ⊠ EMERGENCY BUTTON |
| ⊠ DOOR LOCK RELEASE | ▲ TELEPHONE |
| 🔔 FIRE ALARM BELL | |

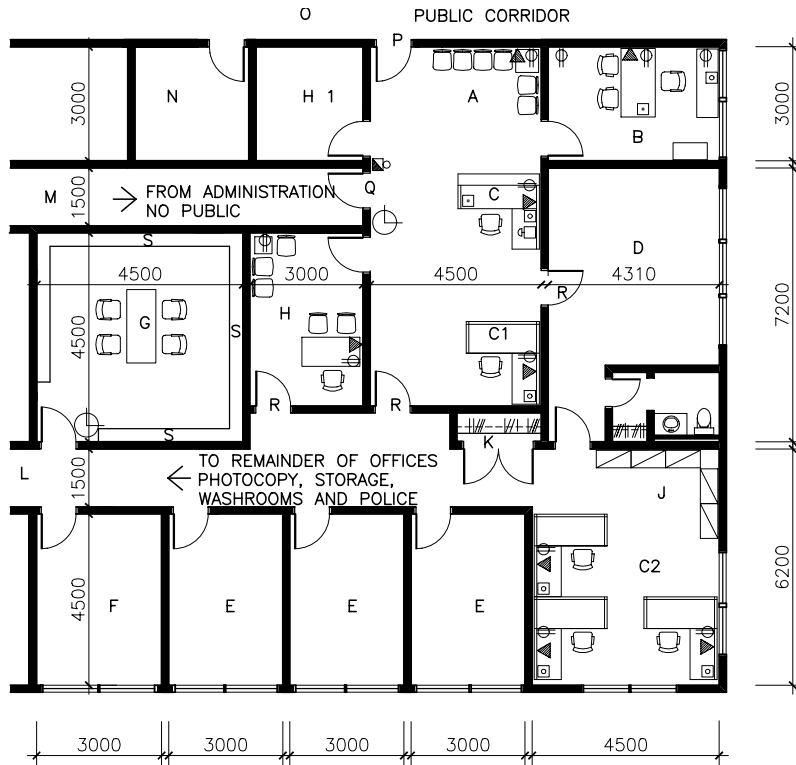
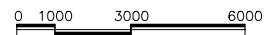


FIG: I 6



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 8	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 9	built-in portable none
SERVICES	NOTE 10	water electricity telephone intercom special
SECURITY	NOTE 11	high medium low

NOTES
1. PUBLIC MUST HAVE ACCESS WHICH IS CONTROLLED BY THE RECEPTIONIST.
2. TRAFFIC VARIES, BUT IS HIGH PRIOR TO COURT SITTING.
3. SHOULD BE ORDERLY - SEE NOTES FOR ASSISTANT CROWN ATTORNEYS.
4. ONLY TO ACCOMMODATE EXPANSION. PLANNING AND LOCATION OF WASH-ROOMS ETC. SHOULD ALLOW FOR FUTURE EXPANSION.
5. PLANS SHOW THOSE AREAS WHICH SHOULD HAVE VIEW OUT OR NATURAL LIGHT. NOTE LOCATION OF SECRETARY/TYPISTS.
6. GOOD NON-GLARE LIGHTING. IF LAY-IN LIGHT TROFFERS ARE USED, LENSES SHALL BE PARABOLIC OR EQUIVALENT.
7. STC VALUE BETWEEN OFFICES, INTERVIEW ROOMS AND PUBLIC SPACES, AND THE REQUIRED AMBIENT NOISE LEVEL THROUGHOUT THE SUITE SHALL BE AS SPECIFIED IN SECTION Q.
8. GOOD RESPONSIVE SYSTEMS FOR HVAC SHALL BE INSTALLED. NOTE 7 SHALL GOVERN AIR NOISE.
9. SEE NOTE 8, PAGE I 14.
10. SEE NOTE 9, PAGE I 14.
11. SEE NOTE 10, PAGE I 14.

AREA
VICTIM/WITNESS, INTERVIEW, CO-ORDINATOR, WAITING, SECRETARY, RECEPTION, CROWN ATTORNEY ROBING ROOMS
13.5sm (145.3sq ft) COORDINATOR
7.0sm (75.3sq ft) SECRETARY
5.0sm (53.8sq ft) RECEPTIONIST
7.0sm (75.3sq ft) PER TYPIST/CLERK
.50sm (5.38sq ft) WAITING (Per Person)
13.5sm (145.3sq ft) PER INTERVIEW ROOM
0.5sm FILING (Per Cabinet) PLUS WORK AREA.
1.85sm PER LOCKER FOR FIRST 10 LOCKERS PLUS 0.3sm FOR EACH ADDITIONAL LOCKER (ROBING ONLY)
PROXIMITIES
SEE NOTES ON CROWN ATTORNEYS & PROSECUTORS
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt NOTE 1 swivel/tilt
TABLES	NOTE 2 movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	NOTE 4 decorative functional
DESK	NOTE 5 plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	* plain * cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. SEE ASSISTANT CROWN ATTORNEYS AND PROSECUTORS TOGETHER WITH CROWN ATTORNEY FOR FURNITURE IN ALL CROWN ATTORNEYS' OFFICES. WAITING CHAIRS, LIBRARY CHAIRS AND SIDE CHAIRS IN INTERVIEW AREAS SHALL BE SLED BASE OR LEGS WITH ARMS. COORDINATOR'S CHAIR SHALL BE SWIVEL TILT LOW BACK. SECRETARIES AND TYPISTS SHALL HAVE ERGONOMIC FIVE LEG SWIVEL STENO CHAIRS WITH ADJUSTABLE ARMS.</p> <p>2. THE LIBRARY TABLE SHALL BE 1828mm X 914mm WITHOUT DRAWERS, LAMINATE FINISH.</p> <p>3. INSTALL FIVE DRAWER 914mm WIDE FILING CABINETS IN REQUIRED NUMBER.</p> <p>4. 505mm X 505mm SIDE TABLE, LAMINATE FINISH.</p> <p>5. DESKS FOR INTERVIEW ROOMS SHALL BE 762mm X 1524mm WITH PENCIL DRAWER ONLY, NO PEDESTALS. SECRETARIES SHALL HAVE STANDARD SECRETARIAL DESK WITH PEDESTAL IN RUN-OFF. DESK SYSTEM MUST ACCOMMODATE COMPUTER. ALLOW STAND OR TABLE TOP FOR PRINTER, LAMINATE FINISH.</p> <p>6. CREDENZA FOR THE COORDINATOR SHALL BE 1524mm LONG FITTED AS REQUIRED, I.E. PEDESTALS OR CUPBOARDS, LAMINATE FINISH.</p>

AREA
<p>VICTIM/WITNESS, INTERVIEW, CO-ORDINATOR, WAITING, SECRETARY, RECEPTION, CROWN ATTORNEY ROBING ROOMS</p> <p>13.5sm (145.3sq ft) COORDINATOR</p> <p>7.0sm (75.3sq ft) SECRETARY</p> <p>5.0sm (53.8sq ft) RECEPTIONIST</p> <p>7.0sm (75.3sq ft) PER TYPIST/CLERK</p> <p>.50sm (5.38sq ft) WAITING (Per Person)</p> <p>13.5sm (145.3sq ft) PER INTERVIEW ROOM</p> <p>0.5sm FILING (Per Cabinet) PLUS WORK AREA.</p> <p>1.85sm per Locker FOR FIRST 10 LOCKERS PLUS .3sm FOR EACH ADDITIONAL LOCKER (ROBING ONLY)</p>
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS		drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl
	NOTE 3	paint
DOORS	NOTE 4	standard fire rated
	NOTE 4	secure acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

NOTE: SEE CROWN ATTORNEYS AND ASSISTANT CROWN ATTORNEYS AND PROSECUTORS FOR ALL FINISHES IN OFFICES.

- CARPET THROUGHOUT, EXCEPT THE CROWN ATTORNEY'S OFFICE, SHALL BE 28 OZ.
- ACOUSTIC LAY-IN TILE WILL HELP TO OBTAIN THE REQUIRED NC LEVELS, HOWEVER OTHER FINISHES CAN BE USED AS SPECIFIED IN SECTION Q.
- ALL WALLS SHALL BE DRYWALL ON METAL STUDS CONSTRUCTED FROM FLOOR TO UNDERSIDE OF SLAB TO ACHIEVE REQUIRED AUDIO SECURITY. DRYWALL LAYERS CAN BE DOUBLED AND FIBREGLASS ACOUSTIC BATTS INSTALLED AS REQUIRED. STC RATING AS REQUIRED IN SECTION Q. WALLS TO CORRIDORS, OFFICES, INTERVIEW ROOMS AND WAITING AREA TO BE FINISHED WITH VINYL WALL COVERING. WASHROOM SHALL BE FINISHED WITH CERAMIC TILE TO 1219mm HIGH WITH GLOSS PAINT ABOVE.
- DOORS TO BE 45mm THICK SOLID CORE. ALL DOORS TO OFFICES AND INTERVIEW ROOMS TO BE SOUND STRIPPED. PUBLIC ENTRANCE LOCK TO BE REMOTE CONTROLLED (RECEPTIONIST DESK). CROWN ATTORNEY ENTRANCE DOOR AND ALL DOORS MARKED "R" AS WELL AS DOOR TO POLICE AREA TO BE KEY PAD WITH KEY.
- ALL WINDOWS FACING SOUTH OR WEST SHALL BE FITTED WITH SUN CONTROL BLINDS.

AREA

**VICTIM/WITNESS, INTERVIEW,
 Co-ORDINATOR, WAITING,
 SECRETARY, RECEPTION,
 CROWN ATTORNEY ROBING ROOMS**

13.5sm (145.3sq ft)
 COORDINATOR

7.0sm (75.3sq ft)
 SECRETARY

5.0sm (53.8sq ft)
 RECEPTIONIST

7.0sm (75.3sq ft)
 PER TYPIST/CLERK

.50sm (5.38sq ft)
 WAITING (Per Person)

13.5sm (145.3sq ft)
 PER INTERVIEW ROOM

0.5sm
 FILING (Per Cabinet) PLUS WORK AREA.

1.85sm per Locker
 FOR FIRST 10 LOCKERS
 PLUS .3sm FOR EACH ADDITIONAL LOCKER
 (ROBING ONLY)

PROXIMITIES

INTERNAL ORGANIZATION

CROWN ATTORNEYS' LIBRARY/WORK AREA

14.0sm PER 1000 BOOKS (150.7sq ft)
 2.0sm PER SEAT FOR STUDY (21.5sq ft)

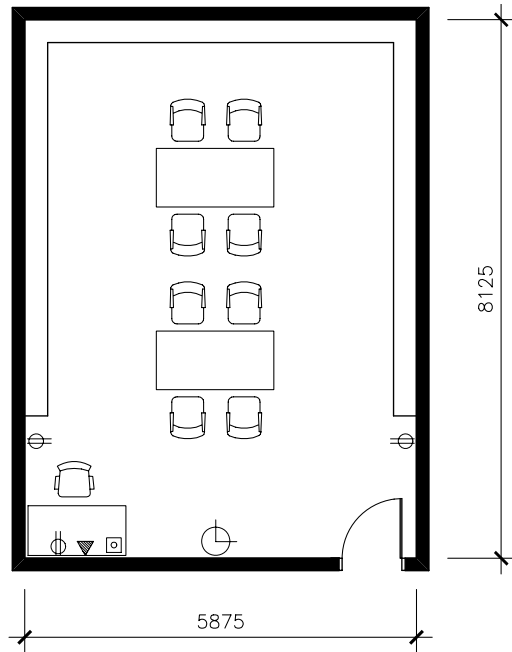


FIG: I 7

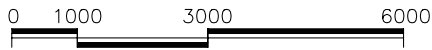


FIG. 17

The area of the library/work room will vary dependent on the volume of books to be housed and the size of the crown attorney's staff. i.e. number of Assistant Crown Attorneys.

NOTE: It is assumed that not all the Assistant Crown Attorneys will be using this room at the same time.

Fig. I 7 shows a possible room layout for approximately 12 Assistant Crown Attorneys.

All libraries shall have a computer table.

The number of books in the library are partly dependent on the number of Crown Attorneys due to the required duplication of the most often used volumes. In calculating required reading/study space it should be realized that some of the books could be taken back to private offices.

LEGEND

- ▲ TELEPHONE
- ◻ COMPUTER JACK
- ⊕ DUPLEX OUTLET
- ⊙ CLOCK

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	* *	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 2	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 3	important desirable optional none
ILLUMINATION	NOTE 4 NOTE 4	bright moderate subdued special
QUIETNESS	NOTE 5	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 6	built-in portable none
SERVICES	NOTE 7 NOTE 7 NOTE 7	water electricity telephone intercom computer
SECURITY	NOTE 8	high medium low

NOTES
1. LOCATED IN CROWN ATTORNEYS' SUITE. ALL NOTES AND RESTRICTIONS NOTED ON PAGE 112 WILL APPLY.
2. RELATIVELY UNIMPORTANT EXCEPT FOR EXPANSION OF CROWN ATTORNEY SPACE.
3. THE WALL SPACE IS REQUIRED TO OBTAIN THE MAXIMUM LINEAR METRES FOR SHELVING.
4. THE LIGHTING IN THE CENTRE OF THE ROOM (WORK AREA) SHOULD BE NON GLARE WITH A HIGH VCL. AS THE WORK AREA WILL ALSO BE USED FOR REFERENCE, VEILED REFLECTANCE MUST BE AVOIDED. THE LIGHTING SHOULD ALSO BE DESIGNED TO ALLOW EASY READING OF BOOK TITLES.
5. QUIETNESS IS IMPORTANT AS STUDY REQUIRING HIGH LEVELS OF CONCENTRATION WILL BE CARRIED OUT IN THIS ROOM. THE PENETRATION OF OUTSIDE NOISE MUST BE AVOIDED.
6. BOOK SHELVES ONLY ARE TO BE INSTALLED.
7. ELECTRICAL DUPLEX OUTLETS, COMPUTER JACK AND TELEPHONE SHALL BE INSTALLED.
8. SEE NOTE 10, PAGE 111.

AREA
<p>CROWN ATTORNEYS' LIBRARY/WORK AREA</p> <p>14.0sm PER 1000 BOOKS (150.7sq ft) 2.0sm PER SEAT FOR STUDY (21.5sq ft)</p>
PROXIMITIES
<p>IN CROWN ATTORNEYS' SUITE. LOCATED AWAY FROM INTERVIEW ROOMS OR OTHER AREAS THAT MAY BE VISITED BY THE PUBLIC.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

CHAIRS		sled base side chairs tilt
	NOTE 1	swivel/tilt secretarial
TABLES	NOTE 2	movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE	NOTE 3	full height low doors
SIDE TABLES		decorative functional
DESK		plain single or double
	NOTE 4	pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT

1. CHAIRS SHALL BE SWIVEL TILT WITH ARMS AT STUDY TABLE WHILE CHAIR AT COMPUTER STATION SHALL BE ARMLESS ERGONOMIC STENO CHAIR WITH FIVE LEGS, ADJUSTABLE SEAT HEIGHT AND BACK.
2. TABLES SHALL BE WITHOUT APRONS OR DRAWERS AND SHALL MEASURE 1828mm X 914mm FOR A SMALL ROOM AND 2438mm X 914mm FOR ALL OTHER ROOMS.
3. BOOK SHELVES SHALL BE IN 914mm WIDE SECTIONS SECURED TO WALL.
4. DESK FOR COMPUTER STATION SHALL BE 1524mm X 914mm WITH PENCIL DRAWER AND ONE PEDESTAL. THIS DESK CAN BE MODIFIED TO A COMPUTER TABLE IF REQUIRED.

AREA**CROWN ATTORNEYS'
LIBRARY/WORK AREA**

14.0sm PER 1000 BOOKS (150.7sq ft)
2.0sm PER SEAT FOR STUDY (215.5sq ft)

PROXIMITIES**INTERNAL ORGANIZATION**

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted NOTE 2 acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS		standard fire rated secure NOTE 4 acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. 28-OZ. CARPET.
2. ACOUSTIC CEILING WILL HELP TO CONTROL REVERBERATION.
3. WALLS SHALL BE DRYWALL ON METAL STUD CONSTRUCTED TO AN STC VALUE TO REFLECT THE REQUIREMENTS FOR QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q. BOOK SHELVES CAN ASSIST IN ACHIEVING THIS RATING WITH VINYL WALL COVERING WHERE WALL IS EXPOSED.
4. WOOD DOOR SHALL BE SOLID CORE WITH KEY PAD LOCKING DEVICE.

AREA

**CROWN ATTORNEYS'
 LIBRARY/WORK AREA**

**14.0sm PER 1000 BOOKS (150.7sq ft)
 2.0sm PER SEAT FOR STUDY (21.5sq ft)**

PROXIMITIES

INTERNAL ORGANIZATION

**LEGAL AID OFFICE/
 DUTY COUNSEL**

9sm (97sq ft)
 OFFICE

0.50sm (5.38sq ft)
 WAITING AREA PER PERSON

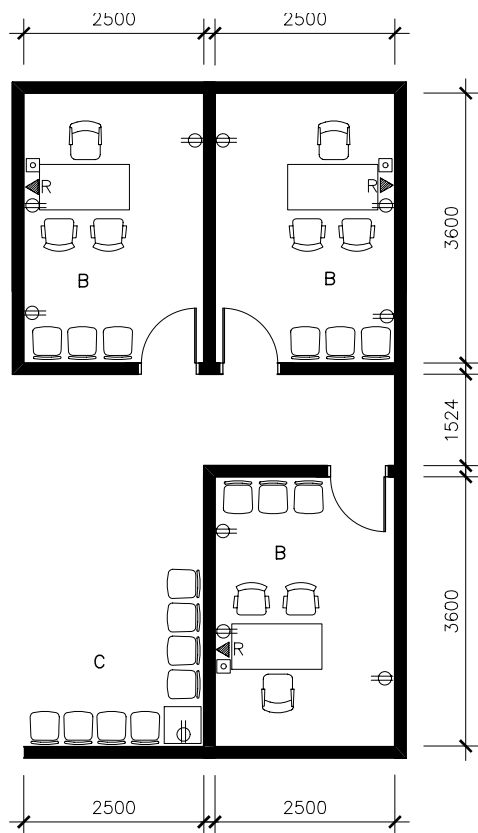


FIG: I 8

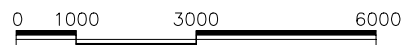


FIG. I 8

Fig. I 8 illustrates a possible planning solution when three Legal Aid offices are required by the program. The configuration of the plan can be changed to suit the overall planning concept of the court house, but the square metre areas given above must not be exceeded.

The waiting space shall be calculated on the square metre allowance of 0.5sm per person. The number of waiting spaces will vary with the required number of offices.

The Legal Aid office or suite shall be located adjacent to the public area and reasonably near the social services offices. Telephones shall be installed with restricted dialling area, i.e. local calls only. Computer jack will not allow access to MAG's computer system, but can be used by the Legal Aid lawyers to access their offices by modem.

LEGEND

- A PUBLIC AREA
- B LEGAL AID LAWYERS' OFFICES
- C WAITING AREA
- ⊕ DUPLEX OUTLET
- ▲ TELEPHONE (RESTRICTED DIALLING AREA - ALL TELEPHONES)
- ⊞ COMPUTER JACK

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	*	built-in portable none
SERVICES	NOTE 8 NOTE 8 NOTE 8 NOTE 8	water electricity telephone computer paging
SECURITY		high medium low

NOTES
<p>1. THE OFFICES SHOULD BE LOCATED IMMEDIATELY ADJACENT TO THE PUBLIC CIRCULATION OR WAITING SPACE. IN A SMALL COURT HOUSE WITH ONLY ONE OR TWO LEGAL AID OFFICES, THE OFFICES SHOULD BE LOCATED SO THAT THE PUBLIC WAITING AREA CAN BE UTILIZED AS WAITING SPACE.</p> <p>2. THE USE OF LEGAL AID AND THEREFORE THE TRAFFIC VARIES WITHIN THE COURT HOUSE. THE PROGRAM OR INSTRUCTIONS TO THE CONSULTANT WILL COMMENT ON THIS ASPECT.</p> <p>3. A LARGE PERCENTAGE OF THE PUBLIC REQUIRING LEGAL AID ARE NOT ONLY INVOLVED IN THE STRESS OF COURT APPEARANCE BUT ARE ALSO SUBJECT TO THE STRESS OF SEEKING LEGAL ADVICE WITHOUT THE MEANS TO PAY FOR IT. IT FOLLOWS THAT THE OFFICE SHOULD BE ORDERLY AND EFFICIENT BUT ALSO HAVE A FRIENDLY AMBIENCE TO ASSIST THE APPLICANT AT A DIFFICULT TIME.</p> <p>4. FUNCTIONAL ADAPTABILITY IS DESIRABLE TO THE DEGREE THAT FUTURE DEMOLITION TO ACCOMMODATE PLANNING CHANGES IS RELATIVELY EASY, I.E. STUD WALLS ARE EASIER TO DEMOLISH THAN MASONRY WALLS.</p> <p>5. NON-GLARE LIGHTING IS ESSENTIAL, NOT ONLY FROM A COMFORT LEVEL (HIGH VCL), BUT ALSO TO ASSIST IN THE CREATION OF A FRIENDLY ENVIRONMENT.</p> <p>6. ALL INTERVIEWS AND DISCUSSIONS ARE BETWEEN LAWYER AND CLIENT AND THEREFORE CONFIDENTIAL. ALL WALLS SHALL HAVE AN STC VALUE AS SPECIFIED IN SECTION Q AND ALL DOORS TO THE WAITING AREA SHALL HAVE AN ACOUSTIC VALUE AS SPECIFIED IN SECTION Q.</p> <p>7. GOOD TEMPERATURE CONTROL IS ESSENTIAL WHETHER COOLING OR HEATING IS REQUIRED. GOOD AIR QUALITY IS REQUIRED THROUGH THE WHOLE COURT HOUSE.</p> <p>8. A TELEPHONE (RESTRICTED DIALLING AREA), AN ELECTRICAL DUPLEX OUTLET AND A COMPUTER JACK ARE REQUIRED IN EACH OFFICE.</p>

AREA
<p>LEGAL AID OFFICE/ DUTY COUNSEL OFFICE</p> <p>9.0sm (97sq ft) OFFICE</p> <p>0.50sm (5.38sq ft) WAITING AREA PER PERSON</p>
PROXIMITIES
<p>THE LEGAL AID/DUTY COUNSEL OFFICE SHALL BE ACCESSED FROM THE PUBLIC CIRCULATION OR WAITING AREA. SEE NOTE 1. HOWEVER, AS ASSISTANCE FROM THE SOCIAL SERVICE AGENCIES MAY BE REQUIRED FROM TIME TO TIME, THIS RELATIONSHIP SHOULD BE KEPT IN MIND DURING THE PLANNING OF THE COURTHOUSE.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

CHAIRS	NOTE 1	sled base
	NOTE 1	side chairs tilt
	NOTE 1	swivel/tilt
TABLES		movable standard
		special
FITMENTS		modular movable
		fixed
		special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered
		wood
COUCH		full size
		small
BOOKCASE		full height
		low
		doors
SIDE TABLES		decorative
	NOTE 2	functional
DESK	NOTE 3	plain
		single or double
		pedestal
		computer
		executive
		secretarial system
DAIS & PLATFORMS		fixed i.e. built in place
		sectional (movable)

FURNISHINGS & EQUIPMENT

1. LAYWERS' CHAIRS SHALL BE SWIVEL TILT WHILE THE APPLICANTS' CHAIRS, SPARE SIDE CHAIRS AND WAITING AREA CHAIRS SHALL BE LEG OR SLED BASE WITH ARMS.
2. SIDE TABLE, WHERE APPROPRIATE, TO BE PLASTIC LAMINATE FINISH, 457mm X 457mm, TO HOLD LITERATURE AND MAGAZINES.
3. THE DESKS SHALL HAVE A SINGLE PEDESTAL AND CENTRE PENCIL DRAWER ONLY, PLASTIC LAMINATE FINISH.

AREA

**LEGAL AID OFFICE/
DUTY COUNSEL OFFICE**

9.0sm (97sq ft)
OFFICE

0.50sm (5.38sq ft)
WAITING AREA PER PERSON

PROXIMITIES**INTERNAL ORGANIZATION**

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl
	NOTE 3	paint
DOORS	NOTE 4	standard fire rated * secure * acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. 28-OZ. CARPET THROUGHOUT OFFICES AND WAITING AREA.
2. ACOUSTIC LAY-IN CEILING.
3. DRYWALL ON METAL STUD WALLS CONSTRUCTED TO ACHIEVE AN STC VALUE AS SPECIFIED IN SECTION Q. WALLS SHALL BE TAKEN TO UNDERSIDE OF SLAB. DRYWALL SHEETS SHALL BE DOUBLED IF REQUIRED TO ACHIEVE ATTENUATION. WALLS SHALL BE FINISHED WITH VINYL WALL COVERINGS OR THREE COATS OF PAINT.
4. WOOD DOORS SHALL BE SOLID CORE, SOUND STRIPPED IN ACCORDANCE WITH SECTION Q.

AREA

**LEGAL AID OFFICE/
 DUTY COUNSEL OFFICE**

9.0sm (97sq ft)
 OFFICE

0.50sm (5.38sq ft)
 WAITING AREA PER PERSON

PROXIMITIES

INTERNAL ORGANIZATION

MEDIATORS' OFFICE/SUITE

13.5sm (145.3sq ft)
OFFICE

7.0sm (75.3sq ft)
SECRETARY

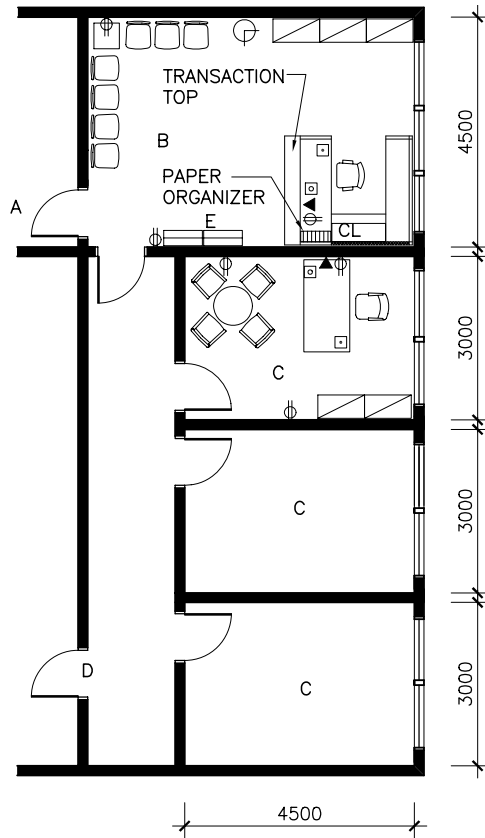


FIG: 1 9

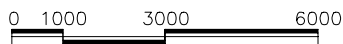


FIG. 19

Fig. 19 illustrates an acceptable planning solution for three to six mediators' offices. The size of the waiting/display area is based on the functional layout and amount of reading material to be displayed with allowances for waiting at 0.5sm per seat; secretary/reception space at 7.0sm and 0.5sm per filing cabinet. For the purpose of giving direction, the waiting area has been made large enough for six offices (a further four chairs can be added). As a degree of circulation is required in the waiting area to access displayed reading material and to talk to the secretary/receptionist, the size of the reception area can only be marginally reduced for less than three offices. It should also be noted that the people waiting should not crowd the secretary's desk for security reasons.

The mediators' offices are frequently open after normal working hours and therefore they should be located near an access to the building so the remainder of the court house can be secured from public entry when the mediators are working late. Plan can be varied to suit overall plan of the court house, but area sizes must not be exceeded. Since furniture shown is a proprietary system, sizes may change if other manufacturers are used. Area of office has been determined by function, not classification. Up to five persons could be meeting at one time. One office/meeting area is more efficient and economical than separate smaller offices and separate meeting rooms. During normal working hours duress push button will activate alarm in security office and administrator's office. After normal working hours, an alarm (loud bell) will ring both inside and outside the court house in addition to normal working hours' alarm.

LEGEND

A	PUBLIC ENTRY	B	RECEPTIONIST/WAITING/DISPLAY
C	MEDIATORS' OFFICES (ALL WITH THE SAME FURNITURE & SERVICES)	D	EMERGENCY EXIT ONLY OPERATED FROM CORRIDOR SIDE ONLY, I.E. NO ACCESS
▲	TELEPHONE	⊠	COMPUTER JACK
■	DURESS BUTTON	⊕	DUPLEX OUTLET
⌚	CLOCK	▨	FIVE-DRAWER 914mm WIDE X 45mm DEEP LATERAL FILING CABINET
▨	64" HIGH SCREEN	▬	42" HIGH SCREEN
▨	CLOSED SHELF UNIT	▬	DISPLAY RACKS

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 8	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 9	built-in portable none
SERVICES	NOTE 10 NOTE 10 NOTE 10 NOTE 10 NOTE 10	computer electricity telephone paging special
SECURITY	NOTE 11	high medium low

NOTES
<p>1. THE LOCATION OF THE MEDIATORS' OFFICES SHALL BE PLANNED TO ALLOW EASY ACCESS FROM THE PUBLIC AREA BUT ALSO TO ALLOW ACCESS AFTER WORKING HOURS WHEN THE REMAINDER OF THE COURT HOUSE IS CLOSED.</p> <p>2. TRAFFIC VARIES, BUT AS ALL MEETINGS ARE BY APPOINTMENT, THE TRAFFIC IS LIMITED TO THE NUMBER OF PERSONS THE SPACE CAN ACCOMMODATE.</p> <p>3. THE DISCUSSIONS THAT TAKE PLACE IN THESE OFFICES ARE TO MEDIATE FAMILY DISPUTES, POSSIBLE RECONCILIATION OR AN AGREED SOLUTION TO FAMILY PROBLEMS AND, IN THE FUTURE, PROPERTY DIVISIONS. THE IMPACT OF THE ROOM'S IMAGE ON THESE DISCUSSIONS IS VERY IMPORTANT. THE OFFICE SHOULD PROJECT AN IMAGE OF FRIENDLY EFFICIENCY. THE CONTROLLED PERSONALIZATION OF THE OFFICE BY THE MEDIATOR CAN CONTRIBUTE TO ACHIEVING THE RIGHT ATMOSPHERE FOR THESE VERY INTIMATE DISCUSSIONS.</p> <p>4. AS THE LOCATION OF THESE OFFICES HAS VERY SPECIFIC REQUIREMENTS, RELOCATION IS UNLIKELY.</p> <p>5. TO CREATE AN ATTRACTIVE LOW-KEY IMAGE, WINDOWS ARE VERY IMPORTANT.</p> <p>6. LIGHTING SHOULD BE ADEQUATE FOR THE MEDIATOR'S DESK WORK BUT SHOULD BE WITHOUT GLARE OF ANY KIND. THE USE OF PARABOLIC LENSES OR SIMILAR IS IMPORTANT TO PUT THE LIGHT WHERE IT IS REQUIRED. TABLE OR FLOOR LAMPS WOULD BE ACCEPTABLE AS AN ALTERNATIVE LIGHT SOURCE IN THE CONFERENCE AREA (NORMAL ROOM LIGHTING WITH LENSES NOTED ABOVE IS REQUIRED OVER THE WHOLE OFFICE).</p> <p>7. ACOUSTIC PRIVACY IS EXTREMELY IMPORTANT IN THESE OFFICES. AS NOTED ABOVE, THE MATTERS BEING DISCUSSED ARE EXTREMELY PRIVATE AND SOMETIMES VOLATILE. THE USE OF AN INSIDE CORRIDOR FORMING A SEPARATE SUITE OF OFFICES NOT ONLY CONTRIBUTES TO THE ACOUSTIC PRIVACY, BUT ALSO GIVES THE PARTICIPANTS IN THE DISCUSSION A PERCEPTION OF PRIVACY FROM THE PUBLIC AREAS. ALL WALLS SHALL HAVE THE STC VALUE AND BE SOUND STRIPPED AS SPECIFIED IN SECTION Q.</p> <p>8. QUALITY OF CONTROL SHALL BE ACCURATE BUT THE DESIGN SHALL ENSURE GOOD QUALITY AIR AT ALL TIMES WITHOUT DUCT OR FAN NOISE. NC OF ROOM SHALL BE 30 - 35.</p> <p>9. STATIONERY STORAGE IS REQUIRED, AND SHALL CONSIST OF A METAL CABINET WHICH WILL BE REPLENISHED AS REQUIRED FROM THE MAIN STORAGE ROOM.</p> <p>10. ALL MEDIATORS' ROOMS AND THE SECRETARY'S WORK STATION SHALL HAVE A TELEPHONE, COMPUTER JACK, ELECTRICAL DUPLEX OUTLET AND A DURESS ALARM BUTTON. THE SECRETARIAL STATION SHALL HAVE TWO DUPLEXES TO ACCOMMODATE MULTIPLE OFFICE MACHINES.</p> <p>11. ALTHOUGH SECURITY IS NOTED AS MEDIUM, THERE IS ALWAYS A RISK IN FAMILY DISPUTES THAT VIOLENCE WILL ERUPT. AS MANY FAMILY MEETINGS TAKE PLACE AFTER NORMAL WORKING HOURS THE DURESS BUTTON SHALL ALSO ACTIVATE A LOUD ALARM BELL BOTH INSIDE AND OUTSIDE THE BUILDING. AFTER WORKING HOURS, IN ADDITION TO THE NORMAL DAYTIME ALARM, THE AFTER HOURS ALARM SHALL BE SET BY THE ADMINISTRATOR OR HIS/HER REPRESENTATIVE AT THE END OF THE NORMAL WORKING DAY.</p>

AREA
<p>MEDIATOR'S OFFICE/SUITE</p> <p>13.5sm (145.3sq ft) OFFICE</p> <p>7.0sm (75.3sq ft) SECRETARY</p>
PROXIMITIES
<p>CLOSE TO PUBLIC AREA AND ONE OF THE BUILDING ENTRANCES.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

CHAIRS	NOTE 1	sled base
	NOTE 1	side chairs tilt
	NOTE 1	swivel/tilt
TABLES	NOTE 2	movable standard special
		modular movable fixed special design
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench)
		fixed (gang) upholstered wood
		full size small
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES	NOTE 3	decorative functional
		decorative functional
DESK	NOTE 4	plain single or double pedestal computer executive secretarial system
	NOTE 4	plain single or double pedestal computer executive secretarial system
		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers
FILING CABINETS	NOTE 5	lateral

FURNISHINGS & EQUIPMENT

1. MEDIATORS' DESK CHAIRS SHALL BE SWIVEL TILT WITH ARMS. SECRETARY'S CHAIR SHALL BE ARMLESS ERGONOMIC SWIVEL STENO CHAIRS. ALL ABOVE CHAIRS SHALL HAVE FIVE LEGS. SIDE AND WAITING ROOM CHAIRS SHALL BE EITHER SLED BASE OR FOUR LEGS, UPHOLSTERED, WITH ARMS.
2. ALL OFFICES SHALL HAVE A 762mm DIAMETER TABLE FINISHED IN PLASTIC LAMINATE.
3. 457mm X 457mm SIDE TABLE SHALL BE PROVIDED IN THE WAITING AREA FOR MAGAZINES OR INFORMATIVE MATERIAL.
4. DESKS FOR MEDIATORS SHALL BE 914mm X 762mm, DOUBLE PEDESTAL. PEDESTALS SHALL BE AS REQUIRED BY MEDIATORS BUT GENERALLY WILL CONSIST OF ONE FILE DRAWER WITH PENCIL DRAWER OVER, AND A THREE-DRAWER PEDESTAL ON THE OPPOSITE SIDE. THE SECRETARY'S DESK SHALL BE PART OF THE FURNITURE SYSTEM CHOSEN WITH SUPPLEMENTARY WORK AREA, COMPUTER SURFACE, FILE DRAWERS AND OVERHEAD CUPBOARD AND SHELVES. A NARROW COUNTER TOP SHALL BE INSTALLED ON TOP OF THE SCREEN FACING THE ENTRANCE FOR RECEPTION AND TRANSACTIONS.
5. THREE 914mm WIDE BY 457mm DEEP, FIVE-DRAWER LATERAL FILING CABINETS SHALL BE PROVIDED TOGETHER WITH TWO DISPLAY UNITS WITH STORAGE AND SLOPING SHELVES. A STATIONERY STORAGE CABINET SHALL ALSO BE PROVIDED. ALL CABINETS SHALL BE LOCKABLE.

AREA**MEDIATOR'S OFFICE/SUITE**

13.5sm (145.3sq ft)
OFFICE

7.0sm (75.3sq ft)
SECRETARY

CAPACITY**INTERNAL ORGANIZATION**

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic
	NOTE 1	wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish
	NOTE 2	paint acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl
	NOTE 3	paint
DOORS	NOTE 4	standard fire rated secure
	NOTE 4	acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE MEDIATORS' OFFICES SHALL BE CARPETED WITH 28-OZ. CARPET. THE FLOOR OF THE WAITING AREA AND CORRIDOR SHALL BE FINISHED IN SHEET OR 914mm X 914mm RUBBER TILES TO FACILITATE CLEANING AS THE AREA WILL BE LOCATED NEAR AN ENTRANCE. IF THE PLAN CONFIGURATION ALLOWS, THE SECRETARY'S AREA SHALL ALSO BE CARPETED.
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE WITH AN NRC VALUE AS SPECIFIED IN SECTION Q.
3. WALLS SHALL BE DRYWALL ON METAL STUD TAKEN TO THE UNDER-SIDE OF THE SLAB AND CONSTRUCTED TO ACHIEVE AN STC THAT REFLECTS THE REQUIREMENTS OF QUIETNESS OUTLINED IN THIS SECTION AND DETAILED IN SECTION Q. WALLS SHALL BE FINISHED WITH VINYL WALL COVERING OR THREE COATS OF PAINT.
4. WOOD DOORS SHALL BE SOLID CORE WITH ALL EDGES SOUND STRIPPED IN ACCORDANCE WITH SECTION Q. ALL DOORS TO BE MANUALLY LOCKABLE AND KEYED ALIKE EXCEPT EMERGENCY DOOR WHICH SHALL BE LOCKED FROM OCCUPANT SIDE ONLY, BUTTON TURN RELEASE.
5. WINDOWS FACING SOUTH OR WEST SHALL BE FITTED WITH SUN CONTROL BLINDS.

AREA

MEDIATOR'S OFFICE/SUITE

13.5m (145.3sq ft)
OFFICE

7.0m (75.3sq ft)
SECRETARY

PROXIMITIES

INTERNAL ORGANIZATION

INTERVIEW ROOMS

9.0sm (96.9sq ft)

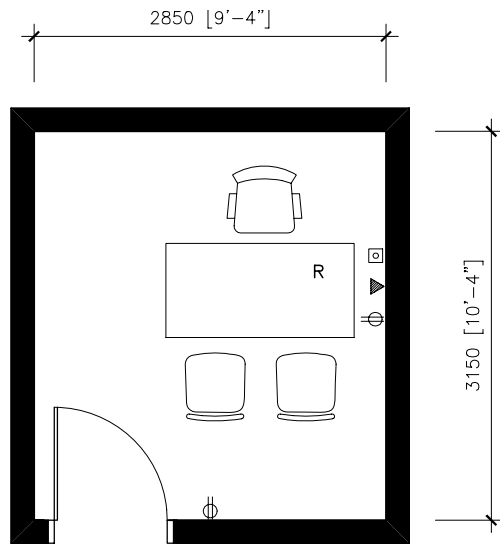


FIG: I 10



FIG. I 10

All interview rooms shall have an area of 9.0sm except when used in conjunction with a courtroom or motions room where they may be slightly more or, in the case of the motions room, slightly less than 9.0sm. Where motions rooms are adjacent to each other, two interview rooms could become one large one. The interview rooms can be used by defence counsel, Crown Attorneys, social agencies or others requiring a private discussion, instruction or briefing area. Interview rooms located in the Crown Attorneys' area are 13.5sm so they can be used for expansion of the Crown Attorneys' offices. Interview rooms associated with courtrooms shall be provided with a small viewing window in the door.

A telephone with restricted dialling area (local calls only) shall be installed.

Although Fig. I 10 shows a nearly square room, the configuration of the room can be changed to meet the overall planning requirements but the area shall not be enlarged.

LEGEND

- R TELEPHONE (RESTRICTED DIALLING AREA)
- ⊕ DUPLEX OUTLET
- ⊞ COMPUTER JACK

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high
	NOTE 2	medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 3	important
	NOTE 3	desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional
	*	none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	NOTE 4	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE		built-in portable none
SERVICES		water
	NOTE 5	electricity
	NOTE 5	telephone
	NOTE 5	paging computer
SECURITY	*	high medium low

NOTES
<p>1. ALL INTERVIEW ROOMS EXCEPT THOSE DEDICATED TO A PARTICULAR SECTION, I.E. CROWN ATTORNEYS', SHALL BE EASILY ACCESSIBLE TO THE PUBLIC.</p> <p>2. PRIOR TO THE COURT SITTING, THE INTERVIEW ROOMS NORMALLY RECEIVE HIGH USAGE BY DIFFERENT PARTIES FOR SHORT PERIODS. AT OTHER TIMES THE USAGE OF THESE ROOMS COULD BE LOW.</p> <p>3. WHEN LOCATED ADJACENT TO THE COURTROOM OR MOTION ROOM, FUNCTIONAL ADAPTABILITY IS UNIMPORTANT, BUT WHEN LOCATED IN OTHER AREAS OF THE COURT HOUSE, CONSIDERATION SHOULD BE GIVEN TO FUTURE EXPANSION OR ALTERATION.</p> <p>4. ALL INTERVIEW ROOMS ARE LOCATIONS FOR PRIVATE DISCUSSION OR BRIEFING AND THEREFORE SHOULD BE ACOUSTICALLY SECURED FROM OVERHEARING FROM OUTSIDE THE INTERVIEW ROOM, EVEN FROM IMMEDIATELY OUTSIDE THE DOOR.</p> <p>5. A TELEPHONE WITH A RESTRICTED DIALLING AREA, ELECTRICAL DUPLEX OUTLETS AND A COMPUTER JACK FOR FUTURE USE SHALL BE INSTALLED.</p>

AREA
<p>INTERVIEW ROOMS</p> <p>9.0sm (96.9sq ft)</p>
PROXIMITIES
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST		
CHAIRS		sled base
	NOTE 1	side chairs tilt swivel/tilt
TABLES		movable standard
		special
FITMENTS		modular movable
		fixed
		special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered
		wood
COUCH		full size
		small
BOOKCASE		full height
		low
		doors
SIDE TABLES		decorative
		functional
DESK	NOTE 2	plain
		single or double
		pedestal
		computer
		executive
		secretarial
		system
DAIS & PLATFORMS		fixed i.e. built in place
		sectional (movable)
CREDENZA		plain
		cupboards
		file drawers

FURNISHINGS & EQUIPMENT
<p>NOTE: THE INTERVIEW ROOMS WILL BE USED BY MANY PEOPLE FOR SHORT PERIODS OF TIME. ALL FURNITURE SHOULD THEREFORE BE CONSIDERED FOR MULTIPLE USE.</p> <p>1. ALL CHAIRS SHALL BE SIDE CHAIRS, FOUR LEGS OR SLED BASE WITH ARMS UPHOLSTERED.</p> <p>2. DESK SHALL BE 1524mm X 762mm WITHOUT PEDESTALS, WITH PENCIL DRAWER ONLY. PLASTIC LAMINATE FINISH.</p>

AREA
<p>INTERVIEW ROOMS</p> <p>9.0sm (96.9sq ft)</p>
CAPACITY
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	*	sheet vinyl
	*	paint
DOORS	NOTE 4	standard fire rated secure
	NOTE 4	acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. CARPET SHALL BE 28 OZ.
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE AS SPECIFIED IN SECTION Q.
3. WALLS SHALL BE DRYWALL SHEET ON METAL STUDS CONSTRUCTED TO ACHIEVE THE STC RATING SPECIFIED IN SECTION Q.
4. WOOD DOORS SHALL BE SOLID CORE AND SOUND STRIPPED IN ACCORDANCE WITH SECTION Q.

AREA

INTERVIEW ROOMS

9.0sm (96.9sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

JANITORS' CLOSET
 2.16sm (23.25sq ft)
AND STOREROOM
 8.12sm (87.4sq ft)

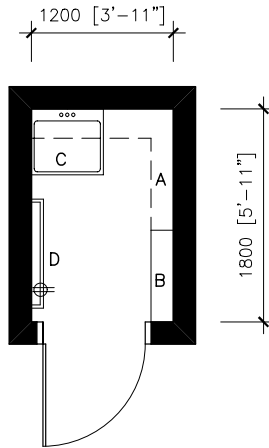


FIG: I 12

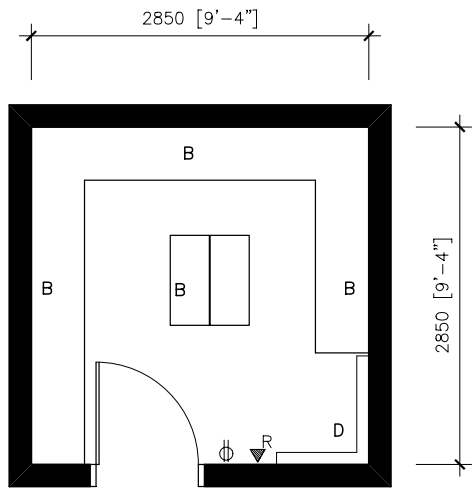


FIG: I 11



FIG. I 11

As janitors' closets and janitors' storerooms are often overlooked in the programming of space, they are inserted here as a reminder and examples to the designer.

Each floor of a court house will have a minimum of one janitors' closet. Large floors with multiple washrooms shall have two or three closets as required.

Each court house will have a main janitors' storeroom to store paper goods, cleaning liquids and powders, buckets, mops, brooms etc. Janitors' closets will be replenished from the main store as required.

In small court houses (up to four courtrooms), the janitors' closets shall be increased in area to 5.0sm and used for storage also.

Dedicated waste management areas shall be incorporated throughout the court house with a main collection area adjacent to the building's shipping/receiving area. Receptacles for recycling of papers and containers for soft drinks and the like shall be designed as an integral part of the building.

LEGEND

- A HIGH-LEVEL SHELF
- B HIGH STORAGE (SEVEN SHELVES)
- C FLOOR SINK
- D BROOM HANGING & VACUUM STORAGE
- ⊕ DUPLEX OUTLET
- ▲^R TELEPHONE (RESTRICTED DIALLING AREA)

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE		dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 2	built-in portable none
SERVICES	NOTE 3 NOTE 3 NOTE 3	water electricity telephone intercom special
SECURITY	NOTE 4	high medium low

NOTES
<p>1. LOCATION OF JANITORS' CLOSETS SHOULD BE EVENLY DISTRIBUTED IN THE COURT HOUSE, GENERALLY ACCESSED FROM PUBLIC AREAS. IN LARGE COURT HOUSES CLOSETS MAY BE REQUIRED IN BOTH PRIVATE AND RESTRICTED AREAS.</p> <p>2. STORAGE AS SHOWN ON PLANS.</p> <p>3. HOT AND COLD WATER AND ELECTRICAL DUPLEX SHALL BE INSTALLED IN JANITORS' CLOSET. ELECTRICAL DUPLEX AND WALL-MOUNTED TELEPHONE SHALL BE INSTALLED IN STORE ROOM.</p> <p>4. BOTH DOORS SHALL BE LOCKED, <u>NOT</u> KEYED ALIKE.</p>

AREA
<p>JANITOR'S CLOSET & STOREROOM</p> <p>2.16sm (23.25sq ft) JANITORS' CLOSET</p> <p>8.12sm (87.4sq ft) STORAGE</p>
PROXIMITIES
Empty space for Proximities
INTERNAL ORGANIZATION
Empty space for Internal Organization

CHECKLIST

FLOOR	carpet
	vinyl
	ceramic
	wood
	rubber
NOTE 1	special
CEILING	drywall sheet
	drywall lathe &
	sprayed acoustic
	finish
NOTE 2	paint acoustic tile
WALLS	NOTE 3 drywall sheet
	acoustic panels
	NOTE 3 concrete block
	marble
	NOTE 3 ceramic
	sheet vinyl
	paint
DOORS	NOTE 4 standard
	fire rated
	secure
	acoustic
WINDOWS	sun control
	decorative drapes
	full drapes

NOTES ON FINISHES

1. FLOOR OF JANITORS' CLOSET SHALL BE CONCRETE SEALED OR PAINTED WITH EPOXY PAINT. STOREROOM FLOOR SHALL BE SHEET VINYL.
2. ACOUSTIC TILE CEILINGS IN BOTH ROOMS.
3. WALLS OF JANITORS' CLOSET SHALL BE CONCRETE BLOCK, FILLED AND PAINTED WITH CERAMIC TILE AROUND FLOOR SINK, 914mm HIGH. WALLS OF STORAGE CAN BE SAME OR DRYWALL ON STEEL STUDS REINFORCED FIXED SHELVING.
4. DOORS SHALL BE 45mm SOLID CORE WITH SECURE LOCKS.

AREA

JANITOR'S CLOSET & STOREROOM

2.16sm (23.25sq ft)
JANITORS' CLOSET

8.12sm (87.4sq ft)
STORAGE

PROXIMITIES

INTERNAL ORGANIZATION

WITNESS WAITING

13.5sm (145.31sq ft)

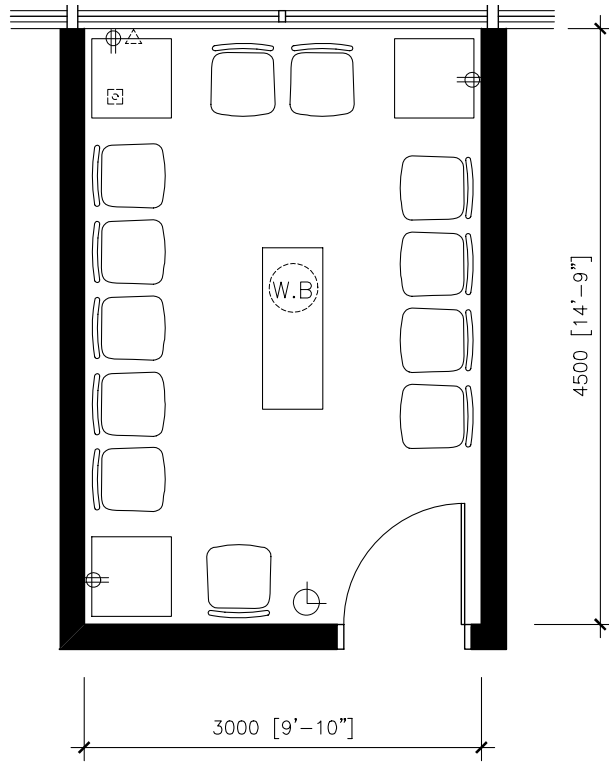


FIG: I 13



FIG. I 13

Some witnesses are required to be separated from the general public while waiting to be called into the courtroom. Fig. I 13 shows a room capable of holding a maximum of 12-13 persons although in a smaller court house fewer chairs would be required or a room 9.0sm could be provided as an alternative. In a larger court house the waiting room could be enlarged or additional rooms of the same size could be constructed.

The 13.5sm area is a very flexible one for replanning and therefore should be given serious consideration before adopting the smaller 9.0sm room.

LEGEND

- ⊕ DUPLEX OUTLET
- ⌚ CLOCK
- △ WIRE FOR POSSIBLE FUTURE TELEPHONE
- ⊞ WIRE FOR POSSIBLE FUTURE COMPUTER JACK
- Ⓜ WASTE BASKET UNDER TABLE

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	NOTE 2	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	NOTE 3	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 6	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	*	built-in portable none
SERVICES	NOTE 7 NOTE 7 NOTE 7 NOTE 7	water electricity telephone paging computer
SECURITY	*	high medium low

NOTES

1. SHOULD BE LOCATED ADJACENT TO THE PUBLIC WAITING AREA.
2. WITNESSES OFTEN HAVE TO SPEND MANY HOURS IN THESE ROOMS. THEY SHOULD, THEREFORE, HAVE A RELAXING AMBIENCE. HOWEVER, THEY SHOULD ALSO BE KEPT CLEAN, TIDY AND ORDERLY.
3. THE ROOM SHOULD BE WIRED FOR FUTURE TELEPHONE AND COMPUTER OUTLETS. THE AREA OF 13.5sm IS ONE OF THE MOST USED SIZES IN THE COURT HOUSE AND THEREFORE COULD BE USED FOR MANY OTHER FUNCTIONS.
4. Fig. I 13 SHOWS THE ROOM LOCATED ON AN EXTERNAL WALL WITH WINDOWS WHICH IS A DESIRABLE SOLUTION. THE AVAILABILITY OF EXTERNAL WALL IS USUALLY RESTRICTED DUE TO HIGHER PRIORITIES. IN THIS CASE A ROOM WITHOUT WINDOWS IS ACCEPTABLE. THE INTERIOR DESIGN SHOULD RECOGNIZE THE LONG HOURS THAT THE OCCUPANTS MAY HAVE TO SPEND IN A RELATIVELY SMALL ENCLOSED ROOM.
5. GOOD NON-GLARE READING LIGHT IS ESSENTIAL FOR THE REASONS GIVEN IN NOTE 4. A HIGH VCL SHOULD BE ACHIEVED, ESPECIALLY IN ROOMS WITHOUT WINDOWS.
6. AS THE PEOPLE DENSITY IS HIGH, CARE MUST BE TAKEN TO ACHIEVE A COMFORTABLE AIR ENVIRONMENT FOR THE WHOLE YEAR INCLUDING SPRING AND AUTUMN CHANGE-OVER PERIODS.
7. ELECTRICAL DUPLEX OUTLETS, PAGING AND AN ELECTRIC CLOCK SHALL BE INSTALLED TOGETHER WITH WIRING FOR A POSSIBLE FUTURE TELEPHONE AND COMPUTER JACK.

AREA**WITNESS WAITING**

13.5sm (145.31sq ft)

PROXIMITIES

LOCATED ADJACENT TO THE COURTROOM
PUBLIC WAITING AREA.

INTERNAL ORGANIZATION

CHECKLIST		
CHAIRS	NOTE 1	sled base
	NOTE 1	side chairs tilt swivel/tilt
TABLES	NOTE 2	movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES	NOTE 3	decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. CHAIRS SHALL BE COMFORTABLE UPHOLSTERED SLED BASE OR SIDE CHAIRS WITH LEGS. ALL CHAIRS SHALL HAVE UPHOLSTERED ARMS.</p> <p>2. THE CENTRE TABLE SHALL BE 609mm WIDE X 1524mm LONG X 914mm HIGH FINISHED WITH LAMINATE.</p> <p>3. LOW SIDE TABLES FOR MAGAZINES ETC. SHALL BE PROVIDED AS SHOWN. TABLE SHALL BE 457mm X 457mm X 381mm HIGH.</p> <p>NOTE: A NON-FLAMMABLE WASTE BASKET SHALL BE PROVIDED.</p>

AREA
<p>WITNESS WAITING</p> <p>13.5sm (145.31sq ft)</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish
	*	acoustic tile
WALLS	NOTE 2	drywall sheet acoustic panels wood marble ceramic
	NOTE 2	sheet vinyl paint
DOORS	NOTE 3	standard fire rated secure acoustic
WINDOWS	NOTE 4	sun control decorative drapes full drapes

NOTES ON FINISHES

1. 28-OZ. CARPET, SHEET RUBBER OR 914mm X 914mm RUBBER T I L E S ARE ACCEPTABLE.
2. WALLS SHALL BE CONSTRUCTED OF METAL STUDS AND DRYWALL, FINISHED WITH VINYL WALL COVERING. THE WALLS SHALL BE SOUND INSULATED. THE STC RATING OF THE WALL SHALL BE AS SPECIFIED IN SECTION Q.
3. DOORS SHALL BE WOOD WITH A SOLID CORE AND A LOCK. SEE SECTION Q.
4. IF THE ROOM FACES WEST OR SOUTH AND HAS WINDOWS, SUN CONTROL BLINDS SHALL BE INSTALLED.

AREA

WITNESS WAITING

13.5sm (145.31sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

OFFICE SPACE FOR SOCIAL AGENCIES

13.5sm (145.3sq ft)
 EACH OFFICE

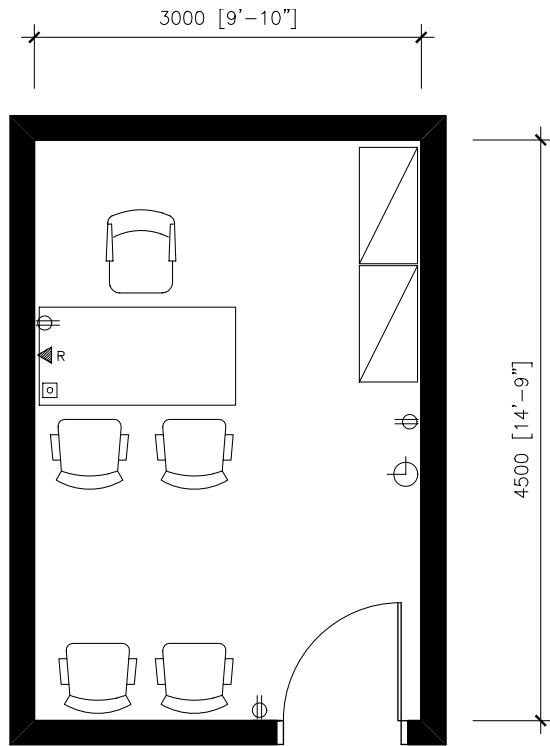


FIG: I 14








FIG. I 14

Social agencies such as the John Howard Society, Elizabeth Fry Society, native organizations or religious groups are provided space in court houses. The organizations vary in activity from court house to court house. Therefore an assessment has to be made when the program is being prepared.

Where possible, and when the agencies are not present every day, an office can be shared between two agencies each with its own filing cabinet. If one or more agencies are very active, and especially where they are of assistance to the administration, a separate office shall be provided for each agency serving the court house. Two filing cabinets shall be provided for shared rooms only. Doors shall be lockable.

LEGEND

-  DUPLEX OUTLET
-  TELEPHONE (RESTRICTED DIALLING AREA)
-  COMPUTER JACK (SEE PAGE I 46)
-  CLOCK
-  914mm WIDE 4-DRAWER HIGH LATERAL FILING CABINET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5 NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in portable none
SERVICES	NOTE 9 NOTE 9 NOTE 9 NOTE 9	water electricity telephone paging computer
SECURITY	*	high medium low

NOTES
1. EASILY ACCESSIBLE TO THE PUBLIC.
2. NORMALLY THE TRAFFIC IS NOT HIGH, BUT IN CERTAIN PARTS OF THE PROVINCE THE AGENCIES ARE VERY ACTIVE. IN THESE AREAS THE SOCIAL WORKER IS PRESENT WHEN THE COURT IS OPEN AND OFTEN ASSISTS THE ADMINISTRATION WITH PRE-TRIAL REPORTS ETC. IN THESE COURT HOUSES THE TRAFFIC IS HIGHER.
3. THE WORK DONE BY THE SOCIAL AGENCIES ALSO VARIES FROM COURT HOUSE TO COURT HOUSE. THE ASSISTANCE AND SUPPORT GIVEN INCLUDES THE FAMILY OF THE ACCUSED AS WELL AS THE PARTIES IN CIVIL ACTIONS SUCH AS SEPARATION AND CUSTODY. IN NEARLY ALL INSTANCES THE PARTY BEING HELPED IS UNDER STRESS. THE OFFICE SHOULD THEREFORE BE DECORATED TO PROJECT A FRIENDLY, RELAXING AMBIENCE WHILE BEING ORDERLY.
4. THE ROOM AREA ALLOWS FOR MANY FUNCTIONS AND THEREFORE IT DOES NOT NECESSARILY HAVE TO BE DEMOLISHED TO ACCOMMODATE A DIFFERENT USE.
5. A VIEW OUT WOULD BE DESIRABLE BUT IS LOW IN PRIORITY WITH OTHER AREAS REQUIRING NATURAL LIGHT OR A VIEW OUT. OFFICES BEING USED FULL TIME SHOULD BE GIVEN GREATER CONSIDERATION FOR WINDOWS THAN OFFICES USED PART TIME.
6. GOOD NON-GLARE LIGHTING IS REQUIRED.
7. SINCE CONFIDENTIAL MATTERS ARE DISCUSSED ACOUSTICAL PRIVACY IS A CONCERN.
8. FILING CABINET, ONE FOR EACH AGENCY.
9. ELECTRICAL DUPLEX OUTLETS SHALL BE INSTALLED WITH A TELEPHONE (RESTRICTED DIALLING AREA), PAGING, ELECTRIC CLOCK AND A COMPUTER JACK. THE COMPUTER IS FOR A MODEM CONNECTION TO THE AGENCY'S LOCAL OFFICE, NOT TO THE COURT HOUSE COMPUTER SYSTEM. HOWEVER, IT MUST BE POSSIBLE TO CONNECT THE COMPUTER JACK TO THE COURT HOUSE SYSTEM IN THE FUTURE.

AREA
OFFICE SPACE FOR SOCIAL AGENCIES
13.5sm (145.3sq ft) EACH OFFICE
PROXIMITIES
CLOSE TO PUBLIC AREA AND IF POSSIBLE REASONABLY CLOSE TO THE ADMINISTRATION AREA.
INTERNAL ORGANIZATION

CHECKLIST		
CHAIRS	NOTE 1	sled base side chairs
	NOTE 1	tilt swivel/tilt
TABLES		movable standard special
FITMENTS	NOTE 2	modular movable fixed
		special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES		decorative functional
DESK	NOTE 3	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. DESK CHAIR SHALL BE SWIVEL TILT WITH ARMS AND FIVE LEGS. SIDE CHAIRS SHALL BE UPHOLSTERED SLED BASE OR LEGS WITH ARMS.</p> <p>2. FILING CABINETS SHALL BE FOUR-DRAWER HIGH 914mm WIDE, ALLOCATED ONE PER AGENCY. WHERE AN OFFICE IS SHARED, TWO FILING CABINETS SHALL BE PROVIDED WITH DIFFERENT LOCKS.</p> <p>3. DESK SHALL BE 914mm X 1524mm WITH TWO PEDESTALS FINISHED WITH PLASTIC LAMINATE. WHEN AN OFFICE IS SHARED, PEDESTALS SHALL BE INDIVIDUALLY LOCKED OTHERWISE PEDESTALS SHALL BE KEYED ALIKE.</p>

AREA
<p>OFFICE SPACE FOR SOCIAL AGENCIES</p> <p>13.5sm (145.3sq ft) EACH OFFICE</p>
CAPACITY
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted * acoustic tile
WALLS	NOTE 2	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	NOTE 3	standard fire rated secure acoustic
WINDOWS	NOTE 4	sun control decorative drapes full drapes

NOTES ON FINISHES

1. 28-OZ. CARPET SHALL BE INSTALLED.
2. WALLS SHALL BE DRYWALL SHEETS ON METAL STUDS WITH VINYL WALL COVERING. WALLS SHALL BE CONSTRUCTED AND SOUND INSULATED TO PROTECT THE OCCUPANTS FROM BEING OVERHEARD. SEE SECTION Q FOR STC VALUES.
3. DOOR SHALL BE WOOD SOLID CORE WITH SOUND STRIPPING IF OPENING ONTO PUBLIC AREA. SEE SECTION Q FOR SPECIFICATION.
4. IF WINDOWS ARE PROVIDED SUN CONTROL BLINDS SHALL BE INSTALLED ON ALL WINDOWS FACING WEST OR SOUTH.

AREA

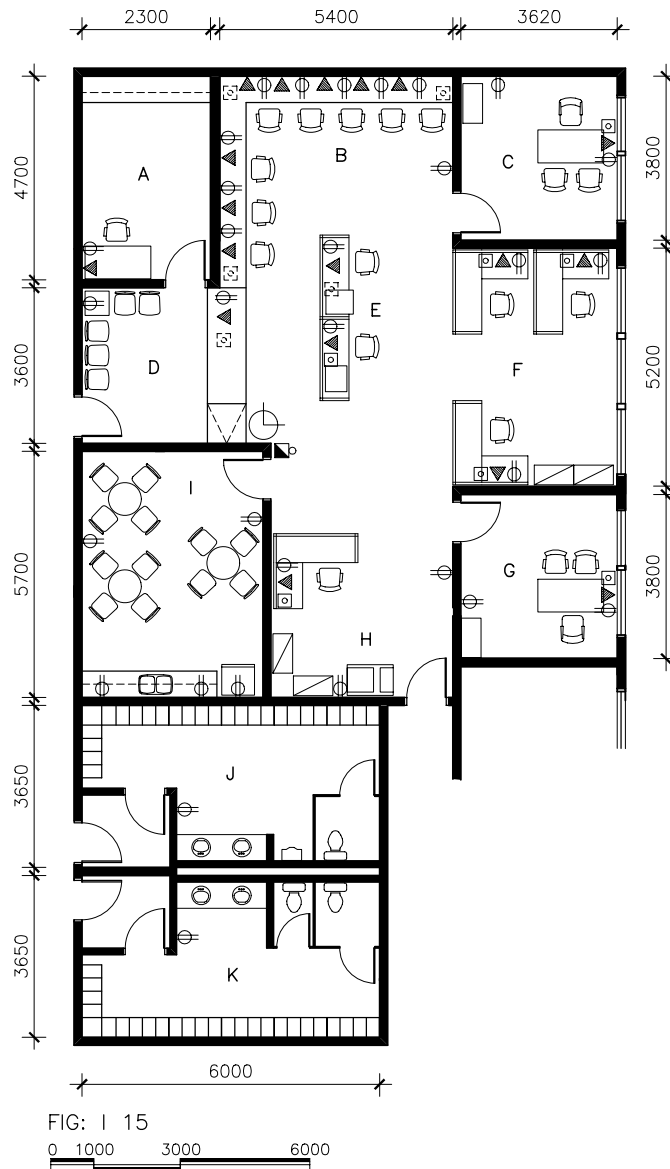
OFFICE SPACE FOR SOCIAL AGENCIES

13.5sm (145.3sq ft)
 EACH OFFICE

PROXIMITIES

INTERNAL ORGANIZATION

POLICE BUREAU INCLUDING LUNCHROOM AND LOCKER/WASHROOMS



RECEPTION, OFFICE AREA, POLICE WITNESS WAITING, LUNCHROOM/ MEETING ROOM, LOCKER/WASHROOMS

FIG. I 15

Fig. I 15 shows a possible planning solution for a police bureau that illustrates the relationships between the various functions.

- A **POLICE WITNESS WAITING AREA.** It is not part of the police bureau and is therefore not directed by the senior police staff member (usually a staff sergeant). However, it is usually located adjacent to the police bureau. In the smaller court house, the police witness waiting area shall be combined with the police lunchroom/meeting room. Minimum room size 9.0sm based on usable space allocation of 3.0sm per person.
- B **WORK STATIONS** to accommodate court officers who prepare the police paper work both before and after court sittings: 5.0sm per work station.
- C **STAFF SERGEANT OF POLICE, DOCUMENTS SECTION:** private office at 13.5sm
- D **PUBLIC WAITING AREA AND COUNTER:** waiting at 0.5sm per seat plus area required for counter layout
- E **COMPUTER AND PRINTER** (not connected to MAG computer): computer at 2.0sm And printer at 1.0sm
- F **GENERAL OFFICE AND SECRETARIES:** 7.0sm per secretary/clerk
- G **SERGEANT OF POLICE, DOCUMENTS SECTION:** private office at 13.5sm
- H **COPYING AREA:** 5.0sm allocation
- I **LUNCHROOM/MEETING ROOM:** 1.0sm per user based on three shifts but ensure room adequately sized for daily briefing meetings.
- J,K **WASHROOMS AND LOCKER ROOMS.** Note access can be as shown (with keypad locks) or from inner corridor dependent on overall planning and required access for security officers (holding cell), locker room allocation: 1.85sm per locker for first 10 lockers plus 0.3sm for each additional locker. Locker size 305mm wide x 457mm deep x 1829mm high. Washroom fixtures as per Ontario Building Code.

NOTE: Lunchroom and washroom locker rooms are for common use of both security and documents sections of the police.

LEGEND

- ⊕ TELEPHONE (WIRING IN CONTRACT; INSTRUMENT AND FEES PAID BY POLICE).
NOTE: TWO TWISTED PAIR FOR FUTURE MAG COMPUTERS SHOULD BE INSTALLED AT ALL TELEPHONE LOCATIONS.
- ⊙ DUPLEX OUTLETS
- ⊙ CLOCK
- ⊙ COMPUTER JACKS FOR POLICE COMPUTER SYSTEM, NOT MAG SYSTEM.
- ⊠ FUTURE MAG COMPUTERS (WIRING ONLY)

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 5	important desirable unimportant
VIEW OUT	NOTE 6	important desirable optional none
ILLUMINATION	NOTE 7	bright moderate subdued special
QUIETNESS	NOTE 8	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 9	built-in portable none
SERVICES	NOTE 10 NOTE 10 NOTE 10 NOTE 10 NOTE 10	water electricity telephone intercom computer special
SECURITY	NOTE 11	high medium low

NOTES
1. MUST BE LOCATED ON THE PUBLIC CIRCULATION.
2. TRAFFIC IS USUALLY QUITE HIGH WITH A CONSTANT INTERFACE WITH BOTH THE CROWN ATTORNEY AND THE PUBLIC.
3. THE PUBLIC CAN OFTEN VIEW THE POLICE AREA FROM THE COUNTER AND THEREFORE THE IMAGE TO BE PROJECTED SHOULD BE ONE OF ORDER AND EFFICIENCY BUT NOT INTIMIDATING.
4. THE LOCATION OF THE BUREAU IS DEPENDENT ON ITS RELATIONSHIP TO THE CROWN ATTORNEYS' AREA. IT IS UNLIKELY THAT BOTH AREAS WOULD BE REPLANNED. HOWEVER, THE CONSTRUCTION OF WALLS MUST ALLOW FOR THIS EVENTUALITY.
5. INTERNAL REPLANNING IS A DISTINCT POSSIBILITY AS THE POLICE PRESENCE IN COURT HOUSES INCREASES AS THEY TAKE RESPONSIBILITY FOR SECURITY.
6. THE AREA IS OCCUPIED FOR FULL WORKING DAYS AND SHOULD BE LOCATED AND PLANNED AS AN OFFICE FUNCTION.
7. ILLUMINATION SHOULD BE NON-GLARE, COMFORTABLE OFFICE LIGHTING. THE LUNCHROOM IS A RELAXATION AREA. THE LIGHTING SHOULD THEREFORE BE NON-GLARE BUT A SLIGHTLY LOWER LEVEL OF ILLUMINATION STILL SUFFICIENT FOR READING.
8. THE ATTENUATION OF SOUND FROM THE BUREAU TO ADJOINING SPACES MUST BE ACHIEVED, I.E. OVERHEARING MUST BE PREVENTED. THE PRIVATE OFFICES SHOULD BE BUILT TO THE STC VALUE SPECIFIED IN SECTION Q.
9. A SMALL STORAGE ROOM FOR STATIONERY SUPPLIES WOULD BE INCLUDED DEPENDENT ON THE SIZE OF THE COURT HOUSE.
10. HOT AND COLD WATER AND ELECTRICAL POWER SHALL BE INSTALLED IN THE LUNCHROOM AND WASHROOMS. ELECTRICAL POWER, TELEPHONE WIRING, COMPUTER WIRING, ELECTRIC CLOCK, PAGING SYSTEM, AND FIRE ALARM BELL SHALL BE INSTALLED IN THE OFFICE AREA. <u>NOTE</u> : THE WIRING ONLY FOR THE TELEPHONE AND COMPUTER WILL BE INSTALLED. TELEPHONE INSTRUMENTS AND ALL COSTS OF CALLS, ETC., WILL BE BILLED DIRECTLY TO THE POLICE DEPARTMENT. WIRING FOR COMPUTER WILL NOT BE CONNECTED TO THE MAG COMPUTER BUT WILL BE CONNECTED AS REQUIRED TO POLICE HEADQUARTERS. ALLOWANCE SHALL BE MADE FOR POSSIBLE INTERFACE WITH MAG COMPUTER IN THE FUTURE. PAGING SERVICE SHALL BE FITTED WITH VOLUME CONTROL.
11. ENTRANCE DOOR INTO POLICE BUREAU SHALL BE BY KEY PAD WITH MANUAL OVERRIDE. IF WASHROOMS ARE ENTERED FROM THE PUBLIC CIRCULATION THEY SHALL ALSO BE FITTED WITH KEY PAD LOCKS.

AREA
POLICE BUREAU INCL. LUNCHROOM AND LOCKER/WASHROOMS
RECEPTION, OFFICE, POLICE WITNESS WAITING, LUNCHROOM/MEETING ROOM, LOCKER/WASHROOM
PROXIMITIES
MUST BE LOCATED ADJACENT TO THE CROWN ATTORNEY WHILE HAVING ACCESS FROM THE PUBLIC CIRCULATION.
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>NOTE: ALL FURNITURE WILL BE SELECTED AND INSTALLED BY THE POLICE DEPARTMENT. THE COUNTERS AND FITMENTS WILL FORM PART OF THE CONSTRUCTION CONTRACT. REFRIGERATOR AND STOVE TO BE PROVIDED BY POLICE MAG PROVIDE ELECTRICAL WIRING AND OUTLETS.</p>

AREA
<p>POLICE BUREAU INCL LUNCHROOM AND LOCKER/WASHROOMS</p> <p>RECEPTION, OFFICE, POLICE WITNESS WAITING, LUNCHROOM/MEETING ROOM, LOCKER/WASHROOM</p>
CAPACITY
Empty space for capacity
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST

FLOOR	NOTE 1	carpet vinyl
	NOTE 1	ceramic
	NOTE 1	wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic finish painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

- 28-OZ. CARPET SHALL BE INSTALLED EXCEPT IN RECEPTION AREA AND ROOM A, WHICH MAY BE SHEET OR RUBBER TILE IF AREA IS NEAR THE FRONT ENTRANCE. RUBBER OR VINYL SHALL BE USED IN THE LUNCHROOM AND CERAMIC TILE IN THE WASHROOM/LOCKER AREA.
- LAY-IN ACOUSTIC TILE WITH AN NRC OF 1.9 MINIMUM SHALL BE INSTALLED.
- WALLS SHALL BE CONSTRUCTED OF DRYWALL SHEET ON METAL STUDS WITH SOUND INSULATION OR DOUBLE SHEETING OR OTHER CONSTRUCTION REQUIRED TO ACHIEVE ACOUSTIC RATING SPECIFIED IN SECTION Q. WALLS SHALL BE FINISHED IN ALL ROOMS WITH VINYL WALL COVERING EXCEPT THE WASHROOM WHICH SHALL HAVE CERAMIC TILES UP TO 1219mm HIGH AND GLOSS PAINT ABOVE THIS HEIGHT.
- WOOD DOOR SHALL BE SOLID CORE.
- SUN CONTROL SHALL BE INSTALLED ON ALL WINDOWS FACING WEST OR SOUTH.

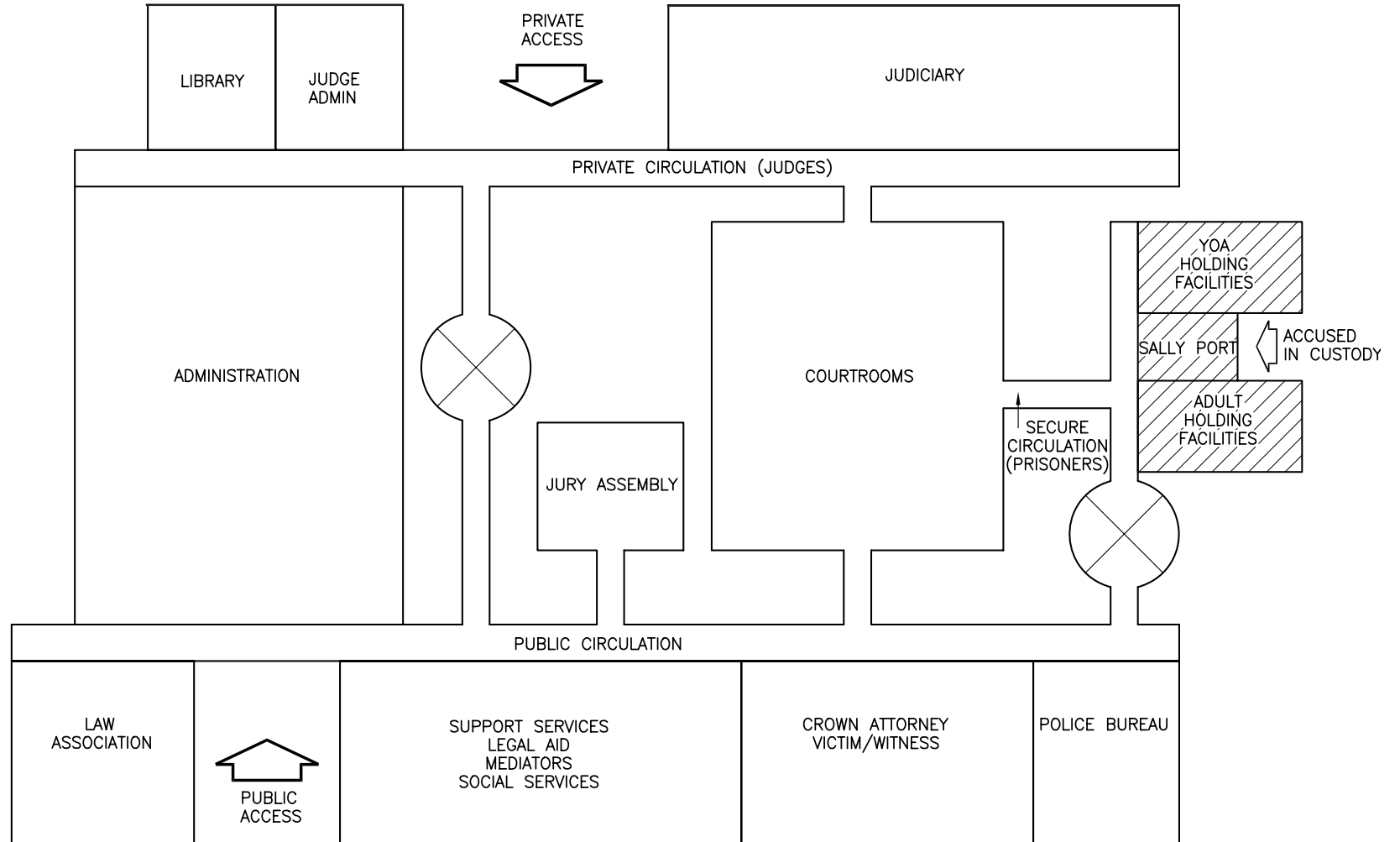
AREA**POLICE BUREAU INCL. LUNCHROOM
AND LOCKER/WASHROOMS**

RECEPTION, OFFICE, POLICE WITNESS WAITING,
LUNCHROOM/MEETING ROOM, LOCKER/WASH-
ROOM

PROXIMITIES**INTERNAL ORGANIZATION**

SECTION J

HOLDING AREA AND RELATED FUNCTIONS



CUSTODIAN (POLICE) AREA - CONSOLE

34sm (365sq ft)
INCLUDING WASHROOM AND COUNTER

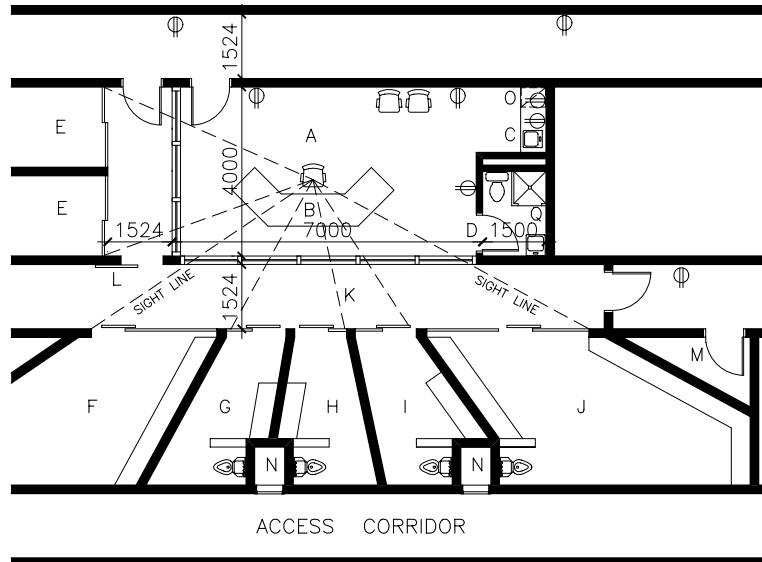


FIG: J2

0 1000 3000 6000

FIG. J2

Fig. J2 shows a possible relationship between the custodian's area and cells under direct surveillance. This arrangement would be confined to court houses with five or fewer courtrooms. In larger court houses the custodian's area would not increase but direct surveillance would be supplemented with indirect surveillance utilizing video cameras. It should be noted that even in small court houses, surveillance cameras may be required to survey the entrances to the holding area, the accused/lawyer interview area, the sally port doors, and the accused corridors and stairs to the courtrooms.

Fig. J2 shows one solution to the problem of direct surveillance. Other planning solutions may be submitted although the custodian must be able to see the accused at all times. Corridors must be a minimum of 1524mm wide.

The console will control all video cameras, all electric locks to the cells, sally port and all entrances to the holding area. The console will also contain all TV terminals, alarms, and other electronics controlling the security and safety of the court house.

With the increased concern for the safety of accused and escort staff, all cells shall be equipped with video cameras to facilitate video recording. The VCRs shall have special slow speed features for taping as necessary. Video taping is limited to accused in holding areas.

LEGEND

A CUSTODIAN (POLICE) AREA	F FEMALE BULLPEN	L SOLID SLIDING DOOR BETWEEN ADULTS AND YOUNG OFFENDERS
B CONSOLE	G FEMALE CELL	M JANITOR'S ROOM
C COUNTER, SINK	H, I MALE CELLS	N ACCESS PANEL FOR SERVICING (SEE L2)
D WASHROOM	J MALE BULLPEN	O UNDER COUNTER REFRIGERATOR
E YOUNG OFFENDERS	K ACCUSED CELL CORRIDOR	Q EMERGENCY SHOWER

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE		dignified orderly friendly bold peaceful
	NOTE 3	
FUNCTIONAL ADAPTABILITY		important desirable unimportant
	*	
INTERNAL FLEXIBILITY		important desirable unimportant
	*	
VIEW OUT		important desirable optional none
	*	
ILLUMINATION		bright moderate subdued special
	NOTE 4	
QUIETNESS		important desirable unimportant
	NOTE 5	
ENVIRONMENTAL CONTROL		high normal low
	NOTE 6	
CEILING HEIGHT		high normal low
	NOTE 7	
STORAGE		built-in portable none
	NOTE 8	
SERVICES		water electricity telephone intercom special
	NOTE 9	
	NOTE 9	
	NOTE 9	
	NOTE 9	
SECURITY		high medium low
	NOTE 10	

NOTES
<p>1. THE HOLDING AREA AND ACCESS TO THE AREA, BOTH INTERNAL AND EXTERNAL, ARE IN A RESTRICTED ZONE. ACCESS IS BY POLICE AUTHORITY AND ALL ACCESS IS THROUGH ELECTRICALLY CONTROLLED DOORS.</p> <p>2. IN LARGE COURT HOUSES, TRAFFIC CAN BE VERY HIGH, ESPECIALLY AT ARRIVAL AND DEPARTURE TIMES.</p> <p>3. HOLDING AREA MUST BE KEPT CLEAN AT ALL TIMES AND THE CUSTODIAN'S AREA SHALL BE EFFICIENT AND ORDERLY.</p> <p>4. LIGHTS IN CUSTODIAN AREA SHALL BE LAY-IN NON-GLARE FIXTURES. WHERE CELLS ARE PLANNED ON OPPOSITE SIDES OF THE CUSTODIAN'S AREA WITH RESTRICTED VIEWING FROM OPPOSITE CELLS, ONE-WAY GLASS CAN BE USED, BUT THE LIGHTING LEVEL IN THE CUSTODIAN'S AREA MUST BE REDUCED BELOW THAT OF THE CELLS. THIS ONLY OCCURS WHEN DIRECT SURVEILLANCE IS EMPLOYED. LIGHTS IN CELLS ARE SPECIAL TAMPER-PROOF FIXTURES.</p> <p>5. ALL WALLS ARE CONCRETE OR MASONRY AND CEILINGS ARE STEEL. NOISE REFLECTION IS HIGH DUE TO HARD SURFACES. THE POSSIBILITY OF PRISONERS OVERHEARING THE POLICE CONVERSATIONS <u>MUST</u> BE AVOIDED. SEE DETAILS IN SECTION Q INCLUDING MECHANICAL INSTALLATION.</p> <p>6. ALTHOUGH HVAC ONLY REQUIRES NORMAL CONTROLS, DESIGN SHOULD TAKE INTO CONSIDERATION THE MAXIMUM NUMBER OF ACCUSED. PROPER VENTILATION IS IMPORTANT AS THE NUMBER OF ACCUSED IN HOLDING CELLS MAY EXCEED ORIGINAL DESIGN INTENT.</p> <p>7. SEE SECTION L FOR DIMENSIONS AND CONSTRUCTION DETAILS.</p> <p>8. ALTHOUGH THE CUSTODIAN'S AREA DOES NOT REQUIRE STORAGE OTHER THAN COUNTER CUPBOARDS, THE HOLDING AREA, DEPENDING ON SIZE, MAY REQUIRE LOCKERS FOR STORAGE OF POLICE FIREARMS.</p> <p>9. THE CUSTODIAN'S AREA SHALL HAVE ELECTRICAL POWER AS DETERMINED BY THE ELECTRICAL ENGINEER. TELEPHONE, PAGING, VOICE COMMUNICATION, TV SURVEILLANCE, ELECTRICAL DOOR LOCKING CONTROL, EMERGENCY BUTTON SIGNAL ALL AS DESCRIBED IN SECTION N SHALL BE INSTALLED. INSTALL HOT AND COLD WATER. BATTERY POWERED EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT ACCUSED CIRCULATION AREAS.</p> <p>10. CONTROL OF ACCESS AND BOTH AUDIO AND TV SURVEILLANCE MUST BE UNDER THE DIRECTION OF THE POLICE. ALL DOORS ACCESSING THE HOLDING AREA SHALL HAVE BOTH TV CAMERA AND VOICE COMMUNICATION WITH THE CONSOLE. CAMERAS TO BE PROTECTED BY VANDAL-PROOF HOUSINGS. THE NEED TO VIDEO RECORD THE ACCUSED IN HOLDING CELLS AND CIRCULATION CORRIDORS SHALL BE REVIEWED WITH THE POLICE. VIDEO RECORDING OF PUBLIC AREAS IS NOT PERMITTED AT THIS TIME.</p> <p>11. SEE SECTION P FOR DETAIL OF CELL FITMENTS, BARS, GATES, ETC.</p>

AREA
<p>CUSTODIAN (POLICE) AREA - CONSOLE</p> <p>34sm (365sq ft)</p>
PROXIMITIES
<p>THE HOLDING AREA IS NORMALLY LOCATED IN THE BASEMENT OR GROUND FLOOR CONNECTED TO THE SALLY PORT (ACCUSED ARRIVAL PORT) BUT WITH INTERNAL ACCESS FOR POLICE, LAWYERS AND ADMINISTRATION.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST	
CHAIRS	sled base side chairs tilt
	NOTE 1 swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed
	NOTE 2 special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> SWIVEL TILT CHAIR SHALL BE SUPPLIED FOR THE CONSOLE OPERATOR. TWO UPHOLSTERED SIDE CHAIRS WITH ARMS SHALL ALSO BE INSTALLED. COUNTER, SINK, HOT AND COLD WATER AND CUPBOARDS UNDER AND ABOVE COUNTER SHALL BE INSTALLED. CONSOLE AND WORK SURFACES SHALL BE SPECIAL DESIGN. SEE FIG. L5 FOR DETAIL OF CONCRETE CELL BENCH.

AREA
<p>CUSTODIAN (POLICE) AREA - CONSOLE</p> <p>34sm (365sq ft)</p>
CAPACITY
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR	carpet
	vinyl (sheet)
NOTE 1	ceramic
	wood
	rubber
	special
CEILING	drywall sheet
	drywall lathe & sprayed acoustic finish
	NOTE 2 painted acoustic tile
WALLS	drywall sheet
	acoustic panels
	NOTE 3 masonry
	wood
	marble
	NOTE 3 ceramic sheet vinyl paint
DOORS	standard
	NOTE 4 fire rated secure acoustic
WINDOWS	sun control
	decorative drapes
	NOTE 5 full drapes 1-way mirrored glass

NOTES ON FINISHES

1. EITHER SHEET VINYL OR RUBBER SHALL BE INSTALLED IN THE CUSTODIAN'S AREA. 914mm x 914mm RUBBER TILES WOULD BE ACCEPTABLE BUT NOT VINYL TILES.
2. LAY-IN ACOUSTIC TILES.
3. WALLS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE BLOCK FILLED AND PAINTED. ALL GLAZING SHALL BE BULLET RESISTANT, SET IN METAL FRAMES.
4. DOORS TO CUSTODIAN'S AREA FROM CORRIDORS SHALL BE METAL SECURITY DOORS, ELECTRICALLY OPERATED WITH A MANUAL OVERRIDE. OTHER DOORS TO WASHROOM, ETC., SHALL BE HEAVY-DUTY HOLLOW METAL IN ACCORDANCE WITH DETAILS GIVEN IN SECTION P, WITH APPROPRIATE LOCKS.
5. WINDOWS OVERLOOKING CELLS SHALL BE ONE-WAY MIRRORED GLASS ALLOWING SURVEILLANCE OF THE ACCUSED WITHOUT THE ACCUSED BEING ABLE TO SEE THE STAFF OR OTHER PRISONERS.

AREA

CUSTODIAN (POLICE) AREA - CONSOLE

34sm (365sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

HOLDING CELLS - SINGLE OCCUPANCY

4.44sm (47.79sq ft) EACH CELL

ADULT AND YOUNG OFFENDERS FOR MALES & FEMALES

HOLDING CELLS - MULTIPLE OCCUPANCY

1.50sm (16.14sq ft) PER PERSON ADDITIONAL TO SINGLE CELL

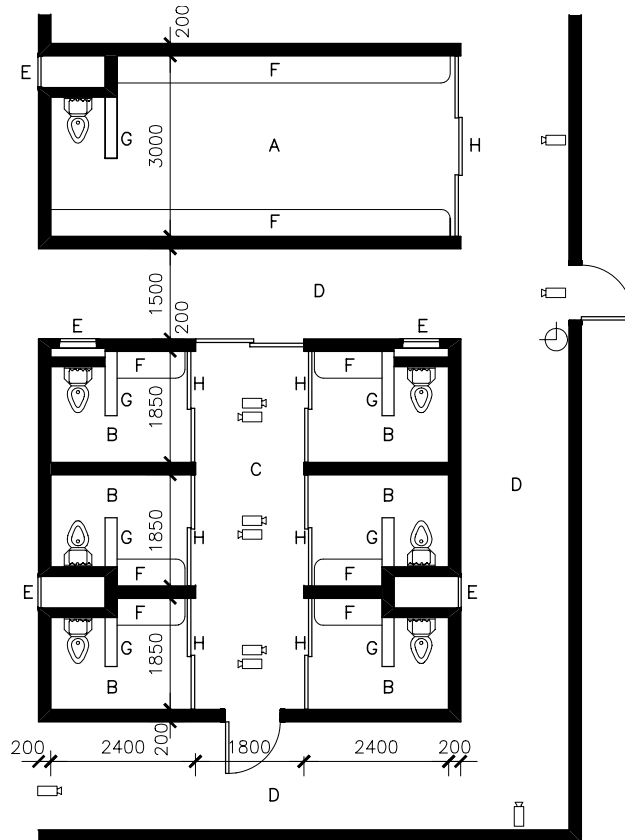


FIG: J3

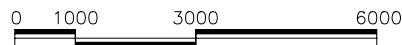


FIG. J3

Fig. J3 illustrates planning principles to be adopted when indirect surveillance is employed i.e. TV cameras, as opposed to the solution shown on Fig. J2. For small holding areas the cells are rectangular and economical in size. The access corridor (C) will be entered from the sliding gates while the swing solid door (with viewing window) is the alternate fire exit.

The planning can be modified to suit the number of cells, the YOA requirement and the separation of female cells, but the planning principles shown on Fig. J3 must be maintained.

The area allocations should be reviewed for adequacy in light of the current air quality standards under Bill 208 of the Occupational Health and Safety Act.

Read next page for information regarding the number of cells required in a court house.

LEGEND

- A MULTIPLE OCCUPANCY CELL
- B SINGLE OCCUPANCY CELL
- C ACCESS CORRIDOR
- D CIRCULATION CORRIDOR
- E ACCESS PANELS (See Fig. L3)
- F CONCRETE SEATING (See Fig. L5)
- G LOW PRIVACY WALL (See Fig. L1)
- H BARS & SLIDING GATE (See Fig. L4)

TV CAMERA

TV CAMERA WITH SWEEP CAPABILITY

ELECTRIC CLOCK

NOTE: All ceilings are steel (see Figs. L7 and L8). Light fixtures and air diffusers are to be vandal proof. Stainless steel combination security lavatory and toilet with drinking water bubbler, Arista-Newman or equivalent. Sprinklers in corridors only and not in cells wherever possible.

HOLDING CELLSs(Cont.)

Holding cell capacity shall be based on statistical data provided by the local police. Where no such data is available, the following approach could be employed. The number of cells required is a ratio to the number of courtrooms provided.

MALE

SINGLE CELLS: .75 cells per courtroom (for both adult & young offenders).

MULTIPLE OCCUPANCY CELLS: 3-person places per courtroom.

EXAMPLE: nine courtrooms: single cells, $.75 \times 9 = 6.75 (=) 7$ cells.
 multiple occupancy, $9 \times 3 = 27$ persons.

FEMALE

SINGLE CELLS: .50 cell per courtroom (for both adult & young offenders).

MULTIPLE OCCUPANCY CELLS: 1.50 person places per courtroom.

EXAMPLE: 9 courtrooms:

single cells, $.50 \times 9 = 4.50 (=) 4$ cells.

multiple occupancy, $9 \times 1.50 = 13.5 (=) 13$ persons.

A 9-courtroom court house would be planned to include 7 single male cells, 4 single female cells, 2 male multiple occupancy cells accommodating 14 persons in each cell and one female occupancy cell accommodating 13 persons.

In a large court house with a corresponding large number of accused in the holding area, consideration should be given to a separate matron's office to monitor the female cells.

Although adult and young offenders will be held in similar holding cells, the Young Offenders Act states that the adult prisoners and young offenders shall not see or hear each other either in the cells or on circulation routes to and from the cells. The separation must be achieved by proper planning even though both adult prisoners and young offenders pass through the same sally port.

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 3	bright moderate subdued special
QUIETNESS	NOTE 4	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 5	high normal low
CEILING HEIGHT	NOTE 6	high normal low
STORAGE	*	built-in portable none
SERVICES	NOTE 7	water electricity telephone intercom special
SECURITY	NOTE 8	high medium low

NOTES
1. THE CELLS OF HOLDING AREAS ARE RESTRICTED TO POLICE OR MAG STAFF ESCORTED BY POLICE.
2. TRAFFIC IS USUALLY HIGH BEFORE COURT SITS, BUT CAN TAPER OFF DURING THE DAY.
3. LIGHTING SHOULD BE MODERATE TO BRIGHT.
4. DUE TO THE HARD SURFACES, INTERNAL NOISE CAN BE HIGH I.E HIGH REFLECTANCE. THE PROBLEM OF NOISE LEVEL, REFLECTANCE AND STC VALUES IS ADDRESSED IN SECTION Q.
5. ENVIRONMENTAL CONTROL IS VERY IMPORTANT DUE TO THE POSSIBLE NUMBER OF ACCUSED, SOME OF WHOM MAY NOT BE CLEAN. NOTE AIR QUALITY REQUIREMENTS UNDER BILL 208 OF THE OCCUPATIONAL HEALTH AND SAFETY ACT.
6. WHERE POSSIBLE, MINIMUM HEIGHT SHALL BE 2640mm WITH MAXIMUM HEIGHT 3000mm FOR 190mm BLOCK WALL.
7. HOT AND COLD WATER SUPPLY WITH HAND BASIN AND TOILET WASTE PIPES. SPRINKLER HEADS TO BE LIMITED TO CORRIDORS WHEREVER POSSIBLE. ELECTRIC CLOCKS TO BE ON MASTER SYSTEM. ADDITIONAL SHUT OFF VALVES TO FIXTURES IN CELLS SHALL BE LOCATED IN CUSTODIAN'S ROOM. HOSE BIBS IN SECURE LOCKABLE CABINETS SHALL BE PROVIDED IN CIRCULATION AREAS DIRECTLY OUTSIDE THE CELLS TO DOWN THE CELLS. ENSURE VANDAL RESISTANT GUARDS AND COVERS ARE PROVIDED FOR ELECTRICAL AND MECHANICAL EQUIPMENT SUCH AS FIRE ALARM PULL STATIONS, FIRE HOSE CABINETS, THERMOSTATS AND THE LIKE.
8. IDENTIFIED SLIDING BAR GATES AND OTHER HINGED SOLID DOORS WILL BE ELECTRICALLY OPERATED FROM THE CONSOLE IN THE CUSTODIAN'S AREA. ALL ELECTRONIC LOCKS WILL HAVE A MANUAL OVERRIDE. CELL SURVEILLANCE SHALL BE SUPPLEMENTED BY TV CAMERAS WHERE REQUIRED. CORRIDORS SHALL BE AUDIO SURVEYED BY TWO-WAY MICROPHONES/SPEAKERS IN THE CEILINGS AT APPROXIMATELY 6000mm CENTRES. CAMERAS TO BE PROTECTED WITH VALDAL PROOF HOUSINGS.

AREA
<p>HOLDING CELLS - MULTIPLE/SINGLE OCCUPANCY</p> <p>4.44sm (47.79sq ft each) SINGLE CELL</p> <p>1.5sm PER PERSON (16.14sq ft) MULTIPLE OCCUPANCY CELL</p>
PROXIMITIES
<p>CELLS SHALL BE LOCATED IN THE HOLDING AREA ADJACENT TO THE CUSTODIAN'S OFFICE, ACCUSED ENTRY AND SALLY PORT.</p>
INTERNAL ORGANIZATION

CHECKLIST	
FLOOR	<p>NOTE 1 carpet concrete ceramic wood rubber special</p>
CEILING	<p>drywall sheet drywall lathe & acoustic plaster</p> <p>NOTE 2 steel acoustic tile</p>
WALLS	<p>drywall sheet acoustic panels</p> <p>NOTE 3 concrete block marble ceramic sheet vinyl paint</p>
DOORS	<p>standard fire rated</p> <p>NOTE 4 secure acoustic</p>
WINDOWS	<p>sun control decorative drapes full drapes</p>

NOTES ON FINISHES
<p>1. FLOOR WILL BE CONCRETE SEALED AND PAINTED OR EPOXY FINISHED.</p> <p>2. CEILING WILL BE STEEL PLATE (SEE FIGS. L8 AND L9) PAINTED. CIRCULATION CORRIDOR CEILINGS SHALL BE CONSTRUCTED OF TWO LAYERS OF 16 MM GYPSUM WALLBOARD WITH THE FINISHED LAYER BEING OF A HIGH IMPACT ABUSE RESISTANT TYPE. IF FOR ANY REASON THE CIRCULATION CORRIDOR MUST BE LOW, STEEL PLATE SHOULD BE CONSIDERED FOR THE CEILING.</p> <p>3. WALLS SHALL BE REINFORCED CONCRETE BLOCK EPOXY COATED (SEE FIG. L7) OR STEEL BARS (SEE FIG. L4).</p> <p>4. DOORS TO CELLS SHALL BE SLIDING STEEL BAR PANELS (SEE FIG. L4). FLUSH STEEL DOORS SHALL BE SECURITY TYPE WITH BULLET RESISTANT OR SHATTERPROOF GLAZING PANEL AS REQUIRED. (SEE FIG. L3). ALL DOORS AND SLIDING STEEL PANELS SHALL BE IN SECURE STEEL FRAMES. ALL TO BE MANUFACTURED BY DETENTION EQUIPMENT MANUFACTURER.</p> <p>5. WINDOWS TO BE BULLET RESISTANT OR SHATTERPROOF GLAZING IN SECURITY FRAMES. USE REFLECTIVE GLAZING AT CONSOLE WINDOWS. NOTE LIGHT LEVEL IN CONSOLE ROOM MUST BE KEPT LOWER THAN LEVEL IN CORRIDORS AND CELL AREAS FOR REFLECTIVE GLAZING TO BE EFFECTIVE.</p>

AREA
<p>HOLDING CELLS - MULTIPLE/SINGLE OCCUPANCY</p> <p>4.44sm (47.79sq ft each) SINGLE CELL</p> <p>1.5sm PER PERSON (16.14sq ft) MULTIPLE OCCUPANCY CELL</p>
PROXIMITIES
<p>CELLS SHALL BE LOCATED IN THE HOLDING AREA ADJACENT TO THE CUSTODIAN'S OFFICE, ACCUSED ENTRY AND SALLY PORT.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT		important desirable optional windows
	NOTE 3	
ILLUMINATION		bright moderate subdued special
	NOTE 4	
QUIETNESS		important desirable unimportant
	NOTE 5	
ENVIRONMENTAL CONTROL	NOTE 6	high normal low
CEILING HEIGHT		high normal low
	NOTE 7	
STORAGE	*	built-in portable none
SERVICES		water electricity telephone intercom special
	NOTE 8	
	NOTE 8	
SECURITY		high medium low
	NOTE 9	

NOTES
<p>1. THE CONSULTING CUBICLES SHALL BE LOCATED IN THE HOLDING CELL AREA WITH ACCESS FOR THE PRISONERS FROM THE HOLDING CELLS. ACCESS FOR THE LAWYERS SHALL BE FROM A NON-RESTRICTED CORRIDOR THROUGH A SECURE ACCESS DOOR. SEE NOTE 9.</p> <p>2. TRAFFIC IS USUALLY AT ITS MAXIMUM BEFORE COURT SITTING AND IS RESTRICTED BY THE NUMBER OF CUBICLES. IF NECESSARY, LAWYERS CAN WAIT FOR A FREE CUBICLE IN THE CORRIDOR OR AREA OUTSIDE THE ACCESS DOOR WHICH WILL BE UNDER TV SURVEILLANCE.</p> <p>3. THE WALL SEPARATING THE LAWYER AND PRISONER SHALL BE CONCRETE BLOCK WITH 32mm BULLET-RESISTANT WINDOW IN A METAL FRAME AND SPEAKING PORT BAFFLES LOCATED IMMEDIATELY ABOVE THE STAINLESS STEEL COUNTERTOP (SEE DETAIL FIG. L10).</p> <p>4. LIGHTS SHALL BE VANDAL PROOF.</p> <p>5. FIGS. L9 AND L10 SHOW CONSTRUCTION DETAILS OF THE PRIVACY WALLS FORMING EACH CUBICLE WHICH SHALL BE LINED WITH ACOUSTIC PANELS.</p> <p>6. THE RATIO OF PEOPLE TO CUBIC AREA IS HIGH. CLOSE ATTENTION MUST THEREFORE BE GIVEN TO THE HVAC DESIGN AND CONTROL.</p> <p>7. NORMAL CEILING HEIGHT (2640mm).</p> <p>8. DUPLEX OUTLETS FOR CLEANING EQUIPMENT SHALL BE INSTALLED. AREA SHALL BE SURVEYED BY TV CAMERAS ON BOTH PRISONER AND LAWYER SIDES. INSTALL PAGING SPEAKERS WITH VOLUME CONTROL ON LAWYER SIDE.</p> <p>9. ACCESS DOOR FOR LAWYERS SHALL BE PROTECTED BY A TV SURVEILLANCE CAMERA AND VOICE COMMUNICATION WITH THE CONSOLE OPERATOR. THE ACCESS DOOR FOR LAWYERS SHALL BE ELECTRICALLY LOCKED AND CONTROLLED FROM THE CONSOLE. THE SAME SECURITY PRECAUTIONS SHALL BE INSTALLED ON THE DOOR BETWEEN THE LAWYERS' AND PRISONERS' AREA. CAMERAS SHALL BE PROTECTED WITH VANDALPROOF HOUSINGS.</p>

AREA
<p>LAWYER/PRISONER CONSULTING CUBICLES</p> <p>2.88sm (31sq ft) PER CUBICLE</p> <p>AREA H CROSSED (SEE FIG. J4)</p>
PROXIMITIES
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR		carpet vinyl
	NOTE 1	concrete wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster
	NOTE 2	steel acoustic tile
WALLS		drywall sheet acoustic panels
	NOTE 3 NOTE 3	concrete block marble ceramic sheet vinyl paint
DOORS		standard fire rated
	NOTE 4	secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. CONCRETE SEALED.
2. CEILING SHALL BE STEEL PLATE SIMILAR TO DETAIL SHOWN ON FIGS. L7 AND L8.
CEILING ON LAWYER'S SIDE OF CUBICLE CAN BE CONSTRUCTED OF TWO LAYERS OF 16 MM GYPSUM WALLBOARD.
3. WALL SHALL BE CONCRETE BLOCK, EPOXY COATED WITH ACOUSTIC PANELS INSTALLED AS SHOWN ON FIG. L10. ALSO SEE DETAIL FOR BULLET-RESISTANT GLASS.
4. ALL DOORS SHALL BE STEEL SECURITY TYPE WITH MANUAL OVERRIDE WHEREVER ELECTRICALLY LOCKED.

AREA

**LAWYER/PRISONER
 CONSULTING CUBICLES**

**2.88sm (31sq ft)
 PER CUBICLE**

AREA H CROSSED (SEE FIG. J4)

PROXIMITIES

INTERNAL

JUSTICE OF THE PEACE BAIL OFFICE

9.0sm (97sq ft)

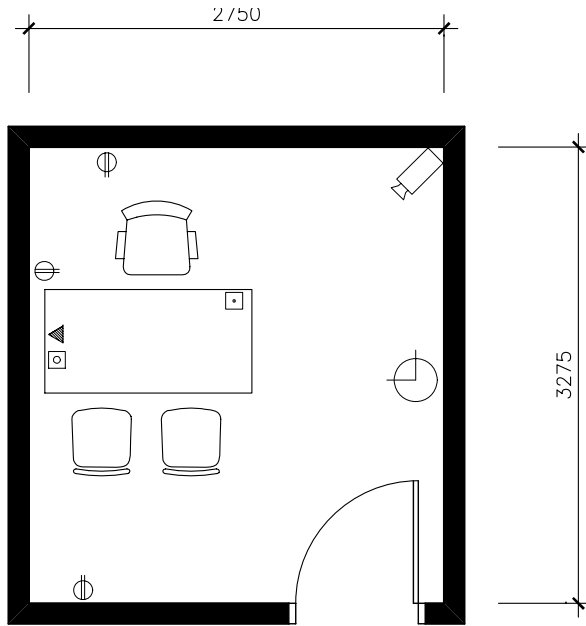


FIG: J5



FIG. J5

The justice of the peace bail office shall be located adjacent to the holding area. It is used for completing the required documentation to allow the accused out on bail. It can also be used for an emergency bail hearing after normal working hours rather than using the police station.

The office shall be planned to allow egress by the accused without using restricted circulation in holding cells or passing through the staff or public waiting areas.

The office shall be under TV camera surveillance and the desk shall have a duress button. After-hours bail hearings shall be with a police escort.

The requirement for the bail office shall be reviewed with the justice(s) of the peace in each location.

LEGEND

- | | | | |
|----|------------------|---|------------------------|
| ▲ | TELEPHONE | ⊕ | DUPLEX OUTLETS |
| ⊙ | COMPUTER JACKS | ⌚ | CLOCK ON MASTER SYSTEM |
| ◻• | EMERGENCY BUTTON | 📹 | TV CAMERA |

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 3	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE		built-in portable none
SERVICES	NOTE 4 NOTE 4 NOTE 4 NOTE 4	water electricity telephone paging special
SECURITY	NOTE 5	high medium low

NOTES
<p>1. THE JUSTICE OF THE PEACE BAIL OFFICE SHOULD NOT BE LOCATED IN THE HOLDING CELL AREA BUT ADJACENT TO THE CELLS. AN IDEAL LOCATION WOULD BE NEAR THE LAWYERS' ENTRY TO THE CONSULTING CUBICLES AND STILL WITHIN THE SECURE AREA.</p> <p>2. NORMALLY THE CIRCULATION IS LOW TO MEDIUM DEPENDENT ON THE SIZE OF THE COURT HOUSE AND THE NUMBER OF BAIL RELEASES.</p> <p>3. LIGHTING SHALL BE MODERATE WITH LOW GLARE.</p> <p>4. ELECTRICAL DUPLEX OUTLETS, TELEPHONE, COMPUTER JACKS, DURESS BUTTON AND AN ELECTRIC CLOCK SHALL BE INSTALLED. A TV CAMERA MONITORED FROM THE CONSOLE SHALL ALSO BE INSTALLED. THE DOOR SHALL HAVE A KEY PAD LOCK WITH A MANUAL OVERRIDE.</p> <p>5. SECURITY IS HIGH BECAUSE OF ITS LOCATION AND ACCESS TO ESCORTED PRISONERS WHO MAY ATTEMPT TO ESCAPE.</p>

AREA
<p>JUSTICE OF THE PEACE BAIL OFFICE</p> <p>9.0sm (97sq ft)</p>
PROXIMITIES
Empty space for Proximities
INTERNAL ORGANIZATION
Empty space for Internal Organization

CHECKLIST		
CHAIRS	NOTE 1	sled base side chairs tilt
	NOTE 1	swivel/tilt
TABLES		movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES		decorative functional
DESK	NOTE 2	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. THE DESK CHAIR SHALL BE SWIVEL TILT WITH UPHOLSTERED ARMS AND FIVE LEGS. THE SIDE CHAIRS SHALL BE EITHER LEGS OR SLED BASE WITHOUT ARMS.</p> <p>2. DESK SHALL BE 1524mm X 762mm WITH A SINGLE PEDESTAL AND PENCIL DRAWER FINISHED IN LAMINATE.</p>

AREA
<p>JUSTICE OF THE PEACE BAIL OFFICE</p> <p>9.0sm (97sq ft)</p>
CAPACITY
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR	NOTE 1	carpet
	NOTE 1	vinyl (sheet) ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS		standard fire rated
	NOTE 4	secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR FINISH SHALL BE 28-OZ. CARPET, RUBBER TILE OR SHEET VINYL.
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE.
3. WALLS SHALL BE METAL STUD WITH DRYWALL SHEETS. TO PREVENT THE INTRUSION OF NOISE, THE WALLS SHALL BE INSULATED WITH ACOUSTIC BATTS OR EQUIVALENT.
4. THE DOOR SHALL BE SECURITY TYPE. PROVIDE SMALL VIEWING WINDOW WITH SHATTER-RESISTANT GLASS.

AREA

JUSTICE OF THE PEACE BAIL OFFICE

9.0sm (97sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

SALLY PORT

53.0sm (571 sq ft) UP TO 8 COURTROOMS
 91.4sm (984 sq ft) MORE THAN 8 COURTROOMS

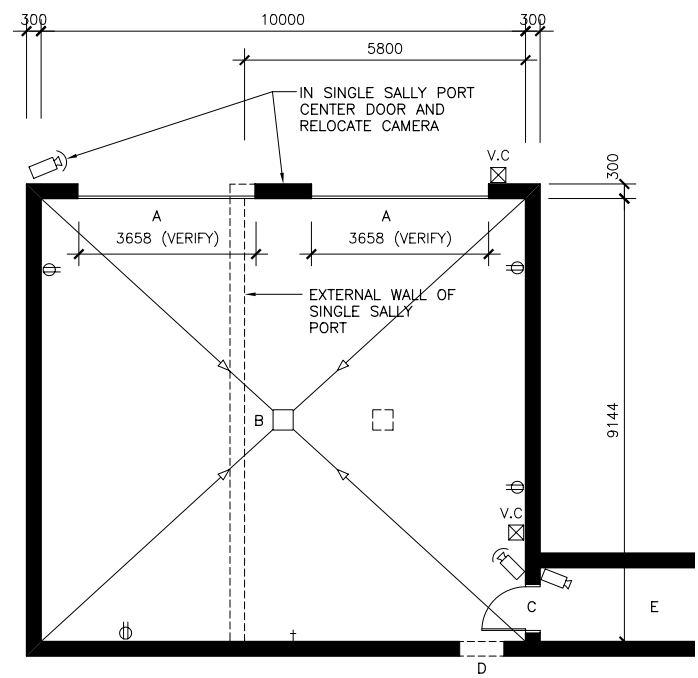


FIG: J6
 0 1000 3000 6000

FIG. J6

Fig. J6 shows the alternative plans for single and double sally ports. The sally port is for the unloading of prisoners only and should not be used as a garage at any time. The overhead door, which shall be electrically operated from the console, must be in series with the exit door C so that one will not open when the other is open, i.e. the exit door C will not open until the overhead door is down and locked. The same must occur in reverse. The TV camera outside the sally port shall be capable of sweeping and shall have a telescopic lens. The camera inside the sally port shall be capable of sweeping and shall have a wide-angle lens.

Due to non-standard vans employed by the police for the transporting of prisoners in the various jurisdictions it is important to verify vehicle dimensions for proper clearances. A minimum clear height of 3353 shall be provided when a 3048 high overhead door is found to be acceptable.

Corridor to cell shall be surveyed by TV cameras and audio surveillance in the ceiling at 6000mm centre to centre.

LEGEND

- A OVERHEAD DOOR, ELECTRICALLY OPERATED FROM CONSOLE
- B FLOOR DRAIN WITH OIL TRAP
- C DOOR TO CELLS, ELECTRICALLY OPERATED FROM CONSOLE
- D ALTERNATE POSITION OF DOOR C
- E CORRIDOR TO HOLDING CELLS, MINIMUM 1524mm WIDE
- VC VC VOICE COMMUNICATION WITH CONSOLE OPERATOR
- ⊕ DUPLEX OUTLETS
- HOSE BIB
- ▭ FIXED TV CAMERA
- ⤴ SWEEP TV CAMERA

CHECKLIST		
ZONE		public private restricted
	NOTE 1	
TRAFFIC		high medium low
	NOTE 2	
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT		important desirable optional none
	NOTE 3	
ILLUMINATION		bright moderate subdued special
	NOTE 4	
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL		high normal low
	NOTE 5	
CEILING HEIGHT		high normal low
	NOTE 6	
STORAGE	*	built-in portable none
SERVICES		water electricity telephone intercom special
	NOTE 7	
	NOTE 7	
SECURITY		high medium low
	NOTE 8	

NOTES
1. ONLY THE POLICE OR POLICE-AUTHORIZED STAFF ARE ALLOWED IN THIS AREA.
2. DEPENDENT ON THE SIZE OF THE COURT HOUSE, THE TRAFFIC CAN VARY FROM MEDIUM TO HIGH. HOWEVER, THE TRAFFIC IS USUALLY CONFINED TO PRE-COURT SITTING HOURS.
3. OVERHEAD DOOR SHALL NOT HAVE WINDOWS.
4. THE WHOLE AREA OF THE SALLY PORT AND THE AREA OUTSIDE SHALL BE BRIGHTLY ILLUMINATED.
5. THE SALLY PORT <u>SHOULD NOT BE USED</u> AS A GARAGE BUT ONLY FOR THE UNLOADING OR COLLECTION OF PRISONERS. CONTRAVENTION OF THIS REQUIREMENT WOULD ALSO BE A CONTRAVENTION OF THE ONTARIO BUILDING CODE. A LARGE PERMANENT NOTICE TO THIS EFFECT MUST BE INSTALLED. WHERE SPECIAL APPROVAL* IS GIVEN TO USE THE SALLY PORT AS A GARAGE, PRIOR TO CONSTRUCTION A DEDICATED EXTRACT FAN AND AIR CHANGE SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH THE BUILDING CODE.
* THIS APPROVAL CAN ONLY BE GIVEN AT DIRECTOR LEVEL OF COURT SERVICES AND FACILITIES.
6. A CLEAR HEIGHT OF 3353mm SHALL BE PROVIDED WITH MECHANICAL AND ELECTRICAL SERVICES INCLUDING SPRINKLER HEADS KEPT ABOVE THIS DIMENSION.
7. WATER (COLD) SHALL BE INSTALLED INSIDE A LOCKABLE CABINET FOR THE PURPOSE OF HOSING DOWN THE SALLY PORT FLOOR. ELECTRICAL DUPLEX OUTLET SHALL BE INSTALLED AS SHOWN. SECURITY REQUIREMENT SHALL BE AS DESCRIBED IN NOTE 8.
8. HIGH SECURITY HAS TO BE MAINTAINED AT ALL TIMES. THE APPROACH TO THE SALLY PORT MUST BE UNDER SURVEILLANCE BY A FULL SWEEP TV CAMERA, AS SHOULD THE INSIDE OF THE SALLY PORT. HOWEVER, THE EXTERNAL CAMERA SHALL BE FITTED WITH A TELESCOPIC LENS WHILE THE INTERNAL CAMERA SHALL HAVE A WIDE-ANGLE LENS. THE CORRIDOR FROM THE SALLY PORT TO THE HOLDING CELLS SHALL ALSO BE SURVEYED BY TV CAMERA AND AUDIO SURVEILLANCE AT 6000 c/c. CAMERAS CONTROLLING ENTRANCES WILL ALWAYS HAVE A MEANS OF VOICE COMMUNICATION WITH THE CONSOLE OPERATOR. ALL DOOR LOCKS SHALL BE ELECTRICALLY OPERATED FROM THE CONSOLE WITH MANUAL OVERRIDE.
9. OVERHEAD DOOR SHALL BE A MINIMUM OF 3048mm HIGH. VERIFY HEIGHT AND WIDTH FOR REQUIRED CLEARANCES OF VANS OR BUSES.

AREA
SALLY PORT
53.0sm (571sq ft) UP TO 8 COURTROOMS SINGLE
91.4sm (984sq ft) MORE THAN 8 COURTROOMS DOUBLE
PROXIMITIES
EASY ACCESS FROM THE ROAD WITH A CLEAR VIEW IN ALL DIRECTIONS. SHOULD BE LOCATED AS NEAR THE HOLDING CELLS AS POSSIBLE TO REDUCE DISTANCE TRAVELLED BY PRISONERS.
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet vinyl concrete wood rubber special
	*	
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster
	NOTE 2	steell
	NOTE 2	concrete
WALLS		drywall sheet acoustic panels
	NOTE 3	masonry marble ceramic sheet vinyl paint
DOORS		standard fire rated
	NOTE 4	secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR SHALL BE CONCRETE WITH COLOURED NON-RUSTING ADDITIVE OR SEALED.
2. CEILING SHALL BE EXPOSED CONCRETE PAINTED WHITE OR STEEL ALSO PAINTED WHITE.
3. WALLS SHALL BE CONCRETE BLOCK PLASTIC-COATED OR Poured CONCRETE PAINTED OR PLASTIC COATED.
4. ALL DOORS SHALL BE HIGH-SECURITY STEEL AND AS DESCRIBED ON PAGE J18, NOTE 8.

AREA

SALLY PORT

53.0sm (571sq ft)
 UP TO 8 COURTROOMS SINGLE

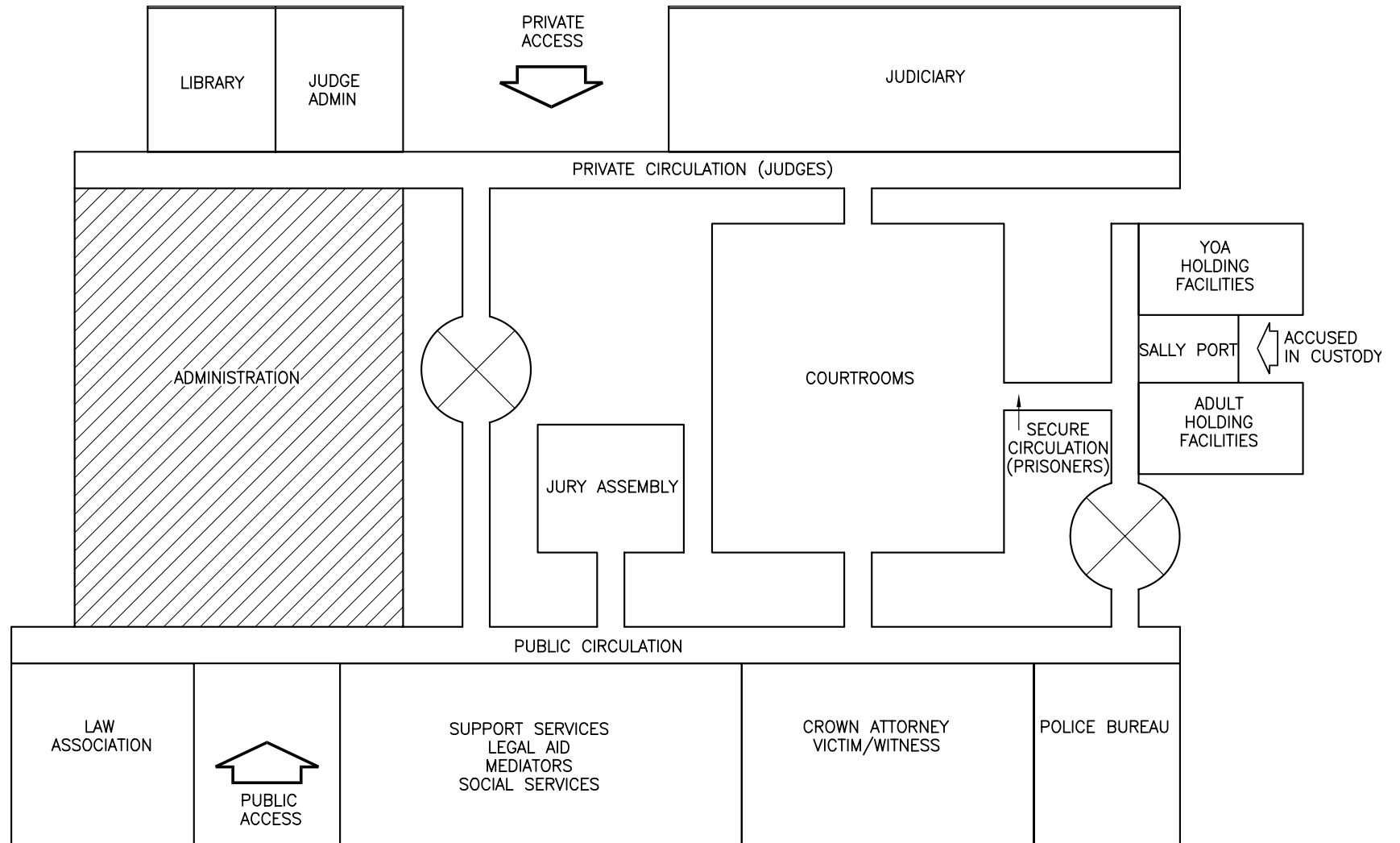
91.4sm (984sq ft)
 MORE THAN 8 COURTROOMS DOUBLE

PROXIMITIES

INTERNAL ORGANIZATION

SECTION K

ADMINISTRATION



TRIAL COORDINATOR'S OFFICE

13.5sm (145sq ft)

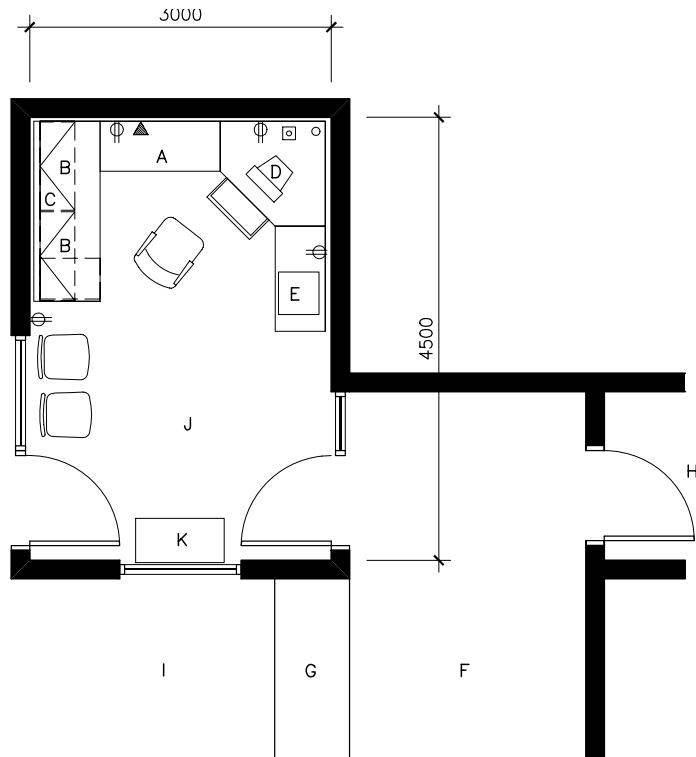


FIG: K2

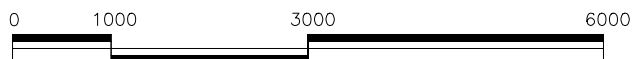


FIG. K2

Fig. K2 shows a possible and acceptable configuration of the trial coordinator's office and its suggested location relative to the general office I, the counter G, the public waiting F, and a private corridor H. The plan shown is not mandatory but is included to clarify planning principles and relationships only. Alternate plans can be submitted for approval provided the areas are not increased and planning principles are adhered to.

The optional glazing shown is a minimum of 1066mm above the floor level and is positioned to give a clear view to the general office and entrances. The furniture (see page K3) is designed to accept a computer and printer while leaving space for other work.

In very large court houses it will be necessary to increase the office size to accommodate the required staff with furniture and required computers and printers. Separate trial coordinator's offices for both general division and provincial division trials may be required. They will in turn report to an individual who will be required to manage the overall allocation of courtrooms in the facility.

LEGEND

- | | | | |
|---|---|---|---------------------------------------|
| A | SYSTEMS DESK TO PROVIDE SPACE FOR A COMPUTER, PRINTER AND WORK AREA | G | COUNTER |
| B | OVERHEAD CABINET 914mm WIDE BY FOUR DRAWERS HIGH FILING CABINET | H | PRIVATE CIRCULATION CORRIDOR |
| C | 2400mm BY 1200mm PIN-UP BOARD | J | FLOOR OF OFFICE TO BE RAISED FLOORING |
| D | COMPUTER AND KEYBOARD | I | GENERAL OFFICE |
| E | PRINTER | K | TWO SHELVES |
| F | PUBLIC AREA | | |
-
- | | |
|---|---------------|
| ⊕ | DUPLEX OUTLET |
| ⊞ | COMPUTER JACK |

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in portable none
SERVICES	NOTE 9 NOTE 9 NOTE 9 NOTE 9	water electricity telephone intercom special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. THE TRIAL COORDINATOR'S OFFICE SHALL BE LOCATED WITH DIRECT ACCESS FROM THE GENERAL OFFICE AND THE PRIVATE CIRCULATION. IT SHOULD ALSO BE NEAR THE PUBLIC.</p> <p>2. AS THIS STAFF MEMBER IS RESPONSIBLE FOR COORDINATING ALL TRIAL DATES AND THE ALLOCATION OF COURTROOMS, THE TRAFFIC CAN BE VERY HIGH.</p> <p>3. DUE TO THE COMPLEXITY OF THE WORK AND THE FACT THAT THE OFFICE WILL BE VISITED BY THE JUDICIARY AND LAWYERS, IT IS ESSENTIAL THAT THE OFFICE PROJECTS AN IMAGE OF ORDER AND CONTROL.</p> <p>4. AS THE COURT HOUSE SHOULD BE PLANNED WITH MAXIMUM FLEXIBILITY, THE POSSIBILITY OF REPLANNING MUST ALWAYS BE KEPT IN MIND WHEN ARRIVING AT DESIGN SOLUTIONS. THE OFFICE AND ADJOINING GENERAL OFFICE SHOULD HAVE A RAISED FLOOR TO ACCOMMODATE WIRING.</p> <p>5. IN THIS INSTANCE THE NEED TO LOOK OUT IS FOR THE PURPOSE OF COMMUNICATION. HOWEVER, EXTERNAL WINDOWS IN THE GENERAL OFFICE WILL PROVIDE BORROWED LIGHT.</p> <p>6. LIGHTING MUST NOT REFLECT INTO THE COMPUTER SCREEN AND MUST ALSO BE FREE OF GLARE. PARABOLIC LENSES SHOULD BE USED IN THIS OFFICE.</p> <p>7. GOOD CONTROL OF THE HVAC SYSTEM IS IMPORTANT.</p> <p>8. ONLY STORAGE SYSTEMS FURNITURE AND FILING CABINET IS REQUIRED.</p> <p>9. ELECTRICAL DUPLEX OUTLETS, COMPUTER JACK, TELEPHONE AND VOLUME CONTROLLED PAGING SYSTEM SHALL BE INSTALLED.</p> <p>10. SECURITY LEVEL IS MEDIUM. HOWEVER, THE OFFICE DOORS SHALL HAVE A KEY PAD LOCK WITH KEY OVERRIDE AND THE DOOR TO THE PRIVATE CORRIDOR SHALL HAVE A SIMILAR LOCK.</p>

AREA
<p>TRIAL COORDINATOR'S OFFICE:</p> <p>13.5sm (145sq ft)</p>
PROXIMITIES
<p>SEE NOTE 1 THIS PAGE.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST		
CHAIRS		sled base
	NOTE 1	side chairs
		tilt
	NOTE 1	swivel/tilt
TABLES		movable standard
		special
FITMENTS		modular movable
		fixed
		special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered
		wood
COUCH		full size
		small
BOOKCASE		full height
		low
		doors
SIDE TABLES		decorative
		functional
DESK		plain
		single or double
		pedestal
		computer
		executive
		secretarial
	NOTE 2	system
DAIS & PLATFORMS		fixed i.e. built in place
		sectional (movable)
MISC.	NOTE 3	pin-up board
	NOTE 3	filing cabinets

FURNISHINGS & EQUIPMENT
1. DESK CHAIR SHALL BE ARMLESS SWIVEL TILT WITH FIVE LEGS. SIDE CHAIRS SHALL BE SLED BASE OR LEGS WITH ARMS.
2. DESK AND WORK AREA SHALL BE FROM A SELECTED SYSTEMS FURNITURE WITH FILE DRAWERS AND STORAGE AS REQUIRED.
3. INSTALL PIN-UP BOARD MEASURING 2400mm x 1200mm AND 914mm WIDE 4-DRAWER HIGH FILING CABINET.

AREA
TRIAL COORDINATOR'S OFFICE:
13.5sm (145sq ft)
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR FINISH SHALL BE 28-OZ. CARPET.
2. CEILING SHALL BE LAY-IN-ACOUSTIC TILES.
3. WALLS SHALL BE METAL STUD WITH PREFINISHED VINYL-COVERED PANELS. ALLOW BLOCKING TO ACCEPT PIN-UP BOARD AND SHELVING ABOVE DESK AS SHOWN. WALLS SHOULD BE SOUND INSULATED AND WINDOWS SHOULD BE DOUBLE GLAZED.
4. DOORS SHALL BE WOOD SOLID CORE WITH KEY PAD LOCKS.

AREA

TRIAL COORDINATOR'S OFFICE:

13.5sm (145sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

COMPUTER/TELEPHONE ROOM

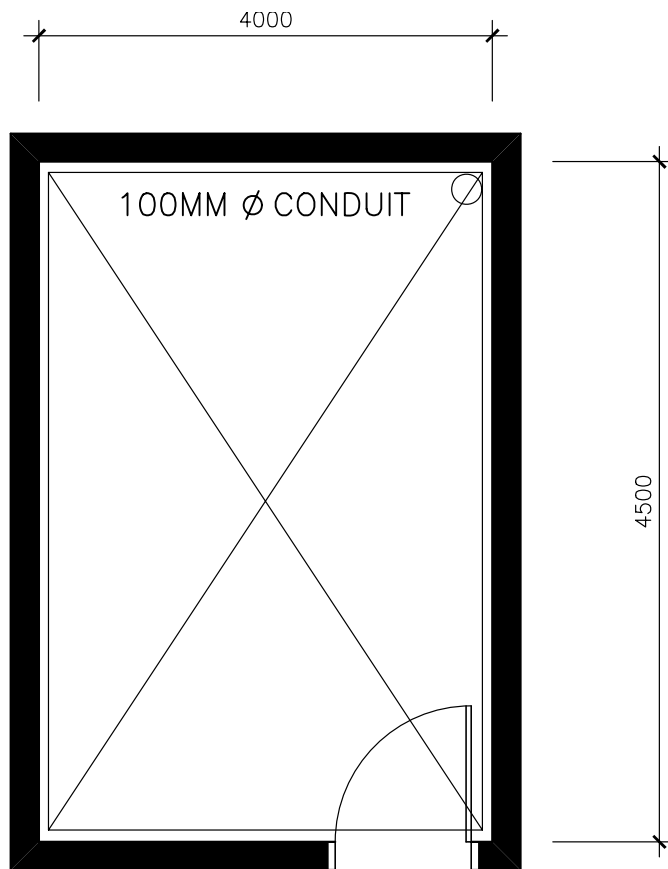


FIG. K3

The size of the computer/telephone room is dependent on the number of persons using telephones and computers and the computer equipment to be accommodated. It is essential that any calculation of area by facilities staff or consultants shall be checked in writing with the Ministry of the Attorney General.

Fig. K3 shows a suggested size for a 50-person court house but does not show the equipment layout which will vary dependent on requirement. In any given court house there could be a combination of the following equipment:

- NETWORKED COMPUTER SYSTEM AND HUBS
- IBM 3270 TERMINAL CONTROLLER
- PBX TELEPHONE SYSTEM
- ELECTRONIC KEY TELEPHONE SYSTEM (EKTS)

The above equipment is supplemented by adjunct modems, power supplies, battery back-up devices and test terminals.

Detailed technology standards are currently under development and they shall be referred to for additional computer room requirements.

Entrance door shall be 914mm wide.

Allow in layout for required duplex outlets and telephone. Crossed area is area of raised floor at least 152mm clear. Depress slab so that floor of computer telephone room finishes flush with floor immediately outside the access door

FIG: K3



CHECKLIST

FLOOR	carpet
	vinyl
NOTE 1	ceramic
	wood
CEILING	rubber
	special
CEILING	drywall sheet
	drywall lathe & sprayed acoustic plaster
WALLS	acoustic panels
	wood
NOTE 2	marble
	masonry
DOORS	sheet vinyl
	paint
NOTE 3	standard
	fire rated
WINDOWS	secure
	acoustic
WINDOWS	sun control
	decorative drapes
	full drapes

NOTES ON FINISHES

1. FLOOR SHALL BE VINYL OR RUBBER COVERED RAISED FLOOR PANELS WITH A CLEAR MINIMUM SPACE UNDERNEATH OF 152mm.
2. WALLS SHALL BE CONSTRUCTED OF MINIMUM 150mm THICK MASONRY LINED WITH 13mm FIRE-TREATED PLYWOOD 3048mm HIGH.
3. DOORS SHALL BE 914mm WIDE, 45mm THICK SOLID CORE WITH SECURITY ACCESS CARD READER.

AREA

COMPUTER/TELEPHONE ROOM

SIZE DEPENDENT ON COMPUTER EQUIPMENT AND TELEPHONE REQUIREMENTS. CHECK WITH MINISTRY OF THE ATTORNEY GENERAL CTSB STAFF.

PROXIMITIES

INTERNAL ORGANIZATION

TYPICAL WORK STATIONS FOR TYPIST, COMPUTER OPERATOR, CLERK, SECRETARY

TYPIST OR COMPUTER OPERATOR 5.0sm (53.8sq ft)
 EXCLUDING CIRCULATION

CLERK OR SECRETARY 7.0sm (75sq ft)
 EXCLUDING CIRCULATION

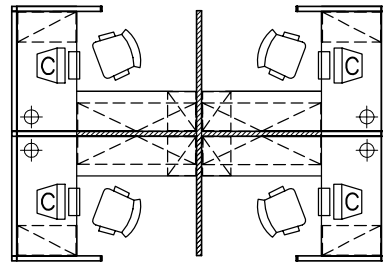
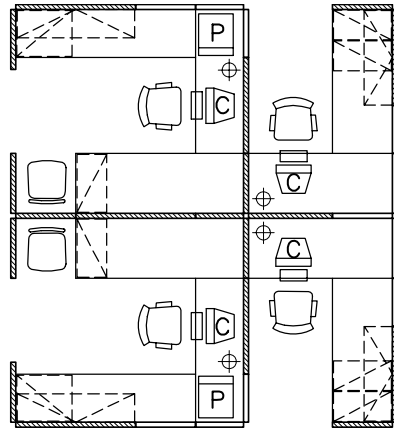


FIG: K4



FIG. K4

Workstations shall be selected from a systems manufacturer who has a standing agreement with the Government of Ontario. As suppliers can change from year to year, the configurations shown on Fig. K4 may vary.

Space allocation for a typist or computer operator performing routine work of limited scope is 5.0sm. Clerks and secretaries whose function is of a more varied nature and require normal storage/reference needs are to be allocated 7.0sm.

All work stations shall be serviced with electrical power, computer jack and telephone. If any of these services are not required at work station, store under raised floor. Maintain adequate circulation distances between workstation groups and between workstations and the rear edge of any work counter.

The grouping shown can be repeated to required number of work stations but each group should not exceed six stations. Note that the high screens are to accommodate closed shelves and to increase audio separation between work stations. It is important that the low screens should be used to avoid the enclosed feeling that would prevail should all the screens be 1245mm high. Provide electric clock.

LEGEND

- Computer and Keyboard/Tray
 - Printer
 - 1245 High Screen
 - 1067 Low Screen
 - Closed Shelf Unit
 - Pedestal Units under WorkTop
 - Location of entry of all services from raised floor ie. computer, phone, electrical supply, where required services in baseboard raceway.
- Heights will vary slightly dependant on manufacturer.

CHECKLIST		
ZONE	NOTE 1 NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 5	important desirable unimportant
VIEW OUT	NOTE 6	important desirable optional none
ILLUMINATION	NOTE 7	bright moderate subdued special
QUIETNESS	NOTE 8	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 9	high normal low
CEILING HEIGHT	NOTE 10	high normal low
STORAGE	NOTE 11	built-in room none
SERVICES	NOTE 12 NOTE 12 NOTE 12 NOTE 12	water electricity telephone paging special
SECURITY	NOTE 13	high medium low

NOTES
<p>1. THE ADMINISTRATION AREA IS SEPARATED FROM THE PUBLIC AREA BY A COUNTER. THIS IS THE MEETING PLACE BETWEEN PUBLIC AND THE COURT HOUSE ADMINISTRATION. THE PUBLIC SHOULD NOT ENTER THE ADMINISTRATION AREA WITHOUT AN APPOINTMENT AND MUST BE ESCORTED BY A STAFF MEMBER.</p> <p>2. THE TRAFFIC IN THE ADMINISTRATION AREA IS FAIRLY CONSTANT. THE COUNTER TRAFFIC, HOWEVER, CAN BE VERY HIGH.</p> <p>3. THE ADMINISTRATION AREA IS THE WINDOW THROUGH WHICH THE PUBLIC VIEWS AND ASSESSES THE MINISTRY OF THE ATTORNEY GENERAL. THE PROJECTED IMAGE MUST BE ORDERLY, EFFICIENT AND FRIENDLY.</p> <p>4. THE SPACE OCCUPIED BY THE ADMINISTRATION SHOULD BE LOCATED IN A PROPER RELATIONSHIP TO OTHER COURT ELEMENTS AND THEREFORE MOVING THE ADMINISTRATION WOULD ALSO ENTAIL REPLANNING OTHER AREAS.</p> <p>5. NOTWITHSTANDING NOTE 4 ABOVE, IT IS IMPORTANT THAT INTERNAL PLANNING, WITH A MINIMUM OF DISRUPTION, CAN BE ACHIEVED QUICKLY.</p> <p>6. IT IS IMPORTANT THAT WINDOWS BE PROVIDED TO ALLOW NATURAL LIGHT TO PENETRATE THE AREA. THE PLANNING SOLUTIONS SHOULD EXCLUDE THE TOTAL USE OF THE EXTERNAL WALL FOR ENCLOSED OFFICES AT THE EXPENSE OF THE GENERAL OFFICE.</p> <p>7. THE LIGHTING SHALL HAVE A HIGH VCL. GLARE AND VEILED REFLECTIONS SHOULD BE AVOIDED.</p> <p>8. THE ADMINISTRATION AREA IS TO BE OPEN PLANNED USING HIGH AND LOW SYSTEM SCREENS IN COMBINATION WHICH, WHEN ADDED TO THE ROOM FINISHES (SEE PAGE K12), WILL PROVIDE A RELATIVELY HIGH LEVEL OF SOUND ABSORBENCY. HOWEVER, AUDIO PRIVACY CANNOT BE ACHIEVED IN AN OPEN PLAN. THEREFORE SECURE OR CONFIDENTIAL CONVERSATIONS SHOULD TAKE PLACE IN AN ENCLOSED OFFICE. (NOTE THAT PRIVATE OFFICES AND OTHER ENCLOSED ADMINISTRATION SPACES ARE ADDRESSED ELSEWHERE IN SECTION K.)</p> <p>9. A GOOD SYSTEM OF ENVIRONMENTAL CONTROL (HVAC) SHALL BE PROVIDED THAT WILL RESPOND TO A CHANGING OCCUPATIONAL LOAD AT THE COUNTERS.</p> <p>10. CEILING HEIGHTS SHALL BE A MINIMUM OF 2750mm FOR SMALL OFFICES AND 3050mm FOR LARGE OFFICES.</p> <p>11. THE REQUIRED ENCLOSED ROOMS, STORAGE AREAS SUCH AS VAULTS, EXHIBIT, OR STATIONERY STORAGE, ARE ADDRESSED ELSEWHERE IN SECTION K.</p>

AREA
<p>TYPICAL WORK STATIONS FOR:</p> <p>TYPIST OR COMPUTER OPERATOR - 5.0sm (53.8sq ft) EXCLUDING CIRCULATION</p> <p>CLERK OR SECRETARY - 7.0sm (75.3sq ft) EXCLUDING CIRCULATION</p>
<p>PROXIMITIES</p> <p>THE ADMINISTRATION AREA SHALL BE LOCATED TO ALLOW EASY ACCESS TO THE PUBLIC COUNTER FROM THE PUBLIC CIRCULATION OR WAITING AREAS. OTHER ENTRIES TO THE GENERAL OFFICE SHALL BE FROM PRIVATE CIRCULATION AREAS. I.E. JUDGES, SECRETARIES ETC.</p>
<p>INTERNAL ORGANIZATION</p> <p>THE ORGANIZATION EMBRACES FAMILY, CRIMINAL AND CIVIL SECTIONS. SEE ORGANIZATION CHART FOR COURT HOUSE ADMINISTRATION AT THE BEGINNING OF SECTION K.</p>

CHECKLIST		
ZONE	NOTE 1 NOTE 12	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 5	important desirable unimportant
VIEW OUT	NOTE 6	important desirable optional none
ILLUMINATION	NOTE 7	bright moderate subdued special
QUIETNESS	NOTE 8	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 9	high normal low
CEILING HEIGHT	NOTE 10	high normal low
STORAGE	NOTE 11	built-in room none
SERVICES	NOTE 12 NOTE 12 NOTE 12 NOTE 12	water electricity telephone paging special
SECURITY	NOTE 13	high medium low

NOTES

12. THE SPACE UNDER THE RAISED FLOOR SHALL CONTAIN THE ELECTRICAL, COMPUTER AND TELEPHONE SERVICES WHICH SHALL BE FED THROUGH SERVICE BOXES TO THE WORK STATIONS. THIS SYSTEM SHOULD GREATLY REDUCE OR ELIMINATE ELECTRICAL HARNESSSES IN THE SCREEN SYSTEM. PAGING SPEAKERS WITH VOLUME CONTROL SHALL BE PROVIDED IN THE PUBLIC AREAS ONLY. HOWEVER CAPABILITY TO ACCESS THE PAGING SYSTEM FROM THE ADMINISTRATION AREA IS HIGHLY DESIRABLE.

13. ALTHOUGH IT IS UNNECESSARY TO PROVIDE ELECTRONIC SURVEILLANCE, THE AREA MAY REQUIRE PROTECTION FROM THE PUBLIC AT THE COUNTER WITH A TRANSPARENT SCREEN WITH SPEAKING PORTS. THE SCREEN WILL PROTECT THE STAFF FROM ENTRY BY THE PUBLIC OVER THE COUNTER AND REDUCE THE TRANSMISSION OF INFECTIONS SUCH AS COLDS ETC.

AREA

TYPICAL WORK STATIONS FOR:

TYPIST OR COMPUTER OPERATOR
 - 5.0sm (53.8sq ft) EXCLUDING CIRCULATION

CLERK OR SECRETARY
 - 7.0sm (75.3sq ft) EXCLUDING CIRCULATION

PROXIMITIES

THE ADMINISTRATION AREA SHALL BE LOCATED TO ALLOW EASY ACCESS TO THE PUBLIC COUNTER FROM THE PUBLIC CIRCULATION OR WAITING AREAS. OTHER ENTRIES TO THE GENERAL OFFICE SHALL BE FROM PRIVATE CIRCULATION AREAS, I.E. JUDGES, SECRETARIES ETC.

INTERNAL ORGANIZATION

THE ORGANIZATION EMBRACES FAMILY, CRIMINAL AND CIVIL SECTIONS. SEE ORGANIZATION CHART FOR COURT HOUSE ADMINISTRATION AT THE BEGINNING OF SECTION K.

CHECKLIST		
CHAIRS	NOTE 1	sled base secretarial tilt swivel/tilt
TABLES	NOTE 2	movable standard special
FITMENTS	NOTE 3	modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH		full size small
BOOKCASE		full height low doors
SIDE TABLES		decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers
SYSTEM FURNITURE	NOTE 4	total system screens only

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. INSTALL ERGONOMIC FIVE-LEG SWIVEL STENO CHAIRS WITH ADJUSTABLE ARMRESTS, SEAT HEIGHT AND BACK. 2. INSTALL 1524mm X 762mm LAMINATE FINISHED TABLES WITHOUT DRAWERS AS REQUIRED BETWEEN WORK STATIONS. FINISH TO MATCH WORK TOPS IN WORK STATIONS. 3. SPECIAL FITMENTS SUCH AS CARD INDEX BOXES (ON CARPET CASTORS) ETC. WILL VARY CONSIDERABLY FROM COURT HOUSE TO COURT HOUSE. A LIST OF REQUIREMENTS MUST BE OBTAINED FROM THE COURT SERVICES MANAGER AND THE MINISTRY OF ATTORNEY GENERAL RECORD AND FORMS SERVICE SECTION OF THE COMPUTER AND TELECOMMUNICATION SERVICES BRANCH. 4. THE FURNITURE SHALL BE A TOTAL SCREEN SYSTEM ACCEPTABLE TO GOVERNMENT PURCHASING BRANCH AT THE TIME OF ORDERING. THE SYSTEM SHALL CONSIST OF SCREENS, WORKTOPS, STORAGE CUPBOARDS, ORGANIZERS, PEDESTALS ETC. TO CREATE A TOTAL WORKING AREA.

AREA
<p>TYPICAL WORK STATIONS FOR:</p> <p>TYPIST OR COMPUTER OPERATOR - 5.0sm (53.8sq ft) EXCLUDING CIRCULATION</p> <p>CLERK OR SECRETARY - 7.0sm (75.3sq ft) EXCLUDING CIRCULATION</p>
CAPACITY
VARIES
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

- 28-OZ. CARPET SHALL BE INSTALLED (I.E. CARPET ON RAISED FLOOR PANELS) TO BOTH INCREASE THE ABSORBENCY (APPROXIMATE NRC .2) AND TO REDUCE NOISE BEING GENERATED FROM WALKING OR MOVING CHAIRS ON A HARD FLOOR.
- THE CEILING SHALL BE LAY-IN ACOUSTIC TILE WITH AN NRC VALUE SPECIFIED IN SECTION Q. NOTE THAT A SCULPTURED CEILING SUCH AS COFFERS ETC. IS ACCEPTABLE PROVIDED THE REQUIRED NRC VALUE AND THE LIGHTING STANDARD IS MAINTAINED.
- INTERNAL WALLS SHALL BE METAL STUD WITH PREFINISHED (VINYL) DRYWALL BOARDS OR DRYWALL SHEETS WITH TAPED JOINTS AND FINISHED WITH SHEET VINYL. IT IS IMPORTANT THAT WALLS SEPARATING THE GENERAL OFFICE FROM PRIVATE OFFICES SHALL BE CONSTRUCTED TO THE REQUIRED STC RATING.

NOTE: CERTAIN WALL SYSTEMS MAY FAIL TO MEET THE REQUIRED STANDARD. INTERSECTION OF WALL AND CEILING SHALL HAVE A NEOPRENE OR SIMILAR PAD TO PREVENT NOISE PENETRATION. WHERE HIGH LEVELS OF ACOUSTIC PRIVACY ARE REQUIRED THE WALLS SHALL BE TAKEN UP TO THE UNDERSIDE OF THE SLAB ABOVE. EXTERNAL WALLS SHALL BE INSULATED AND FINISHED IN A SIMILAR MANNER.
- DOORS SHALL ALL BE 45mm THICK WOOD SOLID CORE WITH LOCKING DEVICES EXCEPT THE LUNCHROOM. THE VAULT, EXHIBIT STORAGE, COMPUTER ROOM, TRIAL COORDINATOR'S ROOM AND ENTRANCE DOORS TO THE GENERAL OFFICE SHALL HAVE KEY PAD LOCKS.
- ALL WINDOWS FACING WEST OR SOUTH SHALL HAVE SUN CONTROL BLINDS.

AREA

TYPICAL WORK STATIONS FOR:

TYPIST OR COMPUTER OPERATOR
 - 5.0sm (53.8sq ft) EXCLUDING CIRCULATION

CLERK OR SECRETARY
 - 7.0sm (75.3sq ft) EXCLUDING CIRCULATION

PROXIMITIES

INTERNAL ORGANIZATION

MECHANICAL FILING AND FILING CLERK'S WORK STATION

25.3sm (272sq ft) AREA FOR FOUR LARGE LEKTREIERS WITHOUT COMPUTER STATION

* Two Lektrievers will only require 50% of the above space but one Lektriever will require 8.25sm.

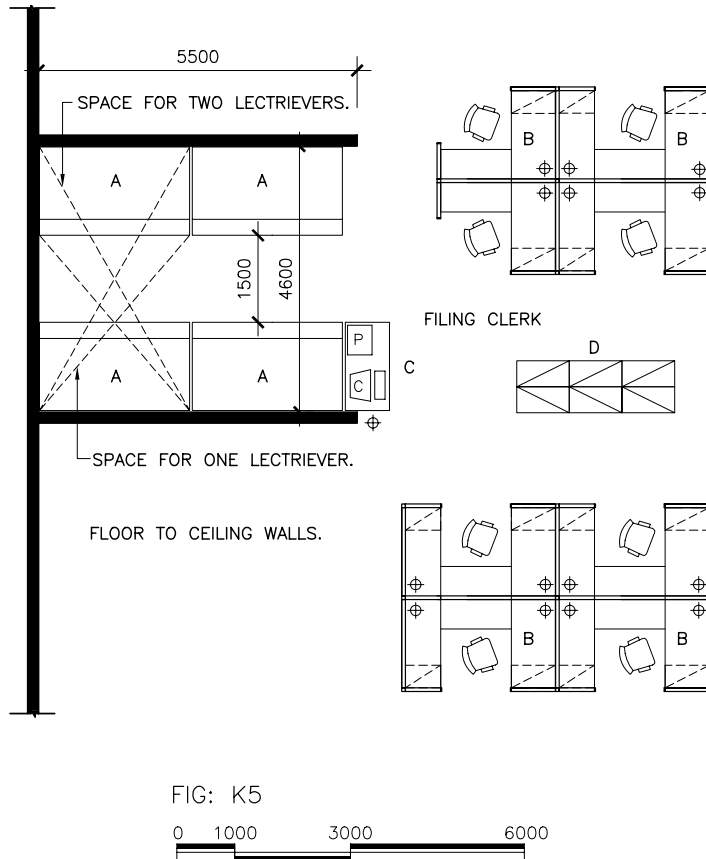


FIG: K5

FIG. K5

The use of mechanical filing as a space saving device is increasing in existing court houses and therefore Fig. K5 is included to show the relationship of the Lektrievers to each other and to the filing clerk. One Lektriever 2591mm long x 1524mm deep x 2438mm high has the equivalent capacity of 16 5-drawer lateral filing units at 914mm long x 457mm deep. All the mechanical filing units should be computerized or have provision for future computerization.

In new court houses the structure shall be designed for the imposed load. In retrofit projects the structure must be checked to determine that filing units can be installed. At all times weights shall be on beams, not slabs, and units shall be located near columns unless advised otherwise by a structural engineer.

The planning arrangement on Fig. K5 can be modified with approval to suit overall planning. However, the planning principles illustrated must be respected.

LEGEND

- A MECHANICAL FILING UNITS (LEKTREIERS SHOWN)
- B FILING CLERK'S WORK STATION
- C FILING CLERK'S COMPUTER STATION
- D FILING CABINETS
- CLOCK
- LOCATION OF ENTRY OF ALL REQUIRED SERVICES FROM UNDER RAISED FLOOR

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 4	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 8	high normal low
CEILING HEIGHT	NOTE 9	high normal low
STORAGE		built-in portable none
SERVICES	NOTE 10 NOTE 10	water electricity telephone intercom special
SECURITY	NOTE 11	high medium low

NOTES
1. FILING SHALL BE LOCATED AWAY FROM THE COUNTER AREA.
2. FILING ACCESS SHOULD BE CONFINED TO THE FILING CLERK. DURING RUSH PERIODS ONLY, OTHER STAFF CAN ACCESS FILING BUT THE REFILING OF DOCUMENTS MUST BE DONE BY THE FILING CLERK.
3. THE RECORD RETENTION AREA FORMS PART OF THE GENERAL ADMINISTRATION AREA AND THEREFORE THE PROJECTED IMAGE SHOULD BE THE SAME AS DESCRIBED ON PAGE K10, NOTE 3.
4. DUE TO STRUCTURAL RESTRAINTS, THE RELOCATION OF MECHANICAL FILING UNITS IS DIFFICULT.
5. THE AREA OCCUPIED BY THE FILING UNITS IS USUALLY ENCLOSED ON THREE SIDES (UP TO FOUR UNITS). NATURAL LIGHT IN THIS AREA IS NOT REQUIRED.
6. THE ILLUMINATION MUST BE SUFFICIENTLY BRIGHT THAT FILING TITLES CAN BE EASILY READ. VEILED REFLECTIONS AND GLARE MUST BE AVOIDED.
7. QUIETNESS SHOULD BE THE SAME AS IN THE REST OF THE GENERAL OFFICE.
8. THE ENVIRONMENTAL CONTROL SHOULD BE THE SAME AS IN THE GENERAL OFFICE, BUT ALLOWANCE SHOULD BE MADE FOR ANY HEAT GIVEN OFF BY THE FILING UNITS.
9. SAME AS GENERAL ADMINISTRATION AREA.
10. ELECTRICAL POWER AND COMPUTER WIRING IS REQUIRED TO FILING UNITS. ELECTRICAL POWER COMPUTER JACK AND TELEPHONE IS REQUIRED AT FILING CLERK STATION AND ELECTRICAL POWER AND COMPUTER JACK AT COMPUTER STATION.
11. ALL UNITS MUST BE LOCKABLE WITH A SECURE SYSTEM.

AREA
MECHANICAL FILING AND FILING CLERK'S STATION
25.3sm (272sq ft)
FOR 4 FILING UNITS WITHOUT COMPUTER STATION
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs secretarial swivel/tilt
NOTE 1	
TABLES	movable standard special
NOTE 1	
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
SYSTEM FURNITURE	NOTE 3 total system screens only file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. INSTALL ERGONOMIC 5-LEG SWIVEL STENO CHAIR WITH ADJUSTABLE ARMRESTS, SEAT HEIGHT AND BACK FOR THE FILING CLERK AND COMPUTER WORK STATIONS. ALSO INSTALL UPHOLSTERED SWIVEL STOOLS WITH ADJUSTABLE HEIGHT AT FILING UNITS. 2. COMPUTER STATION SHALL BE A 1524mm x 914mm TABLE WITH LOCKABLE PENCIL DRAWER. 3. THE FURNITURE SHALL BE A TOTAL SCREEN SYSTEM ACCEPTABLE TO GOVERNMENT PURCHASING BRANCH AT THE TIME OF ORDERING. THE SYSTEM SHALL CONSIST OF SCREENS, WORKTOP AND STORAGE CUPBOARDS, ORGANIZERS, PEDESTALS, ETC. TO CREATE A TOTAL WORKING AREA FOR THE FILING CLERK.

AREA
<p>MECHANICAL FILING AND FILING CLERK'S STATION</p> <p>25.3sm (272sq ft)</p> <p>FOR 4 FILING UNITS WITHOUT COMPUTER STATION</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	carpet vinyl ceramic wood rubber special
CEILING	drywall sheet drywall lathe & sprayed acoustic plaster painted acoustic tile
WALLS	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	standard fire rated secure acoustic
WINDOWS	sun control decorative drapes full drapes

NOTES ON FINISHES

REFER TO PAGE K13 FOR FINISHES TO THIS AREA.

AREA

**MECHANICAL FILING AND FILING CLERK'S
STATION**

25.3sm (272sq ft)

FOR 4 FILING UNITS WITHOUT COMPUTER STATION

PROXIMITIES

INTERNAL ORGANIZATION

STAFF LUNCHROOM

1.0sm PER PERSON (10.8sq ft) INCLUDING COUNTER

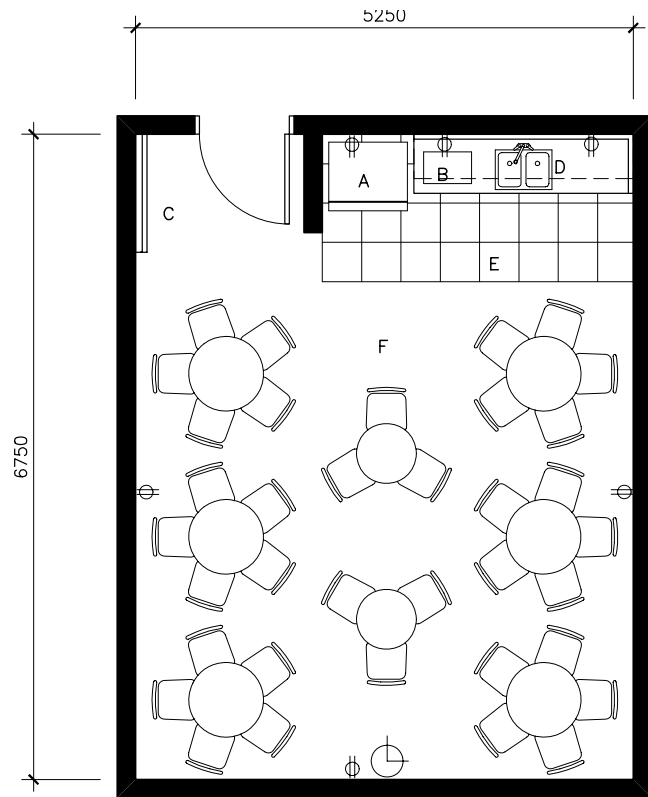


FIG: K6

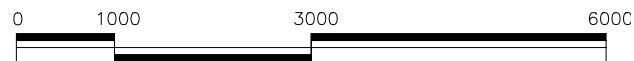


FIG. K6

Fig. K6 shows a typical plan for a staff of 100 which provides seating for 36 persons. Not all the staff will use the lunchroom or have their lunch at the same time and as a result the required seating is based on three shifts. Lunchrooms will be provided for the staff of all court houses. Cafeterias will not normally be provided unless requested by the court house users committee and a feasibility study has been undertaken by Government Food Services Staff.

All lunchrooms shall be equipped with a refrigerator, microwave oven, counter, cupboards and stainless steel double sink.

Note: At the discretion of the regional director, two tables can be eliminated and replaced by a couch.

LEGEND

- | | | | |
|---|----------------------|--|---------------|
| A | REFRIGERATOR | | CLOCK |
| B | MICROWAVE OVEN | | DUPLEX OUTLET |
| C | NOTICE BOARD | | |
| D | STAINLESS STEEL SINK | | |
| E | CERAMIC TILE | | |
| F | RUBBER TILE | | |

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3	dignified orderly friendly relaxing peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in portable none
SERVICES	NOTE 9 NOTE 9	water electricity telephone paging special
SECURITY	*	high medium low

NOTES
1. THE LUNCHROOM IS FOR THE USE OF MAG STAFF ONLY.
2. TRAFFIC IS ONLY NOTICEABLE DURING LUNCH PERIODS OR COFFEE BREAKS.
3. THE LUNCHROOM SHOULD BE A PLACE WHERE THE STAFF CAN RELAX. THE CHOICE OF COLOUR AND WALL HANGINGS SHOULD FORM A CONTRAST TO THE WORKING ENVIRONMENT.
4. ALTHOUGH THE AREA IS SERVICED WITH WATER AND DRAINAGE, IT SHOULD BE KEPT IN MIND THAT REPLANNING OF THE AREA WHERE THE LUNCHROOM IS LOCATED COULD BE POSSIBLE IN THE FUTURE. THEREFORE, THE WALLS SHOULD BE EASILY DISMANTLED.
5. THE RELEGATION OF LUNCHROOMS TO THE BASEMENT WITHOUT WINDOWS ETC. SHOULD BE AVOIDED WHERE POSSIBLE. THE LUNCHROOM ENVIRONMENT, WHICH IS A RELIEF FROM THE WORKPLACE, IS IMPORTANT AS A MEANS OF MENTALLY RESTING THE STAFF AND SHOULD BE LOOKED UPON AS A PLACE OF RESPITE FROM THE PRESSURES OF WORK. A VIEW OUT WOULD BE IMPORTANT IN ACHIEVING THIS END.
6. LIGHTING SHOULD BE DESIGNED TO BE RESTFUL YET BRIGHT ENOUGH TO READ A BOOK OR MAGAZINE.
7. TO REDUCE CLEANING PROBLEMS, THE ROOM SURFACES ARE USUALLY KEPT HARD. THEREFORE, EVERY EFFORT MUST BE MADE TO ACHIEVE LESS REFLECTIVE SURFACES. TO REDUCE NOISE GENERATED BY FOOTFALLS OR SCRAPING OF CHAIRS, RUBBER FLOORING SHOULD BE USED IN PLACE OF VINYL.
8. COUNTER WITH CUPBOARDS BOTH UNDER AND OVER SHALL BE PROVIDED.
9. PROVIDE WATER, DRAINAGE AND ELECTRICITY. ALSO PROVIDE ELECTRIC CLOCK.

AREA
STAFF LUNCHROOM
1.0sm PER PERSON (10.8sq ft) INCLUDING COUNTER
PROXIMITIES
LOCATED NEAR GENERAL OFFICE. TRAVELLING DISTANCE FROM THE OFFICE TO THE LUNCHROOM SHOULD BE KEPT TO A MINIMUM.
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	NOTE 1 sled base side chairs tilt swivel/tilt
TABLES	NOTE 2 movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 3 full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> CHAIRS SHALL BE LIGHTWEIGHT UPHOLSTERED SLED BASE. TABLES SHALL BE LAMINATE FINISHED, SINGLE STEM, 762mm D I A M - ETER OR 762mm X 1829mm RECTANGULAR TABLES WITH DOUBLE STEM SUP- PORTS. PROVIDE FULL LENGTH COUCH AT THE DISCRETION OF THE REGIONAL DIRECTOR. THE COUCH WILL REPLACE TWO TABLES.

AREA
<p>STAFF LUNCHROOM</p> <p>1.0sm PER PERSON (10.8sq ft) INCLUDING COUNTER</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet vinyl (sheet)
	NOTE 1	ceramic wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet
	NOTE 3	acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE FLOOR SHALL BE SHEET RUBBER OR 914mm x 914mm RUBBER TILES. AS AN OPTION, THE RUBBER TILES CAN BE REPLACED WITH CERAMIC TILES IN FRONT OF THE COUNTER.
2. THE CEILING SHOULD BE ACOUSTIC TILE AS SPECIFIED IN SECTION Q.
3. THE WALLS, WHICH SHALL BE CONSTRUCTED OF METAL STUDS, SHALL BE FINISHED WITH DRYWALL PANELS WITH SHEET VINYL OR PREFINISHED PANELS OF DRYWALL AND SHEET VINYL. ACOUSTIC PANELS MAY BE USED ABOVE THE DAMAGE LEVEL OF 1066mm TO INCREASE THE ABSORBENT SURFACE OF THE ROOM.
4. WOOD DOORS SHALL BE 45mm THICK WITH SOLID CORE.
5. WINDOWS FACING SOUTH OR WEST SHALL BE FITTED WITH SUN CONTROL BLINDS.

AREA

STAFF LUNCHROOM
 1.0sm PER PERSON (10.8sq ft)
 INCLUDING COUNTER

PROXIMITIES

INTERNAL ORGANIZATION

FIRST AID AND REST ROOMS

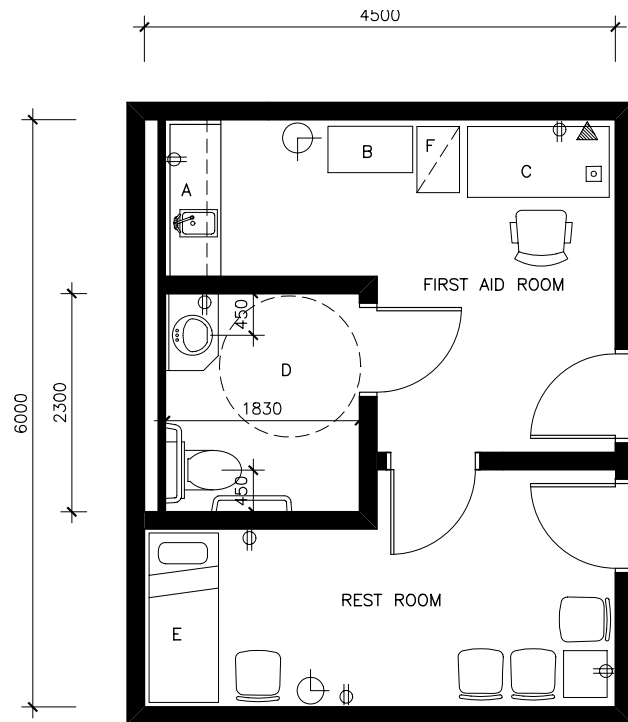


FIG: K7



FIG. K7

First aid and rest rooms are governed by the Occupational Health and Safety Act and Workers' Compensation Board regulations. A rest room only is required where 10 or more workers are employed. A first aid room is required where 200 or more staff are employed in any one shift.

In the example shown on this page the first aid and rest room are en suite to maximize the facilities and reduce the staff requirement.

All doors and sizing of washroom shall be designed to barrier-free details given in Section M.

The first aid room shall have a counter with cupboards over, stainless steel sink, and medicine cabinet with secure lock. For additional equipment to be provided in the first aid room, refer to the Workers' Compensation Board first aid regulations.

The rest room shall have a couch or bed for lying down, with chairs and side table. In a stand alone situation, the rest room size shall be limited to 9.0 sm to adhere to government standards.

LEGEND

- | | | | |
|---|----------------------------------|---|---------------|
| A | COUNTER AND STAINLESS STEEL SINK | ▲ | TELEPHONE |
| B | MEDICINE CABINET | ⊕ | DUPLEX OUTLET |
| C | NURSE'S DESK | ⊠ | COMPUTER JACK |
| D | WASHROOM (BARRIER-FREE) | | |
| E | BED | | |
| F | FILING CABINET | | |

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	*	dignified orderly friendly bold relaxing
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 2	bright moderate subdued special
QUIETNESS	NOTE 3	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 4	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 5	built-in portable none
SERVICES	NOTE 6 NOTE 6 NOTE 6 NOTE 6	water electricity telephone computer special
SECURITY	NOTE 7	high medium low

NOTES
<p>1. BOTH THE REST ROOM AND FIRST AID ROOMS ARE FOR THE USE OF MAG STAFF. COULD BE USED BY THE PUBLIC IN CASE OF EMERGENCY (PRIOR TO CALLING FOR MEDICAL HELP). IF USED BY PUBLIC, STAFF MEMBER MUST BE PRESENT.</p> <p>2. LIGHTING IN THE FIRST AID ROOM TO BE OF SUFFICIENT BRILLIANCE IN COUNTER MEDICINE CABINET AREA TO CARRY OUT FIRST AID. OTHER AREAS IN BOTH ROOMS TO BE GLARE-FREE LIGHTING.</p> <p>3. NOISE FROM OTHER SPACES SHOULD BE AT LEAST 5 TO 10 dB BELOW THE AMBIENT NOISE LEVEL WITHIN THE ROOM. THE FINISHES IN THE REST ROOM CAN BE SOFT, BUT THE FIRST AID ROOM SHOULD BE OF HARD, EASILY CLEANED SURFACES. SEE FINISHES SHEET.</p> <p>4. NORMAL ROOM TEMPERATURES AND HUMIDITY MUST BE MAINTAINED AT ALL TIMES.</p> <p>5. STORAGE SHALL BE IN THE COUNTER WITH FULL CUPBOARDS OVER. ALL CUPBOARDS SHALL HAVE LOCKS. A SEPARATE MEDICINE CABINET SHALL ALSO BE INSTALLED WITH A SECURE LOCK.</p> <p>6. HOT AND COLD WATER, DRAINAGE, TELEPHONE, COMPUTER JACK, AND ELECTRICAL DUPLEX OUTLET SHALL BE INSTALLED. ALSO INSTALL ELECTRIC CLOCKS IN BOTH ROOMS.</p> <p>7. THE ENTRY DOORS SHALL BE KEY LOCKABLE WITH RESTRICTED CIRCULATION OF KEY. ALL CUPBOARDS, FILING CABINET, MEDICINE CABINET,</p>

AREA
<p>FIRST AID AND REST ROOMS</p>
<p>PROXIMITIES</p> <p>REASONABLY CENTRAL LOCATION. NEAR GENERAL OFFICE IF POSSIBLE, BUT COULD BE LOCATED IN FULLY FINISHED BASEMENT IF NECESSARY.</p>
<p>INTERNAL ORGANIZATION</p>

CHECKLIST	
CHAIRS	sled base side chairs tilt NOTE 1 swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed NOTE 2 special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 3 full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative NOTE 4 functional
DESK	NOTE 5 plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
FILING CABINET & STORAGE CABINETS	NOTE 6 low full height

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> DESK CHAIR SHALL BE SWIVEL TILT WITH ARMS IF COMPUTER NOT INSTALLED. IF COMPUTER IS INSTALLED, CHAIR SHOULD NOT HAVE ARMS. SIDE CHAIRS TO BE EITHER SLED BASE OR LEGS UPHOLSTERED WITH ARMS. COUNTER, CUPBOARDS, ETC. SHALL BE SPECIAL DESIGN, BUILT IN, ALL CUPBOARDS WITH LOCKS. SINK TO BE LARGE AND DEEP WITH GOOSE NECK SWIVEL FAUCET. A 914mm x 1981mm BED SHOULD BE INSTALLED. A 609mm x 609mm SIDE TABLE SHOULD BE INSTALLED. DESK SHALL BE 1524mm x 763mm WITH TWO PEDESTALS FOR FILING WITH SHALLOW DRAWER OVER EACH SIDE. SUPPLY AND INSTALL ONE FOUR-DRAWER FILING CABINET AND ONE 914mm x 457mm x 1828mm HIGH MEDICINE CABINET FITTED WITH SHELVES AND DRAWERS, ALL TO BE LOCKABLE. <p>NOTE: FOR EQUIPMENT TO BE PROVIDED IN REST ROOM AND FIRST AID ROOM REFER TO OCCUPATIONAL HEALTH AND SAFETY ACT AND ITS REGULATIONS AND WORKERS' COMPENSATION BOARD REGULATIONS.</p>

AREA
FIRST AID AND REST ROOMS
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST	
FLOOR	NOTE 1 carpet vinyl (sheet)
	NOTE 1 ceramic wood rubber
	NOTE 1 special
CEILING	drywall sheet drywall lathe & sprayed acoustic plaster painted
	NOTE 2 acoustic tile
WALLS	NOTE 3 drywall sheet acoustic panels wood marble
	NOTE 3 ceramic
	NOTE 3 sheet vinyl
	paint
DOORS	NOTE 4 standard fire rated secure acoustic
WINDOWS	sun control decorative drapes full drapes

NOTES ON FINISHES
<p>1. THE REST ROOM FLOOR CAN BE CARPETED WITH 28-OZ. CARPET OR RUBBER. THE FIRST AID ROOM FLOOR CAN BE FINISHED WITH VINYL OR RUBBER. A GOOD SOLUTION WOULD BE TO FINISH BOTH FLOORS WITH RUBBER. WASHROOM FLOOR TO BE CERAMIC TILE.</p> <p>2. CEILINGS IN BOTH ROOMS SHALL BE ACOUSTIC TILE WITH AN NRC VALUE AS SPECIFIED IN SECTION Q.</p> <p>3. WALL CAN BE STEEL STUD WITH DRYWALL SHEETS TAPED OR MASONRY WHERE WALL WILL HAVE TO TAKE A LOADING I.E. TOILETS, GRAB BARS, ETC. WALL IN WASHROOM SHALL BE CERAMIC TILE TO 1371mm HIGH ON ALL WALLS AND SHEET VINYL ABOVE.</p> <p>4. DOORS SHALL BE SIZED TO ALLOW THE PASSAGE OF WHEELCHAIRS (SEE SECTION L). THEY SHALL BE 45mm THICK AND OPEN THROUGH A MINIMUM OF 90mm .</p>

AREA
FIRST AID AND REST ROOMS
PROXIMITIES
INTERNAL ORGANIZATION

MAIL SORTING

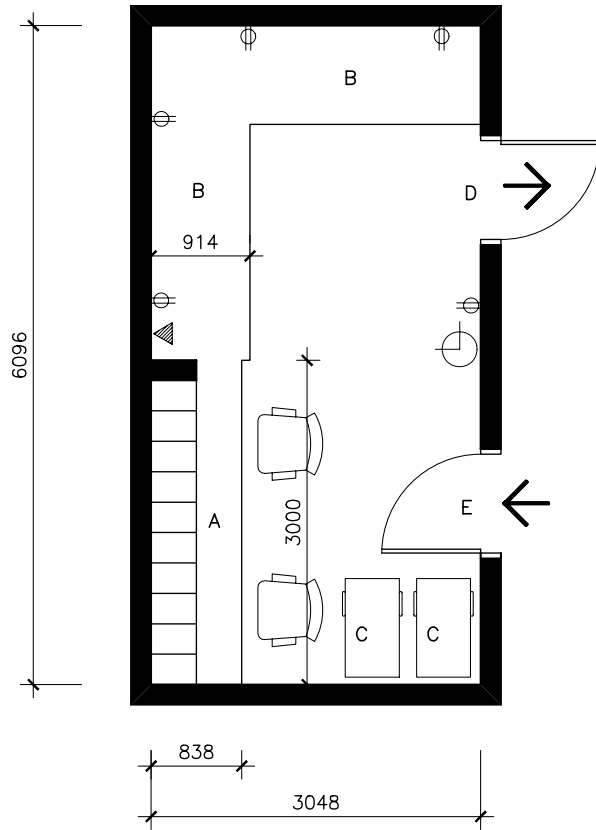
3.0sm (32.3sq ft) PER TABLE

FIG. K8

Fig. K8 illustrates a typical mail room with a sorting area for incoming mail and a counter for processing outgoing mail. The incoming mail is sorted into 142mm wide x 304mm high x 381 mm deep pigeon holes. The outgoing mail will be weighed, stamped or franked before being taken through outgoing door D.

All counters on legs with apron, with clear space under for storage of mail bags.

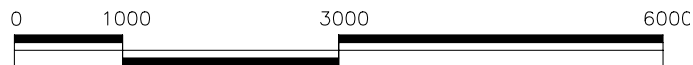
Mail sorting in court houses can be carried out in an open area or a dedicated room or both dependent on the working unit and the size of the court house. Government space allocation for mail sorting is based on 3.0sm per table where supported by functional need.



LEGEND

- A PIGEON HOLES AND SORTING COUNTER
- B OUTGOING MAIL COUNTER, 914mm DEEP
- C MAIL CART STORAGE
- D OUTGOING DOOR
- E INCOMING DOOR (TWO-PART DUTCH DOOR WITH LEDGE)
- ⊙ CLOCK
- ⊕ DUPLEX OUTLET
- ▲ TELEPHONE

FIG: K8



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 4 NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 6	built-in portable none
SERVICES	NOTE 7 NOTE 7	water electricity telephone intercom special
SECURITY	NOTE 8	high medium low

NOTES
<p>1. LOCATION SHOULD BE ON PRIVATE CIRCULATION EASILY ACCESSIBLE TO THE VARIOUS USERS OF THE COURT HOUSE STAFF AND JUDGES. NOTE TRAFFIC IN THE MAIL ROOM IS TO BE RESTRICTED TO MAIL ROOM STAFF ONLY.</p> <p>2. TRAFFIC IS CONFINED TO DELIVERY AND PICK-UP OF MAIL, BOTH INTERNALLY AND EXTERNALLY.</p> <p>3. THE MAIL ROOM SHOULD BE ORDERLY AND EFFICIENT AT ALL TIMES.</p> <p>4. IF IN BASEMENT, WINDOWS ARE NOT AN OPTION. IF ON AN UPPER FLOOR, WINDOWS ARE OPTIONAL.</p> <p>5. WORKING AREAS OVER COUNTERS SHALL BE WELL LIGHTED WITH A HIGH VCL I.E. LOW GLARE OR VEILED REFLECTIONS.</p> <p>6. STORAGE AS SUCH IS NOT REQUIRED BUT UNDERSIDE OF COUNTERS SHOULD BE KEPT CLEAR TO ACCOMMODATE MAIL BAGS ON A DAILY BASIS. FLOOR SPACE IS REQUIRED TO STORE MAIL CARTS.</p> <p>7. THE ROOM SHALL BE SERVICED WITH DUPLEX OUTLETS, TELEPHONE AND ELECTRIC CLOCK.</p> <p>8. THE DOORS TO THE MAIL ROOM SHALL BE KEPT LOCKED WHEN NOT STAFFED WITH KEY PAD LOCKS WITH KEY OVERRIDE. DOOR E TO BE TWO PART WITH TOP LOCK KEY PAD AND BOTTOM LEAF BOLTED.</p>

AREA
<p>MAIL SORTING</p> <p>3.0sm (32.3sq ft) PER TABLE</p>
PROXIMITIES
<p>NOTE: IF COURT HOUSE IS LARGE ENOUGH TO HAVE INTERNAL MAIL PICK-UP AND DELIVERY, THE LOCATION OF THE MAIL ROOM RELATIVE TO THE USERS IS LESS IMPORTANT AND IT COULD BE LOCATED IN A FINISHED BASEMENT IF NECESSARY.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST		
CHAIRS		sled base
	NOTE 1	stools tilt swivel/tilt
TABLES		movable standard
		special
FITMENTS		modular movable
	NOTE 2	fixed special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered
		wood
COUCH		full size
		small
BOOKCASE		full height
		low
		doors
SIDE TABLES		decorative
		functional
DESK		plain
		single or double
		pedestal
		computer
		executive
		secretarial system
DAIS & PLATFORMS		fixed i.e. built in place
		sectional (movable)
MAIL TROLLEYS	NOTE 3	two tier

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. STOOLS TO BE INSTALLED AS SHOWN ON FIG. K8. 2. SORTING PIGEON HOLES SHALL BE CONSTRUCTED ABOVE A SORTING COUNTER MEASURING 152mm WIDE x 304mm HIGH x 381mm DEEP THREE HOLES HIGH. SORTING TABLE SHALL PROJECT 457mm FROM FRONT OF PIGEON HOLES. SPACE UNDER COUNTER TO BE LEFT CLEAR. PROCESSING COUNTER SHALL BE 914mm WIDE x 914mm HIGH FINISHED WITH LAMINATE. THIS COUNTER TO RECEIVE STAMPING, FRANKING AND WEIGHING MACHINES AS REQUESTED BY ADMINISTRATION. PROVIDE 0.76mm UPSTAND AT BACK OF COUNTER. 3. SUPPLY MAIL TROLLEYS WITH TOP AND BOTTOM TRAYS IN COMPARTMENTS AND FITTED WITH CARPET CASTERS.

AREA
<p>MAIL SORTING</p> <p>3.0sm (32.3sq ft) PER TABLE</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet
	NOTE 1	vinyl (sheet)
	NOTE 1	ceramic
		wood
		rubber
		special
CEILING		drywall sheet
		drywall lathe & sprayed acoustic plaster
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet
		acoustic panels
		wood
		marble
	NOTE 3	ceramic
		sheet vinyl
		paint
DOORS		standard
		fire rated
		secure
		acoustic
WINDOWS	NOTE 4	sun control
		decorative drapes
		full drapes

NOTES ON FINISHES

1. THE FLOOR SHALL BE FINISHED IN VINYL OR RUBBER. (NOTE: RUBBER IS QUIETER AND EASIER ON LEGS AND FEET WHEN STAFF IS STANDING FOR LONG PERIODS.)
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE.
3. WALLS SHALL BE DRYWALL SHEET ON STEEL STUDS WITH TAPED JOINTS PAINTED. THE STC RATING OF THE PARTITIONS SHOULD BE APPROPRIATE TO PREVENT NOISE DISTURBING OCCUPANTS OF ADJACENT SPACES. IF ADJOINING SPACES ARE NOT OCCUPIED, THIS REQUIREMENT CAN BE REDUCED. SEE SECTION Q FOR STC SPECIFICATIONS.
4. DOOR TO BE 45mm THICK. 914mm WIDE ENTRY DOOR TO BE DUTCH DOOR. SEE NOTE 8 ON PAGE K27 FOR LOCKING.
5. IF LOCATED WHERE WINDOWS ARE POSSIBLE, SUN CONTROL BLINDS ARE TO BE INSTALLED IF WINDOWS FACE WEST OR SOUTH.

AREA

MAIL SORTING

3.0sm (32.3sq ft) PER TABLE

PROXIMITIES

INTERNAL ORGANIZATION

COURT REPORTERS' OFFICE

5.0sm PER WORKSTATION (53.82sq ft)
 PLUS TAPE STORAGE AND COPYING AREA

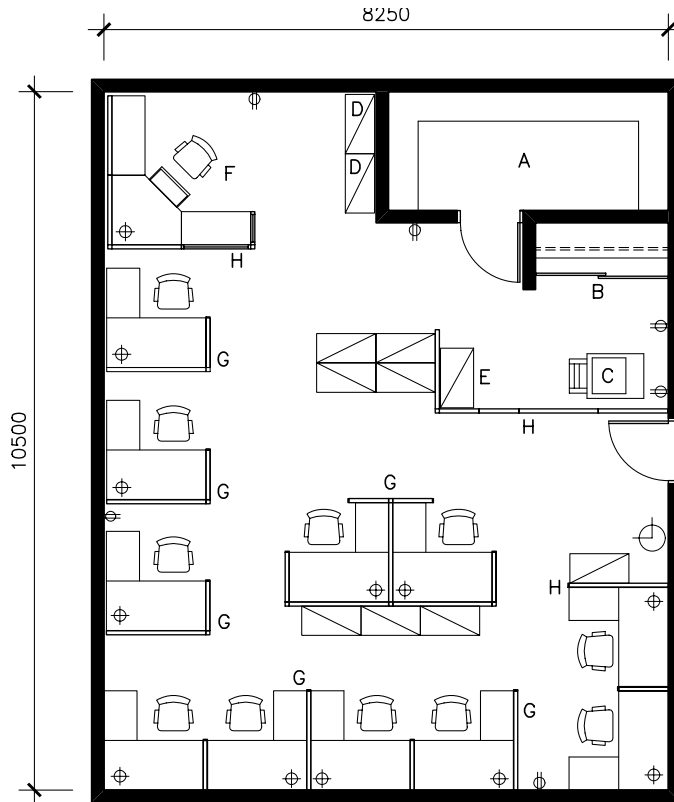


FIG: K9

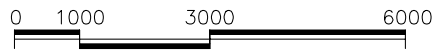


FIG. K9

FIG. K9 is a plan allowing 5.0sm per workstation for 12 court reporters (including the supervisor) with coat hanging cupboard, tape storage copying machine, and paper storage. (Remote secure tape storage is required to accommodate tapes for legal retention period.) Tape storage allocation is based on 1.0sm for standard single sided shelf; shared copying space at 5.0sm; and filing cabinets at 0.5sm per cabinet.

As court reporters can be salaried staff or on contract and as the contract staff often produce their work at home, a set ratio of work stations to courtrooms cannot be determined. This information must be obtained from the court services manager when the program is being produced. Fig. K9 shows a possible number of work stations (12) for a 20-courtroom court house.

Note that in a small court house of, say, two courtrooms, the judge's secretary will often double as a court reporter, making it unnecessary to provide a separate work station.

To obtain maximum flexibility, this area should be planned on a raised floor.

LEGEND

- | | | | |
|---|---------------------------|---|---------------------|
| A | TAPE STORAGE (SHORT TERM) | E | PAPER STORAGE |
| B | COAT CUPBOARD | F | SUPERVISOR |
| C | COPIER | G | 1066mm HIGH SCREENS |
| D | SUPERVISOR'S | H | 1826mm HIGH SCREENS |

⊕ LOCATION OF GROMMET IN RAISED FLOOR TILE THROUGH WHICH ALL SERVICES ARE PASSED TO WORK STATIONS. ALL WORK STATIONS SHALL HAVE A DUPLEX OUTLET AND A COMPUTER JACK. A TELEPHONE SHALL BE INSTALLED FOR THE SUPERVISOR AND OTHER WORK STATIONS DETERMINED BY THE COURT SERVICES MANAGER.

⌚ CLOCK

⊕ DUPLEX OUTLET

▭ FILING CABINET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 2	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 3	important desirable unimportant
VIEW OUT	NOTE 4	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	NOTE 7	high normal low
STORAGE	NOTE 8	built-in room none
SERVICES	NOTE 9 NOTE 9	water electricity telephone paging special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. THE COURT REPORTERS DO NOT HAVE ANY CONTACT WITH THE PUBLIC BUT ARE UNDER THE AUTHORITY OF THE COURT SERVICES MANAGER. THEY SHOULD THEREFORE BE LOCATED IN A PRIVATE ZONE.</p> <p>2. THE WALLS SHALL BE PRE-FINISHED VINYL COVERED DRYWALL PANELS ON METAL STUDS WITH SOUND INSULATION TO GIVE THE FLEXIBILITY OF CONTRACTING, EXPANDING, OR TOTALLY REPLANNING THE SPACE.</p> <p>3. THE RAISED FLOOR ALLOWS THE FLEXIBILITY OF REPLANNING.</p> <p>4. ALTHOUGH FIG. K9 DOES NOT SHOW WINDOWS, IT IS IMPORTANT THAT NATURAL LIGHT AND THE ABILITY TO SEE OUT BE A FACTOR IN PLANNING THE COURT REPORTERS' AREA, AS THEY SPEND CONSIDERABLE TIME IN WINDOWLESS COURTROOMS.</p> <p>5. ILLUMINATION SHOULD HAVE A HIGH VCL BUT WITH SUFFICIENT LIGHT ON THE WORK SURFACE.</p> <p>6. THE AREA SHOULD HAVE THE NC LEVEL AND THE WALLS SHALL HAVE THE STC RATING SPECIFIED IN SECTION Q.</p> <p>7. CEILING HEIGHT SHALL BE 2590mm TO 2743mm.</p> <p>8. THE COURT REPORTERS' AREA SHALL HAVE A SEPARATE STORAGE ROOM FITTED WITH APPROPRIATE SHELVES FOR THE STORAGE OF TAPES. THE DOOR SHALL HAVE A KEY PAD LOCK WITH A KEY OVERRIDE. IN SMALL COURT HOUSES WITH ONLY TWO OR THREE COURT REPORTERS, THE TAPES CAN BE STORED IN STRONG METAL FITTED CABINETS WITH STEEL BARS AND PADLOCKS.</p> <p>9. THE COURT REPORTERS' SPACE WILL BE SERVICED WITH ELECTRICAL POWER, TELEPHONES, COMPUTER JACKS AND ELECTRICAL CLOCK. NOTE ALL WORK STATIONS SHALL BE WIRED UNDER THE RAISED FLOOR FOR POWER, TELEPHONES AND COMPUTERS BUT TELEPHONE INSTRUMENTS SHALL ONLY BE INSTALLED TO THE SUPERVISOR AND OTHER WORK STATIONS DESIGNATED BY THE COURT SERVICES MANAGER UNLESS THEY HAVE A RESTRICTED CALLING AREA.</p> <p>10. THE SECURE STORAGE OF TAPES IS IMPORTANT.</p>

AREA
<p>COURT REPORTERS' OFFICE</p> <p>5.0sm PER WORKSTATION (58.82sq ft) PLUS TAPE STORAGE, COPYING AREA AND COAT HANGING</p>
PROXIMITIES
<p>THE COURT REPORTERS' OFFICE SHOULD BE LOCATED ADJACENT OR NEAR TO THE GENERAL ADMINISTRATION AREA. THE FLOOR SHOULD BE ARAISED FLOOR ON A DEPRESSED SLAB SIMILAR TO ADMINISTRATION AREAS. STRUCTURALLY, IT WOULD BE EASIER TO LOCATE THE TWO AREAS TOGETHER.</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST	
CHAIRS	sled base side chairs tilt
	NOTE 1 swivel/tilt
TABLES	movable standard special
	NOTE 2 modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
	COUCH
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
	NOTE 3
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> 1. INSTALL ARMLESS ERGONOMIC FIVE-LEG SWIVEL CHAIRS WITH ADJUSTABLE SEAT HEIGHT AND BACK. 2. PROVIDE A 914mm WIDE 5-DRAWER HIGH LATERAL FILING CABINET AND A METAL MULTI-SHELF LOCKABLE STEEL STORAGE CABINET, 914mm WIDE x 1828mm HIGH. 3. WORK STATIONS SHALL BE DESIGNED USING 1524mm x 762mm LAMINATE FINISHED DESKS WITH RUN-OFFS SEPARATED BY 1066mm HIGH SCREENS AS SHOWN ON FIG. K9.

AREA
<p>COURT REPORTERS' OFFICE</p> <p>5.0sm PER WORKSTATION (58.82sq ft) PLUS TAPE STORAGE, COPYING AREA AND COAT HANGING</p>
CAPACITY
<p>INTERNAL ORGANIZATION</p>

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
CEILING		drywall sheet drywall lathe & sprayed acoustic plaster painted NOTE 2 acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. 28-OZ. CARPET ON RAISED FLOOR PANELS.
2. CEILING SHALL BE ACOUSTIC LAY-IN TILE WITH AN NRC VALUE SPECIFIED IN SECTION Q. CEILING IS TO ACCEPT LAY-IN LIGHT TROFFERS WITH PARABOLIC LENSES.
3. INTERNAL WALLS SHALL BE PREFINISHED DRYWALL PANELS ON METAL STUDS WHERE REQUIRED TO MEET SPECIFIED STC LEVELS. EXTERNAL WALLS SHALL BE STRAPPED AND FINISHED WITH PLASTERBOARD TAPED AND COVERED WITH SHEET VINYL.
4. WOOD DOOR TO OFFICE SHALL BE SOLID CORE WITH KEYED LOCK. DOOR TO TAPE STORAGE SHALL BE SIMILAR BUT WITH KEY PAD LOCK WITH A KEY OVERRIDE. DOORS TO COAT CLOSET SHALL BE SOLID-CORE WOOD DOORS ON SLIDING TRACK.

AREA

COURT REPORTERS' OFFICE
 5.0sm PER WORKSTATION (53.82sq ft)
 PLUS TAPE STORAGE, COPYING AREA
 AND COAT HANGING

PROXIMITIES

INTERNAL ORGANIZATION

EXHIBIT STORAGE

3.5sm PER COURTROOM (38sq ft) MINIMUM SIZE 9sm (100sq ft)

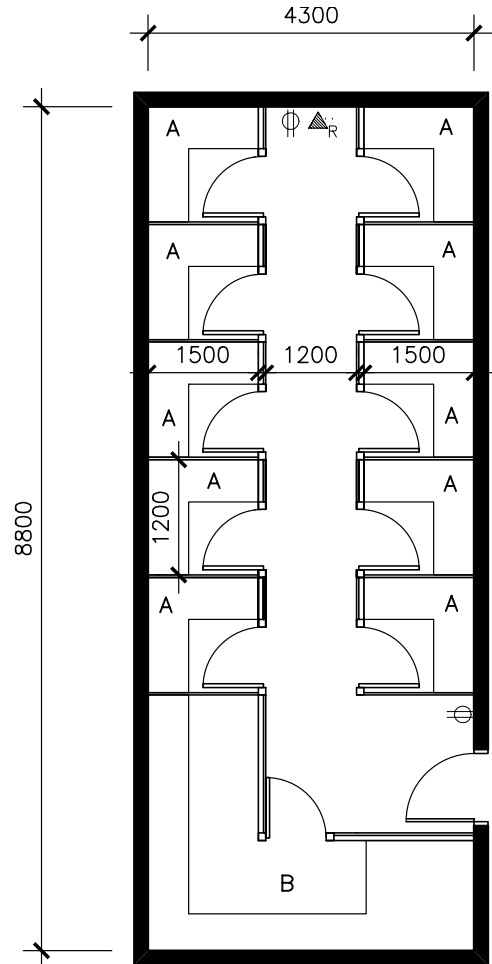


FIG. K10

Fig. K10 illustrates a typical layout for a court house with 10 courtrooms. For control purposes each courtroom has a separate lockable space. A separate space for drugs or firearms to be picked up by the police (or other means of disposal) is planned at the entry to the storage.

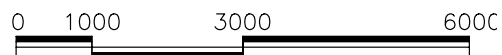
The separate areas shall be constructed from heavy duty maximum 50mm mesh with steel frame. Doors shall be manufactured of similar material with heavy duty locks. Shelves shall also be made of mesh with sufficient room to stand a rifle vertically. The storage entry door shall be heavy gauge hollow metal door with high security lock.

Plan can be varied but principles described above must be adhered to.

LEGEND

- ⊕ DUPLEX OUTLET
- ▲^R TELEPHONE (RESTRICTED DIALLING AREA)
- A STORAGE FOR INDIVIDUAL COURTROOMS
- B GENERAL FIREARM AND DRUG STORAGE AWAITING DISPOSAL.

FIG: K10



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 3	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 4	built-in portable none
SERVICES	NOTE 5	water electricity telephone intercom special
SECURITY	NOTE 6	high medium low

NOTES
<p>1. THE EXHIBIT STORAGE AREA SHALL BE LOCATED IN THE PRIVATE CIRCULATION BUT WELL AWAY FROM POSSIBLE PUBLIC PENETRATION.</p> <p>2. ONLY AUTHORIZED STAFF SHALL BE GIVEN THE RESPONSIBILITY FOR PLACING EXHIBITS IN OR TAKING EXHIBITS OUT OF STORAGE. DOOR LOCK KEY KEPT IN SECURE CHUBB KEY CASE BUILT INTO WALL OF COURT SERVICES MANAGER'S OFFICE.</p> <p>3. ITEMS TO BE STORED FOR EXHIBIT PURPOSES COULD INCLUDE VALUABLE PAINTINGS OR FUR COATS AND THE NECESSARY TEMPERATURE AND HUMIDITY CONTROLS SHOULD BE PROVIDED.</p> <p>4. SEE FIG. K10 AND NOTES ON PREVIOUS PAGE FOR INFORMATION ON STORAGE AREAS.</p> <p>5. ELECTRICAL DUPLEX OUTLETS FOR CLEANING AND A WALL TELEPHONE WITH RESTRICTED DIALLING ACCESS SHALL BE INSTALLED.</p> <p>6. ALTHOUGH THIS ROOM CANNOT BE LOCATED IN THE RESTRICTED AREA (WHICH HAS THE HIGHEST SECURITY), FIREARMS, OTHER LETHAL WEAPONS, AND DRUGS CAN FORM PART OF THE EXHIBITS. IT IS THEREFORE ESSENTIAL THAT THE HIGHEST SECURITY PRECAUTIONS ARE TAKEN AND MAINTAINED AT ALL TIMES. AS WELL AS A SECURE EXHIBIT STORAGE ROOM IT MAY BE NECESSARY TO CONSTRUCT A PROPER BANK TYPE VAULT FOR HOLDING SURROGATE MATTERS, CURRENCY, JEWELS, AND OTHER VALUABLE ITEMS. NO WINDOWS SHALL BE PROVIDED IN THIS ROOM.</p>

AREA
<p>EXHIBIT STORAGE</p> <p>3.5sm PER COURTROOM (38sq ft) MINIMUM SIZE 9sm (100sq ft)</p>
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
NOT APPLICABLE TO THIS AREA.

AREA
EXHIBIT STORAGE
3.5sm PER COURTROOM (38sq ft) MINIMUM SIZE 9sm (100sq ft)
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet vinyl ceramic wood rubber special
	NOTE 1	
CEILING	NOTE 2	steel drywall lathe & acoustic plaster
	NOTE 2	painted acoustic tile
WALLS		drywall sheet acoustic panels
	NOTE 3	masonry marble ceramic
	NOTE 3	sheet vinyl paint
DOORS		standard fire rated
	NOTE 4	secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR SHALL BE CONCRETE, EITHER PAINTED OR SEALED.
2. CEILING SHALL BE STEEL PAINTED WITH FLUSH-MOUNTED LIGHT FIXTURES AND SPECIAL AIR DIFFUSERS.
3. WALLS SHALL BE OF MASONRY CONSTRUCTION PAINTED.
4. ENTRY DOOR SHALL BE HEAVY GAUGE HOLLOW METAL WITH HIGH SECURITY LOCK.

AREA

EXHIBIT STORAGE
 3.5sm PER COURTROOM (38sq ft)
 MINIMUM SIZE 9sm (100sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

COURT ATTENDANTS' LOCKER/REST ROOM

LOCKERS - 1.858sm PER LOCKER (20sq ft)
 RESTAREA - 2.0sm PER USER (21.53sq ft)

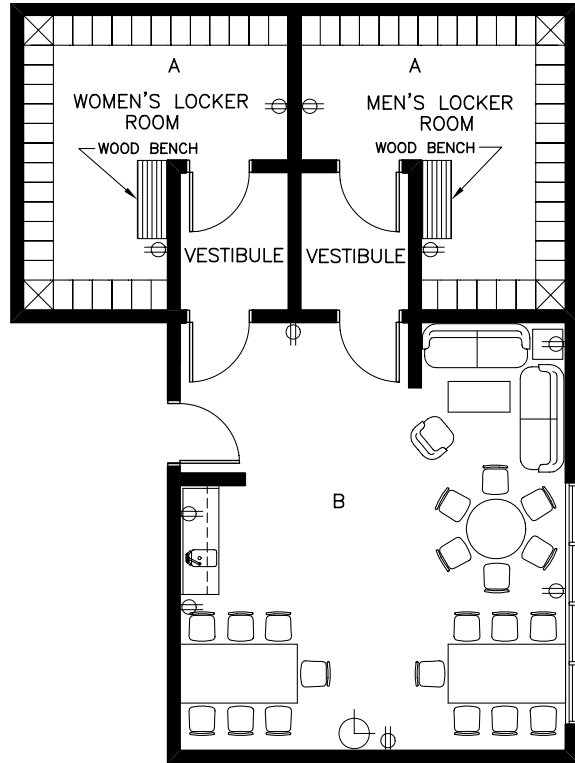


FIG. K11

Fig. K11 illustrates a possible planning solution for the court attendants' accommodation. The lockers are for coat hanging and gowns. To accommodate both genders, the locker area should be partitioned with separate entrances. Washrooms are not required. Fig. K11 accommodates 50 lockers. As for other locker space in the court house, the allocation of 1.85sm per locker is for the first 10 lockers and is then reduced to 0.3sm per each additional locker.

The rest area is to serve both genders and can be used for off-duty time and lunch. A combination sink/counter/refrigerator should be provided with a separate wall cupboard overhead. Not all court attendants will be making use of this space at any one time and a reasonable assessment of number of the people to be accommodated must be made.

LEGEND

A LOCKER ROOM

⊕ DUPLEX OUTLET

B RESTAREA

⌚ CLOCK

FIG: K11



CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold
	NOTE 3	relaxing
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	NOTE 5	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 7	built-in portable none
SERVICES	NOTE 8 NOTE 8 NOTE 8	water electricity telephone paging special
SECURITY	*	high medium low

NOTES
1. SHOULD BE LOCATED ON PRIVATE CIRCULATION.
2. TRAFFIC IS CONFINED TO THE COURT ATTENDANTS.
3. ALTHOUGH THE AREA IS DESIGNED AS A PLACE TO SIT DOWN (THE ATTENDANTS DO NOT HAVE OFFICES) AND A PLACE TO EAT LUNCH, IT SHOULD BE ORDERLY AS WELL AS RELAXING.
4. THE USE OF COURT ATTENDANTS MAY DIMINISH IN THE FUTURE OR THEIR RESPONSIBILITIES MAY CHANGE, REQUIRING A RELOCATION. IF EITHER OF THESE POSSIBILITIES OCCURS THE SPACE COULD BE USED FOR A DIFFERENT FUNCTION. TELEPHONE AND COMPUTER WIRING SHOULD THEREFORE BE RUN ABOVE THE CEILING FOR FUTURE USE.
5. ALTHOUGH THE ATTENDANTS SPEND RELATIVELY LITTLE TIME IN THIS AREA, IT WOULD CERTAINLY BE DESIRABLE AND WOULD ENHANCE THE REST AREA IF IT WERE POSSIBLE TO INSTALL WINDOWS. HOWEVER, IF THE PLANNING WILL NOT ALLOW THE INSTALLATION OF WINDOWS, THE LACK OF VIEW OUT WOULD BE ACCEPTED.
6. THE STC RATING OF THE PARTITIONS SHOULD BE APPROPRIATE TO PREVENT DISTURBING THE OCCUPANTS OF THE ADJACENT SPACES. IF ADJOINING SPACES ARE NOT OCCUPIED, THIS REQUIREMENT CAN BE REDUCED. SEE SECTION Q FOR STC VALUES.
7. BUILT-IN STORAGE FOR CUPS, ETC. SHALL BE PROVIDED ABOVE THE SINK. LOCKER STORAGE SHALL ALSO BE PROVIDED.
8. WATER, DRAINAGE, ELECTRICAL POWER, PAGING AND ELECTRICAL CLOCK SHALL BE INSTALLED.

AREA
COURT ATTENDANTS' LOCKER/RESTROOM
LOCKERS - 1.858sm PER LOCKER (20sq ft) REST AREA - 2.0sm PER USER (21.53sq ft)
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST		
CHAIRS	NOTE 1	sled base side chairs tilt swivel/tilt
TABLES	NOTE 2	movable standard special
FITMENTS	NOTE 3	modular movable fixed special design
SEATING PUBLIC		fixed (bench) fixed (gang) upholstered wood
COUCH	NOTE 4	full size small
BOOKCASE		full height low doors
SIDE TABLES	NOTE 5	decorative functional
DESK		plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
1. CHAIRS FOR LUNCH TABLES SHALL BE LIGHTWEIGHT UPHOLSTERED SLED CHAIRS WITHOUT ARMS.
2. LONG TABLES SHALL BE 1828mm X 762mm PLASTIC LAMINATE FINISH WITH APRONS, NO DRAWERS. ROUND TABLES SHALL BE 914mm DIAMETER WITH SIMILAR FINISH.
3. PROVIDE COMBINATION COUNTER SINK AND REFRIGERATOR WITH HOT AND COLD WATER AND DRAINAGE. A WALL CUPBOARD SHALL BE INSTALLED OVER THE UNIT WITH TWO SHELVES. 450mm X 300mm STEEL LOCKERS SHALL BE INSTALLED WITH SINGLE DOOR AND SHELF.
4. SUPPLY TWO 1828mm LONG UPHOLSTERED COUCHES OR EQUIVALENT MIXTURE OF COUCH AND ARMCHAIRS.
5. SUPPLY THREE 610mm X 610mm PLASTIC LAMINATE SIDE TABLES AND ONE 610mm X 914mm LONG LOW COFFEE TABLE.
NOTE: AMOUNT OF FURNITURE SHALL BE ADJUSTED TO SUIT THE NUMBER OF ATTENDANTS AND SIZE OF ROOM.

AREA
COURT ATTENDANTS' LOCKER/RESTROOM
LOCKERS - 1.858sm PER LOCKER (20sq ft) REST AREA - 2.0sm PER USER (21.53sq ft)
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet
	NOTE 1	vinyl
	NOTE 1	ceramic wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & acoustic plaster
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl
	NOTE 3	paint
DOORS	*	standard fire rated secure acoustic
WINDOWS	NOTE 4	sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE LOCKER ROOM AND THE FLOOR AREA IMMEDIATELY IN FRONT OF THE COUNTER (SHOWN DOTTED) SHALL BE SHEET VINYL, 914mm X 914mm RUBBER OR CERAMIC TILES. THE REMAINDER OF THE FLOOR SHALL BE 28-OZ. CARPET.
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE.
3. WALLS SHALL BE DRYWALL ON STEEL STUDS FINISHED WITH VINYL WALL COVERING OR PAINT. IF ADJOINING AREAS ARE OCCUPIED AS WORK AREAS, THE WALLS SHALL BE TAKEN UP TO THE UNDERSIDE OF THE SLAB ABOVE.
4. IF WINDOWS ARE PROVIDED, SUN CONTROL BLINDS SHALL BE INSTALLED IF THE WINDOWS FACE WEST OR SOUTH.

AREA

COURT ATTENDANTS' LOCKER/RESTROOM

LOCKERS - 1.858sm PER LOCKER (20sq ft)
 REST AREA - 2.0sm PER USER (21.53sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

SECURE FILING FOR ADMINISTRATION OFFICE USE

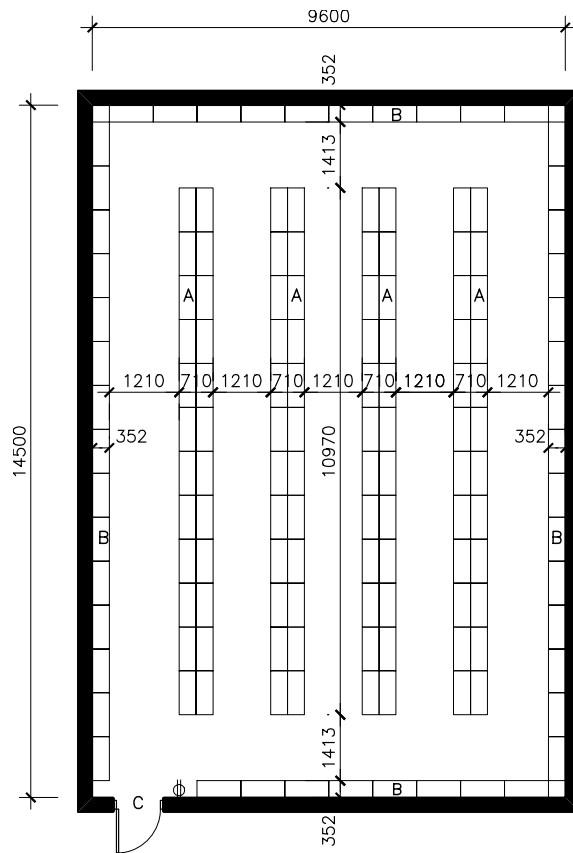


FIG: K12

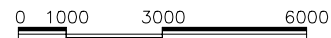


FIG. K12

The secure filing room is for storage of legal documentation and must be constructed with 2-hour fire rated walls and protected with a heavy gauge steel door.

The area requirements should be established with the Manager of Court Operations. During the detailed planning stage, the number of shelving units required should be reviewed and the area requirement adjusted accordingly. An allocation of 1.0sm per single sided shelving unit shall be used as the standard in computing total area required.

Fig. K12 illustrates a filing room of 13.935sm or 1500 sq ft.

Every item or charge has a different retention schedule but generally files must be kept for a period of 5 or 6 years. Once the court case has been completed and the required appeal period has elapsed, the file can be bundled up with others and sent off site to a government storage centre.

Shelving shall be 914mm wide X 352mm deep X 2133mm high steel sections bolted together. Centre rows shall be two sections deep and perimeter shelving shall be one section deep. Perimeter sections shall be secured to the walls.

LEGEND

- A BACK-TO-BACK SECTIONS
- B SINGLE PERIMETER SECTIONS
- C SECURE VAULT DOOR
- ⊕ ELECTRICAL OUTLET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 3	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE		built-in portable none
SERVICES	*	water electricity telephone intercom special
SECURITY	NOTE 4	high medium low

NOTES
1. MUST BE LOCATED IN ADMINISTRATION AREA.
2. THE TRAFFIC CAN VARY FROM LOW TO HIGH DEPENDENT ON WORK LOAD, ETC.
3. LIGHTING SHALL BE ARRANGED TO PROPERLY ILLUMINATE THE SHELVES, AVOIDING VEILED REFLECTANCES.
4. THE ROOM SHALL NOT BE LEFT OPEN UNATTENDED. THE LOCKING MUST BE SECURE WITH A HEAVY GAUGE METAL DOOR.

AREA
SECURE FILING FOR ADMINISTRATION OFFICE Use
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST

CHAIRS	<ul style="list-style-type: none"> sled base side chairs tilt swivel/tilt
TABLES	<ul style="list-style-type: none"> movable standard special
FITMENTS	<ul style="list-style-type: none"> modular movable fixed special design
SEATING PUBLIC	<ul style="list-style-type: none"> fixed (bench) fixed (gang) upholstered wood
COUCH	<ul style="list-style-type: none"> full size small
BOOKCASE	<ul style="list-style-type: none"> full height low doors
SIDE TABLES	<ul style="list-style-type: none"> decorative functional
DESK	<ul style="list-style-type: none"> plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	<ul style="list-style-type: none"> fixed i.e. built in place sectional (movable)
CREDENZA	<ul style="list-style-type: none"> plain cupboards file drawers

FURNISHINGS & EQUIPMENT

1. SHELVING SHALL BE SIZED AS DESCRIBED ON PAGE K42, MADE OF STEEL, PAINTED, BRACED AND BOLTED TOGETHER. SHELVING ON WALLS SHALL BE SECURELY BOLTED TO WALLS.

AREA

**SECURE FILING FOR ADMINISTRATION
OFFICE USE**

CAPACITY

INTERNAL ORGANIZATION

CHECKLIST	
FLOOR	carpet vinyl ceramic wood rubber concrete NOTE 1
CEILING	drywall sheet drywall lathe & acoustic plaster painted NOTE 2 acoustic tile
WALLS	drywall sheet acoustic panels wood marble ceramic sheet vinyl paint
DOORS	NOTE 4 standard fire rated secure acoustic
WINDOWS	sun control decorative drapes full drapes

NOTES ON FINISHES
<ol style="list-style-type: none"> FLOOR SHALL BE CONCRETE, EITHER SEALED OR PAINTED. SUSPENDED LAY-IN ACOUSTIC TILE CEILINGS SHALL BE INSTALLED. WALLS SHALL BE 2-HOUR FIRE RATED AND SHALL EXTEND FROM FLOOR TO UNDERSIDE OF SLAB ABOVE. ALL PENETRATIONS SHALL BE FIRE SEALED AND ALL DUCTS SHALL HAVE FIRE DAMPERS WHERE THEY PASS THROUGH THE WALL. DOOR SHALL BE HEAVY DUTY STEEL AND FIRE RATED WITH SECURE LOCK. DOOR TO BE SET IN GROUTED STEEL FRAMES.

AREA
SECURE FILING FOR ADMINISTRATION OFFICE USE
PROXIMITIES
INTERNAL ORGANIZATION

EXAMINATION ROOM

20.7sm (223sq ft)

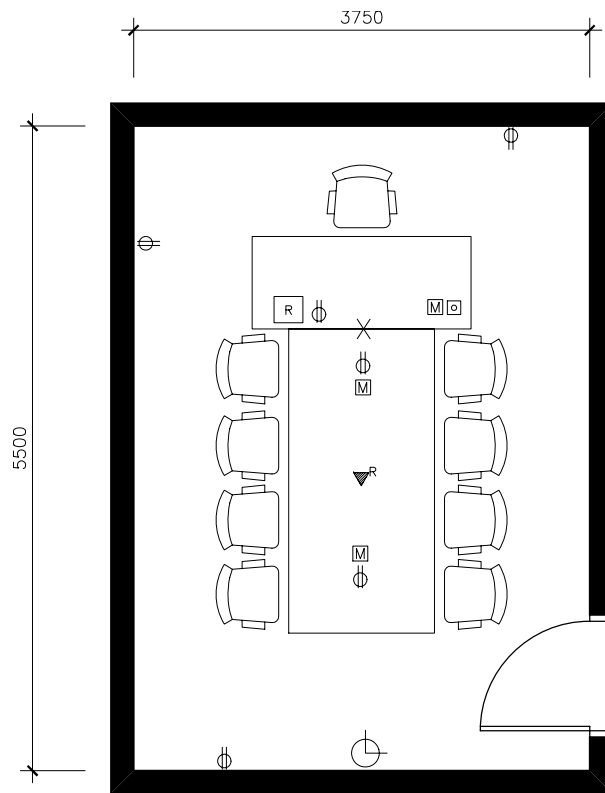


FIG: K13










FIG. K13

The number of examination rooms shall be determined during the programming stage for a specific court house.

The rooms are designed to accommodate both prosecution and defence lawyers, clients and a court reporter.

The room should be located off the public circulation for easy access.

LEGEND

-  DUPLEX OUTLET
-  CLOCK
-  MICROPHONE
-  TAPE DECK (AS SPECIFIED FOR COURTROOMS)
-  POSITION OF FLOOR DISCONNECT FOR ELECTRICAL, TELEPHONE AND MICROPHONE WIRING
-  TELEPHONE (RESTRICTED DIALLING AREA)
-  COMPUTER JACK

NOTE: FIG. K13 ILLUSTRATES A WORKABLE PLAN THAT WOULD BE APPROVED. HOWEVER, OTHER PLANS WOULD FUNCTION EQUALLY WELL AND CAN BE SUBMITTED FOR APPROVAL. THE AREA AND FURNITURE CONFIGURATION SHALL NOT BE CHANGED.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	*	high medium low
IMAGE	NOTE 2	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 3	bright moderate subdued special
QUIETNESS	NOTE 4	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 5	high normal low
CEILING HEIGHT	NOTE 6	high normal low
STORAGE	*	built-in portable none
SERVICES		water electricity telephone intercom special
SECURITY	NOTE 7	high medium low

NOTES
<p>1. THE EXAMINATION ROOMS SHOULD BE ACCESSED BY THE PUBLIC CIRCULATION CORRIDOR BUT NOT IMMEDIATELY OFF THE COURTROOM WAITING AREAS.</p> <p>2. THE PROCEEDINGS ARE RELATIVELY FORMAL AND THEREFORE THE IMAGE SHOULD BE ORDERLY AND EFFICIENT.</p> <p>3. THE ILLUMINATION SHALL HAVE A HIGH VCL.</p> <p>4. ALL THE PROCEEDINGS ARE RECORDED. IT IS THEREFORE ESSENTIAL THAT OUTSIDE NOISE DOES NOT ENTER THE ROOM. THE ACOUSTICS OF THE ROOM ARE VERY IMPORTANT. SEE SPECIFICATIONS IN SECTION Q.</p> <p>5. THE ROOM CAN BE EMPTY OR CONTAIN FROM FIVE TO NINE PERSONS. AS THE ROOM IS NOT SPACIOUS THE TEMPERATURES CAN FLUCTUATE WITH A CHANGE IN THE NUMBER OF OCCUPANTS. HIGH QUALITY HVAC CONTROL IS THEREFORE ESSENTIAL.</p> <p>6. CEILING HEIGHT SHALL BE A MINIMUM OF 2743mm.</p> <p>7. THE RECORDING EQUIPMENT IS EXPENSIVE, AS ARE THE MICROPHONES. AS THIS EQUIPMENT IS LEFT IN PLACE, THE DOOR MUST BE LOCKED WHENEVER THE ROOM IS EMPTY. THE LOCKING SHALL BE PRESS BUTTON KEY PAD WITH A KEY OVERRIDE.</p>

AREA
<p>EXAMINATION ROOM</p> <p>20.7sm (223sq ft)</p>
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<ol style="list-style-type: none"> ALL CHAIRS SHALL BE SWIVEL TILT, FIVE LEGS WITH UPHOLSTERED ARMS. FIG. K13 SHOWS THE TABLE CONFIGURATION. THE HEAD OF THE TEE SHALL BE 1828mm LONG X 762mm WIDE, PLASTIC LAMINATE FINISH WITH ONE PEDESTAL AND ONE DEEP DRAWER. THE LEG OF THE TEE SHALL BE 2438mm LONG X 1214mm WIDE WITH AN APRON BUT NO DRAWERS. WIRING FOR MICROPHONES AND ELECTRICAL OUTLETS SHALL BE CONTAINED IN A RACEWAY ON THE UNDER SIDE OF THE TABLE WITH A FLOOR DISCONNECT AT THE JUNCTION OF THE TWO TABLES MARKED X. THE RECORDING EQUIPMENT SHALL BE THE SAME AND INTERCHANGEABLE WITH THE COURTROOM RECORDING SYSTEMS.

AREA
<p>EXAMINATION ROOM</p> <p>20.7sm (223sq ft)</p>
PROXIMITIES
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 2	acoustic tile
CEILING		drywall sheet drywall lathe & acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated
	NOTE 4	secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. THE FLOOR SHALL BE COVERED WITH 28-OZ. CARPET.
2. THE CEILING SHALL BE LAY-IN ACOUSTIC TILE WITH THE NRC VALUE SPECIFIED IN SECTION Q.
3. WALLS SHALL BE DRYWALL ON METAL STUDS FINISHED WITH VINYL WALL COVERING. THE WALLS SHALL HAVE AN STC RATING AS PER SECTION Q. THE WALLS SHALL BE CONSTRUCTED FROM FLOOR TO THE UNDERSIDE OF THE SLAB ABOVE. AS THE PROCEEDINGS WILL BE RECORDED AND THE ROOM IS RELATIVELY SMALL, CARE MUST BE TAKEN TO AVOID HIGH SOUND REFLECTIONS WITHIN THE ROOM.
4. RECORDING EQUIPMENT WILL BE LEFT IN THE ROOM WHEN NOT IN USE. THEREFORE THE DOOR, WHICH SHOULD BE SOLID CORE 45mm THICK, SHALL BE FITTED WITH A PRESS BUTTON PAD LOCK WITH A KEY OVERRIDE.

AREA

EXAMINATION ROOM

20.7sm (223sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

BASEMENT STORAGE

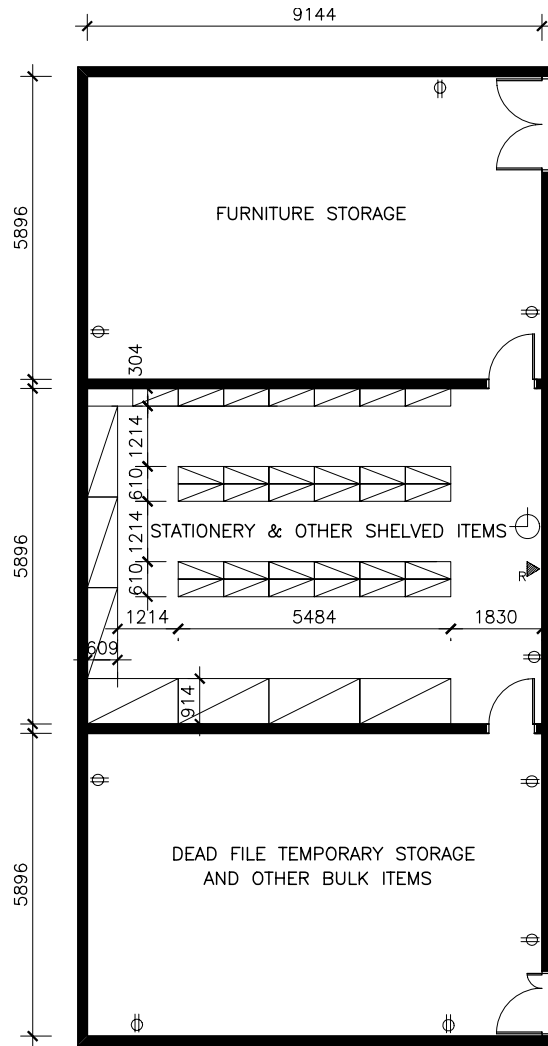


FIG: K14

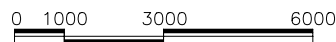


FIG. K14

The main basement storage is to be provided to ensure adequate storage for all items not used on a daily basis or waiting to be picked up. Often, the storage of these items can be seen in the office or corridors, creating a fire hazard, reducing efficiency and projecting an image of disorder.

As a guide an allocation of 5.57sm (60sq ft) per staff member can be used to approximate the size of the area, but this should be reviewed against functional needs. It is important that all space requirements are supportable. Fig. K14 shows a plan for a storage room in a court house with a staff of 30. The shelving area shall be based on a space allocation of 1.0sm per standard single sided shelf.

Fig. K14 is only one solution and the division of the total area will vary from court house to court house. Detailed planning of the area should be discussed with the Court Services Manager. The division of the space could be accomplished with wire enclosures sized to be structurally secure.

LEGEND

- ▲^R WALL TELEPHONE (RESTRICTED DIALLING AREA)
- ⊕ DUPLEX OUTLET
- ⌚ CLOCK

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	*	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 4	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	*	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE		built-in portable none
SERVICES	NOTE 6 NOTE 6	water electricity telephone paging special
SECURITY	NOTE 7	high medium low

NOTES
1. THE STORAGE AREA SHOULD BE LOCATED ON THE PRIVATE CIRCULATION. HOWEVER, DELIVERIES AND PICK UP COULD BE MADE BY NON-GOVERNMENT STAFF. IN ALL SUCH CASES THE NON-GOVERNMENT STAFF SHALL BE ESCORTED AT ALL TIMES.
2. ALTHOUGH TRAFFIC IS GENERALLY LOW, THE ELEVATOR COULD BE TIED UP DURING EXTENDED DELIVERIES OR PICK UP.
3. ALTHOUGH THIS IS A STORAGE AREA IT SHOULD NOT BECOME AN UNCONTROLLED DUMPING AREA. PROPER ORGANIZATION OF THE SPACE IS ESSENTIAL.
4. THE WIRE DIVISIONS SHOULD BE REASONABLY EASY TO RELOCATE BY TRAINED CONTRACTORS.
5. GOOD LIGHTING SHALL BE PROVIDED, BUT IT IS NOT NECESSARY TO INSTALL THE QUALITY REQUIRED IN OFFICES.
6. ELECTRICAL POWER AND TELEPHONE (RESTRICTED DIALING AREA) SHALL BE INSTALLED. THE TELEPHONE WOULD GENERALLY BE USED AS AN INTERCOM.
7. DOORS SHALL BE 914mm WIDE X 45mm THICK SOLID CORE, FITTED WITH PRESS BUTTON PAD LOCKS WITH A KEY OVERRIDE. INTERNAL WIRE DOOR SHALL ALSO BE 914mm WIDE WITH KEY LOCKS.

AREA
BASEMENT STORAGE
PROXIMITIES
SHOULD BE LOCATED IN THE BASEMENT WITH EASY ACCESS BY STAIRS AND ELEVATOR.
NOTE: ELEVATOR SHOULD NOT GIVE ACCESS TO OTHER PARTS OF THE PRIVATE CIRCULATION ON THE UPPER FLOORS.
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	NOTE 1 modular movable fixed special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT
1. ALL SHELVING SHALL BE STEEL BOLTED TOGETHER WITH STRUCTURAL VERTICAL AND HORIZONTAL FRAMING WHERE REQUIRED. SHELVING SHALL BE FIXED TO THE WALL TO PREVENT OVERTURNING UNLESS IT IS WIDE ENOUGH TO BE FREE STANDING.

AREA
BASEMENT STORAGE
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet
		vinyl
	NOTE 1	ceramic
		concrete
		rubber special
CEILING		drywall sheet
		drywall lathe & acoustic plaster
	NOTE 2	paint acoustic tile
WALLS		drywall sheet
		acoustic panels
	NOTE 3	wood masonry
		ceramic sheet vinyl
		paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS		sun control
		decorative drapes
		full drapes

NOTES ON FINISHES

1. FLOORS SHALL BE CONCRETE SEALED OR CONCRETE WITH HIGH QUALITY PAINT FINISH.
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE.
3. WALLS SHALL BE PAINTED MASONRY.
4. DOORS SHALL BE AS DESCRIBED ON PAGE K51, NOTE 7.

AREA

BASEMENT STORAGE

PROXIMITIES

INTERNAL ORGANIZATION

PHOTOCOPYING ROOM

5.0sm (53.8sq ft)
 9.0sm (96.9sq ft)

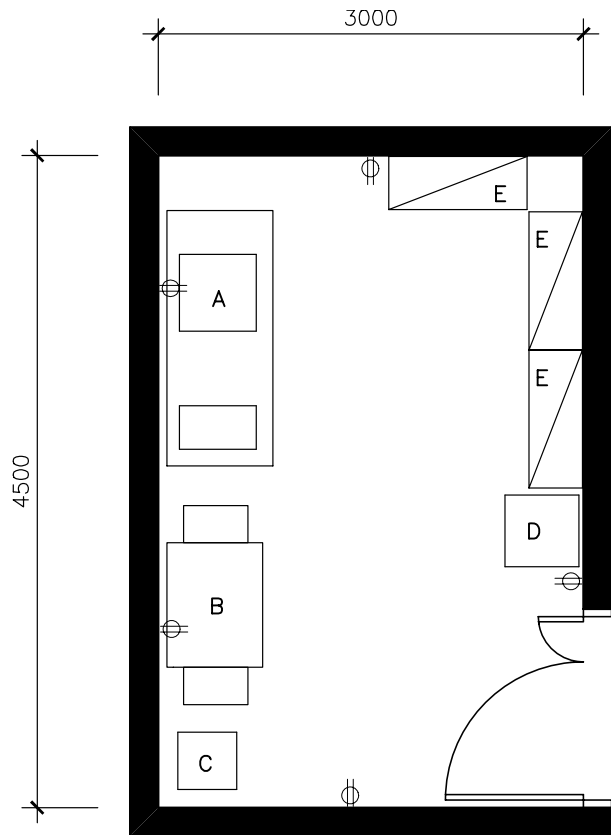


FIG: K15



FIG. K15

The photocopier room will only be required in court houses with five or more courtrooms or in consolidated court houses. In other court houses the copying machine (usually only one) would be located in the general office surrounded by a sound-absorbing screen.

Ontario Government office space standards allocate 5.0sm for standard photocopier and supplies (including table and storage) and 9.0sm for a large photocopier and supplies.

In larger court houses the photocopy machine shall be located in a separate room with a shredding machine, shelving for paper and a waste paper bin.

The use of two copiers (one fast for multiple stapled copies) will depend on the size of the court house and the need for the fast machine. The need for this equipment should be discussed with the regional director.

In the illustration shown in Fig. K15 the room size has been increased to 13.5sm to accommodate a large photocopier @ 9.0sm plus regular copier @ 3.5sm plus shredder @ 1.0sm.

NOTE: A very large court house - 20 courtrooms or larger - may require more than one photocopier room if the administration occupies a large area.

LEGEND

- A LARGE COPYING MACHINE
- B SMALL COPYING MACHINE
- C WASTE-PAPER BIN
- D SHREDDER
- E METAL SHELVING
- Ⓢ DUPLEX OUTLET (CHECK FOR REQUIRED AMPERAGE)

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	*	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 3	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	*	bright moderate subdued special
QUIETNESS	NOTE 4	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 5	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 6	built-in portable none
SERVICES	NOTE 7	water electricity telephone intercom special
SECURITY	NOTE 8	high medium low

NOTES
1. THE PHOTOCOPYING ROOM SHALL BE CENTRALLY LOCATED IN THE ADMINISTRATION AREA.
2. TRAFFIC WILL NORMALLY BE MEDIUM WITH SOME HIGH PERIODS.
3. THIS ROOM COULD FORM A PART OF REPLANNING PROJECTS IN THE FUTURE. THE WALLS CONSTRUCTED WITH A HIGH STC RATING SHOULD BE DEMOUNTABLE. A NEW FLOOR COVERING WOULD BE REQUIRED IF REPLANNED IN THE FUTURE.
4. BOTH THE PHOTOCOPY MACHINES AND THE SHREDDER ARE NOISY. THE WALLS SHALL HAVE AN STC RATING SPECIFIED IN SECTION Q.
5. ALTHOUGH THE HVAC WOULD BE SIMILAR TO OFFICE SPACE, HEAT GENERATED BY THE MACHINES SHOULD BE TAKEN INTO CONSIDERATION IN THE DESIGN. THE AMOUNT OF DUST GENERATED BY THE SHREDDER SHOULD BE INVESTIGATED PRIOR TO DESIGN.
6. STORAGE SHALL CONSIST OF METAL SHELVING.
7. THE ELECTRICAL CHARACTERISTICS OF THE MACHINES SHOULD BE ESTABLISHED PRIOR TO INSTALLING OUTLETS.
8. SECURITY IS GENERALLY LOW BUT SHOULD NOT BE LESS THAN THE ADMINISTRATION AREA.

AREA
PHOTOCOPYING ROOM
5.0 sm (53.8sq ft) 9.0 sm (96.9 sq ft)
PROXIMITIES
ADMINISTRATION
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt swivel/tilt
TABLES	movable standard special
FITMENTS	modular movable fixed NOTE 1 special design
SEATING PUBLIC	fixed (bench) fixed (gang) upholstered wood
COUCH	full size small
BOOKCASE	full height low doors
SIDE TABLES	decorative functional
DESK	plain single or double pedestal computer executive secretarial system
DAIS & PLATFORMS	fixed i.e. built in place sectional (movable)
CREDENZA	plain cupboards file drawers

FURNISHINGS & EQUIPMENT

1. EQUIPMENT SHALL BE PHOTOCOPIERS OF A SIZE TO SUIT THE REQUIREMENTS OF THE COURT HOUSE. SHREDDER, SHELVING AND WASTE-PAPER BIN SHALL BE PROVIDED.

CHECKLIST
PHOTOCOPYING ROOM
5.0sm (53.8sq ft) 9.0sm (96.9sq ft)
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR		carpet
	NOTE 1	vinyl (sheet) ceramic wood
	NOTE 1	rubber special
CEILING		drywall sheet drywall lathe & acoustic plaster painted
	NOTE 2	acoustic tile
WALLS		drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	*	standard fire rated secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. RUBBER OR SHEET VINYL SHALL BE INSTALLED. THE RUBBER FINISH IS QUIETER AND CAN BE USED IN 914mm TILES. VINYL SHALL BE SHEET IF FLOOR IS RAISED TO GIVE FLEXIBILITY IN FUTURE PLANNING (GENERAL OFFICE SHOULD HAVE RAISED FLOOR).
2. CEILING SHALL BE LAY-IN ACOUSTIC TILE WITH THE NRC VALUE SPECIFIED IN SECTION Q.
3. WALLS SHALL BE CONSTRUCTED OF STEEL STUDS FINISHED WITH VINYL COVERED DRYWALL PANELS. STC RATING OF THE WALL SHALL BE AS SPECIFIED IN SECTION Q.

AREA

PHOTOCOPYING ROOM

5.0sm (53.8sq ft)
 9.0sm (96.9sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

MEETING ROOM

2.3sm (24.76sq ft) PER PERSON UP TO 10 PERSONS, PLUS

1.4sm (15.07sq ft) PER PERSON OVER 10 PERSONS

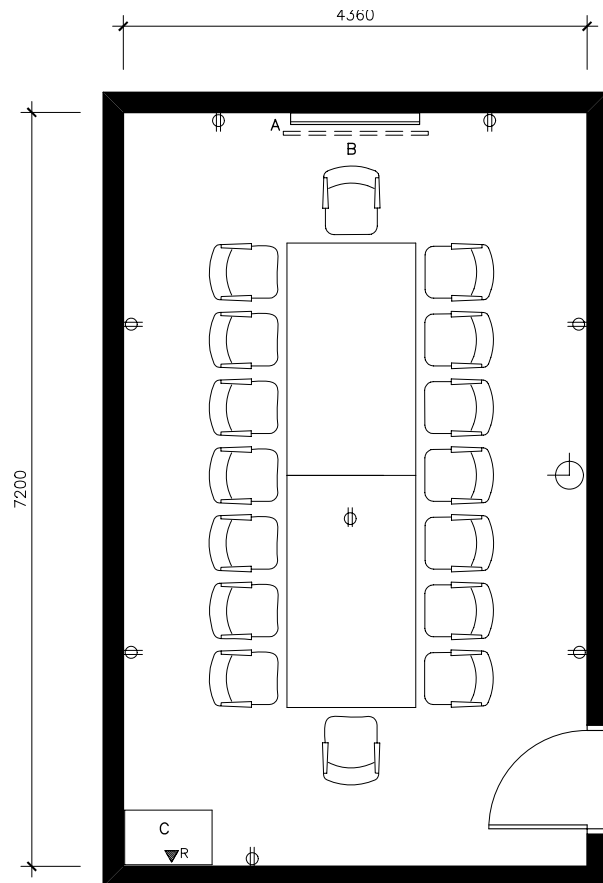


FIG: K16



FIG. K16

Fig. K16 is a plan for 16 persons:

10 at 2.3sm = 23.0sm and
 6 at 1.4sm = 8.4sm

Total area for 16 = 31.4sm

Although the plan is for 16 persons this size will only be required in a large court house. Therefore the following guide should be used:

UP TO SIX COURTROOMS ALLOW FOR 1 PERSON PER COURTROOM.
 MORE THAN SIX COURTROOMS ALLOW FOR .75 PERSONS PER COURTROOM.

i.e. For 20 courtrooms allow for .75 persons per courtroom, .75 X 20 = 15 persons

Install wall-mounted whiteboard with flip chart on one side and cork pin-up board on the other side. In meeting rooms for more than 10 persons, install an overhead retractable screen.

LEGEND

- A WHITEBOARD
- B CEILING-INSTALLED PROJECTION SCREEN (ELECTRICALLY OPERATED)
- C TELEPHONE TABLE
- ⊕ DUPLEX OUTLET
- ⌚ CLOCK
- ▲^R TELEPHONE (RESTRICTED DIALLING AREA)
- ○ COMPUTER OUTLET

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	*	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 5	bright moderate subdued special
QUIETNESS	NOTE 6	important desirable unimportant
ENVIRONMENTAL CONTROL	NOTE 7	high normal low
CEILING HEIGHT	NOTE 8	high normal low
STORAGE	*	built-in portable none
SERVICES	NOTE 9 NOTE 9	water electricity telephone intercom special
SECURITY	*	high medium low

NOTES
1. ACCESS SHALL BE ON PRIVATE CIRCULATION.
2. TRAFFIC WILL BE LOW BUT USE OF MEETING ROOM SHOULD BE ON A BOOKING SYSTEM.
3. THE MEETING ROOM IN A COURT HOUSE IS A WORKING AREA AND ITS IMAGE SHOULD REFLECT ITS USE.
4. DEPENDENT ON ITS ACTUAL LOCATION RELATIVE TO THE ADMINISTRATION AREA, THE FLOOR SHOULD BE RAISED SO THE FLEXIBILITY TO REPLAN THE GENERAL OFFICE IS NOT COMPROMISED. THE WALLS SHALL BE PRE-FINISHED VINYL FACED DRYWALL PANELS ON METAL STUDS.
5. THE LIGHTING SHALL HAVE A HIGH VCL WITHOUT GLARE (PARA-BOLIC LENSES OR EQUIVALENT).
6. ALTHOUGH THE MEETING ROOM HAS MULTIPLE USES, OUTSIDE NOISE MUST NOT DISTURB THE OCCUPANTS. WHEN CONFIDENTIAL MATTERS ARE BEING DISCUSSED THEY SHOULD NOT BE HEARD OUTSIDE THE MEETING ROOM. THE STC VALUE OF THE WALLS SHALL REFLECT THIS REQUIREMENT.
7. THE NUMBER OF OCCUPANTS OF THE MEETING ROOM CAN VARY CONSIDERABLY. THE HVAC CONTROLS SHOULD THEREFORE BE CAPABLE OF MEETING THIS CHANGING HEAT GAIN.
8. ALTHOUGH A SMALL MEETING ROOM CAN BE CONSTRUCTED WITH A NORMAL CEILING HEIGHT, ROOMS FOR 12 OR MORE OCCUPANTS SHOULD HAVE A MINIMUM HEIGHT OF 3048mm.
9. ELECTRICAL OUTLETS, COMPUTER OUTLET, A CLOCK AND A TELEPHONE SHALL BE INSTALLED.

AREA
MEETING ROOM 2.3sm (24.76sq ft) PER PERSON UP TO 10 PERSONS, PLUS 1.4sm (15.07sq ft) PER PERSON OVER 10 PERSONS
PROXIMITIES
EASILY ACCESSIBLE FROM ADMINISTRATION.
INTERNAL ORGANIZATION

CHECKLIST	
CHAIRS	sled base side chairs tilt
	NOTE 1 swivel/tilt
TABLES	NOTE 2 movable standard
	NOTE 2 special
FITMENTS	modular movable fixed
	special design
SEATING PUBLIC	fixed (bench)
	fixed (gang)
	upholstered
	wood
COUCH	full size
	small
BOOKCASE	full height
	low doors
SIDE TABLES	decorative
	NOTE 3 functional
DESK	plain
	single or double
	pedestal
	computer
	executive
	secretarial system
DAIS & PLATFORMS	fixed i.e. built in place
	sectional (movable)
CREDENZA	plain
	cupboards
	file drawers

FURNISHINGS & EQUIPMENT
1. CHAIRS SHALL BE SWIVEL TILT UPHOLSTERED WITH ARMS AND FIVE LEGS WITH CARPET CASTERS.
2. THE MEETING ROOM TABLES SHALL BE SIZED TO THE NUMBER OF OCCUPANTS. THEY SHALL BE A MINIMUM OF 914mm WIDE WITH APRONS ON ALL SIDES FINISHED IN PLASTIC LAMINATE. FIG. K16 SHOWS A 4267mm (14'0") TABLE IN TWO SECTIONS.
3. INSTALL 914mm X 609mm TABLE FOR THE TELEPHONE.

AREA
<p>MEETING ROOM</p> <p>2.3sm (24.76sq ft)</p> <p>PER PERSON UP TO 10 PERSONS, PLUS</p> <p>1.4sm (15.07sq ft)</p> <p>PER PERSON OVER 10 PERSONS</p>
CAPACITY
INTERNAL ORGANIZATION

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber special
	NOTE 2	acoustic tile
CEILING		drywall sheet drywall lathe & acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS		sun control decorative drapes full drapes

NOTES ON FINISHES

1. INSTALL 28-OZ. CARPET ON RAISED FLOOR PANELS.
2. CEILING SHALL BE ACOUSTIC TILE WITH AN NRC RATING SPECIFIED IN SECTION Q.
3. WALLS SHALL BE CONSTRUCTED TO MEET AN STC RATING SPECIFIED IN SECTION Q. METAL STUDS WITH PRE-FINISHED DRYWALL PANELS (VINYL WALL COVERING) WOULD IMPROVE THE FLEXIBILITY, BUT ACOUSTIC RATING MUST BE MET.
4. THE DOOR SHALL BE SOLID CORE WOOD AND SOUND STRIPPED ON ALL EDGES TO MEET THE REQUIREMENTS OF SECTION Q. DOOR SHALL BE FITTED WITH KEY LOCK.

AREA

MEETING ROOM

2.3sm (24.76sq ft)
 PER PERSON UP TO 10 PERSONS, PLUS

1.4sm (15.07sq ft)
 PER PERSON OVER 10 PERSONS

PROXIMITIES

INTERNAL ORGANIZATION

MANAGER, COURT OPERATIONS

13.5sm (145.3sq ft)

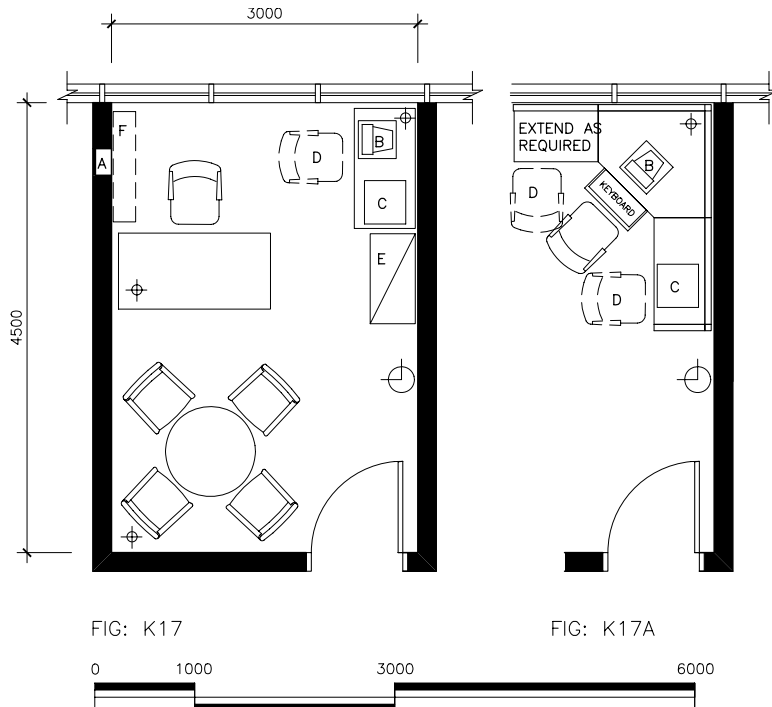


FIG. K17

FIG. K17 shows a traditional office plan supported by a separate computer desk. An alternate plan using systems furniture is shown in **FIG. K17A**. Both plans would include a small conference area.

The office should be located in an area of the general office which would be protected from intrusion by the public and would allow quick access to the private circulation. The Manager of Court Operations is responsible for the smooth and efficient operation of the whole court house, although areas of direct security i.e. holding cells are the responsibility of the police.

The office will have a raised floor in keeping with the general office area.

LEGEND

- A CHUBB OR EQUIVALENT SECURE KEY BOX BUILT IN (ONE OVER-RIDING MECHANICAL KEY FOR THE HOLDING CELLS TOGETHER WITH A GRAND MASTER KEY FOR THE BUILDING IS TO BE KEPT IN THIS KEY BOX)
- B COMPUTER
- C PRINTER
- D ALTERNATIVE POSITIONS OF DESK CHAIR
- E FILING CABINET (IN SCHEME FIG. K17A FILING IS CONTAINED IN THIS SYSTEM)
- F TWO SHELVES TO MATCH FURNITURE WITH GABLE ENDS MOUNTED AT 1371mm ABOVE FLOOR LEVEL



APPROXIMATE LOCATION IN RAISED FLOOR FOR IN-TILE SERVICE BOXES FOR ELECTRICAL, COMPUTER AND TELEPHONE SERVICES



CLOCK

NOTE: NO WALL DUPLEXES OR OTHER SERVICE OUTLETS WILL BE ALLOWED IN THE WALLS.

CHECKLIST		
ZONE	NOTE 1	public private restricted
TRAFFIC	NOTE 2	high medium low
IMAGE	NOTE 3 NOTE 3 NOTE 3	dignified orderly friendly bold peaceful
FUNCTIONAL ADAPTABILITY	NOTE 4	important desirable unimportant
INTERNAL FLEXIBILITY	NOTE 5	important desirable unimportant
VIEW OUT	*	important desirable optional none
ILLUMINATION	NOTE 6	bright moderate subdued special
QUIETNESS	NOTE 7	important desirable unimportant
ENVIRONMENTAL CONTROL	*	high normal low
CEILING HEIGHT	*	high normal low
STORAGE	NOTE 8	built-in portable none
SERVICES	NOTE 9 NOTE 9 NOTE 9	water electricity telephone computer special
SECURITY	NOTE 10	high medium low

NOTES
<p>1. THE LOCATION OF THE MANAGER OF COURT OPERATIONS' OFFICE WILL BE IN THE PRIVATE AREA WHERE THE MANAGER IS IN DIRECT TOUCH WITH THE BUSINESS HUB OF THE COURT HOUSE, BUT HAS EASY ACCESS TO THE PRIVATE CIRCULATION AND THE PUBLIC AREAS AS REQUIRED.</p> <p>2. THE TRAFFIC HAS BEEN DEFINED AS HIGH DUE TO THE MANAGER'S OVERALL RESPONSIBILITY. HOWEVER, THERE WILL BE MANY PERIODS WHEN THE TRAFFIC IS LOW AND IN LARGE COURT HOUSES THE EMPLOYMENT OF SUPERVISORS WILL DIVERT A LOT OF THE TRAFFIC AWAY FROM THE SENIOR MANAGER.</p> <p>3. FROM TIME TO TIME THE MANAGER WILL MEET MEMBERS OF THE PUBLIC IN HIS/HER OFFICE. A DIGNIFIED, ORDERLY, EFFICIENT BUT FRIENDLY IMAGE MUST BE PROJECTED TO ENHANCE THE PUBLIC'S PERCEPTION OF THE COURT SYSTEM.</p> <p>4. THE USE OF A RAISED FLOOR AND THE LACK OF SERVICES IN THE WALLS ALL CONTRIBUTE TO FLEXIBILITY FOR FUTURE PLANNING.</p> <p>5. THE AREA OF THE ROOM WILL NOT CHANGE BUT THE STYLE OF THE MANAGER WILL DICTATE THE TYPE AND LAYOUT OF FURNITURE. THE ABILITY TO MOVE THE IN-TILE SERVICE BOXES TO VARIOUS LOCATIONS IN THE OFFICE WILL ASSIST IN ACHIEVING VARIOUS OFFICE PLANS.</p> <p>6. LIGHTING WITH A HIGH VCL IS ESSENTIAL.</p> <p>7. NOISE INTRUSION AND PROTECTION FROM OVERHEARING IS EXTREMELY IMPORTANT.</p> <p>8. THE ONLY STORAGE WILL BE A FILING CABINET OR THE STORAGE IN THE FURNITURE SYSTEM.</p> <p>9. ELECTRICITY, COMPUTER AND TELEPHONE SERVICES SHALL BE INSTALLED. AN ELECTRIC WALL CLOCK SHALL ALSO BE INSTALLED.</p> <p>10. THE GENERAL SECURITY IS NO MORE THAN THAT REQUIRED IN THE GENERAL OFFICE. HOWEVER, THE INSTALLATION OF THE SECURE KEY BOX SHALL BE FURTHER PROTECTED BY A KEY PAD LOCK ON THE MANAGER'S DOOR.</p>

AREA
<p>MANAGER, COURT OPERATIONS</p> <p>13.5sm (145.3sq ft)</p>
PROXIMITIES
<p>GENERAL ADMINISTRATION OFFICE AND PRIVATE CIRCULATION</p>
INTERNAL ORGANIZATION
Empty space for internal organization

CHECKLIST		
CHAIRS	NOTE 1	sled base
	NOTE 1	side chairs
	NOTE 1	tilt
	NOTE 1	swivel/tilt
TABLES	NOTE 2	movable standard special
FITMENTS		modular movable fixed special design
SEATING PUBLIC		fixed (bench)
		fixed (gang)
		upholstered wood
COUCH		full size small
BOOKCASE		full height low shelves
	NOTE 3	
SIDE TABLES		decorative functional
DESK	NOTE 4	plain single or double pedestal computer executive secretarial system
	NOTE 4	
DAIS & PLATFORMS		fixed i.e. built in place sectional (movable)
CREDENZA		plain cupboards file drawers

FURNISHINGS & EQUIPMENT
<p>1. THE DESK CHAIR SHALL BE SWIVEL TILT WITH ARMS, FIVE LEGS, AND CARPET CASTORS. THE CONFERENCE CHAIRS SHALL BE LEG OR SLED BASE SIDE CHAIRS WITH UPHOLSTERED ARMS.</p> <p>2. SUPPLY 914mm DIAMETER CONFERENCE TABLE (LOW OR HIGH AS REQUIRED) TO MATCH FURNITURE.</p> <p>3. TWO SHELVES WITH GABLE ENDS SHALL BE INSTALLED IN A LOCATION DETERMINED BY THE COURT SERVICES MANAGER'S FURNITURE PLAN.</p> <p>4. DEPENDING ON WHETHER THE MANAGER PREFERS TRADITIONAL FURNITURE AND PLAN OR A MORE CONTEMPORARY STYLE, MAG'S INTERIOR DESIGNER WILL SELECT A DESK 1820mm X 914mm WITH DOUBLE PEDESTAL AND SIDE TABLE TO ACCOMMODATE THE COMPUTER, KEYBOARD AND PRINTER OR SYSTEMS FURNITURE. USING THE SYSTEMS FURNITURE, A CONFIGURATION SIMILAR TO FIG. K17A CAN BE ACHIEVED, ALLOWING MORE ROOM FOR A CONFERENCE AREA AND BUILT-IN FILING. TRADITIONAL LAYOUT WILL REQUIRE A SEPARATE 914mm X 457mm TWO-DRAWER LATERAL FILING CABINET.</p>

AREA
<p>MANAGER, COURT OPERATIONS</p> <p>13.5sm (145.3sq ft)</p>
CAPACITY
<p> </p>
INTERNAL ORGANIZATION
<p> </p>

CHECKLIST

FLOOR	NOTE 1	carpet vinyl ceramic wood rubber
	NOTE 1	special
CEILING		drywall sheet drywall lathe & acoustic plaster painted
	NOTE 2	acoustic tile
WALLS	NOTE 3	drywall sheet acoustic panels wood marble ceramic
	NOTE 3	sheet vinyl paint
DOORS	NOTE 4	standard fire rated secure acoustic
WINDOWS	NOTE 5	sun control decorative drapes full drapes

NOTES ON FINISHES

1. FLOOR SHALL BE RAISED FLOOR PANELS FINISHED WITH 28-OZ. CARPET.
2. THE CEILING SHALL BE ACOUSTIC TILE WITH THE NRC SPECIFIED IN SECTION Q. TO MAINTAIN MAXIMUM FLEXIBILITY FOR FUTURE PLANNING THE PARTITIONS SHOULD NOT BE TAKEN TO THE UNDERSIDE OF THE SLAB ABOVE AND SHOULD FINISH AT CEILING LEVEL. THIS FORM OF CONSTRUCTION ALLOWS THE FILTRATION OF NOISE THROUGH THE ABSORBENT CEILING TO THE ADJOINING SPACES. ALSO NOISE CAN BE CARRIED THROUGH DUCTS TO ADJOINING SPACES. REFER TO SECTION Q FOR APPROPRIATE DETAILS.
3. WALLS SHALL BE CONSTRUCTED OF STEEL STUDS WITH PRE-FINISHED VINYL FACED DRYWALL PANELS. THE STUD WALL SHALL HAVE A NEOPRENE STRIP AT THE HEAD AND BE BUILT ON THE RAISED FLOOR. THE WALL ACCOMMODATING THE SECURE KEY BOX SHALL HAVE 12mm PLYWOOD APPLIED UNDER THE DRYWALL PANELS ON BOTH SIDES. REINFORCE WALLS WITH BLOCKING TO ACCEPT SHELVES. SEE SECTION Q FOR STC RATING.
4. DOORS SHALL BE SOLID CORE WOOD, SOUND STRIPPED ON THE EDGES AND FITTED WITH A KEY PAD LOCK. SEE SECTION Q.
5. WINDOWS FACING WEST OR SOUTH SHALL BE PROTECTED WITH SUN CONTROL BLINDS.

AREA

MANAGER, COURT OPERATIONS

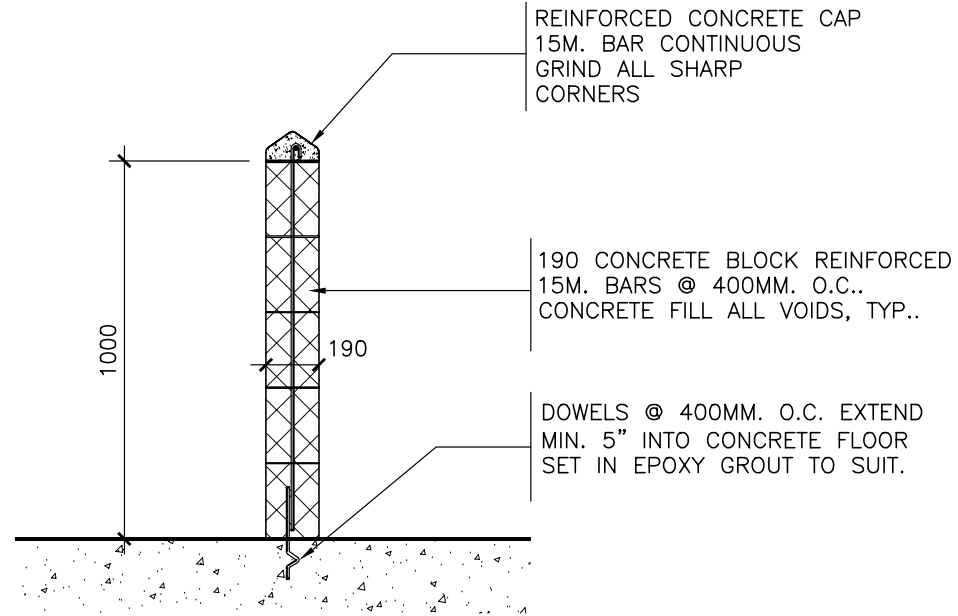
13.5sm (145.3sq ft)

PROXIMITIES

INTERNAL ORGANIZATION

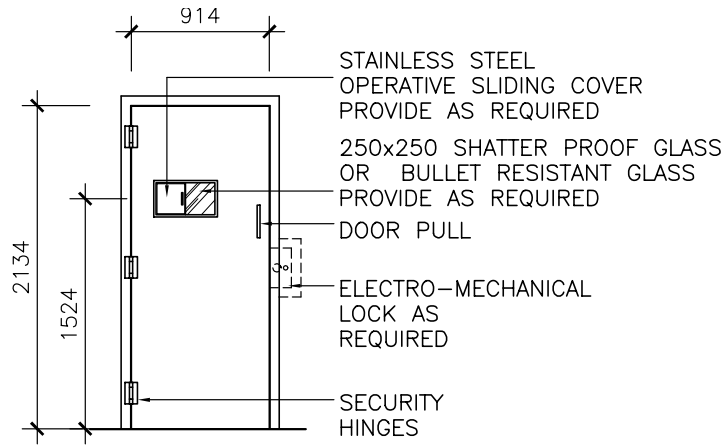
SECTION L

STANDARD CONSTRUCTION DETAILS AND MILLWORK DETAILS



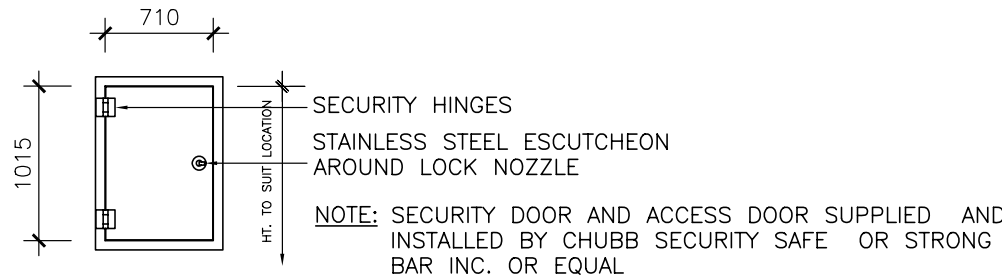
SECTION THROUGH PRIVACY KNEE-WALL IN HOLDING CELL

FIG: L1



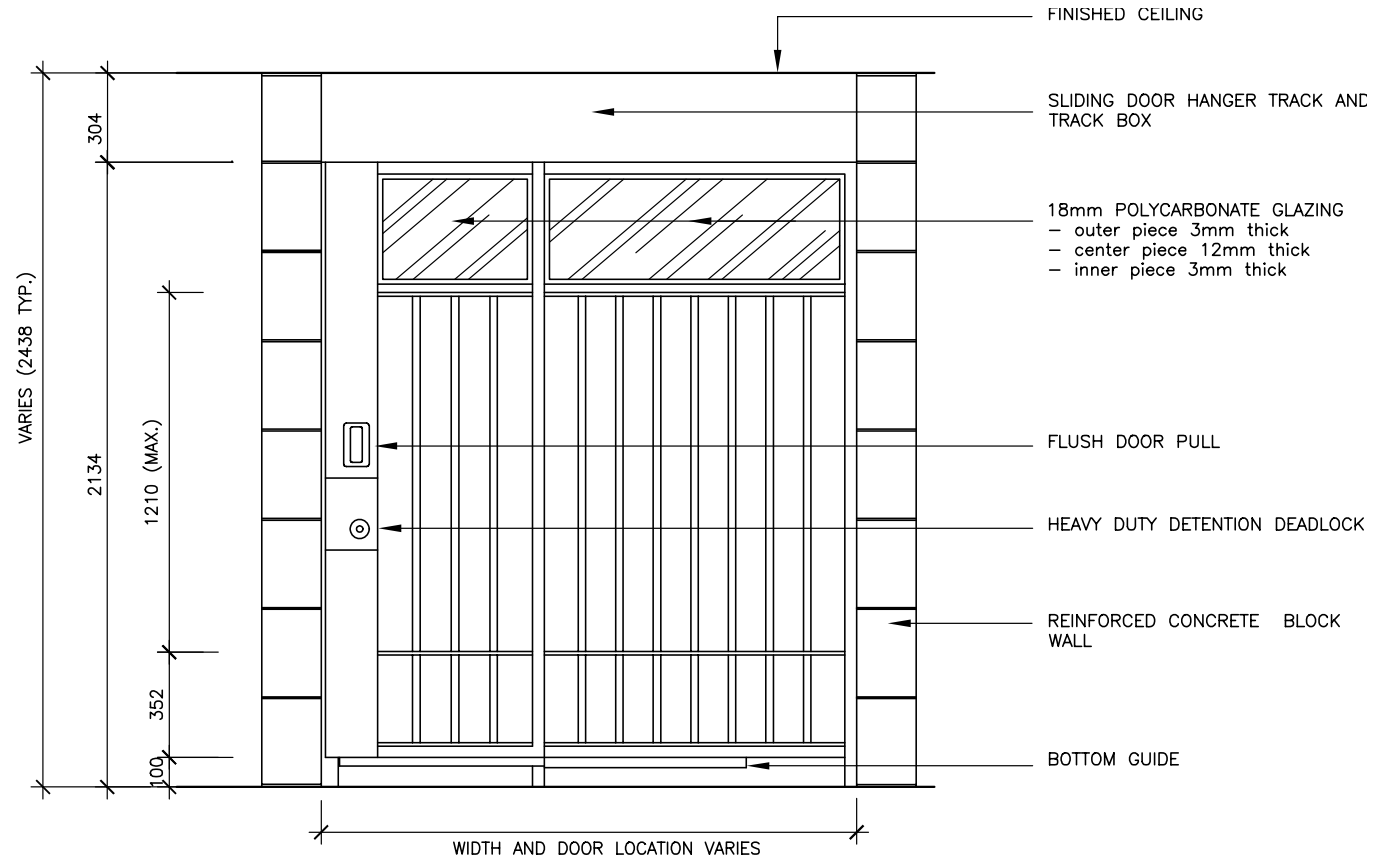
ELEVATION OF SECURITY DOOR

FIG: L2



ELEVATION OF ACCESS DOOR TO PLUMBING PIPES

FIG: L3

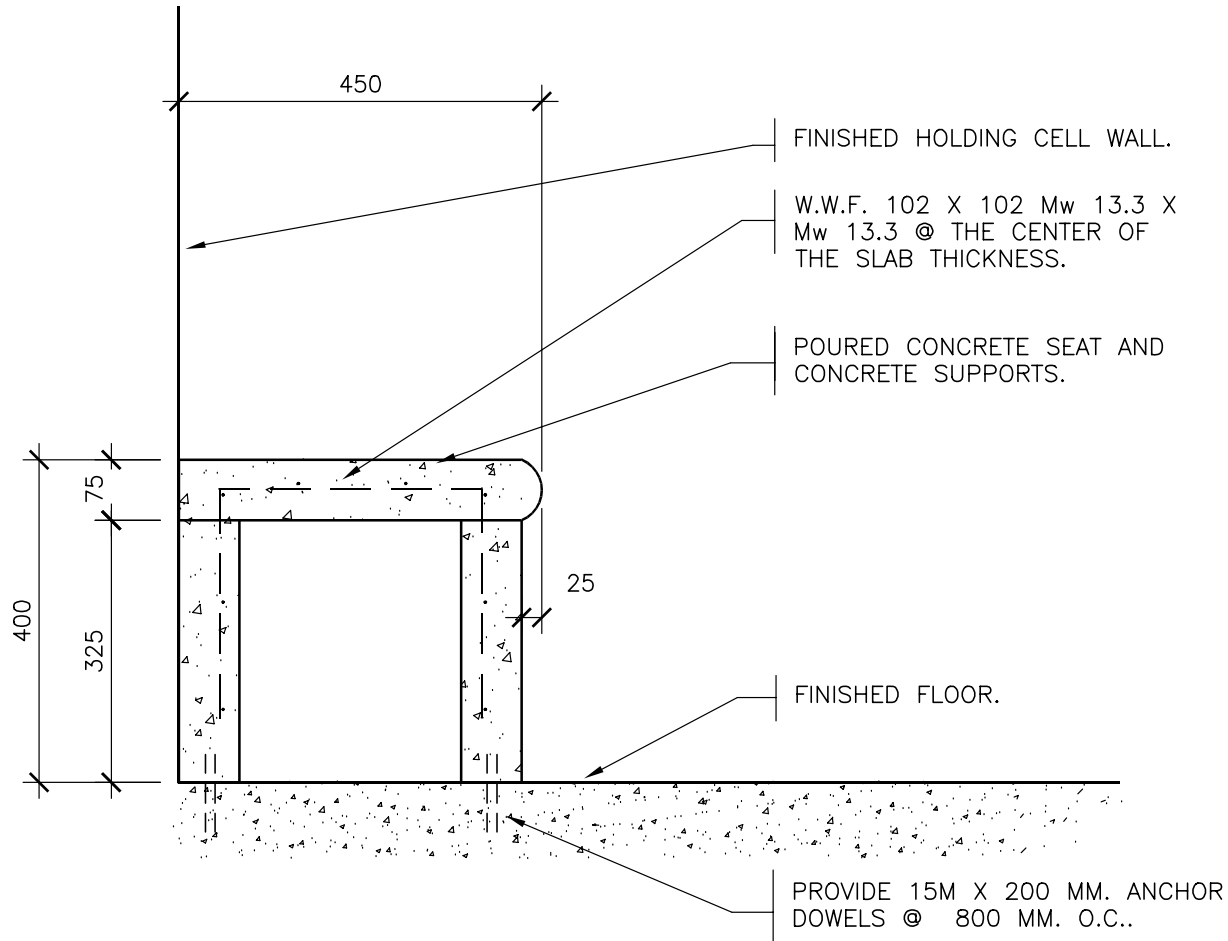


NOTES:

1. 32mm DIA. VERTICAL ROUND BARS CASE HARDENED TO RC 60 TO MINIMUM DEPTH OF 0.050" AND SPACED AT 127 O.C. MAX. HORIZONTAL BARS MIN. 10x64mm STEEL. DOOR(S) SLIDES ON HANGER TRACK AND BOTTOM GUIDE
2. HEAVY DUTY DETENTION DEADLOCK *CHUBB LOCKS 1030D-1 *FOLGER ADAM 32D *OR APPROVED EQUAL
3. MANUFACTURED PRODUCTS SUPPLIED AND INSTALLED BY STRONG BAR INC., CHUBB OR APPROVED EQUAL
4. FINISH - METAL PRIMER BY MANUFACTURER - PAINT FINISH BY OTHERS

HOLDING CELL FRONTS

FIG: L4



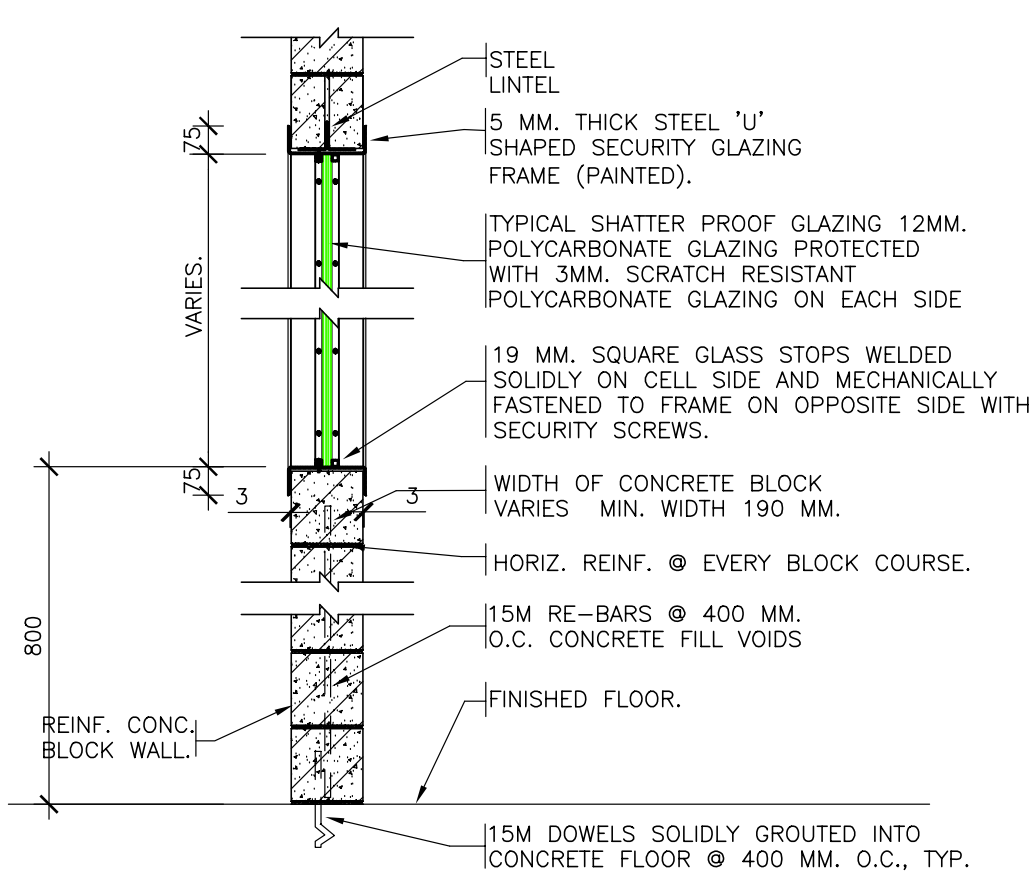
SECTION THROUGH TYPICAL CONCRETE

BENCH IN HOLDING CELL

FIG: L5

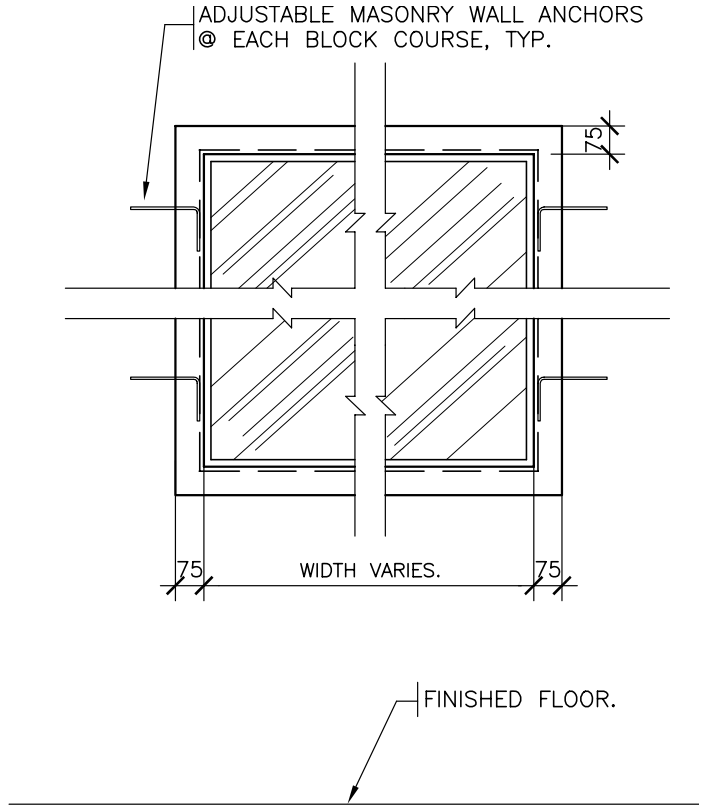
NOTE:

CLOSE OFF ALL ENDS WITH CONCRETE PANELS.
 FINISH: SMOOTH STEEL TROWEL ON EXPOSED SURFACES ONLY.
 CONCRETE: MIN. 35 MPa COMPRESSIVE STRENGTH @ 28 DAYS.



OBSERVATION WINDOW - SECTION.

FIG: L6



OBSERVATION WINDOW - ELEVATION.

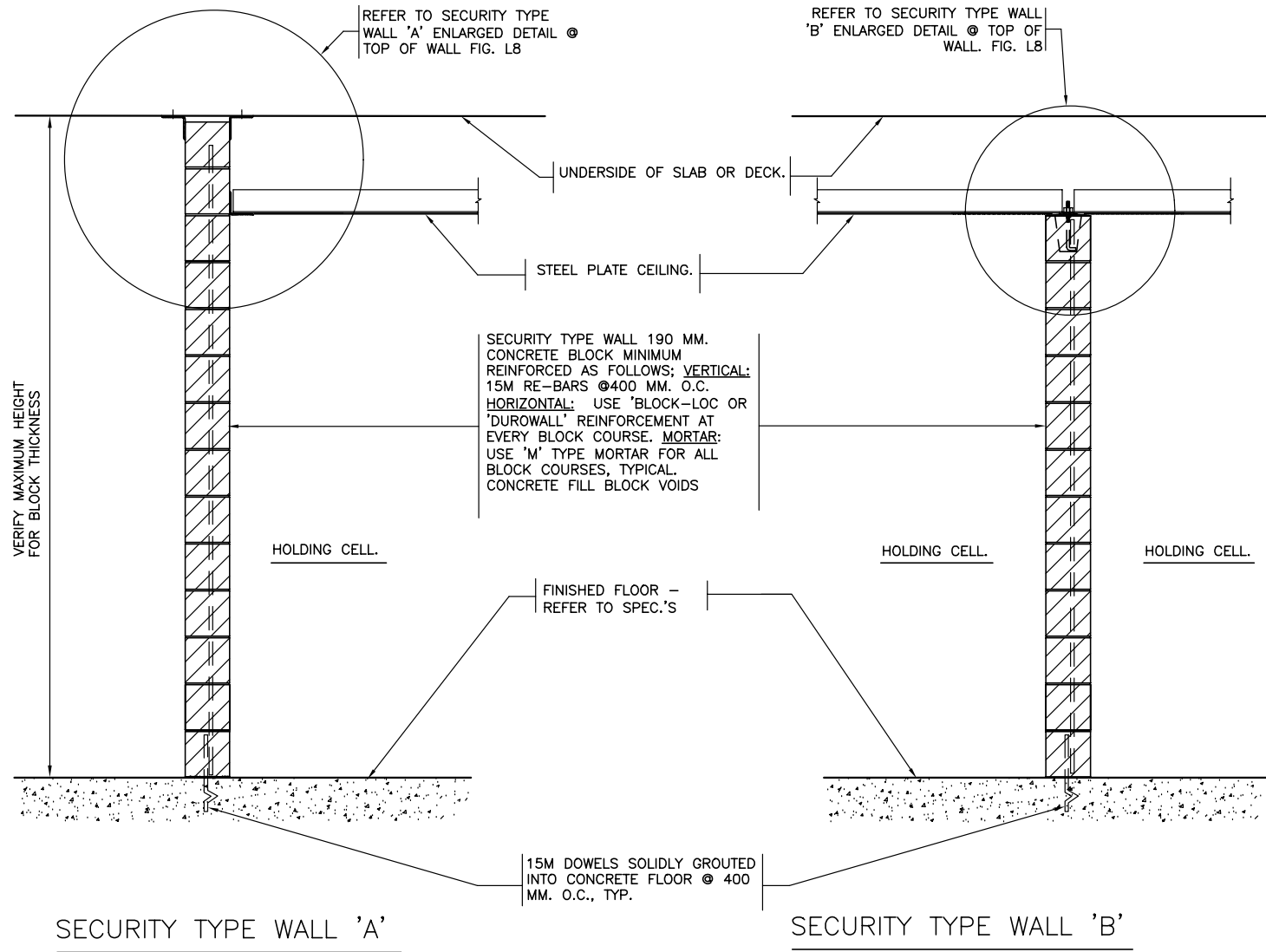
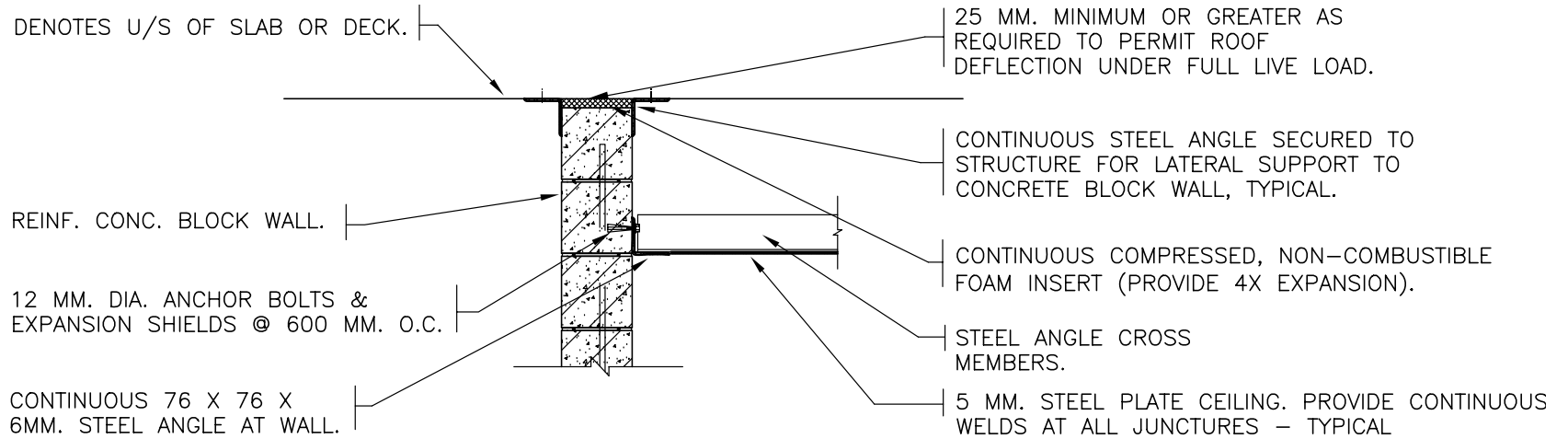
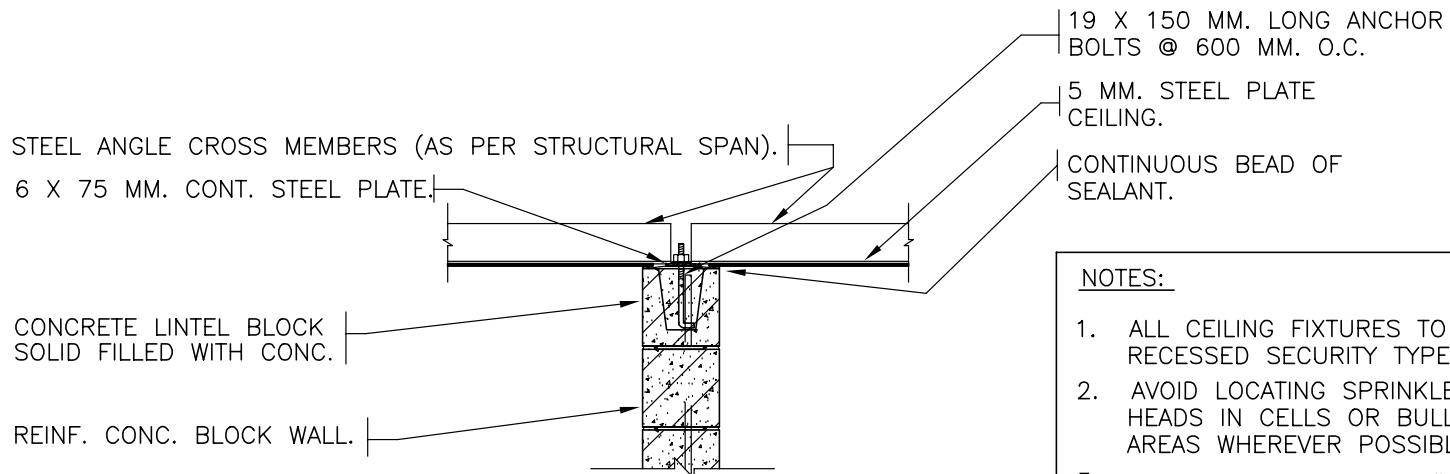


FIG: L7



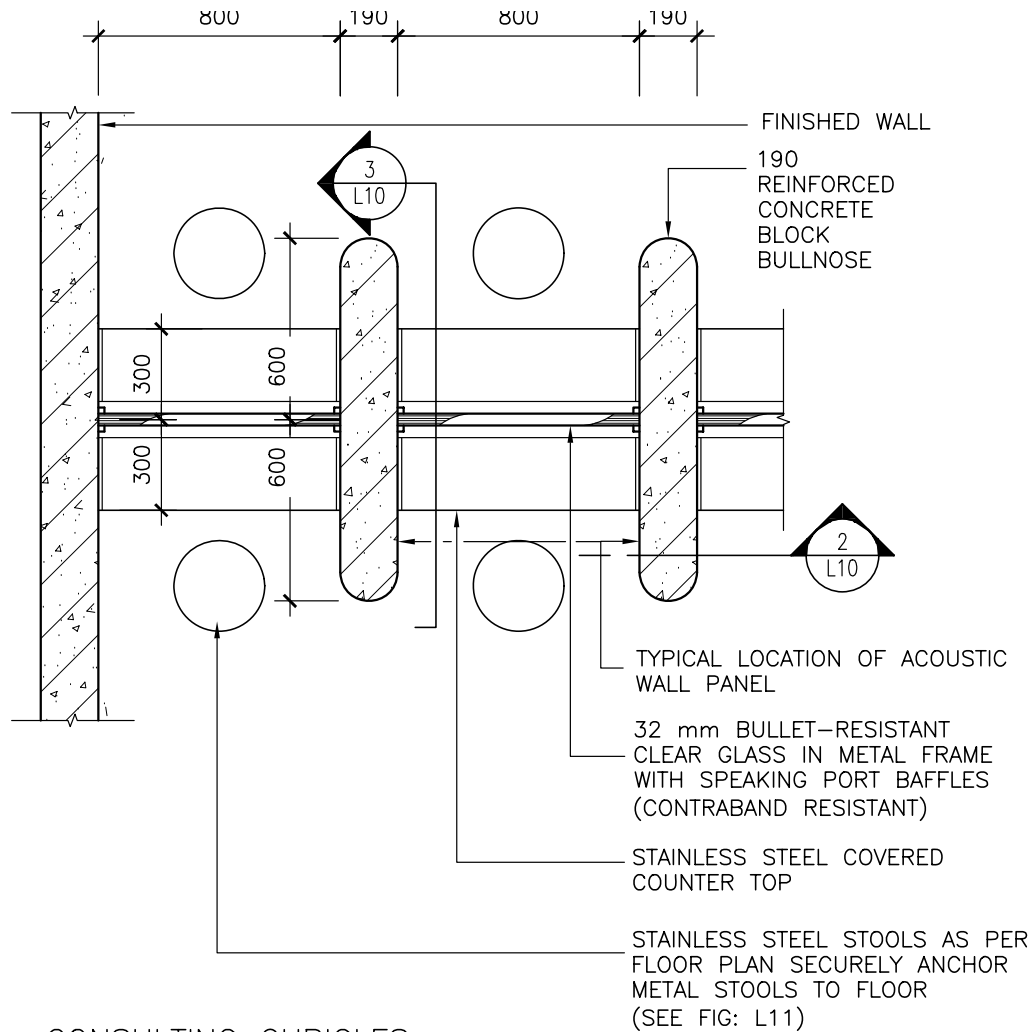
SECURITY TYPE WALL 'A' TOP DETAIL



SECURITY TYPE WALL 'B' TOP DETAIL

FIG: L8

- NOTES:
1. ALL CEILING FIXTURES TO BE RECESSED SECURITY TYPE.
 2. AVOID LOCATING SPRINKLER HEADS IN CELLS OR BULLPEN AREAS WHEREVER POSSIBLE.
 3. WHEN EMPLOYING TYPE "B" WALL DETAIL REVIEW WITH STRUCTURAL ENGINEER FOR APPROPRIATE LATERAL BRACING OF WALL

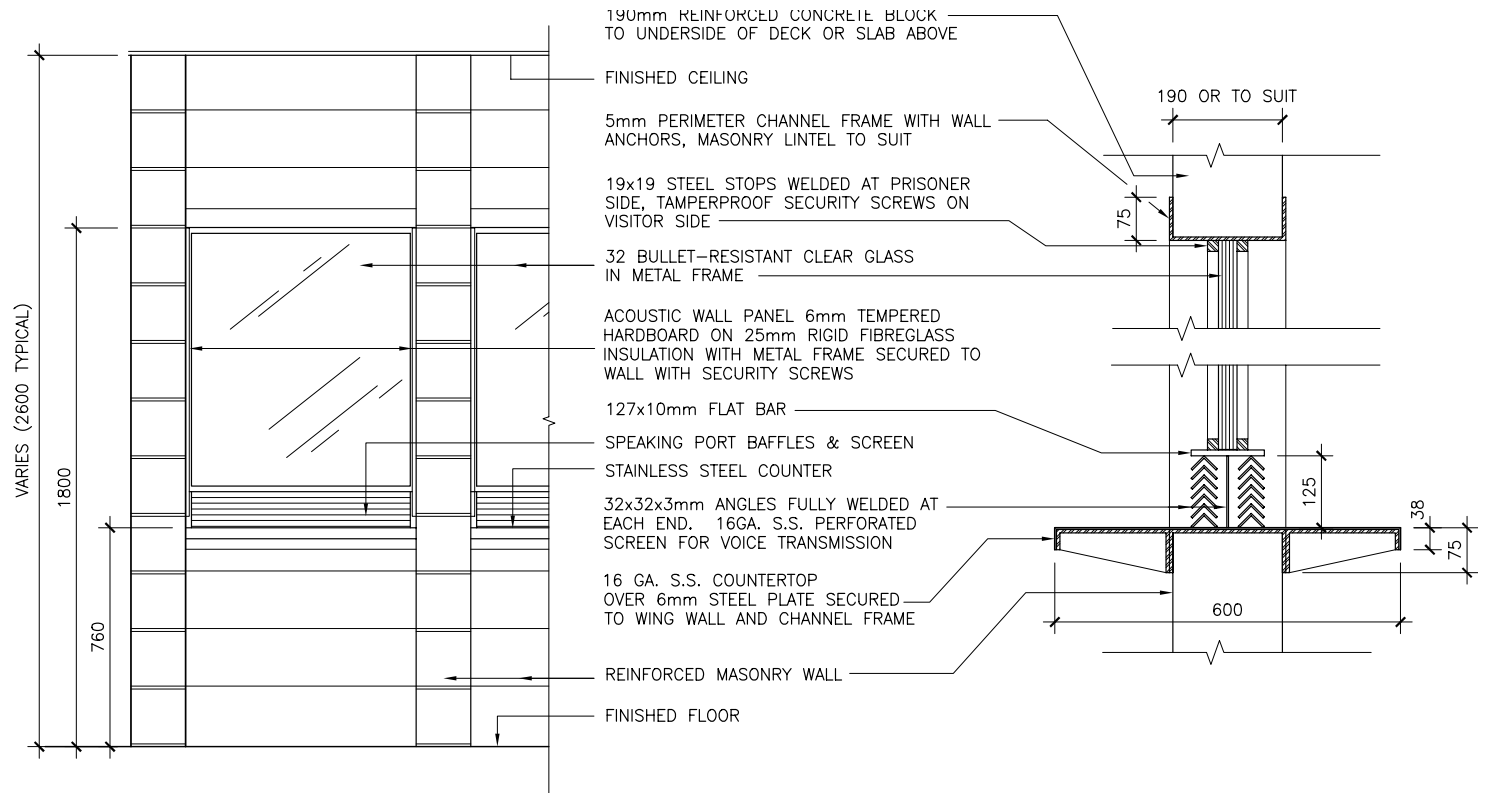


NOTES:

1. ALL EXPOSED SHARP EDGES TO BE RADIUSED
2. SEE FLOOR PLAN(S) FOR ACTUAL EXTENT REQUIRED AND ADJACENT WALL CONDITIONS
3. VISION PANELS, SPEAKING PORT BAFFLES, COUNTER AND STOOLS SUPPLIED BY SAME MANUFACTURER.

CONSULTING CUBICLES

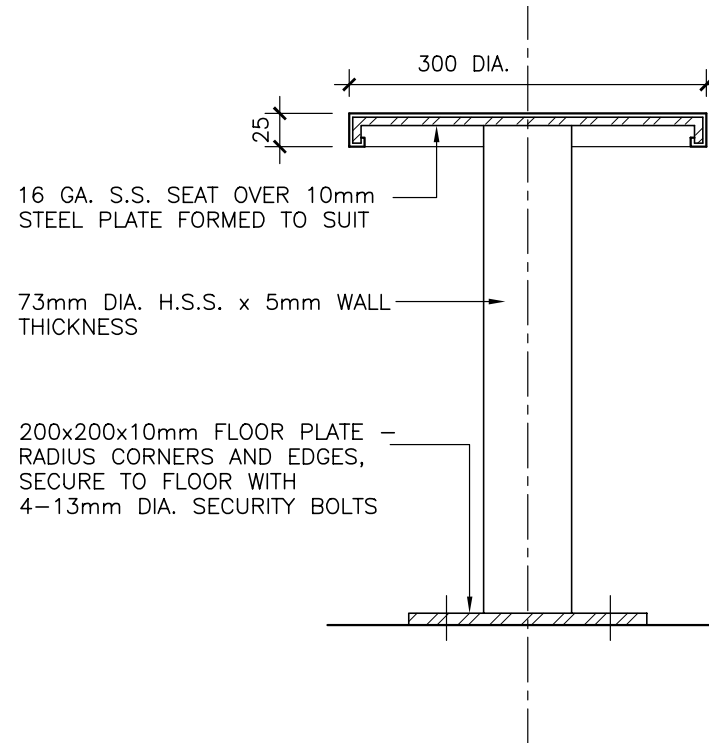
FIG: L9



2 CONSULTING CUBICLES - ELEVATION
 L10

FIG: L10

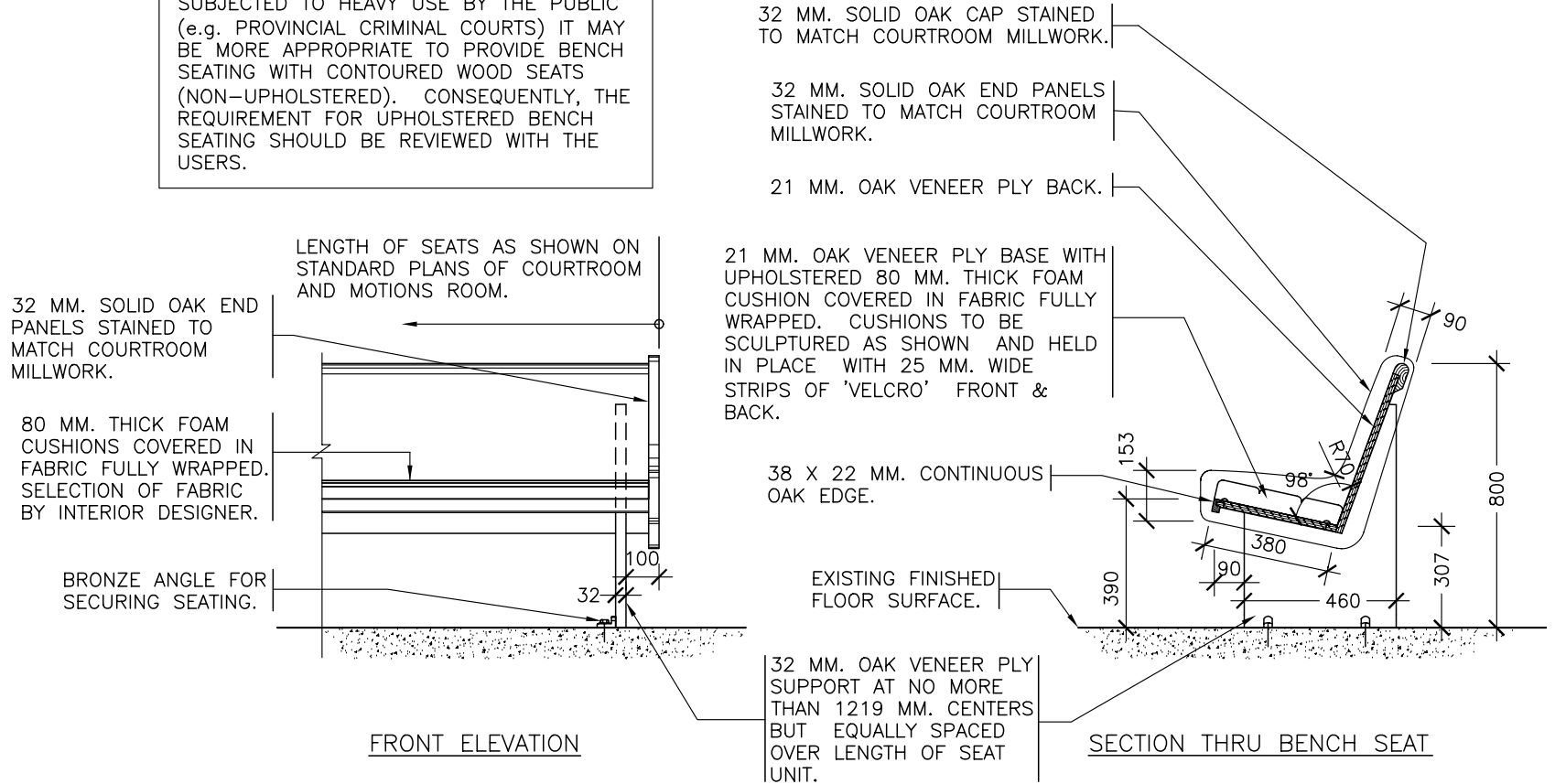
3 CONSULTING CUBICLES - SECTION
 L10



TYPICAL CONSULTING CUBICLE STOOL

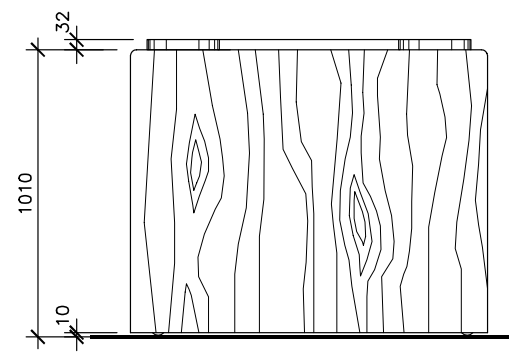
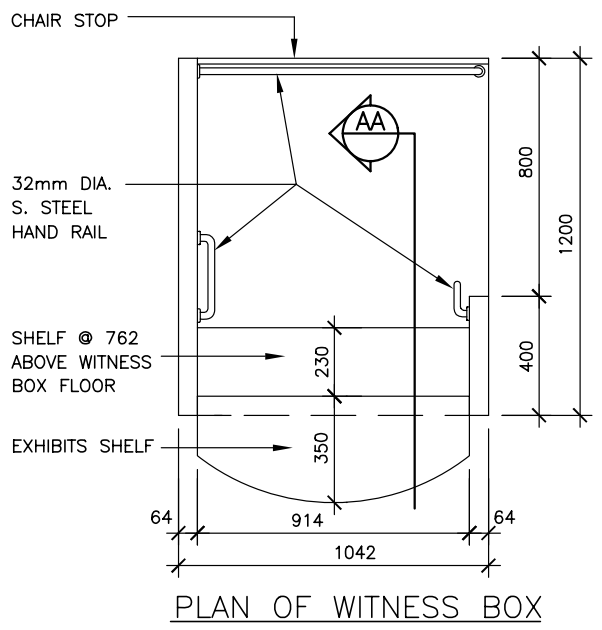
FIG: L11

NOTE: IN COURTROOMS WHICH ARE SUBJECTED TO HEAVY USE BY THE PUBLIC (e.g. PROVINCIAL CRIMINAL COURTS) IT MAY BE MORE APPROPRIATE TO PROVIDE BENCH SEATING WITH CONTOURED WOOD SEATS (NON-UPHOLSTERED). CONSEQUENTLY, THE REQUIREMENT FOR UPHOLSTERED BENCH SEATING SHOULD BE REVIEWED WITH THE USERS.



SECTION & DETAILS OF COURTROOM BENCH SEATING (UPHOLSTERED)

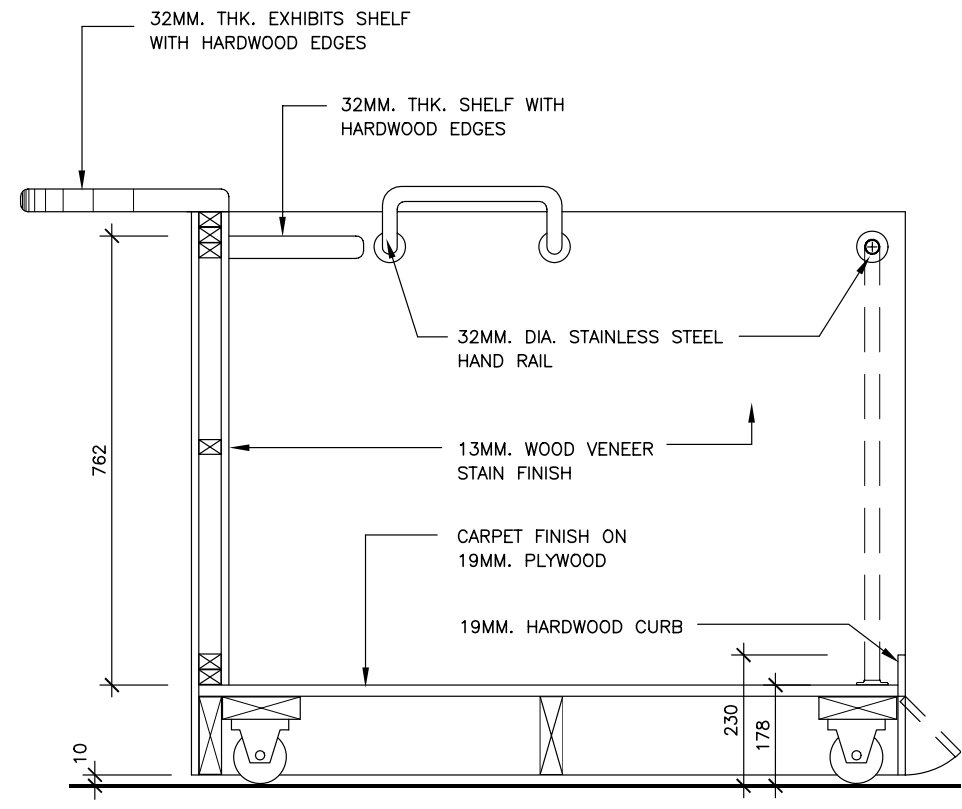
FIG: L12



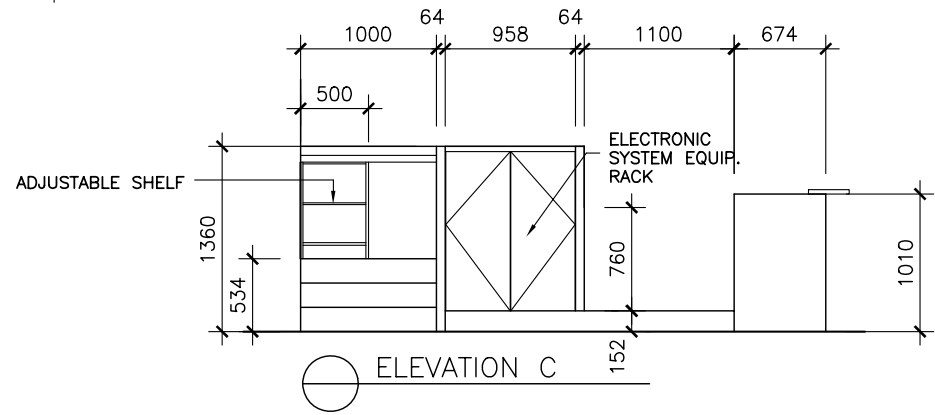
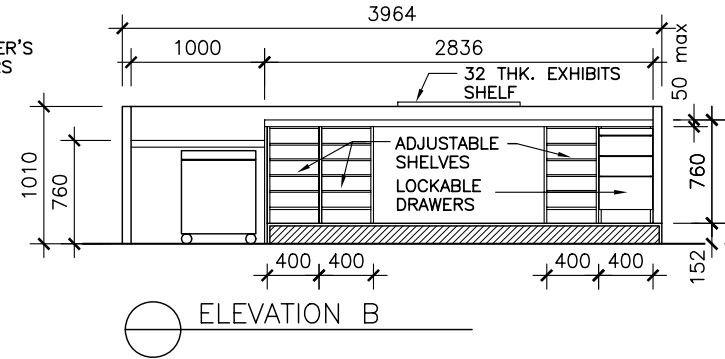
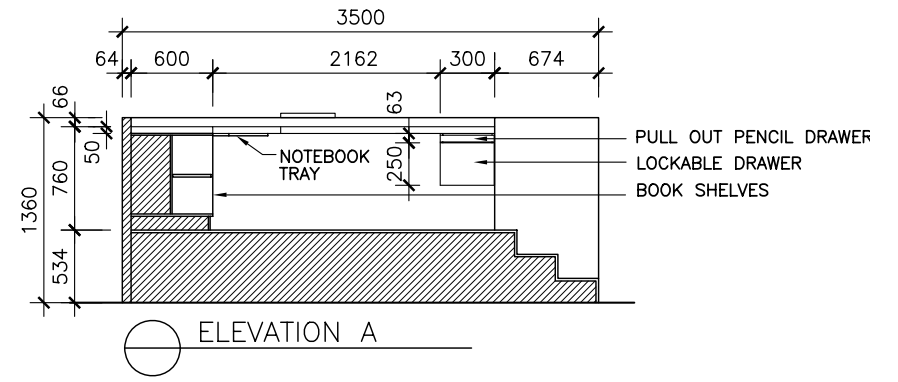
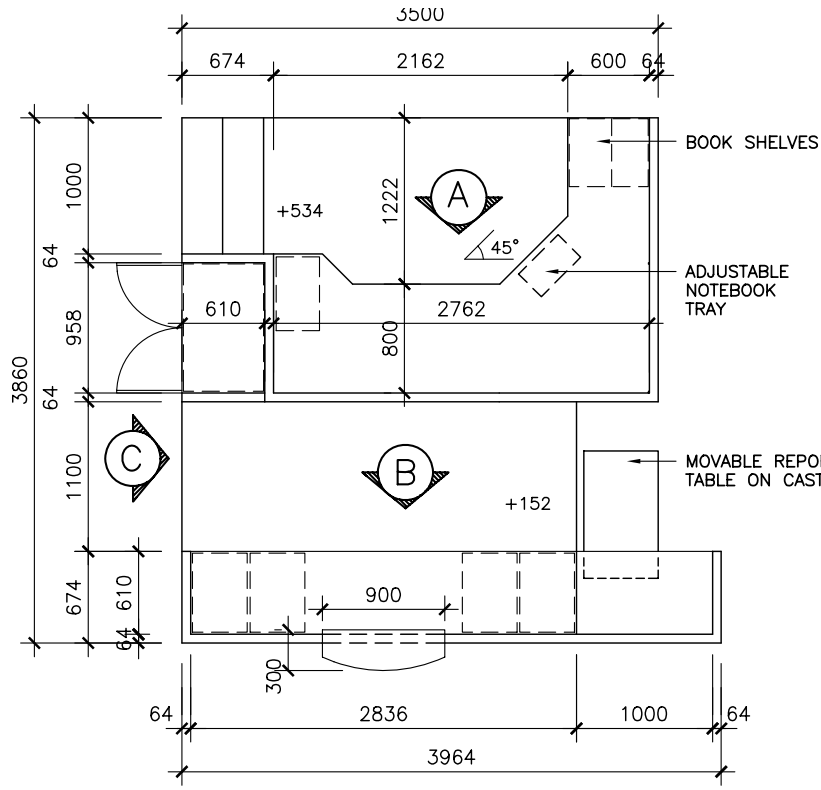
ELEVATION

L13

NOTE
10MM. GAP TO BE MAINTAINED BETWEEN COURTROOM FLOOR AND BOX WITH CARPET CASTERS - PROVIDE CONT. HINGED ACCESS BASE TO CASTER LOCKING MECHANISMS - MIN. 2
PROVIDE SOUND DEADENING MATERIAL UNDER PLYWOOD FLOOR

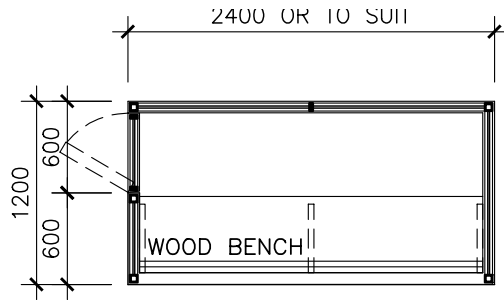


SECTION AA

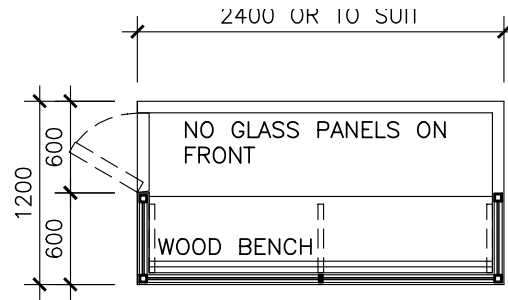


NOTE: INCORPORATE BULLET RESISTANT MATERIAL IN VERTICAL COMPONENT OF JUDGE'S BENCH TO WITHSTAND BULLETS DISCHARGED FROM HANDGUNS

FIG: L14

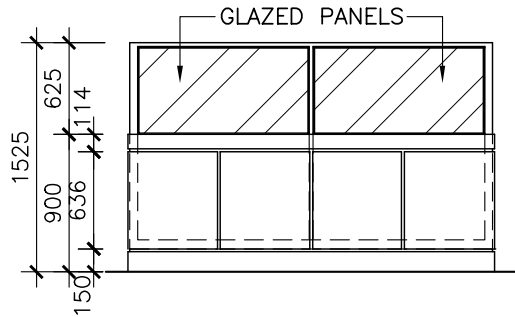


PLAN OF ACCUSED'S BOX
NON JURY COURTROOM

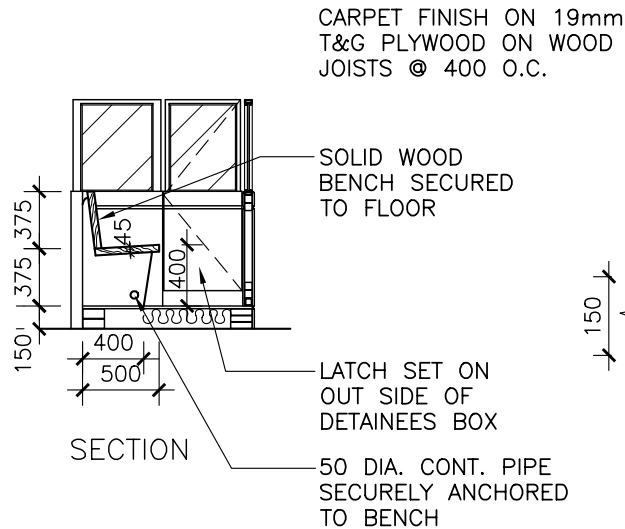


PLAN OF ACCUSED'S BOX
JURY COURTROOM

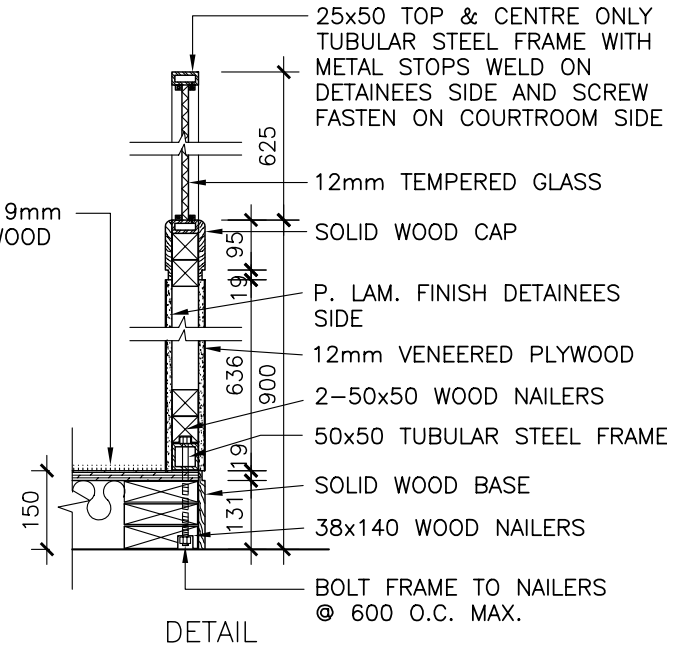
NOTE: HEIGHT TO TOP OF
STEEL FRAME AT GLAZED
PANELS 1830mm.
(JURY COURTROOM ONLY)



ELEVATION



SECTION



DETAIL

FIG: L15

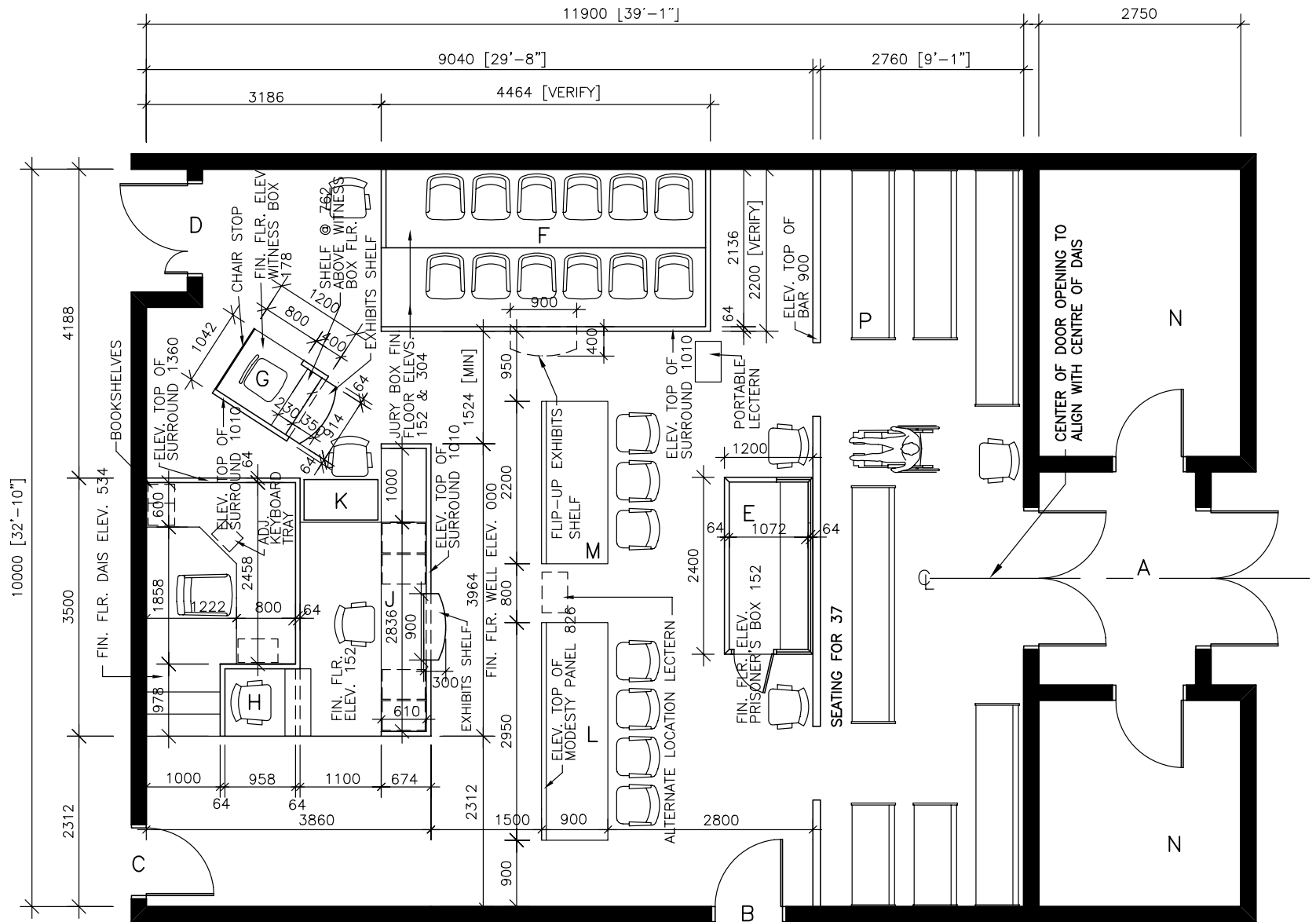
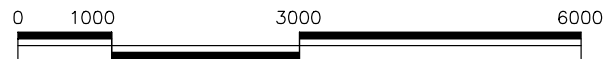


FIG: L16 - STANDARD JURY COURTROOM



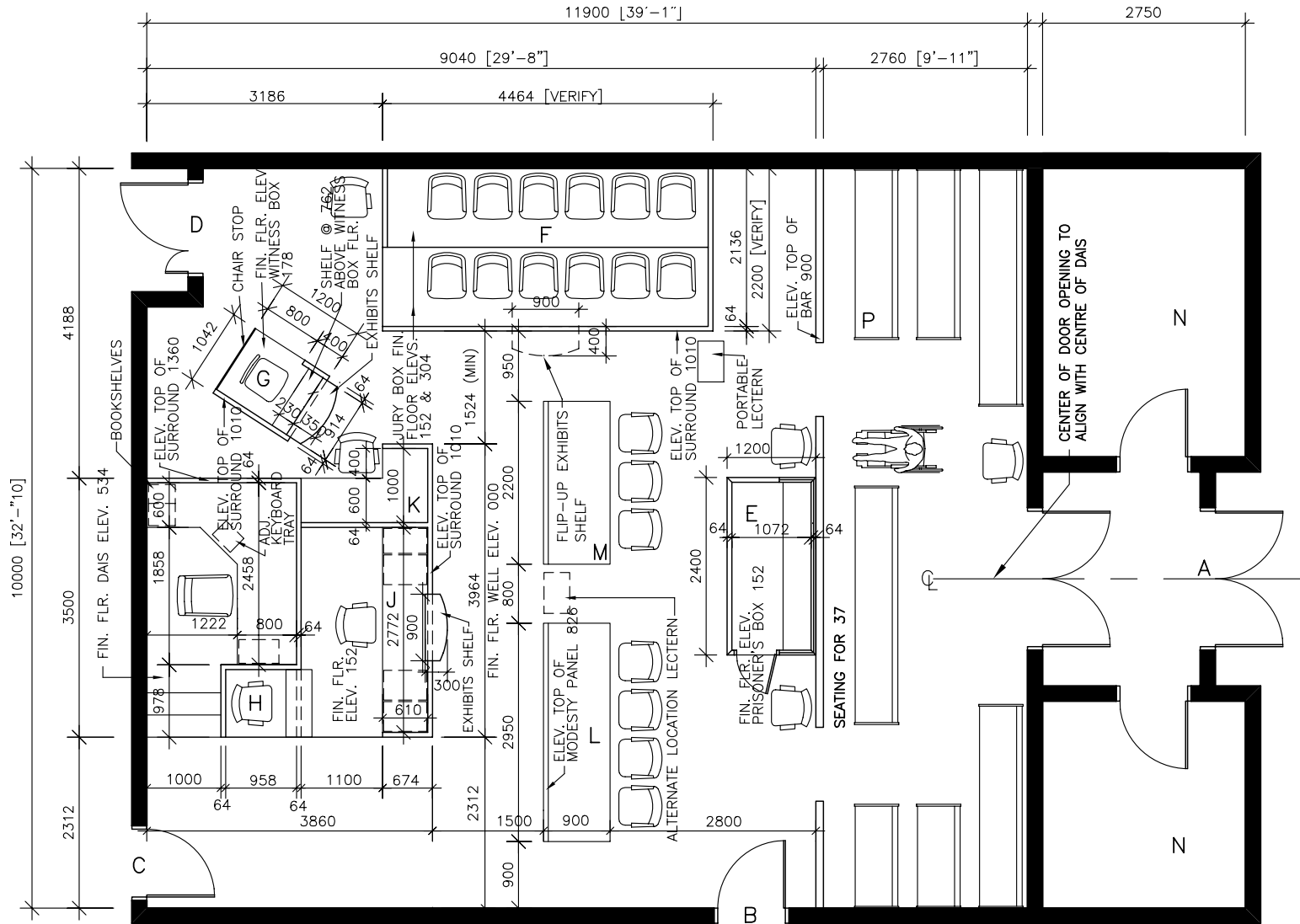


FIG: L17 - STANDARD JURY COURTROOM
ALTERNATE DAIS



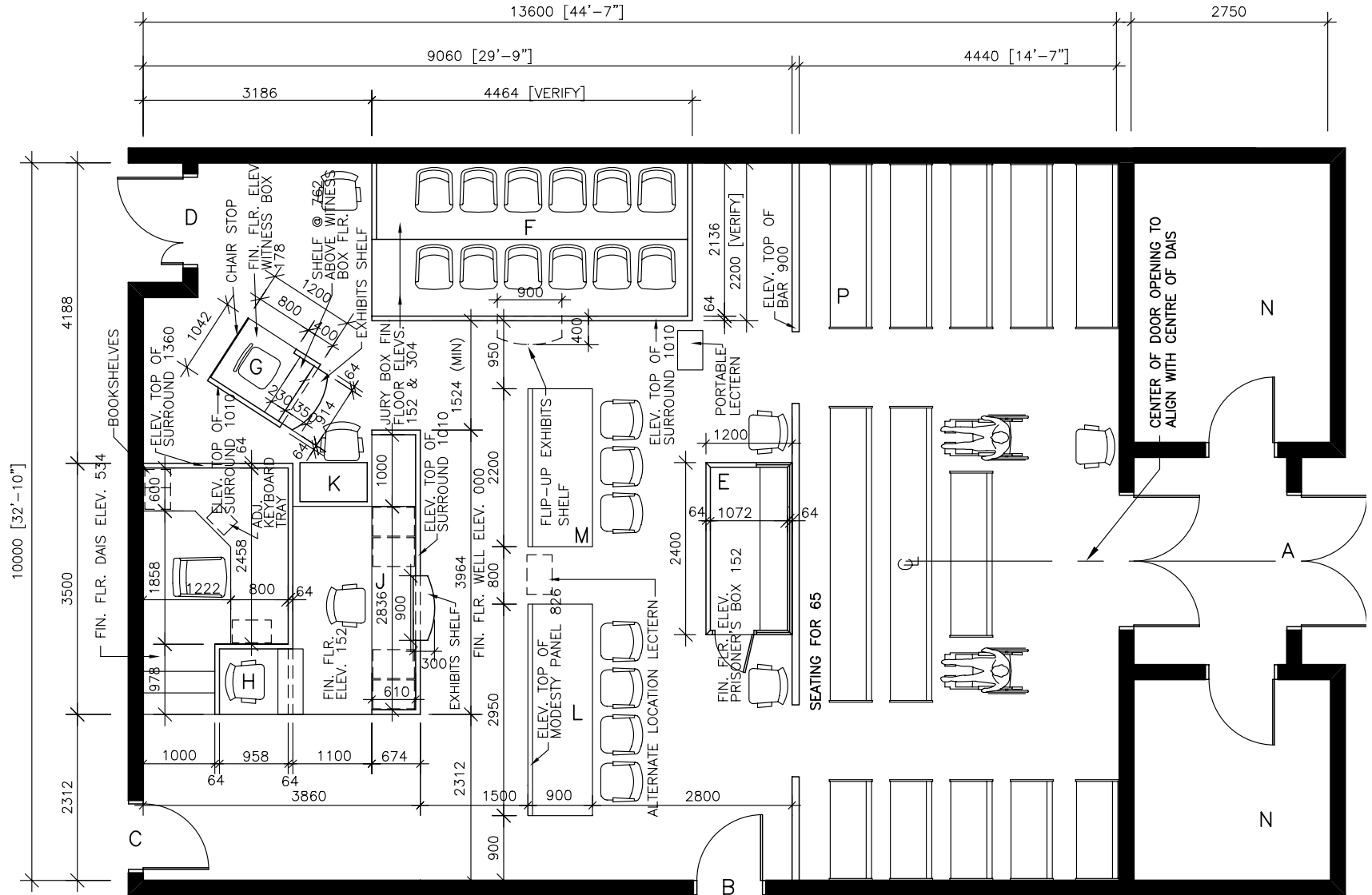
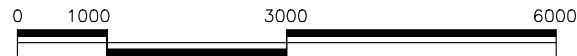


FIG: L18 - ALTERNATE JURY COURTROOM



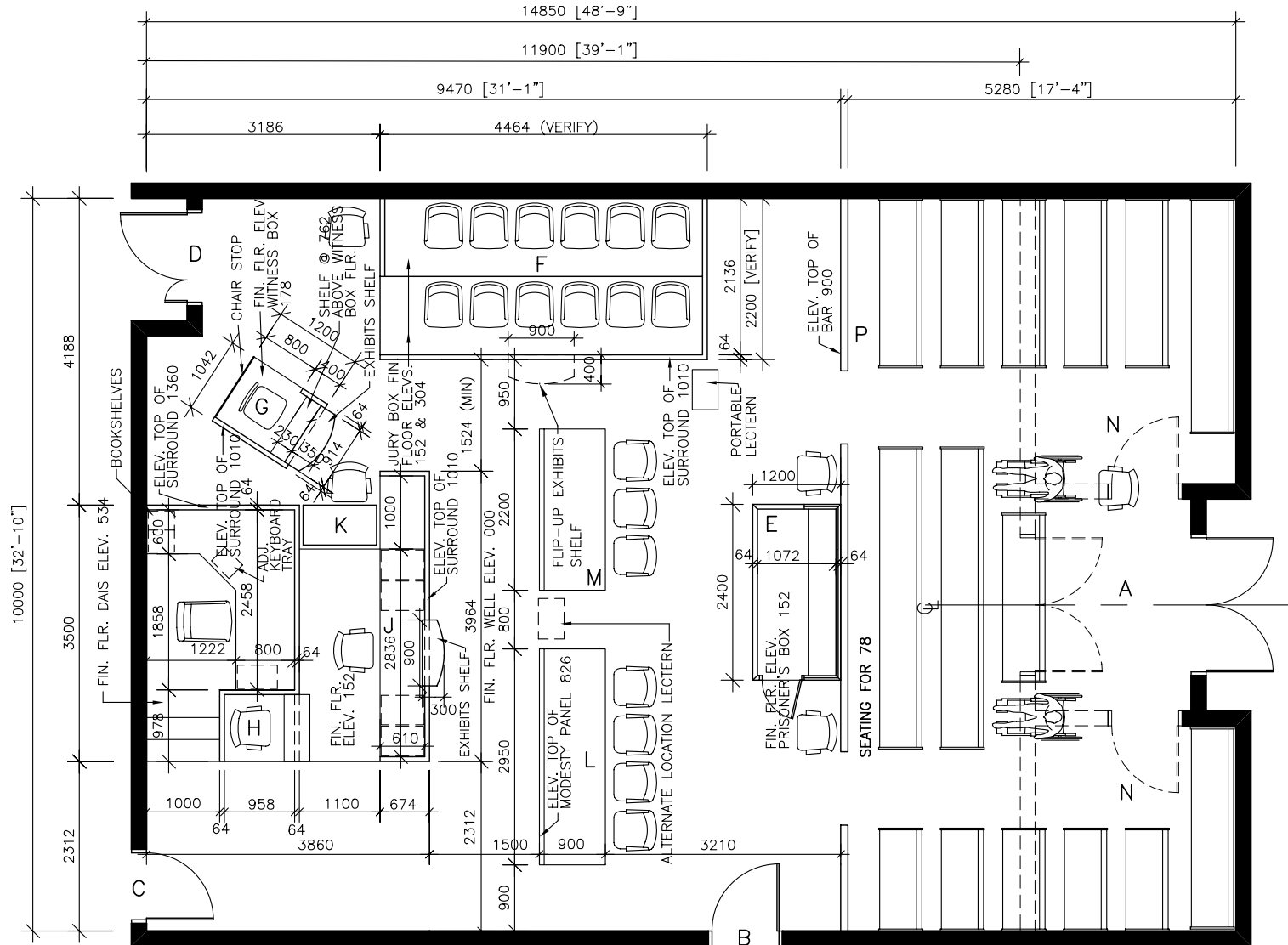
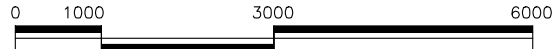


FIG: L19 - ALTERNATE JURY COURTROOM



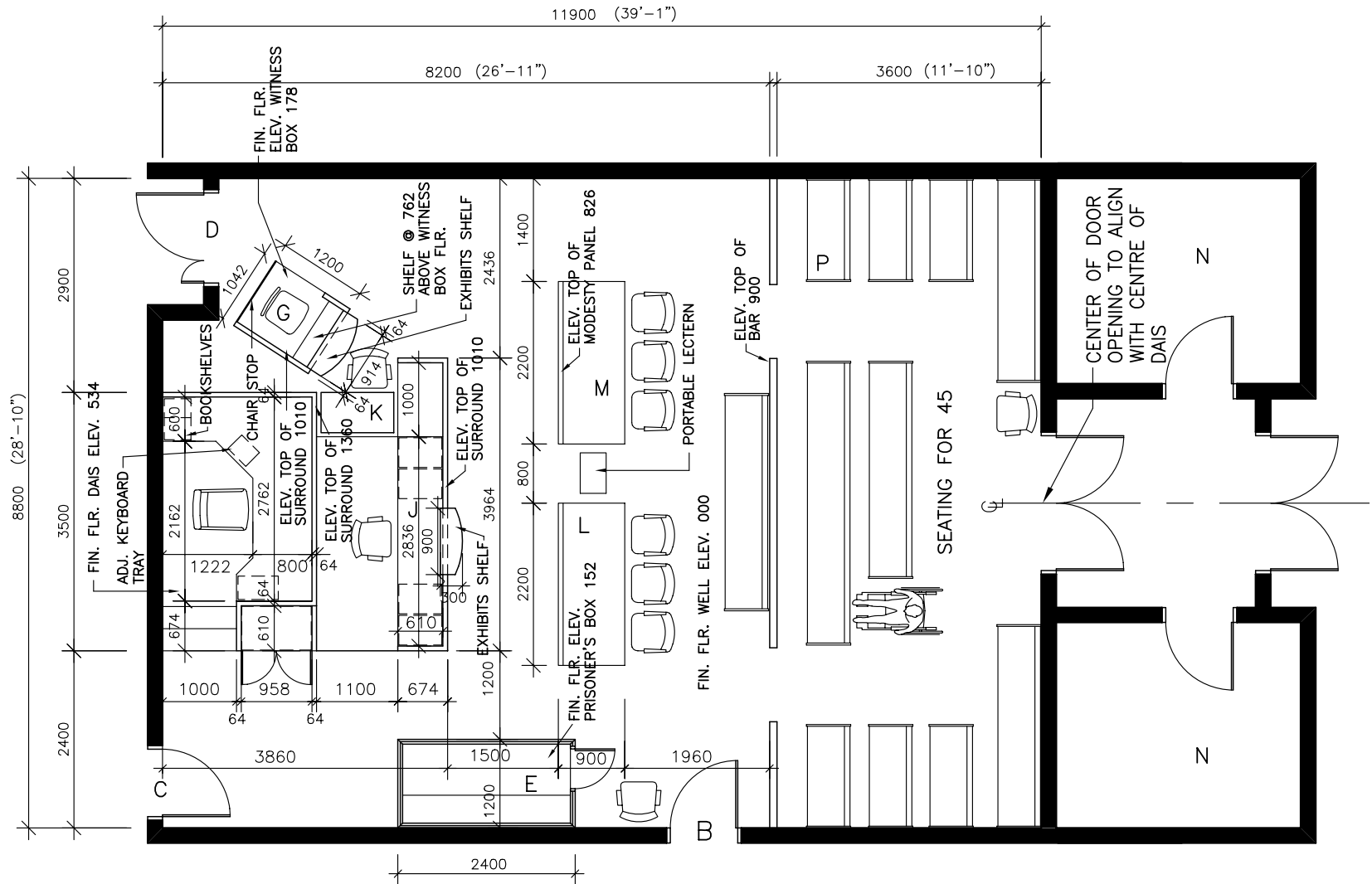
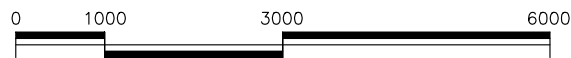


FIG: L20 - STANDARD NON JURY COURTROOM



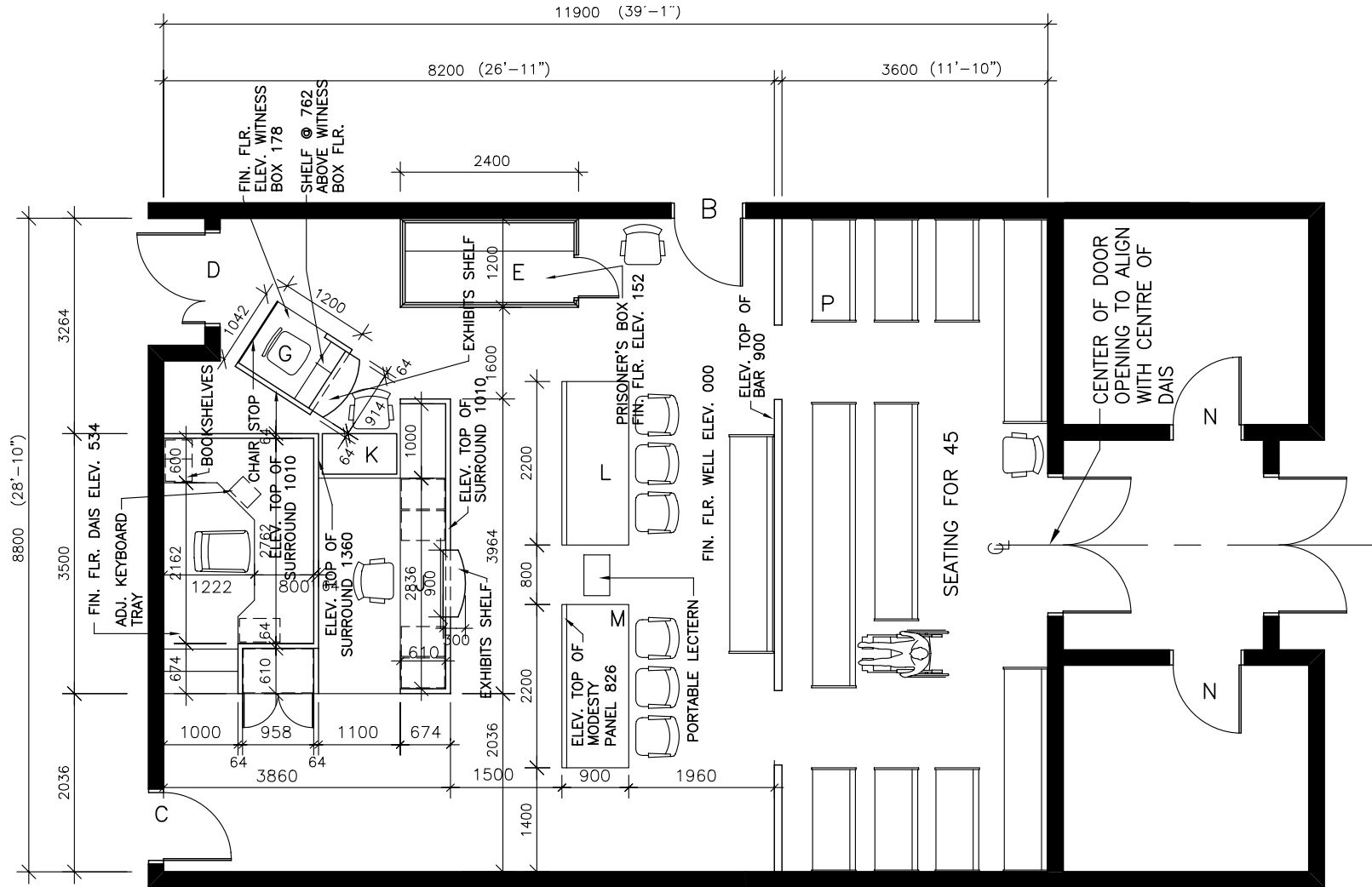
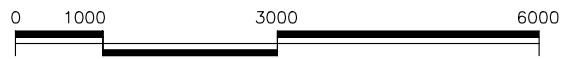


FIG: L21 - STANDARD NON JURY COURTROOM
ALTERNATE ACCUSED BOX ARRANGEMENT



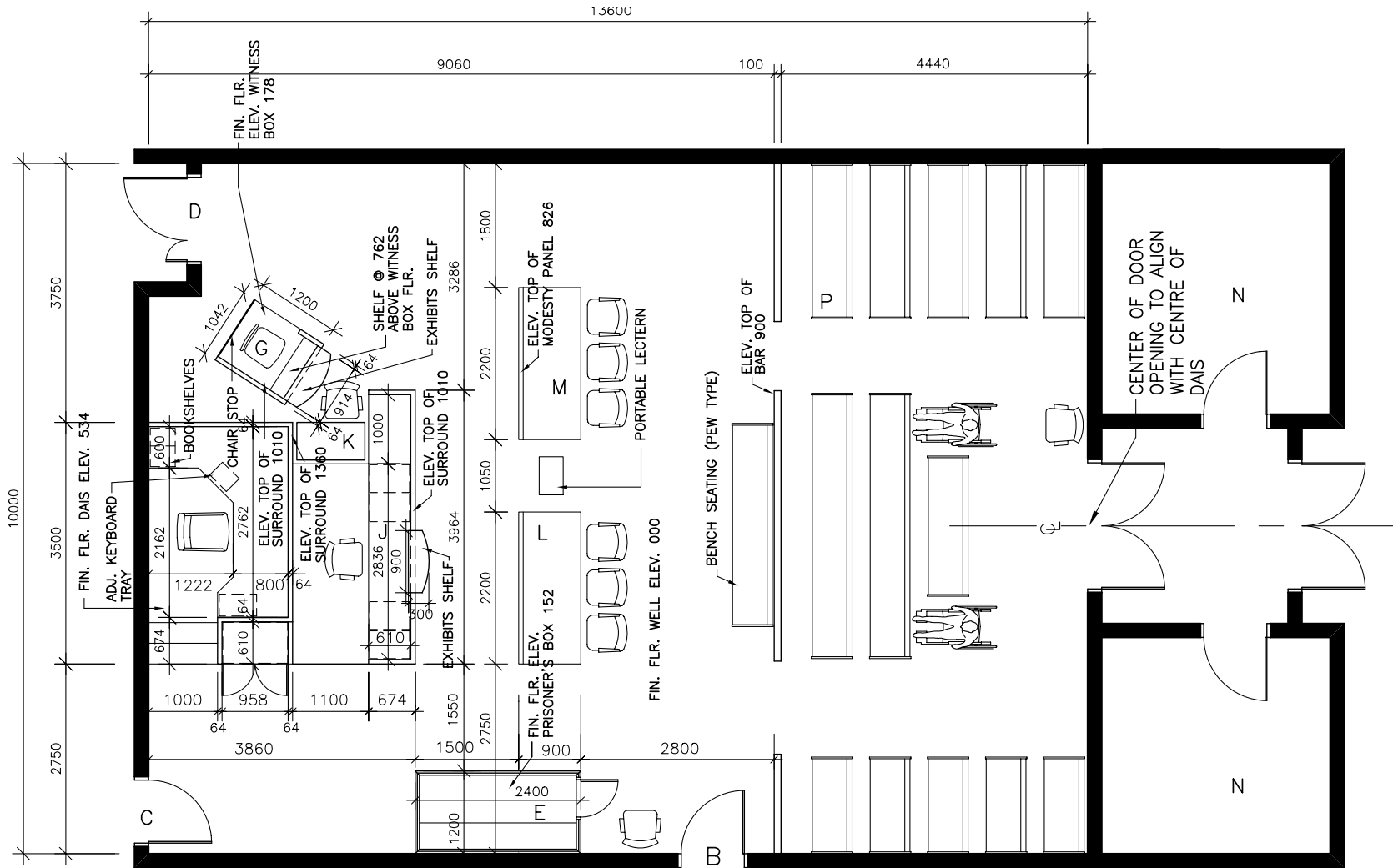
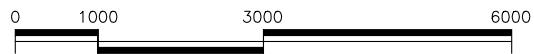


FIG: L22 - ALTERNATE NON JURY COURTROOM



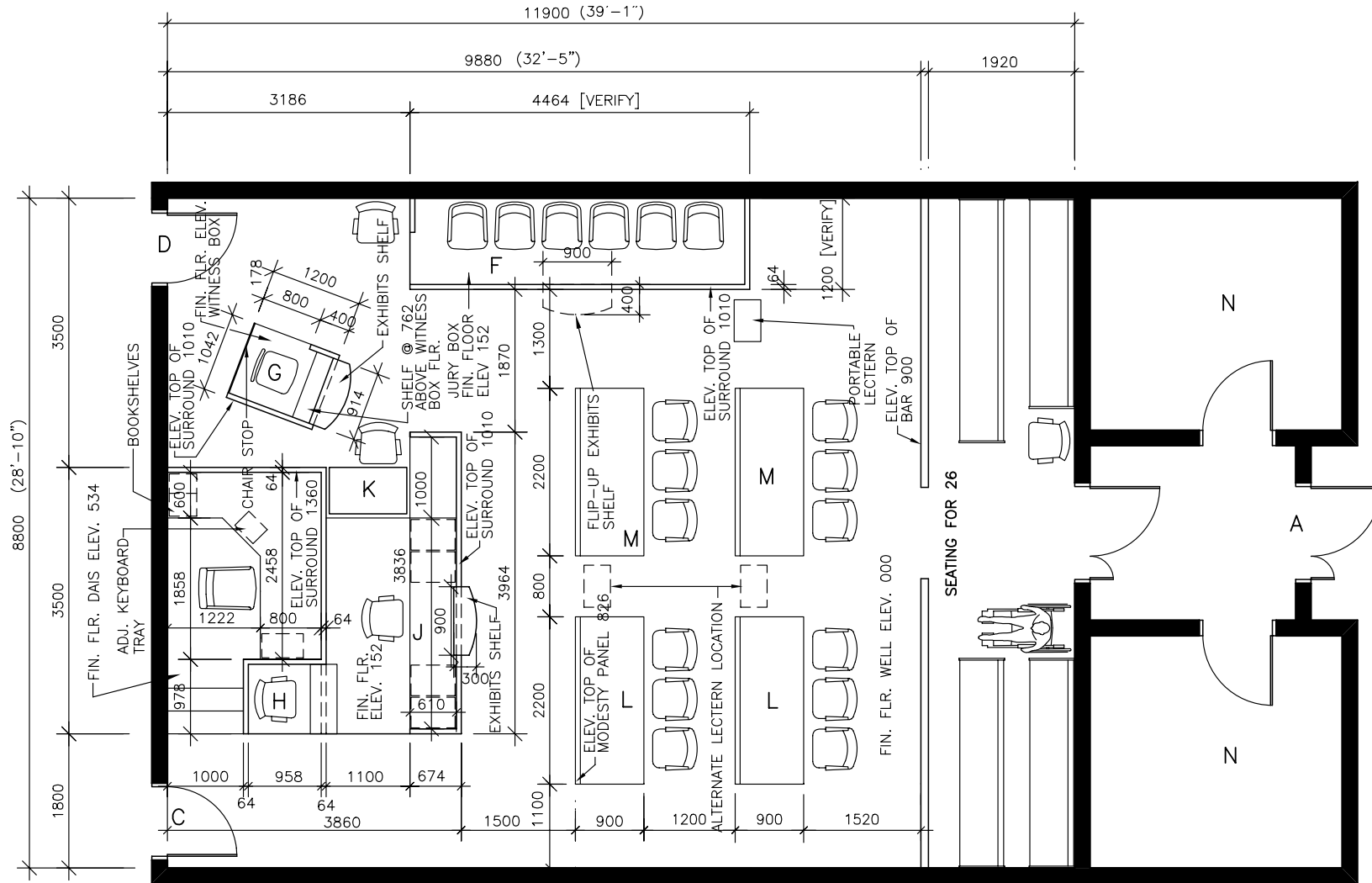
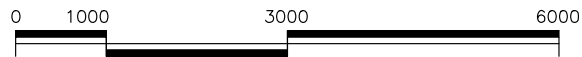


FIG: L23 - STANDARD CIVIL JURY COURTROOM



SECTION M
BARRIER FREE DETAILS
(prepared by Management Board Secretariat)

PURPOSE OF THE MBS BARRIER-FREE STANDARD

It is the intent of the Government of the Province of Ontario to provide Barrier Free Accessibility to all government buildings, accommodations and facilities. Barrier free design guidelines are intended to provide an indication of the minimum requirements and standards of Barrier-Free design in the built environment.

The requirement of barrier-free standards should be used as complementary to the requirements of the Ontario Building Code, Part 3.7.

The design standards described below are currently under revision in response to specifications contained in the revised 1997 Ontario Building Code, and the impact of new legislation regarding the Ontarians with Disabilities Act.

1.0 PARKING FACILITIES

Employee or Visitor:

- 1 All buildings shall be provided with a minimum of two parking spaces designated for use of disabled drivers, preferably covered and located close to the accessible building entrance (within 30m preferred).
- 2 Where more than one parking area is provided, i.e. employee and visitor parking or underground and above ground, each area shall comply individually with the parking space ratio of Barrier-Free parking spaces to regular parking spaces as follows: (1.1 requirements are included in the following):

Total parking in lot	Accessible spaces
up to 20	2 - min
up to 50	3 - min
up to 75	4 - min
up to 100	5 - min

Each additional 100 spaces or part thereof, add one additional space.

- 3 Provide signage to direct disabled drivers to parking spaces. Designate the spaces as reserved for the disabled by providing both a vertical sign mounted approximately 1.8 m from ground level and by painting the International Symbol of Accessibility on the pavement of the parking space.

- 4 Ensure parking spaces allow room for individuals in wheelchairs to get in and out of car (3.7m minimum width). This dimension includes the parking space and a 1.0 m access aisle combined. This access aisle should be permanently and clearly marked on the pavement of the space. Two parking spaces may share one access site.
- 5 Ensure that parked vehicle overhangs shall not reduce the clear width of adjacent accessible routes.
- 6 A hard even paving surface shall be provided. Gravel and other loose materials are not acceptable.
- 7 An accessible path of travel from these designated parking spaces should lead directly to the selected accessible entrance without crossing drive-ways or passing behind parked cars.
- 8* Provide passenger drop-off zone located or near primary entrance. Provide a canopy or overhang if possible. Ensure a minimum overhead clearance of 2750 mm to allow passage of vans, etc.
- 9 Provide curb cuts as required (minimum width 914 mm maximum slope 1:8, textured for identification). Ensure that curb cuts at Barrier-Free parking spaces are located so they will remain accessible and not be blocked by the parking of a vehicle. Level changes at curbs in excess of 150 mm must be treated as ramps.
- 10 Maximum cross fall permitted on parking spaces shall be 2%.
- 11 Where accessible parking spaces are provided in an underground or basement level parking area, ensure that the entrance doors to the building access or elevator lobby from this level are equipped with a semi-automatic power door opener.

2.1 EXTERIOR CIRCULATION

- 1 Accessible exterior routes within property boundaries shall lead from streets, public transportation stops, passenger loading zones and parking areas to at least one main accessible entrance.

Buildings within a common site shall be connected by accessible exterior routes connecting to accessible building entrances. To the extent possible, accessible routes shall coincide with routes for the general public.

- 2 All public walks at least 1.6m wide. In retrofit situations, where this is not possible, provide passing areas 1.6 x 1.6 m minimum, at intervals throughout the route.
- 3 Avoid long paths of travel. Provide resting areas with a bench plus adequate adjacent space for the parking of a wheelchair at intervals, located out of the general path of traffic.
- 4 Street furniture such as benches, etc., should be located out of main paths of travel and should not protrude into the walkway and path of travel.
- 5* Avoid exterior ramps; make gradients less than 1:20 where conditions allow. Ramps should be used in combination with stairs, as different individuals find one or the other easier to use..
- 6 All walks shall be of a hard, even continuous common surface, not interrupted by steps or abrupt changes in level and should drain rapidly. Avoid rough uneven or unstable surfaces such as cobblestones, flagstone or gravel.
- 7 Cane detectable linear strips or warnings used to define the edges of crosswalks, walkways or at any hazardous situation are recommended.
- 8* Walks should be free of obstructions such as signs, trees, parking meters, gratings, manhole covers, etc. Where such obstructions are unavoidable, ensure that a cane detectable warning is provided.
- 9* Where gratings cannot be avoided in walkways the spaces between the parallel bars in the grating should be maximum 13mm wide. Gratings and manhole covers should be flush with the walkway
- 10* Where gratings have elongated openings they should be placed so that the long dimension runs perpendicular to the dominant pedestrian traffic movement.
- 11 Where walks are depressed to permit vehicular crossings, provide a Detectable Warning Surface on either side of the depression.
- 12 Where areas adjoining or intersecting an accessible route such as an overhanging stair, do not provide minimum clear head room of 1980 mm, a cane detectable guardrail or other barrier shall be provided below.

EXTERIOR AMENITIES

- 13 Where facilities or amenities such as playground equipment is provided, care shall be taken to select units that are designed to provide accessibility to users in wheelchairs.
- 14 Where picnic tables are provided within a site, ensure that at least one picnic table is placed on a paved surface, rather than grass and is reachable by way of an Accessible Path or Travel.

2.2 ENTRANCES AND EXITS

- 1 The accessible entry shall connect to accessible external and internal circulation routes,
- 2 Wherever possible the main entrance and/or the most commonly used entrance shall be the accessible entrances.
- 3* Provide more than one accessible entrance for persons in wheelchairs where possible.
- 4 Where the accessible entrance is not obvious, use signage to clearly indicate its location.
- 5 At entrances that are not accessible, provide directional signage indicating the location of the nearest accessible entrance.
- 6 In new construction, it is highly desirable that all entrances be designed to be accessible without the use of ramps. Exterior ramps are not recommended and any level change should be accommodated inside the building. Where the use of exterior ramps is unavoidable, it is recommended that they are located in a sheltered location, offering protection from the build up of snow and ice.
- 7* Provide a sheltered entrance usable by a person in a wheelchair.
- 8 One door in each set or group of entrance doors shall be equipped with semi-automatic push button operated device complete with manual shut-off switch. (Power door openers are required on entrances in buildings of Group B Division 2 major occupancy and buildings of Group A, D, or E major occupancy.)

- 9 In multiple door entries where power operators are required, provide operators on one leaf or one pair of doors.
- 10 Push buttons must be identified, positioned to be easily located and used so that a person in a wheelchair activating the button is not in the way of the opening door.
- 11 Provide signage, i.e. International Symbol of Accessibility, to indicate which door is power operated.
- 12 Exterior doors which are not equipped with semi-automatic operating devices shall be equipped with delayed action door closers to allow physically disabled person time to enter or leave.
- 13 All exterior entrance doors shall be operable with a minimum amount of strength or pressure, 38 N maximum.
- 14 Door handles shall be easy to grasp and operate. Lever type handles and push or pull plates which do not require grasping and turning motions are recommended.
- 15 Ensure the floor on the inside and outside of each doorway is level for a distance of 1.5m from the door.
- 16 Minimum distance between two doors in series shall be 1200mm plus the width of the door which swings into the space between the two doors.
- 17 Large glass surfaces located at entrances or exits shall be identified with **highly visible** decals or symbols of a contrasting colour. In new construction, large areas of glazing shall be designed in such a way so as to be clearly differentiated from adjacent doorways or openings.
- 18 All fire doors and exits should be accessible to, and usable by, persons in wheelchairs (i.e. at grade level).
- 19 Do not provide loose floor mats at entrance doors as wheelchairs will not roll freely.
- 20 Entrance shall conform to Figure M13.
- 21 Doors and frames should be Colour/Brightness contrasted from their surroundings.

2.3 RAMPS

The allowable gradient for ramps ranges from 1:20 to a **maximum slope of 1:12**. A gradient less than 1:20 is considered a slope and does not have to comply with the requirements for ramps.

Ramps should be used in combination with stairs as some people with mobility problems find stairs easier and safer to negotiate.

- 1 Handrails must be provided on both sides of a ramp and must conform to both minimum and maximum dimension between the handrails. Refer to Figures M6 and M7. The maximum distance between handrails is important as many wheelchair users do not wheel themselves up or down a ramp but use the handrails to pull themselves up the incline or to control their speed on the way down.
- 2 The inside handrail on a switchback ramp shall be continuous.
- 3 Handrails shall be a minimum of 32 to maximum of 40 mm diameter, complete with return bends on the required extensions at top and bottom of ramp.
- 4 Clearance between handrail and adjacent wall 40 mm minimum.
- 5 Surface of ramps shall be slip-resistant, glare free and well draining.
- 6 Provide directional signage to ramp location.
- 7 Ramps and handrails shall conform to Figures M6 and M7.
- 8 Exit ramps shall have a wall or well secured guard on each side.
- 9 Exterior ramps are not recommended. If no option other than an exterior ramp exists, it is highly desirable that the ramp be sheltered from rain and snow.

2.4 STAIRS AND STEPS

- 1 All stair nosing shall be non-slip and shall not have abrupt configurations. A smooth nosing design is desirable.
- 2 Open riser designs are not acceptable.
- 3 Nosings/front edges of treads should be Colour/Brightness contrasted with riser and tread: lighter colour than tread and visible from the top and bottom of the stairway.
- 4 Handrails shall continue without a break throughout any one flight and where possible for the full stairway except where other paths of travel intercept such stairways.
- 5 Extend handrails 300mm beyond the top riser and 300mm plus the width of one stair tread beyond the bottom riser.
- 6 Ensure that all handrails are designed so they do not become a hazard, i.e. ends should return smoothly to a wall, the floor or posts.
- 7 Ensure handrails are easy to grasp, 32mm minimum to 40mm maximum in diameter is preferred.
- 8 Ensure clearance between handrail and adjacent wall is 40mm minimum.
- 9 All stairs and landings shall be well lit and free of obstructions.
- 10 All stairs and exits identified by signage.
- 11 Stairs and railings shall conform to figures M10 and M11.
- 12 Provide a detectable warning strip, 900 mm in depth recommended, at the top of stairs. This warning strip should extend the full width of the stair and be differentiated from the surrounding floor material in terms of both colour and texture.

2.5 INTERIOR CIRCULATION

CORRIDOR AND PASSAGEWAYS

A Barrier-Free path of travel as defined by the OBC is a minimum clear width of 1060 mm.

- 1 Partial two-way circulation to accommodate a wheelchair user plus an ambulatory person passing side by side requires a minimum width of 1370mm.
- 2 Full two-way circulation to accommodate two wheelchair users passing side by side requires a minimum width of 1830mm.
- 3 Ensure passageways and corridors are free from projections into the space up to a height of 1980mm to avoid hazards for the visually impaired. Any overhead projection below this height shall be provided with a cane detectable barrier below.
- 4 Wall projections of not more than 100mm into the path of travel are permitted.
- 5 Any projection of greater than 100mm should be carried down to cane detection level of 650mm and preferably down to floor level.
- 6 Corridors and passageways shall conform to figures M14 and M18.
- 7 Where turnstiles or other restricted passageways are constructed to control the flow of pedestrian traffic, there is at least one obvious, equivalent facility usable by a person in a wheelchair.

2. ELEVATORS

* **Where elevators are provided in a building, all elevators shall comply with these requirements.**

1. **Ensure cab size is at least 1.5m x 1.5m to allow adequate space in which to turn a wheelchair.**
- 2 Mount elevator controls 900-1400mm high from the floor of the elevator cab (highest button).
- 3 Ensure controls are easy to use by people with limited vision or those with manual dexterity limitations, complete with raised numbers and Braille markings on or adjacent to the controls.

- 4 Emergency telephone with top mounted 900mm maximum above the floor with coiled handset cord of 915mm minimum in length. If located in a closed compartment, door shall be operable with one hand and shall not require tight grasping, twisting of the wrist or force in excess of 22 Newtons. Voice only emergency systems are not acceptable.
- 5 Elevator lobby call buttons 1220mm or less from the floor.
- 6 A car position indicator showing the location of the car with respect to its floor position together with an audible verbal annunciator shall be provided within the car.
- 7 A visible and audible signal shall be provided in each elevator lobby to indicate which car is answering the call and its direction of travel.
- 8 Elevator door casings on all floors shall have the floor number indicated on both sides of the door by raised Arabic numerals with centre of letter or numeral at a height of 1520mm above the floor.
- 9 Each elevator equipped with a safety ray device to open car doors if they are obstructed by an object.
- 10 Elevator doors 914mm wide minimum.
- 11 Gap between car platform and the landing 32mm or less.
- 12 Provide cab with suitable handrail mounted at 900mm maximum on all non-access walls.
- 13 Cab floor finish should be hard and non-skid. If carpet is used, ensure that it is firmly attached to floor and of a dense low loop construction.

2.7 FLOORS

- 1 Accessible floors or levels at different elevations within the same storey shall be connected by ramps or elevators.
- 2 All floors should be constructed with non-slip surfaces.
- 3 Carpeted floors shall be non-static and usable by persons in wheelchair i.e. dense loop pile construction. Underpad installation is not recommended.

- 4* All floors to be non-reflective and glare free.
- 5* Floor materials and patterns should not be visually confusing.
- 6 All changes in floor level shall be marked by change in floor texture.
- 7* Gratings in floors should have maximum openings of 13mm.
- 8* Elongated grating openings should be placed so that the long dimension of the opening is perpendicular to the anticipated pedestrian traffic pattern.

INTERIOR DOORS

- 1* Provide corridor doors with vision panels (this applies only to doors where privacy is not prime concern).
- 2 Provide push plates and pull bars on washroom entrance doors (i.e. no latch sets if possible).
- 3* Provide kick plates on all doors where wheelchair traffic is anticipated (minimum 250mm high).
- 4 All doors shall be single-hand operation and door closers shall require a minimum amount of strength or pressure to open, 22N maximum.
- 5 Lever-type door handles are preferred. Knob type hardware which requires grasping and turning is not acceptable.
- 6 Doors shall be located to provide sufficient space to manoeuvre a wheelchair on both sides of the door (minimum 600mm adjacent to latch side of door, 300 mm adjacent to opposite side of door).
- 7 Thresholds shall be a maximum of 13mm high, with bevelled edges.
- 8 All doorways shall have a minimum clear opening of 760mm.
- 9 Locate outswinging doors so they do not swing into the path of travel.

2.9 OFFICE AREAS

- 1 Corridors and aisles in office areas should provide a minimum clear width of 1060 to provide a Barrier-Free Path of Travel, as defined by the OBC, throughout the space.
- 2 Ensure accessibility is provided to all common facilities, coffee areas, xerox, etc.
- 3 Attention should be paid to the design and selection of workstation components and layouts to provide the maximum degree of accessibility achievable. Rounded corners and edges are a desirable feature. Items such as suspended file pedestals increase workstation accessibility for people in wheelchairs.
- 4 Mobile or portable furniture such as file pedestals can present a substantial hazard to the visually impaired.
- 5 Emphasis should be placed on features such as colour and tonal contrasts when making colour and material selections for office accommodation and furniture specification. **A high degree of contrast is an important element of wayfinding for the visually impaired.**
- 6 The design of lighting systems should reflect the need for adequate and even lighting levels by people with limited vision. Areas of shadow or bright pools of light should be avoided and elimination of glare is a priority.
- 7 Features such as office side light panels should be designed so as not to be easily mistaken for an open doorway by people with low vision. Integral features such as horizontal mullions are more effective than applied decals.
- 8 Automatic or robotic equipment which moves independently must be equipped with both visible and audible warning signals.

3.0 DRINKING FOUNTAINS

- 1 Provide accessible drinking fountains with spout mounted 914mm from the floor and not located so as to create a hazard to persons with visual impairment.

- 2 Use fountains that are easy to operate (lever or push-button controls are preferred).
- 3 Fully recessed drinking fountains are not acceptable. However, ensure that fountains do not protrude into an accessible path of travel more than the 100 mm allowable.
- 4 Drinking fountains shall conform to figure M20.

4.0 ACCESSIBLE WASHROOMS

Use washroom fixtures of standard design, but ensure that all fixtures are installed at the proper height for use by a person confined to a wheelchair and are still located at a convenient height for use by someone without disabilities.

- 1 Ensure that all accessible washrooms with multiple cubicles have a turning space of 1.5m x 1.5m to allow manoeuvrability of a wheelchair.
- 2 Minimum clearance between the accessible cubicle face (door) and a facing wall shall be 1400mm.
- 3 Grab-bar location and size shall comply with figures M21.
- 4 Ensure lavatories have a minimum of 735mm clearance under the bottom edge of the basin or vanity. Ensure that lavatories conform to figure M22.
- 5 Where only one Barrier-Free lavatory is provided, ensure that it is located immediately adjacent to a papertowel dispenser or hand dryer.
- 6 Ensure that faucets are not spring loaded. Lever-type faucets preferred. Electronic faucets are suitable.
- 7 Temperature of hot water supply 40.6° C maximum or exposed drains and hot water supplies shall be insulated and/or offset.
- 8 Mirror location: bottom 1020mm above floor. Full height mirrors usable by all are preferable to small tilted mirrors.
- 9 Toilet stalls shall be a minimum of 1520mm by 1520mm wide with out-swinging door at least 800mm in width.

- 10 Ensure that the inside locking mechanism is easy to operate with one hand, not requiring fine finger movement and that there is an easily graspable doorpull to facilitate the closing of the door. The use of gravity hinges is recommended.
- 11 Water closets shall be located 460mm from the centre of the fixture to the side wall and be of standard design height, 407mm minimum to the top of a seat of non-spring-up design complete with seat lid.
- 12 Toilet flush lever should be located on the transfer side of the toilet and operable with a minimum use of force or pressure. Electronic flush mechanisms are suitable.
- 13 Ensure all dispensers and disposal units are mounted in an accessible manner with the operable feature, slot or opening no more than 1200 mm max above floor.
- 14 Ensure that wheelchair accessible washrooms are clearly identified by suitable signage.
- 15 All floors to be non-slip and well drained.
- 16 Where shower facilities are provided as a building requirement, ensure that accessibility to showers for a wheelchair is provided, complete with grab bars, hand-held shower head and folding seat.
- 17 In retrofit situations, if it is not feasible to modify existing multi-station washrooms, one special unisex washroom should be provided per floor, located in a convenient, easily accessible area, preferably in the same general area as existing facilities.
- 18 The use of a second interior door creating an entrance vestibule to multi-cubicle washrooms is not recommended.

5.0 PUBLIC TELEPHONES

- 1 Provide a public telephone accessible to a person in a wheelchair and to people with hearing impairments, with the height of the coin slot located 1370mm maximum above floor with a minimum clear approach width of 813mm and with 736mm clear below telephone for wheelchair access.

- 2 Ensure at least one phone in each bank of public phones is equipped with volume control for persons with hearing disabilities.
- 3 Ensure these phones are clearly identified with suitable signage.
- 4 Ensure that accessible telephone areas are well lit.
- 5 Public pay telephones shall conform to figure M27.

6.0 CONTROLS

- 1* Light switches and all similar controls, such as fire alarms, shall be within reach of persons in wheelchairs (1220mm maximum height from floor).
- 2 Where security systems require card access, ensure all card readers are of the proximity type and do not require the insertion of a card into a slot or "swiping" through a groove in order to gain access.

7.0 IDENTIFICATION

- 1 Ensure building directory includes signage system for disabled persons in the building.
- 2 Use raised or recessed numbers or letters to identify rooms or facilities.
- 3 Elevator door casings on all floors shall have the floor number indicated on both sides of the door by raised Arabic numerals with centre of letter or numeral at a height of 1520mm above the floor.
- 4 All other signs to be mounted at a height between 1370mm and 1675mm above floor.

8.0 CAFETERIA AND COFFEE ROOMS

- 1 Ensure there is a clear passage width of 915mm between tables and in food service lanes for wheelchair users.
- 2 Ensure cutlery and food display racks are visible and within reach of a person seated in a wheelchair. Conform to figure M16.

- 3 Provide a choice of seating spaces for people in wheelchairs with a minimum of 735mm clear below table.
- 4* Ensure vending machines are of a design that is easy to operate with limited hand dexterity i.e. no flaps to lift or doors to push aside, coin slots located at a convenient height (1220mm from floor).
- 5* Provide coat rack facilities for the handicapped at 1370mm maximum from the floor.
- 6 Where staff kitchenettes and coffee rooms are provided, ensure that a 1.5 m turning area and clear floor space for wheelchair access to all appliances is provided.

9.0 MEETING ROOMS, BOARDROOMS OR COURTROOMS

- 1* Ensure a choice of seating arrangements or areas for persons in wheelchairs to sit without blocking aisles or exits.
- 2* Seating ratio for wheelchairs as follows:

100 persons	2 spaces min.
101-400	4 spaces min.
More than 400	1% of seating capacity.
- 3* Seating space requirements are as indicated on figure M26.
- 4 Assure that Assistive Listening Systems are provided in major areas of assembly where audible communications are integral to the use of such spaces as courtrooms, auditoriums, meeting rooms, etc. Magnetic induction loops, infra-red and radio frequency systems are types of listening systems which are appropriate for various applications. Ensure that seats provided with ALS shall have a complete view of the stage, podium or dais area of the space and be equipped with an adequate number of electrical outlets or other supplementary wiring necessary to support the listening system provided. Signage shall be provided to notify patrons of the availability of such a system.

10.0 RECEPTION COUNTERS

- 1 Reception/Information counters should be located in an easily visible, approachable and 'logical' spot to assist in wayfinding.
- 2 Provide a section, 1000mm min in length of reception counter accessible to a person in a wheelchair, on which to read and sign documents, counter height 815mm maximum.
- 3 A clear space under the counter of 1000mm wide x 500mm deep x 750mm high is desirable.

11.0 OPERATION AND MAINTENANCE

- 1 Operational and maintenance procedures should be established to ensure that exterior paths of travel, ramps, steps and walkways are kept free of ice and snow, ice and debris at all times of the year.
- 2 Ensure that interior and exterior circulation routes are kept clear of all temporary and or permanent objects such as garbage containers, newspaper boxes, bike racks, etc., that can pose an obstacle or hazard if not placed out of the general and accessible paths of travel.

12.0 TACTILE WARNINGS

Walking surfaces:

Tactile warning textures on walking surfaces shall consist of exposed aggregate concrete, rubber, or plastic cushioned surfaces, raised strips, or grooves. Textures shall contrast with that of the surrounding surface. Grooves shall be used indoors only.

Doors to hazardous areas:

Doors that lead to areas that might prove dangerous to the visually impaired, e.g. loading docks, boiler rooms, stages, etc., shall be made identifiable to the touch by a textured surface on the door handle or other operating hardware. This textured surface may be made by knurling or roughening or by a material applied to the contact surface. Such textured surfaces shall not be provided for emergency exit doors or any door other than to hazardous areas.

Stairs:

All stairs in enclosed stair towers or set to the side of the path of travel should have a tactile warning at the top of the stair runs (see detail sheet).

Hazardous vehicle areas:

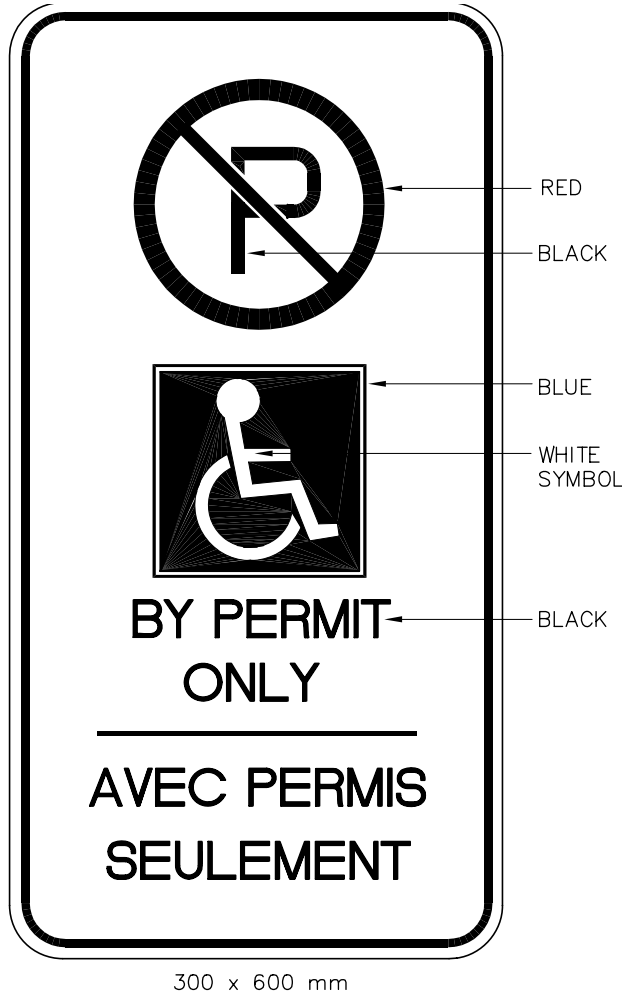
Where a walk crosses or joins a frequently used vehicular way, and if there are no curbs, railings or other elements separating the pedestrian and vehicular areas that can be detected by the visually impaired, a boundary between the areas should be defined by a continuous 915mm wide tactile warning texture.

Reflective pools and planter areas:

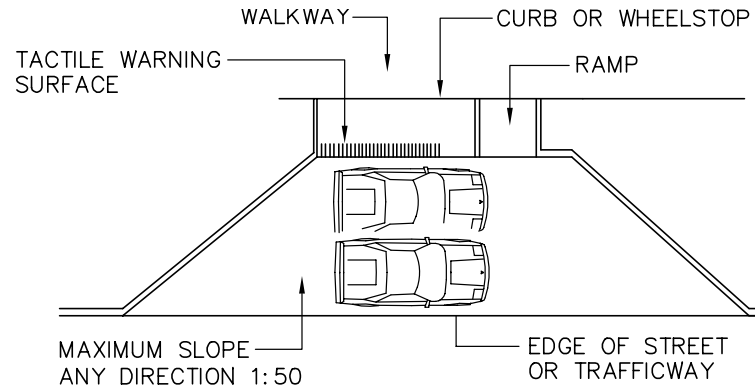
The edges of reflective pools, planters, or specimen tree plantings in walkways should be protected by railings, walls, curbs or tactile warnings.

Standardization:

Textured surfaces for tactile warnings should be standardized within a building, facility, site, or complex of buildings.

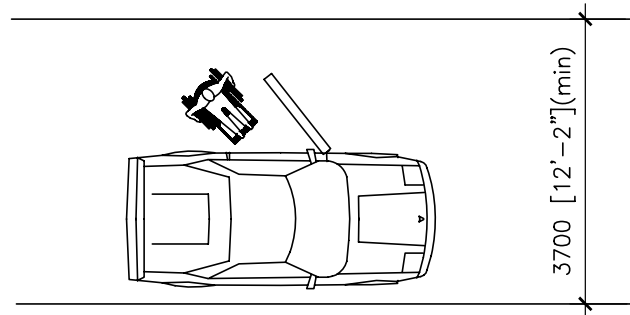


RESERVED PARKING BILINGUAL
FIG: M1



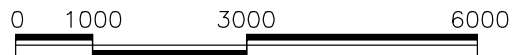
DROP-OFF ZONE

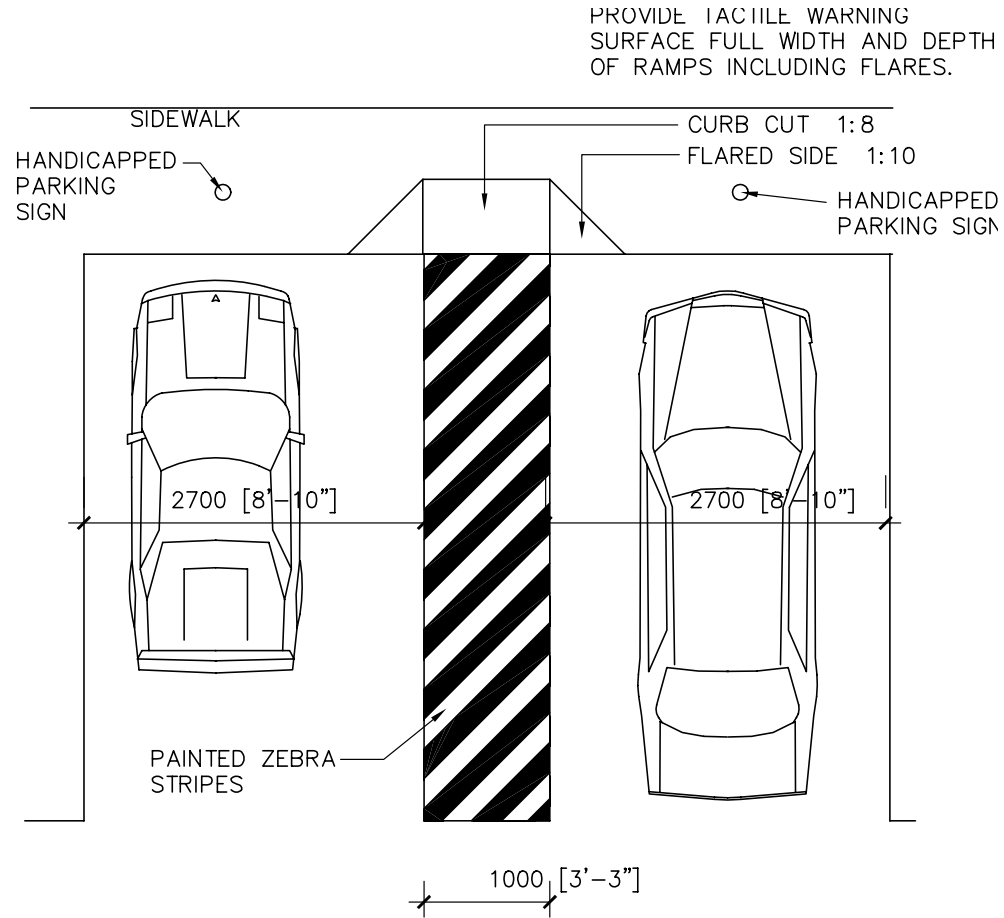
FIG: M2a



ACCESSIBLE PARKING SPACE REQUIREMENT

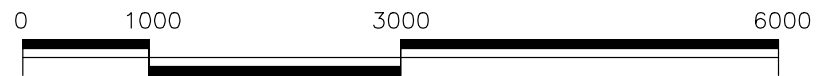
FIG: M2

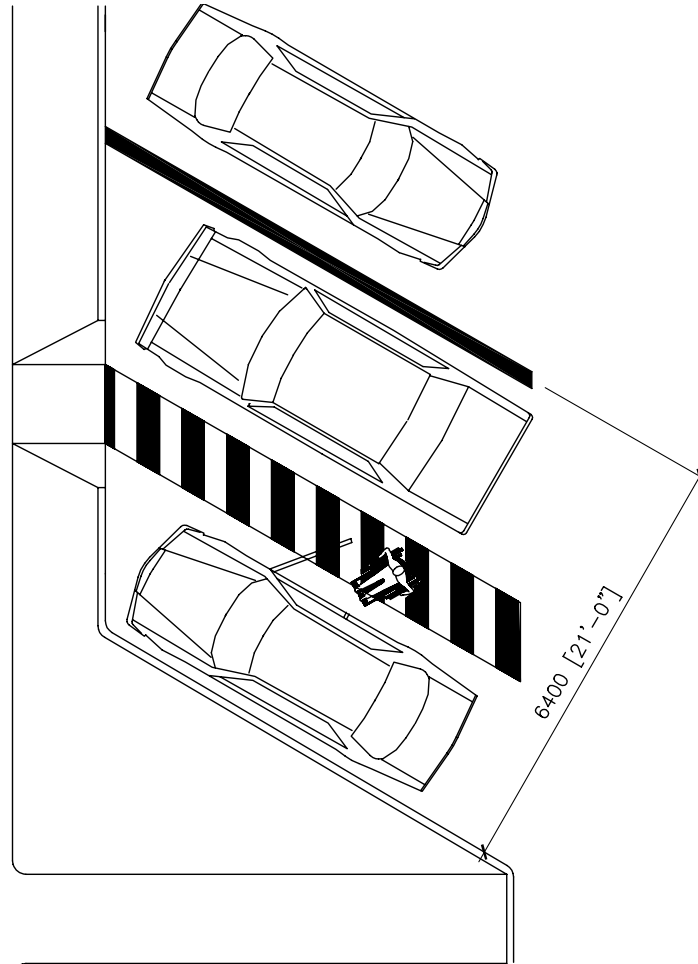




PARKING SPACE FOR HANDICAPPED

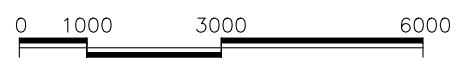
FIG: M3

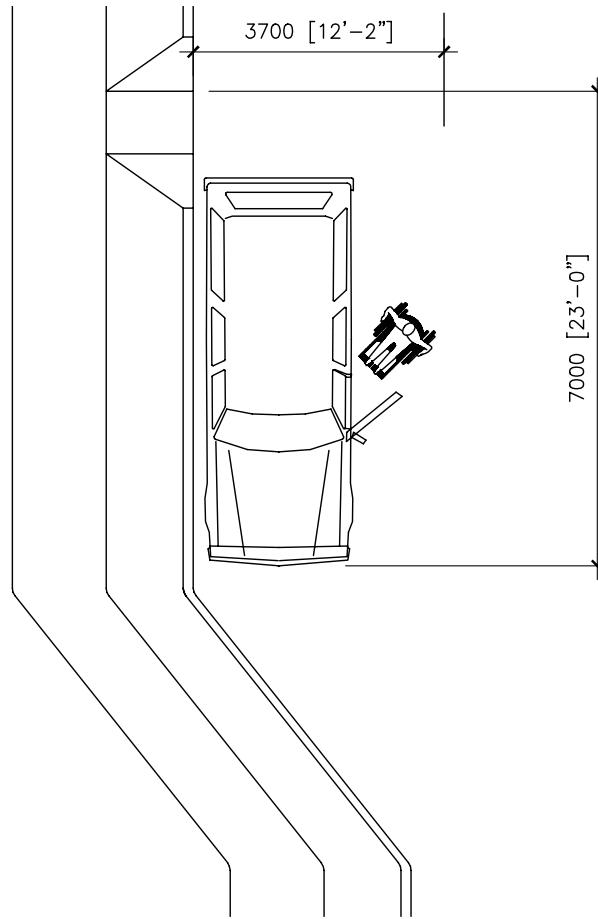




PARKING SPACES FOR HANDICAPPED
DIAGONAL PARKING WITH CURB RAMP

FIG: M4

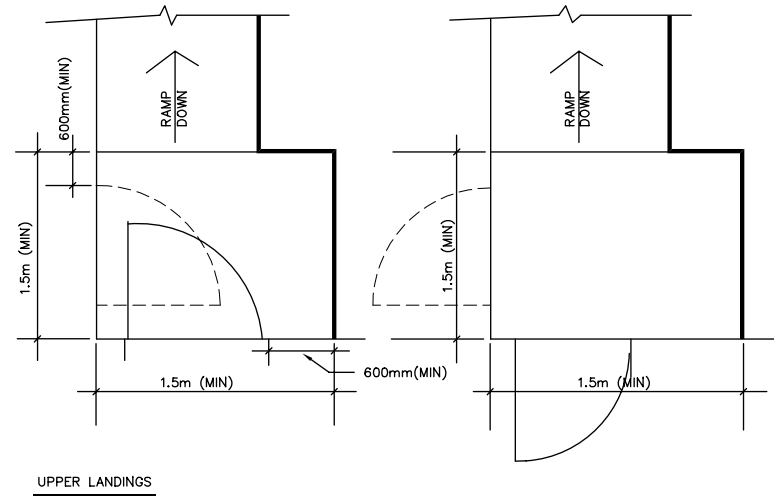
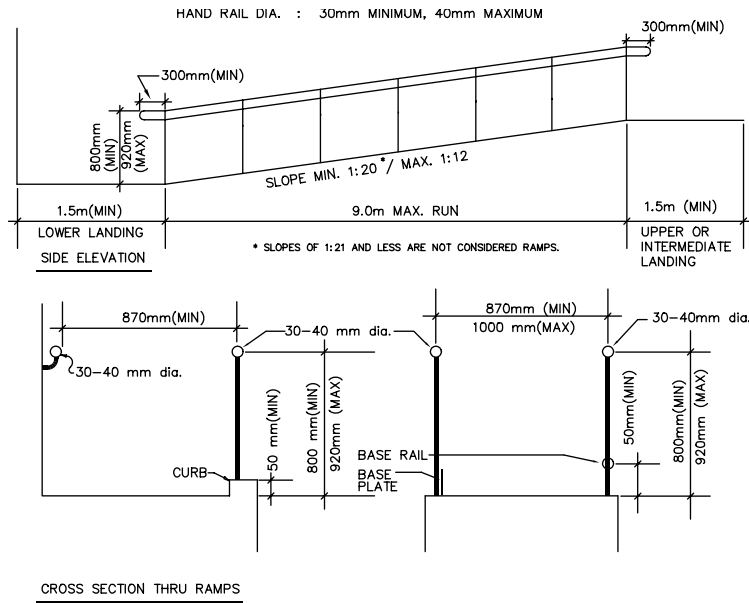




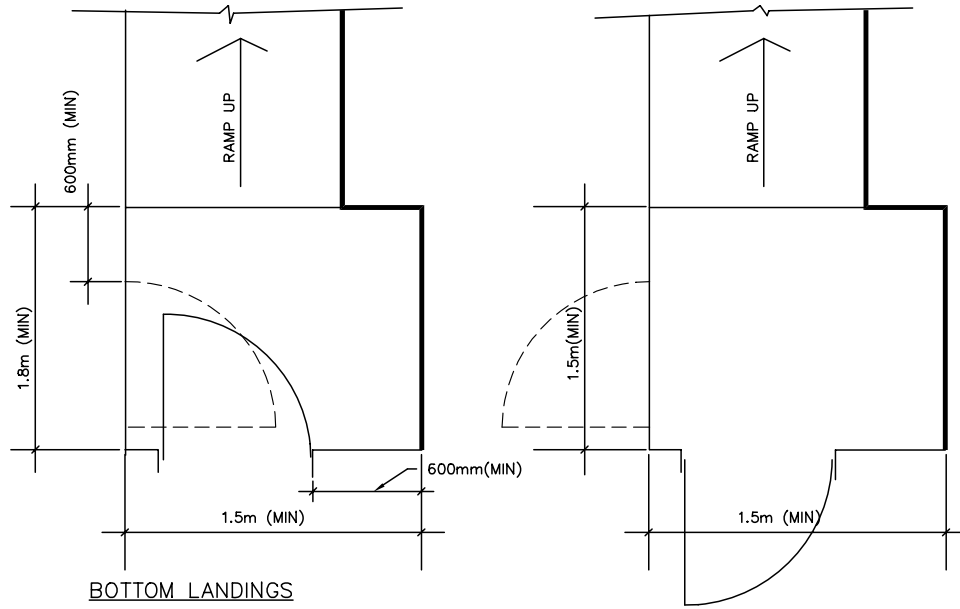
PARKING SPACES FOR HANDICAPPED
PARALLEL PARKING WITH CURB RAMP

FIG: M5

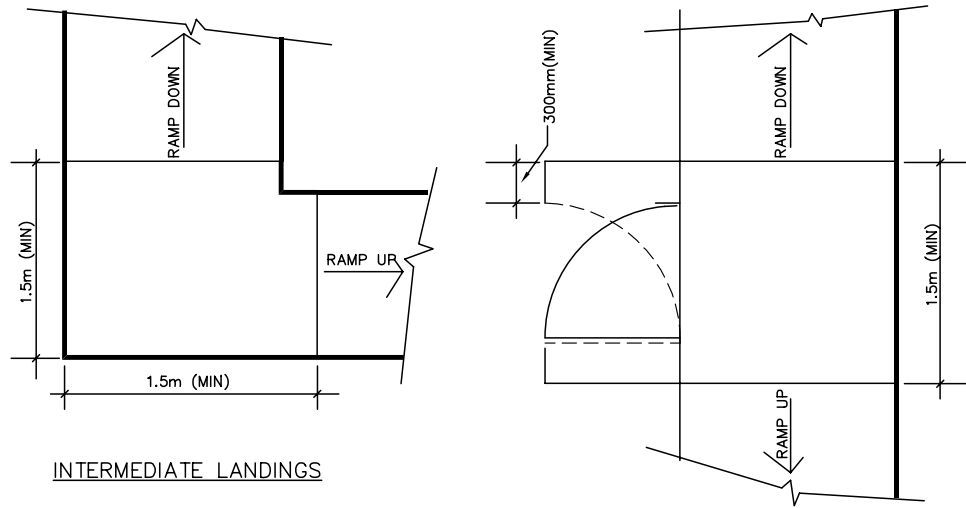




RAMP DETAILS
FIG: M6



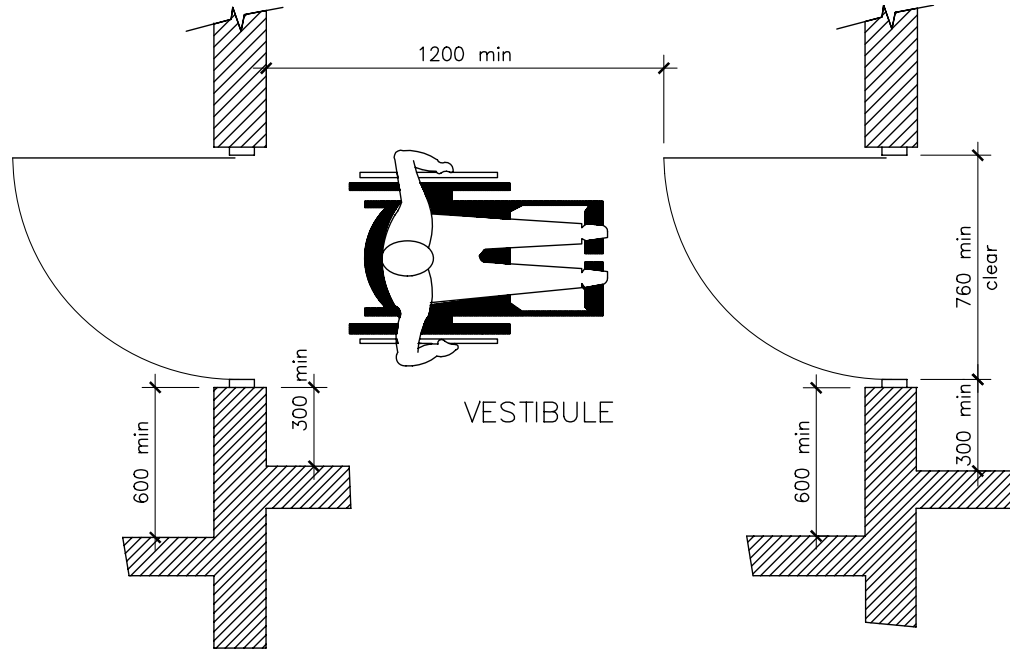
BOTTOM LANDINGS



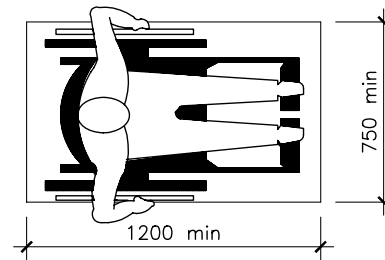
INTERMEDIATE LANDINGS

RAMP DETAILS

FIG: M7

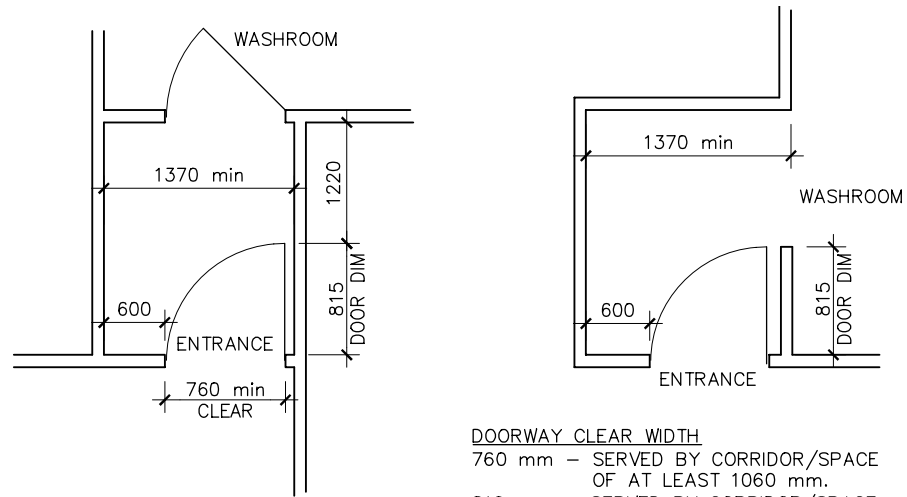


WHEELCHAIR SPACE REQUIREMENT BETWEEN DOORS IN SERIES

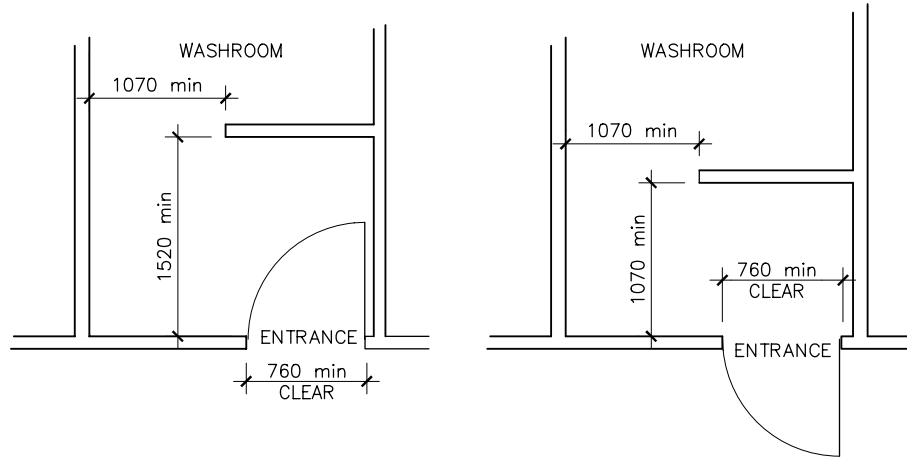


MINIMUM WHEELCHAIR SPACE

FIG: M8

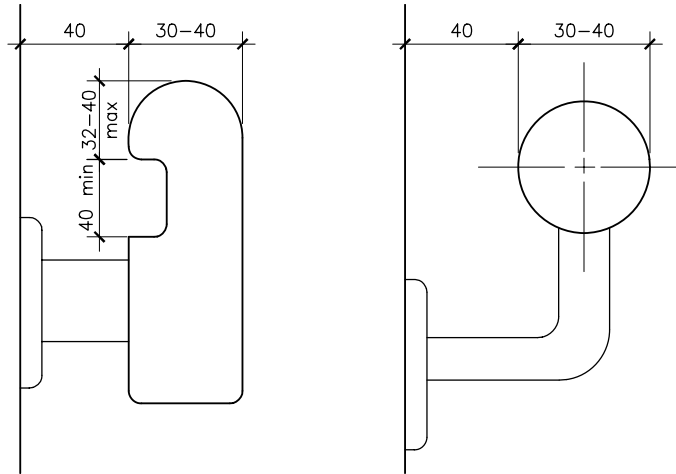


DOORWAY CLEAR WIDTH
 760 mm - SERVED BY CORRIDOR/SPACE OF AT LEAST 1060 mm.
 810 mm - SERVED BY CORRIDOR/SPACE OF LESS THAN 1060 mm.



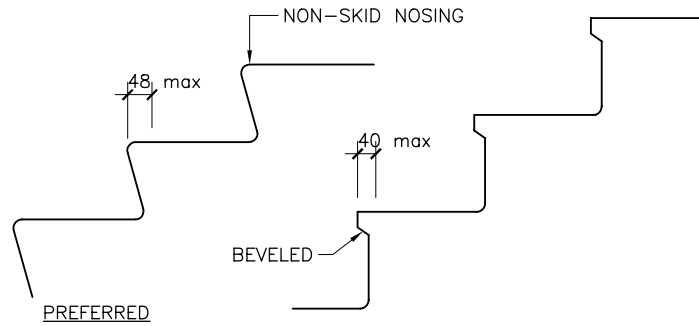
WASHROOM - PRIVACY SCREENS
 SPACE REQUIRED

FIG: M9



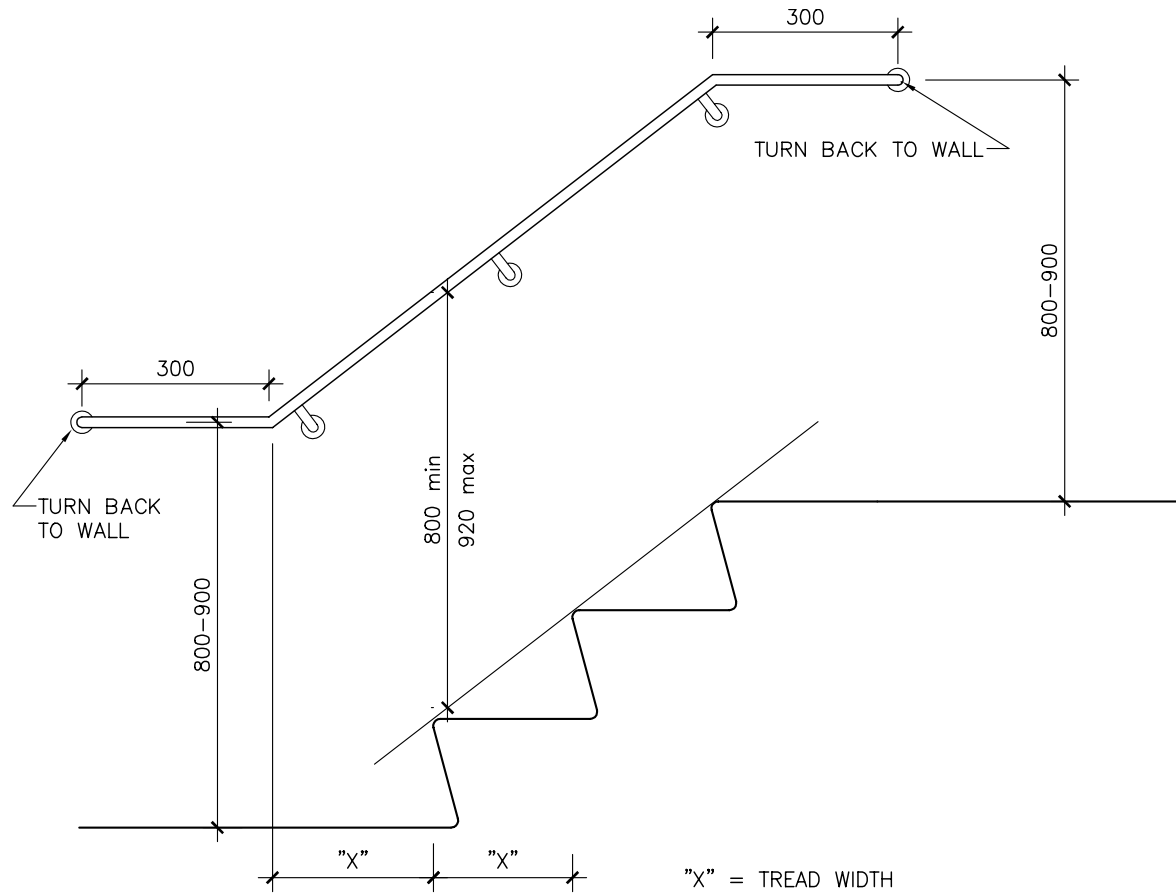
RAIL THICKNESS OR DIAMETER : 30mm MINIMUM, 40mm MAXIMUM

RAILINGS

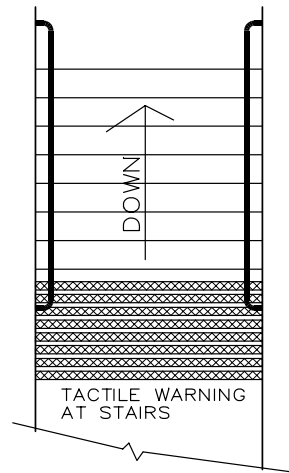
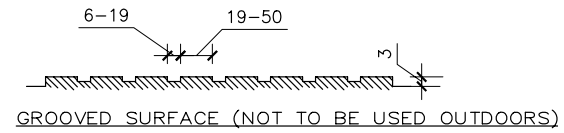
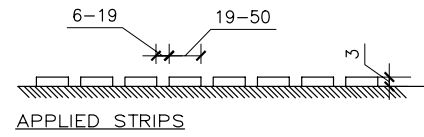
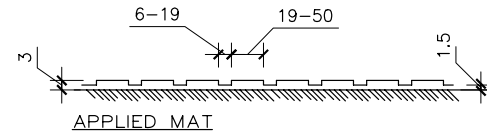
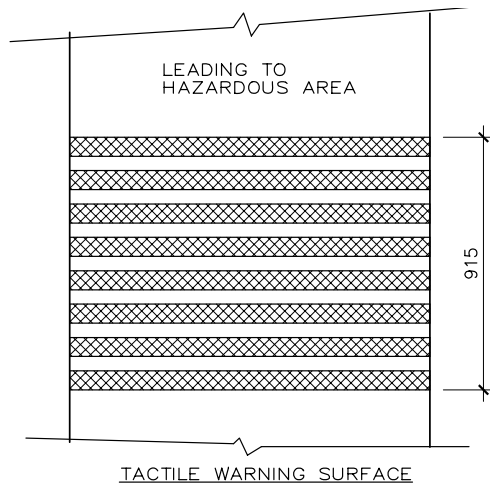


TREAD RISER

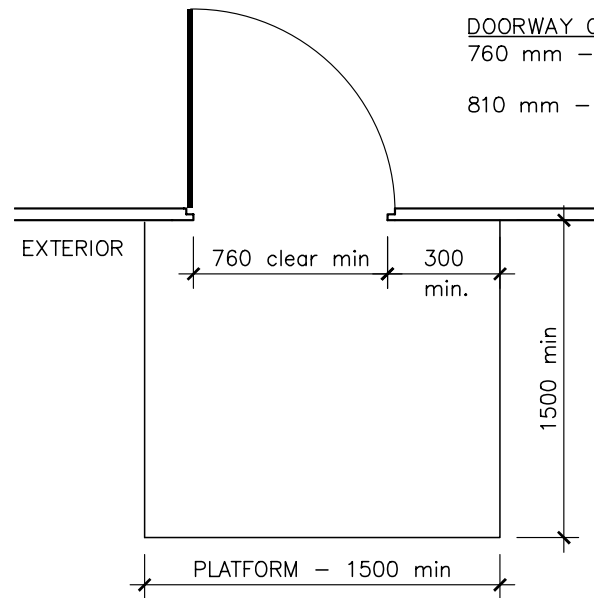
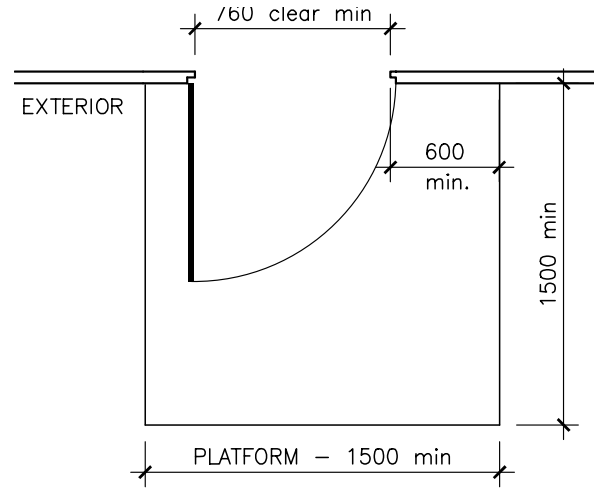
STAIR AND RAILING DETAIL
FIG: M10



HANDRAIL FOR STAIRS
FIG: M11

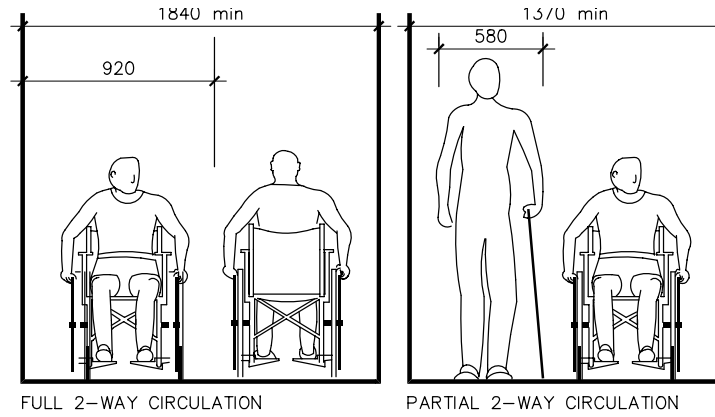


TACTILE WARNING
FIG: M12

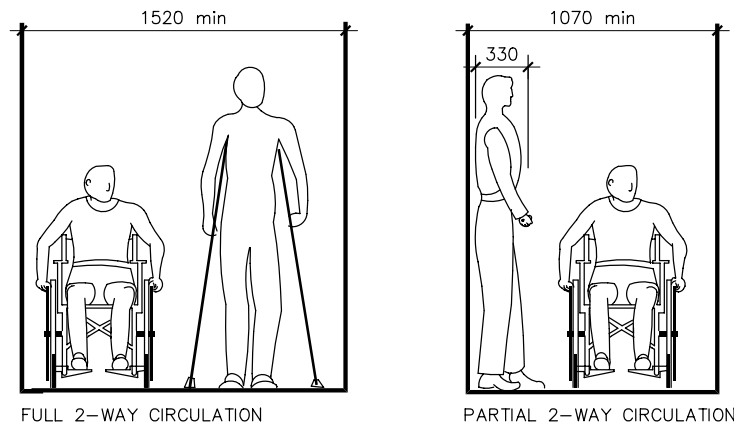


DOORWAY CLEAR WIDTH
760 mm - SERVED BY CORRIDOR/SPACE OF AT LEAST 1060 mm.
810 mm - SERVED BY CORRIDOR/SPACE OF LESS THAN 1060 mm.

EXTERIOR ENTRIES
FIG: M13

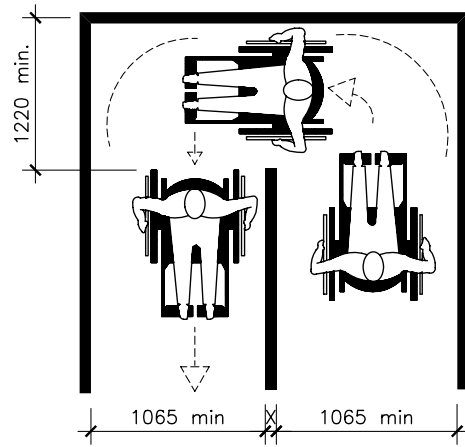
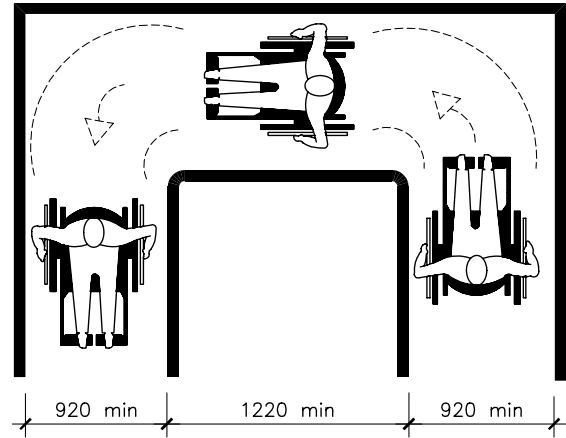


WHEELCHAIR CIRCULATION/CORRIDORS & PASSAGE



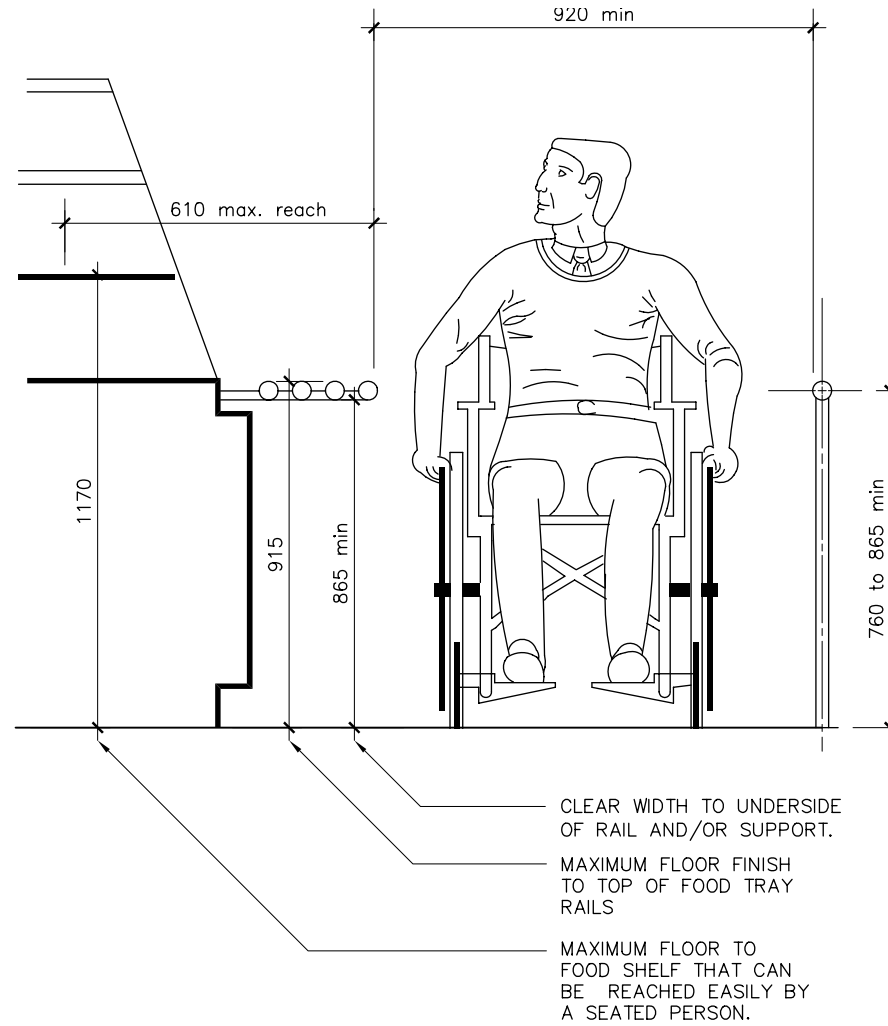
WHEELCHAIR CIRCULATION/CORRIDORS & PASSAGE

FIG: M14

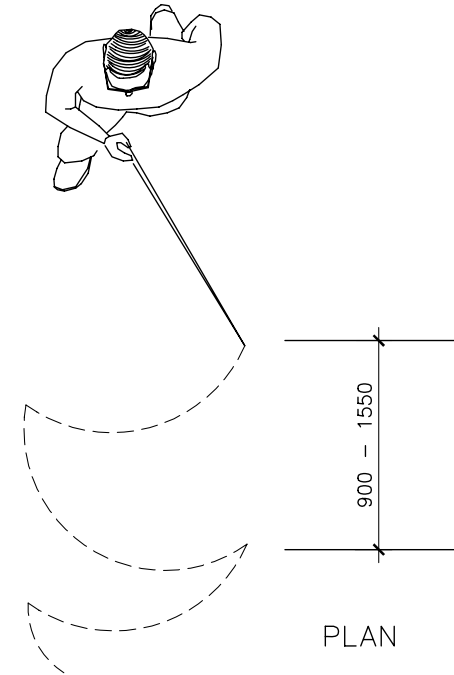
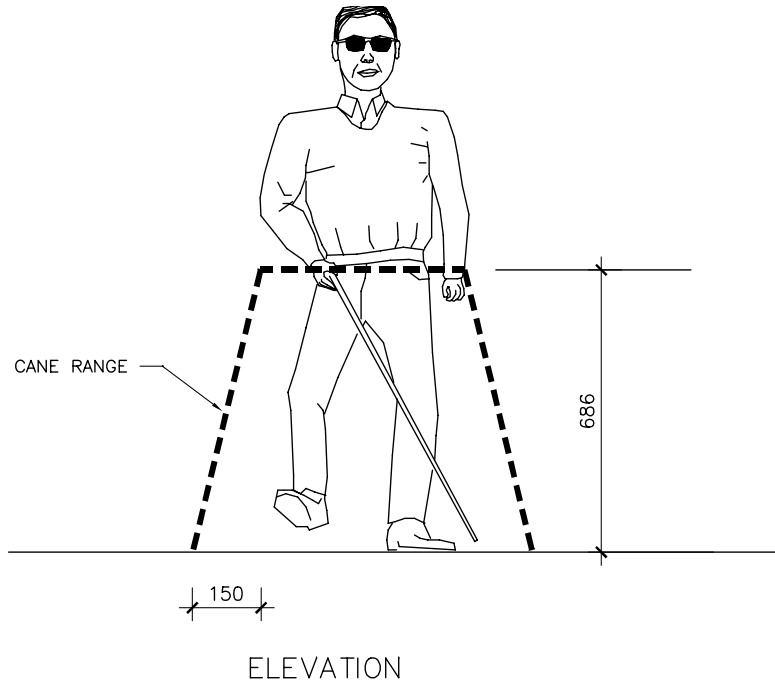


NOTE : DIMENSIONS SHOWN
APPLY WHEN 'X' IS
SMALLER THAN 1220 mm.

SPACE REQUIREMENTS – TURNS AROUND OBSTACLES
FIG: M15

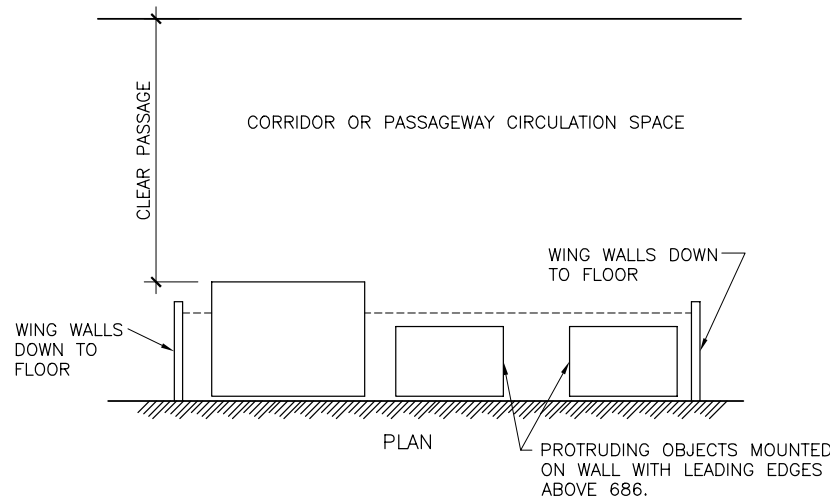
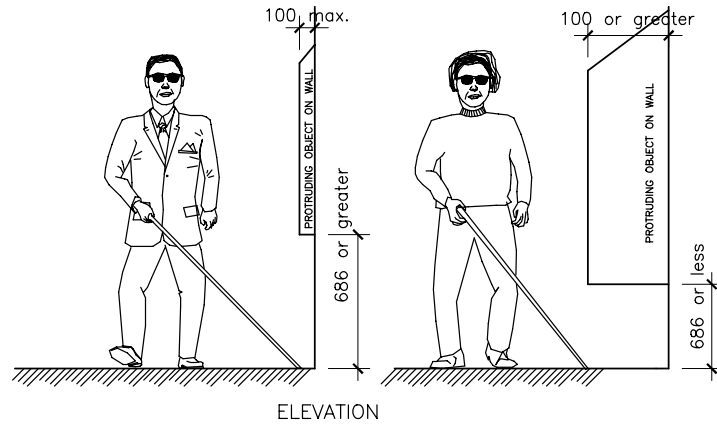


CAFETERIA LINE CLEARANCE
FIG: M16



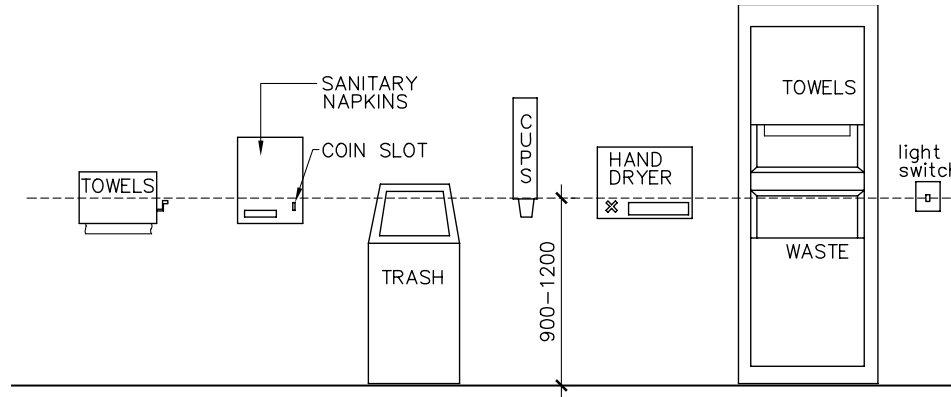
LONG CANE USE BY PEOPLE
WITH VISUAL IMPAIRMENT

FIG: M17



PROTRUDING OBJECTS IN CORRIDOR
OR PASSAGEWAY SPACE

FIG: M18

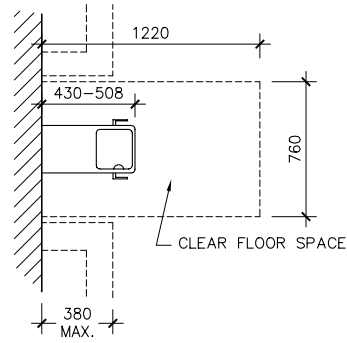


WHEN OBJECTS PROTRUDE MORE THAN 100mm FROM THE WALL WITHOUT CONTINUING TO THE FLOOR, THEY CONSTITUTE A HAZARD TO THE VISUALLY IMPAIRED. RECESSED UNITS SHOULD BE USED WHERE POSSIBLE.

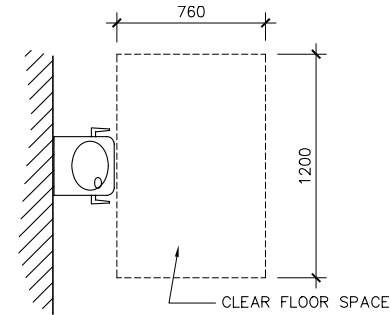
TOWEL DISPENSERS AND HAND DRYERS SHOULD BE PLACED NEXT TO LAVATORIES AS A CONVENIENCE TO THE VISUALLY IMPAIRED AND TO PREVENT THE FLOOR FROM BECOMING WET AND SLIPPERY.

WHEN TOWEL DISPENSERS, HAND DRYER UNITS, VENDING MACHINES AND APPLIANCES ARE PROVIDED IN WASHROOMS, ONE OF EACH TYPE SHOULD BE MOUNTED WITH THEIR OPERATING DEVICES (CRANKS, LEVERS, BUTTONS, COIN SLOTS, ETC.), AND WASTE RECEPTACLES NO GREATER THAN 1200 mm ABOVE FLOOR LEVEL.

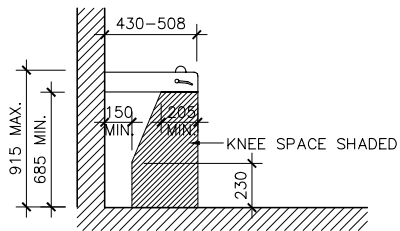
FIG: M19



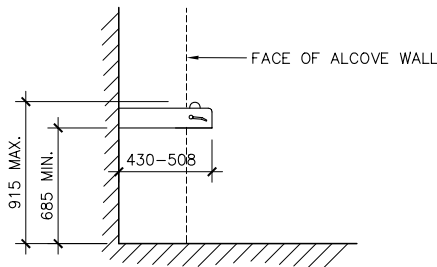
CANTILEVERED DRINKING FOUNTAIN



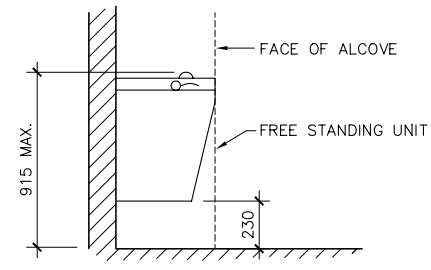
FREE STANDING OR WALL HUNG
 DRINKING FOUNTAIN



CANTILEVERED DRINKING FOUNTAIN

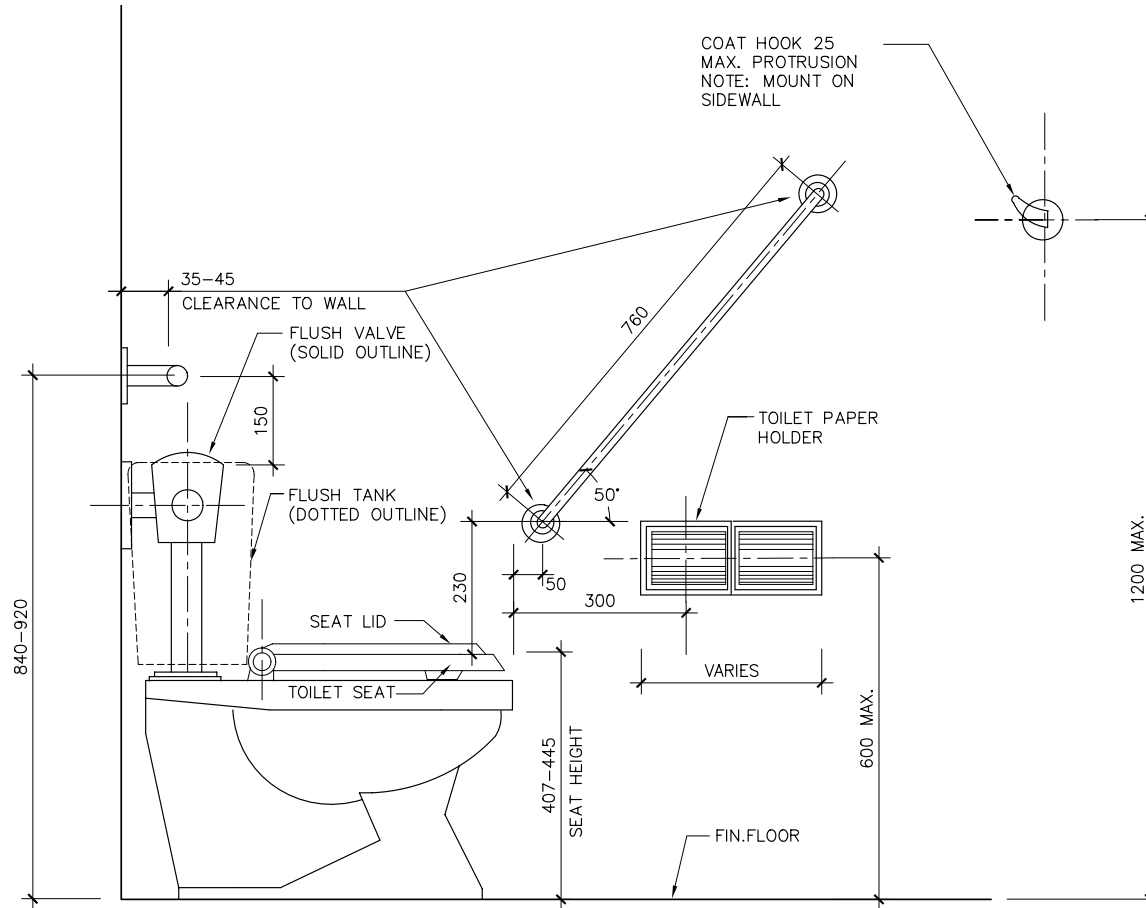


CANTILEVERED DRINKING FOUNTAIN

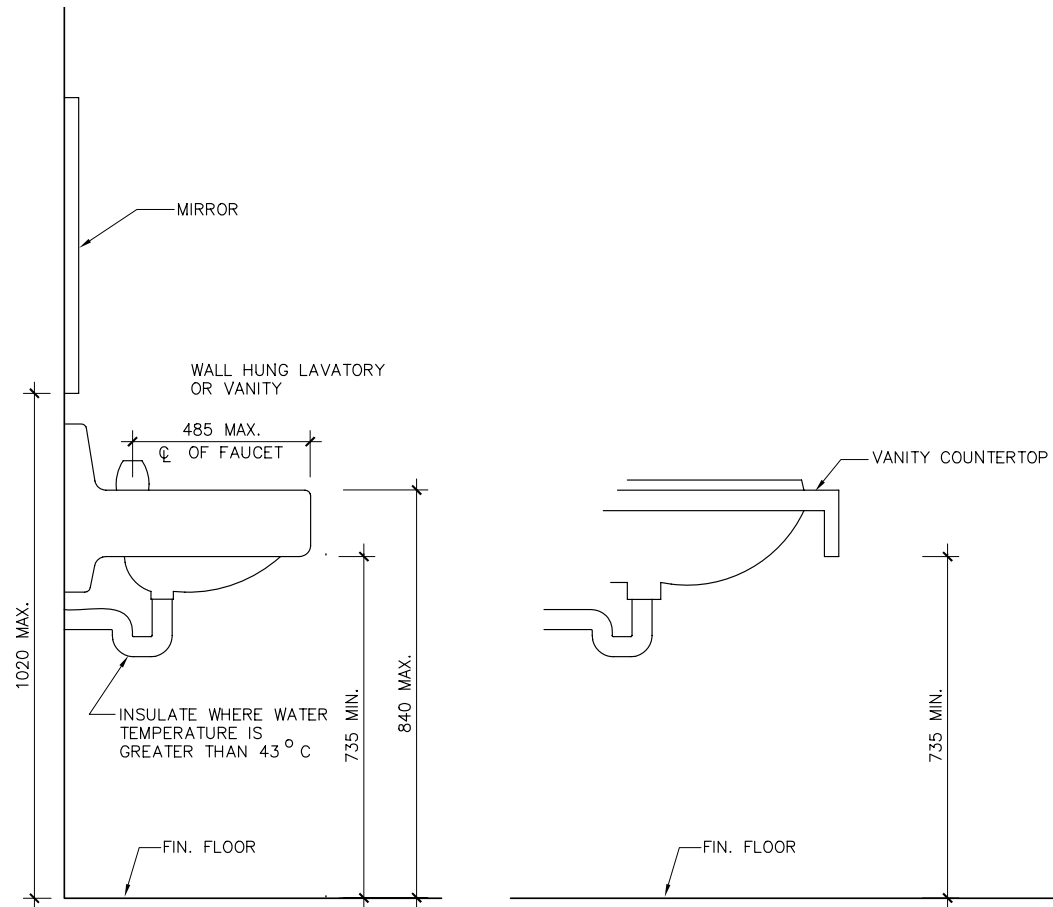


FREE STANDING OR WALL HUNG
 DRINKING FOUNTAIN

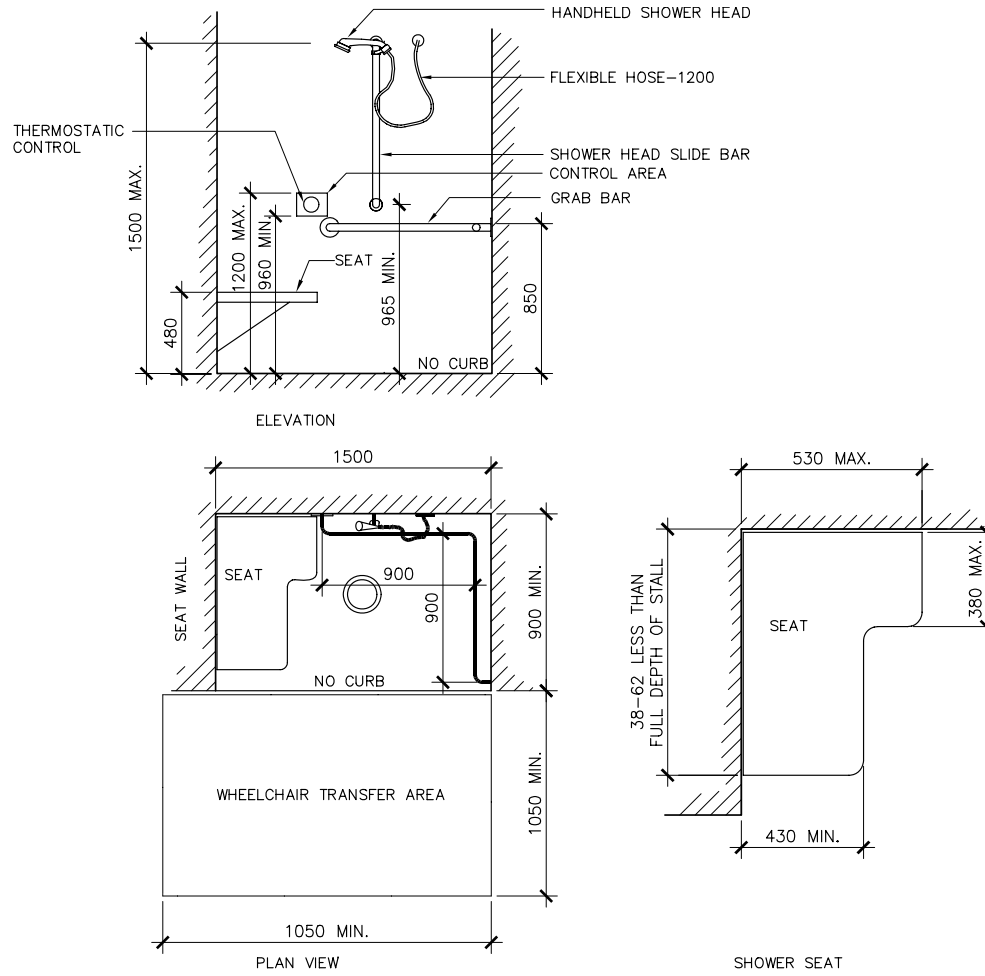
ACCESSIBLE DRINKING FOUNTAIN
 FIG: M20



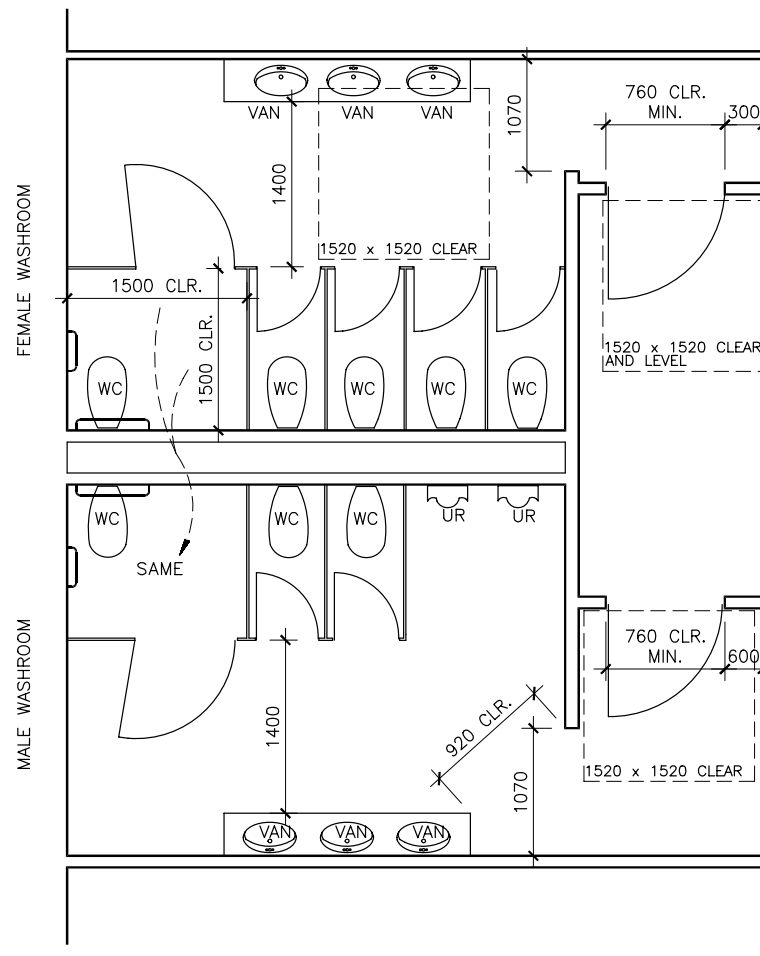
W.C. GRAB BAR LOCATION DETAIL
FIG: M21



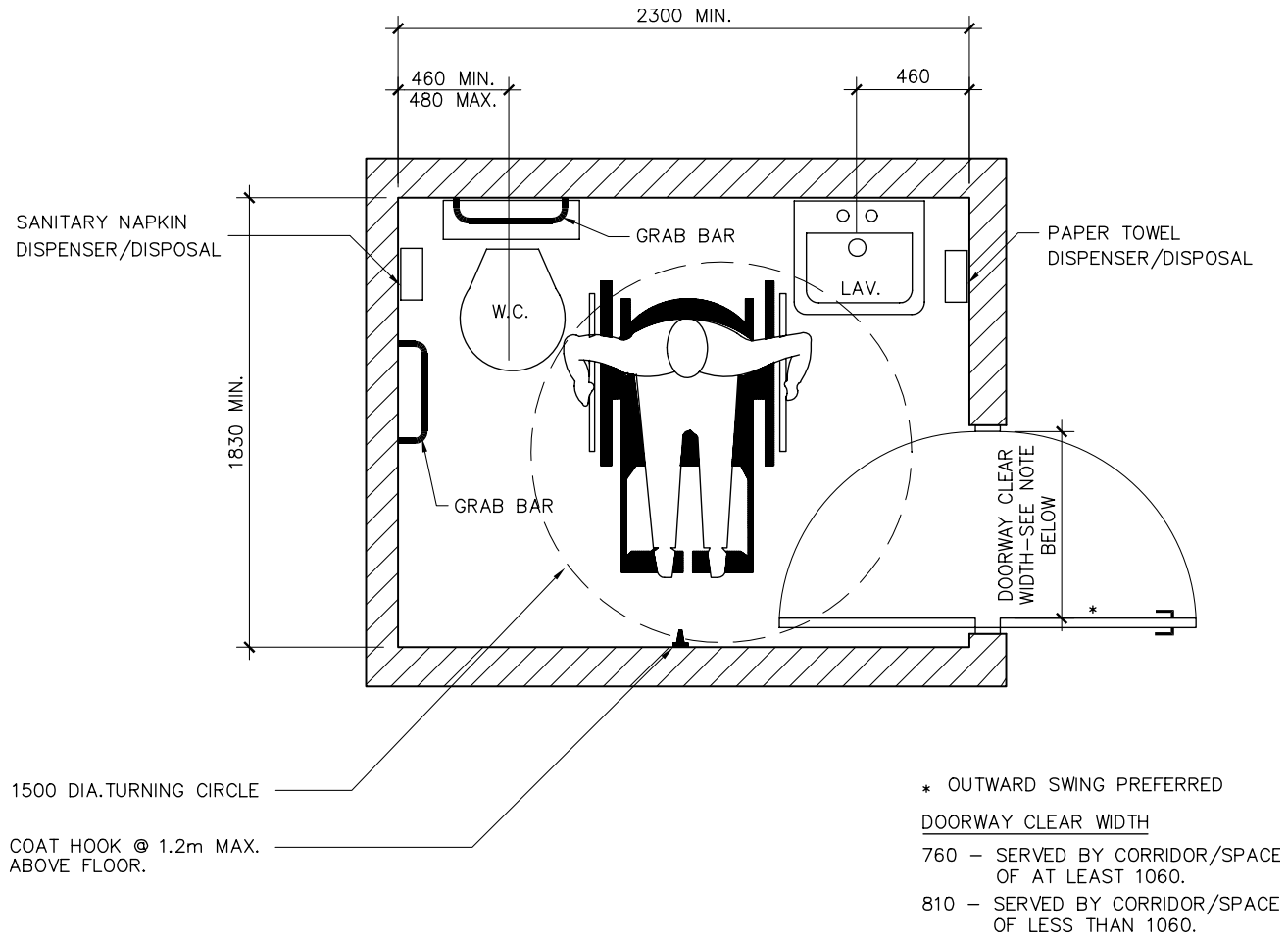
WALL HUNG LAVATORY AND VANITY MOUNTING HEIGHT
FIG: M22



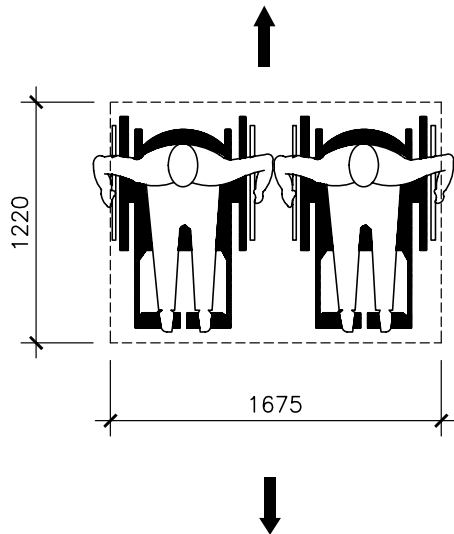
WHEELCHAIR ACCESSIBLE SHOWER
FIG: M23



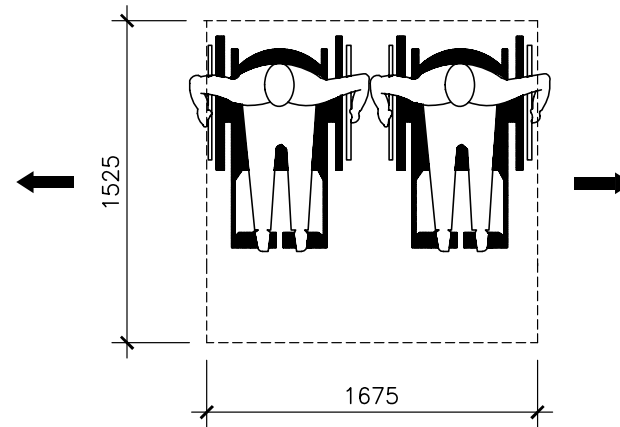
BASIC WASHROOM SPACE REQUIREMENTS
FIG: M24



WHEELCHAIR ACCESSIBLE WASHROOM
 FIG: M25

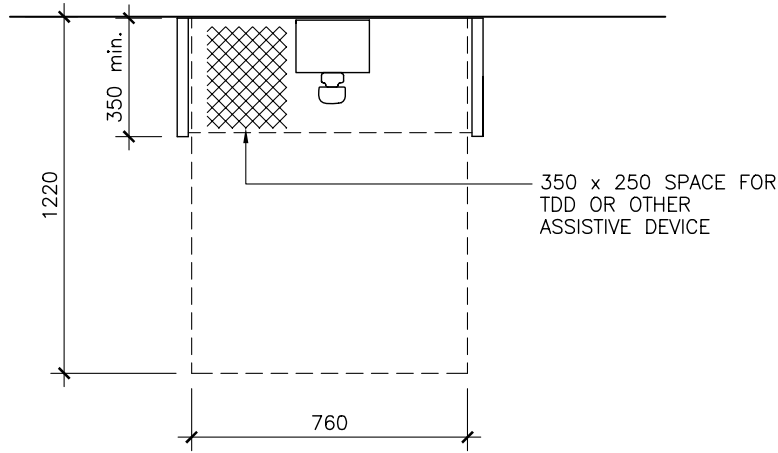


MINIMUM WHEELCHAIR SPACE
FOR FRONT OR BACK EXIT/ENTRANCE

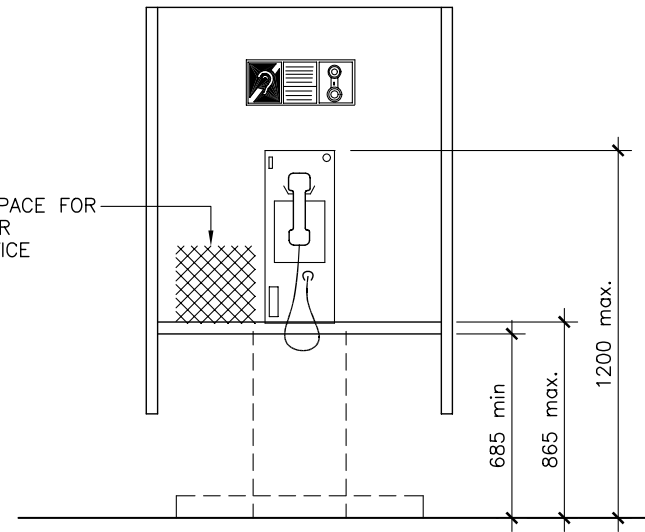


MINIMUM WHEELCHAIR SPACE
FOR SIDE EXIT OR ENTRANCE

WHEELCHAIR SEATING
FIG: M26



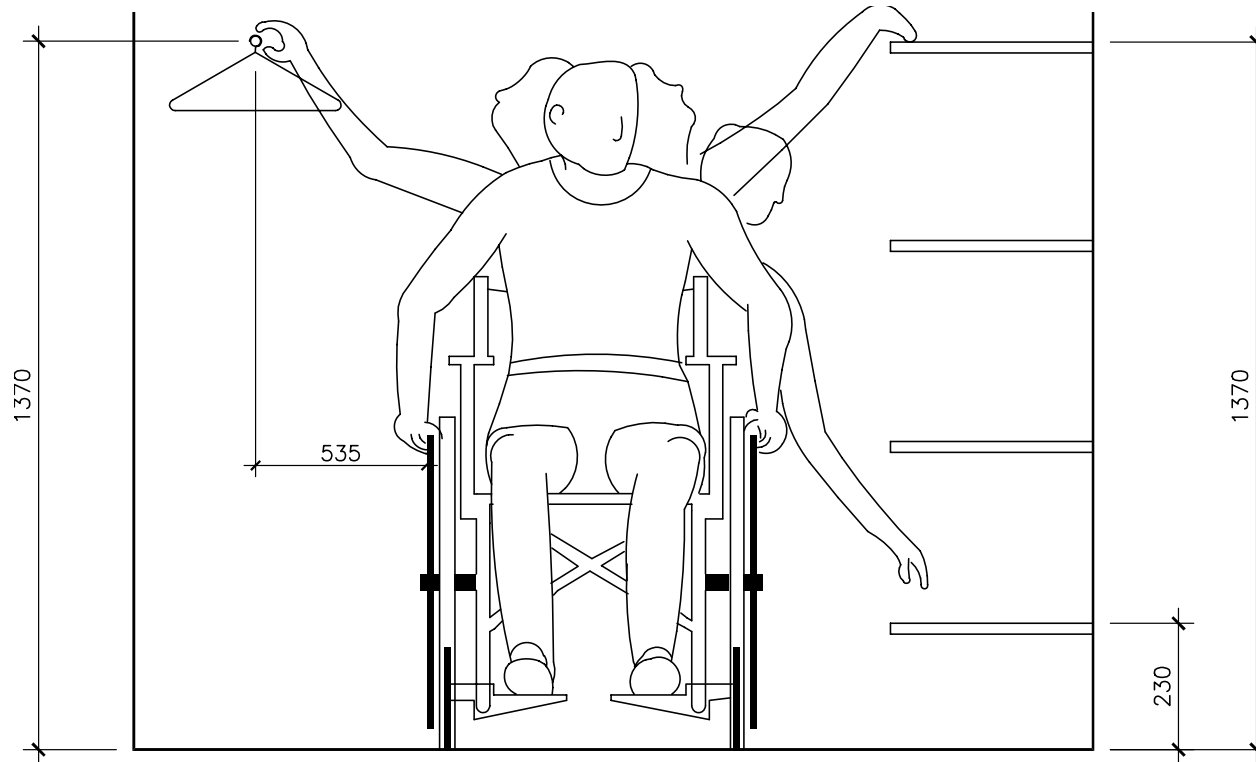
PLAN



ELEVATION

* NOTE:
MAXIMUM HEIGHT TO ALL COIN SLOTS AND OPERATING DEVICES.
MINIMUM WHEELCHAIR SPACE FOR FRONT OR BACK EXIT/ENTRANCE
MINIMUM WHEELCHAIR SPACE FOR SIDE EXIT OR ENTRANCE

TELEPHONES – PUBLIC PAY
FIG: M27



SHELVES AND COAT RACKS
FIG: M28

SECTION N

OUTLINE ELECTRICAL SPECIFICATIONS

Note: The electrical and electronic systems outlined in this section will be superseded by detailed performance specifications currently under development for each type of system

INDEX: OUTLINE ELECTRICAL SPECIFICATIONS

1	Courtroom Sound Reinforcement System	17	Court House Access Control and Monitoring System
2	Local Court Recording Systems	18	Security and Safety Equipment Room
3	Central Court Recording System	19	Fire Alarm System
4	Simultaneous Interpretation System	20A	Duress Alarm System
5	Hearing Impaired System	20B	Parking Alarm System
6	Audio/Visual Presentations	21	Door Control System for Prisoner Areas
7	Video Conferencing	22	Lighting and Controls
8	Video Remands	23	Receptacle Panels for Electronic Equipment
9	Child-Friendly Courtroom	24	Master Clock
10	Public Address System	25	Court-in-Session Lighting
11	Jury Room Intercom System	26	Intelligent Building Concept
12	Security Doors Intercom System	27	Standby Power
13	Door Intercom System	28	Telephone System
14	Video Information System	29	Structured Telecommunications Cabling System
15	Audio Surveillance System	30	Computer Network Systems including Writs UNIX system
16	Video Surveillance CCTV System	31	Wide Area Network
		32	Land Registry Offices

THESE SPECIFICATIONS AND FUNCTIONAL REQUIREMENTS ARE INTENDED TO SERVE AS GUIDELINES FOR CONSULTANTS AND DESIGNERS.

THEY REQUIRE CAREFUL ADAPTATION TO ANY SPECIFIC PROJECT, BASED ON OPERATIONAL REQUIREMENTS AND OCCUPANCY.

OTHER GUIDELINES, SUCH AS ENERGY CONSERVATION GUIDELINES AND ELECTRICAL SYSTEMS DESIGN GUIDELINES FOR DESIGN CONSULTANTS, REQUIRE CONSIDERATION AND ADAPTION TO THESE REQUIREMENTS AND TO THE DESIGN.

THE FOLLOWING SYSTEMS INCLUDED IN THIS SECTION ARE DISCUSSED IN DETAIL IN SECTION Q:

1. COURTROOM SOUND REINFORCEMENT SYSTEM
2. LOCAL COURT RECORDING SYSTEM
3. SIMULTANEOUS INTERPRETATION SYSTEM
4. HEARING IMPAIRED SYSTEM
5. AUDIO/VISUAL PRESENTATION
6. PUBLIC ADDRESS SYSTEM.

1. COURTROOM SOUND REINFORCEMENT SYSTEM

A courtroom sound reinforcement system is an electronic system employed to raise participants' voice levels resulting in improved audibility throughout the courtroom. It consists of microphones, speakers, amplifiers, mixers, switches and other components to create a complete system which in turn can be interconnected to other courtroom systems. Each courtroom, depending on size, is to have individual sound reinforcement systems to provide maximum speech intelligibility. The microphones for the witness stand, and the accused box (in non-jury courtrooms) are to be mounted on a flush stainless steel plate to make them non-removable. In addition, the microphone at the accused box should be located as to preclude tampering by the accused. The microphones are to be voice gated type, without an on/off switch. The microphones for the judge, the attorneys' tables including lectern and court registrar/clerk's desk are usually on fixed bases but they can be on movable bases if appropriate. The microphones are to have weighted bases with non-slip rubber or similar finish on the underside of the base. Judge's microphone and the attorneys' microphones shall have momentary contact muting switches; in addition, judge to

have master mute switch. The court registrar/clerk is to have accused microphone mute switch and the system master ON/OFF switch, all with LEDs indicating the ON mode. Movable microphones are to be automatically muted when the local recorder is switched to playback mode. Outlet jacks for microphones should also be located in the base of the court reporter's station near the witness box and at the end of the jury box closest to the public area.

The systems are to be provided with full range recessed ceiling speakers over the public area. Personnel within the well area are to have concealed speakers mounted, appropriately under desktop and in the raised floor of the jury box. These speakers shall be controlled by the logic muting of the mixer. Design speaker layout to ensure uniformity of sound level throughout the space. Each speaker group shall be provided with volume controls in the equipment cabinet. This cabinet is to be designed within the judge's dais or as instructed by MAG. All electronic components shall be matched for the room acoustics and the application. This system is to be interconnected with the local recording system, central recording system, simultaneous interpretation system, hearing-impaired system, video conference system, and future courtroom video recording system.

2. LOCAL COURT RECORDING SYSTEMS

AUDIO COURT RECORDING SYSTEM

Courtrooms and motions rooms are to be provided with a local, in-court, four-track cassette recording system with twin tape decks and auto transfer. The recorder unit is to be provided with a minimum of 8 microphone inputs (this should not preclude using more than 8 microphones with mixing matrix) to allow independent recording of the judge/jury/clerk, the Crown Attorney(s), the defence attorney(s), and the witness/accused. Alternatively, the recorder shall be capable of being equipped with a stenomask and adaptor. A single channel shall be assigned for this service when required. It must be possible to switch and isolate each channel during playback. Where the courtroom is equipped with a sound reinforcement system, the court recording system shall be interconnected to it. The recorder unit is to be located on the court reporter's desk or at another in-court location as determined during design. If the courtroom is equipped with a simultaneous interpretation system, one track shall be assigned to that activity and the four-track activities described above will be compressed into three tracks. Recording technology is to be decided during the design stage to meet the MAG operational requirements.

VIDEO COURT RECORDING SYSTEM

Make the necessary provisions for future installation of courtroom video recording systems (court proceedings). Provide raceways and outlets for the installation of CCTV cameras and TV monitors (VDU). Locate camera outlets to provide individual coverage of participants with the exception of the jury. Cameras may also be required in one or two designated remote holding cells.

3. CENTRAL COURT RECORDING SYSTEM (CCRS)

Multi-channel audio CCRS is to be provided interfaced with the in court 4 track recording system. The CCRS is to have one dedicated channel per courtroom and motions room. In courtrooms equipped with simultaneous interpretation system, the CCRS shall provide two channels per courtroom. The recording of court proceedings in the CCRS is for archival purposes, and also as a backup for local court recording. The CCR unit is to be located at the court reporters' office area or as determined during the design stage. The multi-channel CCR unit is to have a minimum of 24 hours recording time per tape, with a microprocessor-controlled fail-safe system to provide redundant recording on the standby deck, accurate indexing feature and auto-start and stop triggered by court proceeding audio signal traffic. Recording technology (future digital) shall be selected during the design stage to meet the MAG operational requirements.

4. SIMULTANEOUS INTERPRETATION SYSTEM

Designated courtrooms are to be provided with a simultaneous interpretation system consisting of a dedicated recording and reinforcing channel, channel selector switches, volume controls, permanently hard-wired earphones, shared with hearing impaired system. The system shall have 2 channels, one for floor language and the other interpreted. The interpreter's console is to be located as shown on Figs. G11 and G12. This system is to be interfaced with the courtroom sound reinforcement system. All interpreted courtroom proceedings are to be fed into local court recording system, and central recording system if provided. Judge's dais to have two indicating lights, activated from the interpreter's console, one to request "Repeat Last Sentence" and the other to request "Slow Down". During the design stage of the project, other simultaneous interpretation systems, based on the principle of infrared technology, may be considered. The system shall be designed in accordance with CAN/CGSB-131.2-M88, except reference to operator's equipment and his/her involvement in controlling the system, which should be deleted in its entirety. Reference to conference room, chairperson, delegates and other irrelevant items to court-

room and its proceedings should also be deleted from the above referenced standard.

5. HEARING IMPAIRED SYSTEM

Each courtroom is to have sound amplification facilities for the hearing impaired consisting of an audio frequency induction loop amplifier, induction loop around the well area of the courtroom and the public seating area for those people with their own hearing aids. The latest technology in hearing induction loop system shall be utilized. Hard-wired jacks with volume controls are to be provided for the judge's dais, the attorneys' desks, the court registrar/clerk's desk, the witness box, the accused box (tamperproof jack and remote volume control), the back row of the jury bench and selected locations of public seating. During the design stage of the project, other hearing-impaired systems based on IR technology may be considered depending on the layout and the complexity of the court house. Should the courtroom be equipped with a sound reinforcement system the hearing impaired system shall be interconnected to it.

6. AUDIO/VISUAL PRESENTATION

Selected courtrooms are to be provided with audio/visual presentation systems. These systems shall display clear audio and video-taped evidence, live video, computer generated data and hard evidence by means of visual presenter (colour CCD camera), using fixed projection TV units to suit the courtroom layout. The system shall provide a distortion-free video picture to all participants in the well area and secondarily to the public area. Also, selected courtrooms will be required to have portable projection TV units or large TV monitors with the same features as the fixed one. All courtrooms shall have concealed cabling and outlets to feed fixed and portable projection units, and also portable large TV monitors to provide for full viewing capability for all participants. All courtrooms shall be provided with a separate standard speed cassette player with volume control for audio depositions (evidence). Audio depositions, when played, are to be automatically recorded on the courtroom 4 track recorder and interconnected to the sound reinforcement system where provided.

7. VIDEO CONFERENCING (Provision Only)

Designated courtrooms shall have provision for high bandwidth video conferencing hook-up. Make provision for interconnection between the video conferencing system and the courtroom sound amplification and local recording system, in order to provide interactive video conferencing between the participants. The

courthouse telecommunications system shall have the required transmission speed to support high bandwidth full motion video. (See also Child-Friendly Courtroom requirements).

8. VIDEO REMANDS

In an effort to reduce security risks, lower prisoner transportation costs, speed inmate processing and free up personnel for other assignments, an interactive judicial system for video remands may be a program requirement. The system shall link the court house to designated detention centres and jail sites. Prisoners can be, routinely, appearing electronically before a judge. The two-way audio and video between the designated site and the courtroom can be transmitted by utilizing various technologies already available.

9. CHILD-FRIENDLY COURTROOM

Designated child-friendly jury and non-jury courtrooms shall have two-way close circuit television (CCTV) between the courtroom and the child remote testimony area. The CCTV system shall have: two cameras, one located to view the judge and the other inconspicuously installed in the remote testimony area, to provide a picture of the child witness and counsel. In a jury setting, an additional camera is required to view the jury. One large projection-type TV monitor or several small portable TV monitors shall provide coverage for participants in the courtroom. A TV monitor in the remote testimony area shall display a picture of the judge and jury. Also, two-way hands-free audio is to be provided between the judge and the remote testimony room and shall be integrated into the courtroom sound reinforcement and local recording system. The CCTV system shall be designed to accommodate future video recording. (Please refer to Section G, page G26, Fig. G8 of the Standards for drawing and description).

10. PUBLIC ADDRESS SYSTEM

An independent multi-channel public address system is required to make announcements in zone configuration as outlined below:

- Public corridors, public waiting areas, elevator lobbies and public washrooms (per floor)
- Coffee room or refreshment areas
- Interview Rooms (per floor)
- Witness waiting rooms (maximum two rooms per floor)

- Civil and criminal court reception areas, administrative counter areas (public side)
- All-call
- Other areas specifically noted in the Standards.

The system should have the capability of making paging announcements from: each courtroom, motions room, by the court clerk; from the administration areas, the court services manager's office, and the police office through the use of assigned telephone handsets with an electronic switching system interconnected to the main telephone switching system. The paging system shall have a system busy signal to indicate if the selected zone is in use.

Ceiling speakers shall be used; the location and the number of speakers shall suit the paging zones and the acoustical properties of the area.

11. JURY ROOM INTERCOM SYSTEM

An independent, self-contained intercom system shall be provided in each jury room, which will enable the jurors and the attendant on duty outside the jury room to communicate with each other. The attendant shall not be able to listen in unless the unit in the jury room is activated. The jury room telephone set is activated by a spring-loaded "hold to talk" button. Picking up the telephone set will provide an automatic ring at the attendant's position. The attendant on duty shall also be provided with a similar device.

12. SECURITY DOORS INTERCOM SYSTEM

An independent two-way voice intercom system is to be provided, with door stations located at both sides of the electrically operated doors leading into the holding area sally port and from the sally port into the accused (prisoner) holding area, public corridor to holding area interview booths, at the perimeter of the holding area entrances, accused (prisoner) circulation area, underground secure parking and building shipping/receiving area. The door stations shall have auxiliary contacts so that the intercom system can be interfaced with the CCTV system. The master intercom station and the sub-master station are to be located at the prisoner control post in custodian's office and the building security control post respectively. Both master and sub-master stations shall have spare capacity and be incorporated with the door control consoles.

13. DOOR INTERCOM SYSTEM

A two-way voice intercom system is to be provided, with door stations located outside the main entrance door and identified secondary entrance doors, and the master station at the security control post or at a location as determined during design layout. The master station is to have spare zones. This intercom system can be supported by using ring-down-lines, provided the courthouse telecommunications system has the capability.

14. VIDEO INFORMATION SYSTEM

A tele-display system shall provide public information on court schedules and other pertinent information through colour CCTV display units. The computer controlling alpha-numerical information and its peripheral equipment is to be located in the administrative office and the system shall be interfaced with the existing court house Information Technology (IT) environment. The remote TV display units, wall or ceiling mounted, are to be located at main entrances, public lobbies and other designated locations to suit the court house layout. In addition, a touch screen directory board should also be considered as part of the video orientation system. Electronic bulletins shall be installed at the entrance of each courtroom to display the dockets. The use of this system will depend on the size and complexity of the court house and through consultation with the project architect of the Ministry of the Attorney General. "Court in session" lights shall be located at the public entry and judge's entry to each courtroom and motions room or incorporated into the electronic docket boards via colour bars.

15. AUDIO SURVEILLANCE SYSTEM

The accused circulation corridors, associated stairwells and the accused elevators are to be provided with a zoned audio surveillance monitoring system consisting of flush-mounted speakers throughout these areas. The speakers are to operate both as microphone and a speaker and are to provide two-way voice communication with the prisoner control post. Two-way voice communication is to be possible through individual zone selector switches or as an all-call. Similarly, the Prisoner Handling Control Post within the custodian's area should be able to monitor any disturbances from these specified areas. The audio surveillance system shall have dynamic audio threshold detection and logic timer adjustments. The entire system shall be interfaced with the CCTV system assigned for the accused holding and circulation areas. Alarm-activated zones are to be displayed automatically on TV monitors for visual assessment, and the graphic panel or computer terminal dedicated for emergency alarm system shall indicate the location of the activated zone. There may be a need for limited application of the audio surveillance system within

the main holding area dependent upon the design.

16. VIDEO SURVEILLANCE CCTV SYSTEM

In order to facilitate CCTV monitoring based on functional assignment of responsibilities of the police force in a courthouse, the CCTV system shall be divided into two sub-systems:

- i) Courthouse CCTV Surveillance System, to be monitored at the Security Control Post (SCP), normally located near the main entry; and
- ii) CCTV For Prisoner Surveillance, to be monitored at the Prisoner Control Post (PCP) within the custodian's area.

The CCTV system shall utilize solid-state colour cameras. At exterior locations, where light levels may not be sufficient to allow adequate colour resolution, monochrome cameras or special cameras designed for day/night application can be used.

In order to achieve an effective CCTV monitoring of multiple cameras, video multiplexing and matrix switching technologies shall be utilized. Also, cameras shall be interfaced with alarm points and door intercoms; the associated camera field of view shall be called up automatically for display at the SCP or PCP, depending on the sub-system. Additional monitors are to be provided for continuous viewing of specific areas such as, sally port entrance, staff vehicle entrance, designated holding cells and other areas as indicated by MAG if required because of locational concerns. Cameras with pan-tilt-zoom (P-T-Z) are to be mounted on the building to ensure a secure environment outside the sally port.

Courthouse CCTV Surveillance Sub-System shall have cameras located in the following areas:

- Courthouse main lobby.
- Critical courtroom waiting areas.
- Public service counters.
- Public elevator lobbies.
- Exterior building entrances used for after hours access.
- * - Staff and judicial parking areas.
- * - Underground parking garage entry/exit.
- Exit stairwells at grade.
- * - Shipping/receiving dock.

- * - Provision for future 2 camera outlets per courtroom and motions room.

CCTV Sub-System Prisoner Surveillance to have cameras located in the following areas:

- Police van entry/exit and sally port.
- Exterior P-T-Z cameras.
- Prisoner circulation corridors.
- Prisoner holding cells. - Prisoner elevators.
- * - Shipping/receiving dock.
- * - Staff and judicial parking areas.
- * - Underground parking garage entry/exit.

* Denotes cameras to be connected to both sub-systems monitoring locations, although camera viewing at both locations simultaneously will be optional.

CCTV consoles shall be designated in accordance with the human engineering and ergonomic design guidelines. The CCTV consoles shall be integrated with the door control and emergency alarm monitoring consoles.

Video recording of the accused in holding cells and circulation corridors should be reviewed with the police and provided if deemed necessary.

Video recording of public areas is not permitted at this time.

A separate CCTV system for prisoner surveillance of female holding cells will be required if a separate matron's office is provided. This item will be determined by the MAG.

The number and locations of cameras should be carefully considered. For one or two individuals to constantly oversee a large number of camera views via monitors could become mind-numbing over a period of time and render the system less than reliable.

17. COURT HOUSE ACCESS CONTROL AND MONITORING SYSTEM

Provide an integrated, computerized door security monitoring and access control system. The system is to be expandable and programmable to suit the

operating and security requirements of the court house. The access reader is to be based on the non-insertion or proximity type technology, in order to avoid vandalism to the reading devices. Distributed processing shall be utilized for rapid response time and the ability of the entire system to operate independently from the host PC. The host PC to be used as a window into the system for monitoring system status and management of data. The host PC and its peripheral equipment are to be located at the building manager's office and remote terminals at the Security Control Post and Prisoner Handling Security Post, or at a location determined during design. Provide access readers to control access into non-public areas and other designated security areas at all times.

Specifically, access readers shall be provided at the following doors/barriers:

- Perimeter building entrances used for after hours access.
- Entry/exit points to below garage vehicular areas.
- Access from public areas into private office areas.
- Public elevators.
- Judge's elevator lobbies as required.
- Service elevators.
- Entrance to building from secure parking.
- Identified secure rooms.

With the increasing concern for the safety of court house participants and the need to prevent concealed weapons being brought into the building, metal detection devices may be a requirement at the main entrances and should be reviewed with the police. At the very least, provision should be made for the equipment and control barriers should be considered.

All perimeter doors and other interior designated doors shall have monitoring switches and electronic locking devices. The extent of sophistication of this system will depend on the court house layout and the specific requirements of the MAG through its project architect. Make provision for off site monitoring.

A computerized access control system may not have application to smaller court facilities.

18. SECURITY AND SAFETY EQUIPMENT ROOM

All security, safety and communication controls are to be located in this room with 25% spare space capacity for future systems. The room is to be located adjacent to the building manager's office, or as determined during design. The

door and room are to be monitored for unauthorized entry and shall be ventilated. The size of this room and the HVAC and electrical requirements will be determined at the design stage.

19. FIRE ALARM SYSTEM

An independent hard-wired or multiplex system is to be installed in accordance with the Ontario Building Code, Underwriters Laboratories of Canada, Electrical Safety Code, and this guideline. The system may be integrated with voice capabilities. If a multiplex system with local data gathering panels is used, each panel shall operate as a local control for its connected circuits.

A. Operation of system in a building classified as a high building, or by specific operational requirements and approval:

Upon activation of any alarm initiating device, operate the:

- signal appliances in all zones in intermittent mode,
- respective red zone indication on all annunciators and control panels,
- respective smoke or heat detector red remote alarms indicator, and
- ancillary functions as indicated in Item E.

Upon activation of any general alarm initiating device or alarm as described under A, and if not acknowledged within 5 minutes, operate:

- signal appliances in continuous mode;
- respective zone light on all annunciators.

Total evacuation is to be possible for authorized personnel by activating the audible signal appliances in continuous mode by closing the respective switch on the control panel.

B. Operation of systems in other than high buildings:

Upon activation of any alarm initiating device, operate:

- all signal appliances in continuous mode, with manual silencing at the central control panel by authorized personnel, and automatic silencing after 20 minutes;
- respective red zone indication on all annunciators and control panels.

C. Zoning of systems for all types of buildings is by:

- areas of function, but not larger than 2000 m² per zone;
- areas separated by fire separations;
- vertical shafts;
- each exit staircase;
- all two-hour fire separated areas;
- each sprinkler area supervised by a single water flow switch;
- each kitchen-hood extinguishing system;

- each of other extinguishing systems.

D. Control system will upon:

- operation of the alarm silencing switch, silence all operating alarm signals, but not prevent new activation by another zone, nor extinguish illuminated alarm indications;
- operation of the reset switch, extinguish all illuminated red alarm indications and reset the system;
- operation of the trouble or supervisory device, illuminate the respective yellow trouble or supervisory indications and sound the trouble signal;
- operation of the trouble silence switch, silence the trouble alarm;
- repair of the trouble or after restoring the supervisory device, extinguish automatically the trouble or supervisor's indication.

E. Ancillary function operations during an alarm condition:

- release all smoke and fire control doors in the entire building;
- unlock exits and other locked doors in the entire building, with the exception of prisoner holding security doors;
- shut down recirculation fans or air-conditioning units where such units or fans supply more than one storey or more than one zone;
- initiate smoke controls if building is more than 18m high;
- initiate parking of vertical transportation system, if building is more than 18m high;
- automatically signal the fire department, or a ULC-approved central station using a dedicated telephone line;
- switch on lights where courthouse is equipped with lighting control system;
- if automated lighting control system is installed, provide for interfacing

between lighting control and the fire alarm system to automatically turn on all lights during the alarm condition.

F. Control equipment is to be provided with:

- alarm initiating circuits for each applicable zone with controlling, initiating and supervisory capability; each circuit shall have individual alarm and trouble lights;
- alarm indicating circuit controlling audible or visual signal appliances, with each circuit having individual trouble lights;
- common control module for lamp supervision, system reset, yellow common trouble light with audible signal and silencing switch, subsequent alarm capability, manual signal silence, ground detection, main and secondary power supply, green power-on indicator, fire department connection and auxiliary relays;
- if integrated system (with voice communication), the addition of audio common controls, audio modules, main and standby amplifiers, splitters and transfers.

G. Alarm annunciators are to be provided at:

- main or fire department entrance;
- other areas as required for operation;
- security control post;
- prisoner control post;

H. Initiating devices:

Smoke detectors are required in:

- every room in a contained use area and corridors serving these rooms;
- exit staircases;
- special areas, such as electrical rooms, computer rooms or areas, audio-visual equipment rooms, etc.;
- duct-type smoke detectors required for shut-down purposes in ducts with an air velocity of 9,300 to 66,000m/second. Open spot detector types required where air velocity is less than 9,300m/second air velocity.

Heat detectors are required in:

- storage rooms;
- locker rooms;
- service rooms;
- heating rooms;
- incinerator rooms;
- elevator and dumbwaiter shafts;
- janitor closets; and
- any room where hazardous products are stored or used.

Use a rate of rise and fixed heat detector in all rooms or areas exceeding 36 m² not covered by a sprinkler system and where the ambient temperature is fluctuating.

Use a 57°C type in rooms not exceeding an ambient temperature of 38°C, and 88°C type in rooms above 38°C ambient temperature.

Equip all smoke detectors in contained use areas and accused circulation corridors with security guards as per ORC Standard Drawing M-E-082.

Equip all heat detectors in contained use areas and accused circulation corridors with wire guards, #7 gauge wire zinc plated.

Manually operated stations are:

- key-operated as per ORC Standard drawing M-E-080 in all security areas;
- pull-type in all other general areas.

I. Initiating of extinguishing systems:

- Automatic sprinkler systems are to be activated by the central control panel and the sprinkler alarm is to be activated by flow switches.
- Kitchen-hood systems are activated by a dedicated heat detector under the hood.
- Other fixed extinguishing systems are to be activated by manual pull stations or smoke detectors.

J. Indicating devices:

- Audible signal device appliances are to be provided as required in all

areas. Sizes generally are to be 150mm for bells, and 100mm for speakers. Areas with high ambient noise levels may use a 250mm bell or a speaker-horn.

- Visual signal appliances should be considered where high ambient noise is present in washrooms or where hearing-impaired persons may be alone and unaware of an auditory signal. In addition to standard audible signal appliances, only for second stage alarm in courtrooms, ULC listed visual signal appliances, along with a visual annunciation of alert zone or floor, on a mini remote annunciator, located at the court clerk's desk is desirable and should be reviewed with the authority having jurisdiction.

K. Ancillary devices:

- On doors designated to be held open, use a combination magnetic door hold-open device for closing all smoke and fire doors during alarm conditions.
- On doors designated by MAG security requirements, use magnetic locks for locking/unlocking doors, with 16kg to 540kg holding power, depending on the weight of the doors, and provide keyed bypass switches.
- Use alarm controlled double voltage relays in a suitable enclosure for the shut down of fans and air conditioning units, and closing or opening of dampers for smoke control.

L. Supervisory devices:

- Sprinkler supervisory devices, such as flow and pressure switches, are to be connected to the fire alarm system if the sprinkler system is used in lieu of heat detection devices. These devices require zoning by functions and locations.
- Standpipe supervisory devices such as flow and pressure switches are to be connected to a separate control panel similar to a fire alarm control panel. Such devices require zoning by function and location.
- Supervisory zones require annunciation at the main entrance and maintenance area annunciators only.

M. Installation:

- Installation is to be in accordance with the applicable Electrical Safety Code and Underwriters Laboratories of Canada CAN/ULC-S524-M91.

- All raceways must be concealed where possible. If surface mounted, use electrical metal tubing (EMT), surface mounted raceway (SMR) or M.I. cables. In security areas or where a two-hour fire rating is to be maintained, provide protection with Vericoat epoxy.
- Do not locate equipment, such as pull boxes, terminal boxes, etc., in security areas.
- All wiring shall be at least 105°C type and with no splices, except in terminal boxes supplied with terminal strips.
- All required end-of-line devices are to be installed in either the control panel or a terminal box.
- If a multiplex system is used, trunk lines are to be a loop type or Class "A" wiring.

20A. DURESS ALARM SYSTEM

Provide an independent low voltage hard-wired or multiplex technology based duress alarm system in accordance with the functional requirements outlined below:

Upon activation of duress alarm pushbutton, the following to be initiated:

- At the duress control terminal (DCT) located in the Security Control Post (SCP): continuous audio alarm and flashing illuminated display mode of the respective alarm zone, also on remote terminal annunciators, located at the Prisoner Control Post (PCP) and Court Services Manager's area.
- Activation of the "acknowledge" pushbutton at the DCT, silences the audio alarm at all alarm terminals, and changes the flashing display to steady mode.
- Activation of the reset key switch at the DCT, switches off the alarm zone display at all terminals and resets the system to normal status.
- The duress alarm pushbutton devices shall have a finger well to eliminate accidental activation. All duress alarm initiating devices shall incorporate an electronic supervision of the circuitry. The duress alarm system shall have a provision for interfacing courtroom's future security cameras.

The alarm pushbuttons shall be located to create the following zone configuration:

- Judge's dais and court clerk's station in each courtroom and motions room.
- Judge's office.
- Judge's retiring room.
- Judicial offices reception area.
- Motions rooms.
- Justice of the Peace offices.
- Crown Attorney's offices.
- Mediator's offices.
- Probation offices.
- Legal Aid offices.
- Public Service counters.
 - Police vehicle sally port.
 - Security Control Post.
 - Prisoner Control Post.

20B. PARKING ALARM SYSTEM

The staff and judicial underground parking areas are to be provided with emergency alarm stations consisting of combination emergency blue pushbutton and intercom station, a blue strobe light and a siren mounted high above the pushbutton; upon activation of an emergency alarm station, it initiates the associated local siren, blue strobe light, and displays the affected zone on the control terminal at the SCP and remote terminal at the PCP, annunciating sequence similar to 19A, except upon activation of acknowledge button, it silences the siren and automatically switches on the associated intercom to allow hands free voice communication with the SCP. An associated CCTV camera shall provide automatic visual assessment of activity in the vicinity of the emergency station. Make provision for future video recording equipment.

The emergency alarm stations are to be installed in strategic locations throughout the garage such as near stairwell exits, in elevator lobbies and along usual entry/exit routes. Appropriate signage is required for direction regarding the use of the emergency alarm stations.

Alarm display shall incorporate colour graphic with text description of the alarmed zone. The emergency alarm system and the parking alarm system can be integrated, provided the sequence of operation is maintained as described. Make provision for off-site monitoring after hours.

21. DOOR CONTROL SYSTEM FOR PRISONER AREAS

The system to be used at all times in restricted areas unless specifically stated otherwise.

Operation of system:

Operation Mode A: manually operated doors to be monitored only.

- Opening a door will extinguish green lights and will illuminate respective red indicator light in control console in a flashing mode and operate audio alarm signal (buzzer) for two to five seconds (adjustable).
- Operating acknowledge push button will change flashing red light into steady mode.
- When door is closed, system automatically resets, red light is extinguished and green light is illuminated in steady mode.

Operation Mode B: doors to be electrically operated.

- When door is locked, closed and secured, green display light/switch will illuminate in steady mode.
- On request for door to open by intercom, respective red/green combination light/switch steady green will change to flashing green, depressing the light/switch will extinguish green light, illuminate red light in a flashing mode and unlock door.
- When door is closed, system automatically resets, red light is extinguished, and green light is illuminated in steady mode.

Operation Mode C: sally port doors shall be electrically operated and interlocked with overhead door and man door into holding area from sally port.

- When both doors are locked, closed and secured, green display lights will illuminate in steady mode.
- On request for doors to open (by CCTV or intercom), depressing respective red/green combination light/switch will extinguish green light, illuminate red light in a flashing mode and open one door only.
- When door is closed, system will automatically reset and illuminate respective green light into steady mode, and extinguish red light.
- The second door of the sally port can then be operated in the same manner.
- Operation of the specially authorized secured bypass key switch will open both doors simultaneously.

Cell doors:

- MAG to indicate the requirement for electric locking devices.
- Doors may be required to be electrically and individually controlled from the Prisoner Control Post (PCP).
- Where cell doors are provided with electric locking devices, emergency group release is to be provided with key operation at the PCP.

Note: Operation may require sequencing due to a high electrical load demand, but opening of all locks should be accomplished in approximately seven seconds.

22. LIGHTING AND CONTROLS

In general, maintained illumination levels for common tasks listed in the ORC/ Energy Conservation Guidelines apply to court houses.

The overall general illumination levels are categorized as follows:

Definition	Task or Area	Maintained LUX (Foot-Candle) Level	Equivalent LUX (Foot-Candle) Level
HIGH	Courtroom well areas, prolonged office work areas critical tasks	800 (75)	650 - 860 (65 - 80)
MEDIUM	Normal office work, reading or writing, etc.	530 (50)	430 - 650 (40 - 60)
Low	Public or circulation areas in office areas, washrooms, service areas, cleaning	320 (30)	250 - 390 (25 - 35)

The courtrooms shall have a maintained 75 foot-candles over the dais and well area, and a maintained 55 foot-candles in the public area. Courtroom lighting should be generally limited to direct fluorescent lighting with appropriate lens to eliminate glare, and controlled from the Court Clerk's position. Lighting to have 100% dimming capability.

The standard RP24 should be applied to office lighting to ensure reduced glare lighting where computers are installed for continuous use.

Lighting in public areas should meet minimum requirements and should not be treated as a special area. These areas should be functional with energy con-

servation and maintenance as the prime considerations.

Illumination levels required for cleaning shall not be less than 30 foot-candles. In areas where designed lighting levels exceed 30 foot-candles, excess lighting can be partially switched off for the cleaning period. All lights should be turned off after cleaning is completed. If automated switching is used, the program shall be arranged so that alternate halves of the office area are illuminated during alternate cleaning periods.

Night lighting is not required in the building, except in those areas that may be occupied or patrolled during off hours, such as main circulation areas and the security station in the main lobby area.

Automated lighting controls should be used in all buildings to ensure energy conservation. The equipment should be "user friendly" with programmable security levels, fire alarm access and energy consumption totalling capability. Motion sensors should be used along with the automated control and these should be placed in enclosed offices, meeting rooms, non-public washrooms, stair wells (for after-hours use).

Energy guidelines are provided to ensure that the buildings are designed to acceptable energy conservation levels and that appropriate equipment is used. In general, the energy guidelines are to be applied equally to each area of the building so that one area will not be over-designed at the energy expense of another area.

Fixtures using "U" shaped lamps and pot lights should be avoided.

A. Levels of illumination:

In general, maintained illumination levels for common tasks listed in the ORC Energy Conservation Guidelines apply to court houses. The courtrooms shall have a maintained 75 foot-candles over the dais and well areas and a maintained 55 foot-candles in the public area.

Illumination levels required for cleaning shall not be less than 30 foot-candles. In areas where designed lighting levels exceed 30 foot-candles, excess lighting can be partially switched off for the cleaning period. For example, in a general office where the designated level is 70 foot-candles, 50% of the lighting can be switched off after regular working hours. All lights should be turned off after cleaning is completed. If automated switching is used, the program shall be arranged so that alternate halves

of the office area are illuminated during alternate cleaning periods.

In general, night lighting is not required in the building, except in those areas that may be occupied or patrolled during off hours, such as a security station in the main lobby area.

Ensure that the courtrooms' and motions rooms' illumination level, in particular horizontal lighting component, is adequate to render facial shadow-free images for future courtroom video recording system.

B. Emergency Lighting:

Emergency lighting is to be provided to meet the applicable building code requirements. Additional specifically requested emergency lighting may be required for areas such as holding cells, accused circulation corridors, custodian's and matron's offices, prisoner's box in courtrooms, mechanical rooms, electrical rooms, etc.

C. Switching:

Court houses may or may not be equipped with a central automated lighting control, depending on the size and complexity of the building and the project requirement. Buildings not so equipped are to be designed with sufficient local switching to ensure adequate lighting control.

Where the building is equipped with a central automated lighting control, the following is to be considered:

- There are many areas, such as general offices, public areas, registry offices, etc., where lighting is to be centrally controlled and programmed for automatic switching for 100%, 50% and off.
- Lighting in service rooms such as mechanical rooms, electrical rooms, staff washrooms, storage rooms and janitor closets is to be controlled by local switches and not centrally.
- Lighting in the courtrooms is to have individual switches so fixtures over the dais and judicial area are separately controlled from fixtures over the public area. The courtrooms at times are not operated during regular hours; lighting is, therefore, not to be programmed for central automated control operation.
- Some lighting in areas such as corridors, pass-through rooms, stair-

ways, etc., is controlled by local switches at all entrances. These locally controlled lights are not to be switched off by the central or automated controls.

- Sudden unexpected light interruptions are to be avoided in courtrooms, motions rooms, judges' offices, Crown Attorney's office, probation offices, witness waiting rooms, police office, law library, jury rooms and holding areas. To ensure lighting continuity, these areas are to be equipped with occupancy sensors.

D. Security Fixtures:

Lighting fixtures in area where accused are detained are to be maximum security type. Fixtures in accused circulation, delivery and sally port areas are to be medium security.

E. Convenience 15A duplex receptacles are to be located throughout the court house.

Specific requirements regarding locations and other receptacle ratings and types will be provided by MAG.

23. RECEPTACLE PANELS FOR ELECTRONIC EQUIPMENT

Electrical panels feeding receptacles that provide power for electronic office equipment and other power-sensitive equipment are to be equipped with all mode transient voltage surge suppression (TVSS) with noise filtering, and they shall be listed and labelled to UL1449 standard for TVSS, and CSA listed. All receptacles feeding power to local area network (LAN) equipment to have isolated ground in order to provide signal reference ground to computing equipment.

24. MASTER CLOCK SYSTEM

Include a synchronous clock system composed of a master clock (located in all courtrooms, motions rooms, settlement rooms, judges' offices, general offices, library, cafeteria, corridors and public areas). For clocks in adjacent courtrooms, motions rooms and settlement rooms, clocks shall be located in the well area of the courtroom. No open-faced or skeleton clocks are to be used.

26. COURT IN SESSION LIGHTING

"Court in session" lights shall be located at public entrances to courtrooms as well as the courtroom entrances off the private corridor. The switch for activating the lights shall be located at or near the court registrar/clerks station and be equipped with an LED. Panels indicating which courtrooms are in session shall be located in the court support office and the trial coordinators' area. Both French and English wording shall be provided in the public areas.

26. INTELLIGENT BUILDING CONCEPT

To comply with the intelligent building concept, an integrated structured cabling system based on the star topology is to be considered to support full voice data and full motion video services to each potential work station. Also, employ systems integration and interfacing of various systems such as, Building Automation System (BAS), lighting control, fire alarm, system controlled access, intrusion, intercom, CCTV, door control and modular wiring for power distribution in ceiling and access flooring.

27. STANDBY POWER

A standby power generator is not required if the court house building is no

more than three stories high. However, sufficient battery-powered emergency and exit lighting is to be provided to meet code requirements. In addition to the code requirements, battery-powered lighting is also to be provided in accused holding and circulation areas, custodian's and matron's offices, and over prisoner's box in courtroom, sally port, judges' corridors and police offices, and mechanical and electrical rooms.

Where a standby diesel generator is used, power shall be provided to satisfy all code requirements, all facilities in accused holding and circulation areas, all elevators, all security and public address systems, emergency lighting in public areas and garages, courtrooms, police offices, judges' offices, sally port and associated areas, and mechanical and electrical rooms.

All units or systems are to be CSA certified for performance.

28. TELEPHONE SYSTEM

The telephone system will be provided by MAG and MBS Computer Telecommunications Services branches. The system will consist of a digital private automatic branch exchange (DPABX) or electronic key telephone system (EKTS)

or CENTREX. These systems are to provide internal and external communications.

A DPABX system usually requires a secure equipment room (size to be determined) with controlled environment and automatic fire extinguishing system.

EKTS can be located in a suitable office environment.

A complete wiring network, based on star wiring topology to support voice and data systems, is to be provided in the base price of the building as described in the Telecommunications Structured Cabling System. The system must extend to all locations requiring voice and data communications i.e. all courtrooms and motions rooms; all office areas and judges' offices; and must comply with all building code requirements.

Location of all outlets will be determined with MAG during the project design.

Pay telephones should be available in the public waiting areas but located away from courtroom entrances. Each bank of telephones should provide facilities for people with hearing impairments as well as people in wheelchairs. Facilities for hearing impaired should include both a volume adjustable telephone as well as an electrical connection and adequate space for a TDD. Provision of integral built-in TDD units is also acceptable.

29. STRUCTURED TELECOMMUNICATIONS CABLING SYSTEM

The Structured Telecommunications Cabling System shall comply with CSA Standards CSA T530 (Building Facilities, Design Guidelines for Telecommunications), CSA T529-M95 (Design Guidelines for Telecommunications Wiring Systems in Commercial Buildings), CSA T528 (Design Guidelines for Administration of Telecommunications Infrastructure in Commercial Buildings).

All cabling components shall be Category 5 from a single manufacturer.

Riser Cabling:

- Voice Riser Cabling shall be distributed in star wired configuration from the Main Telecommunications Equipment Room (MTER) to Telecommunications Closet (TC) on all other floors. Data Riser Cabling to be distributed in star wired configuration from Main Computer Room to TC on all other floors.
- Riser Cabling shall be routed vertically through building in 100mm sleeves located in vertically aligned TCs throughout building. Any hori

zontal offsets to be routed through horizontal 100mm conduit.

- Voice Riser Cabling System shall utilize 24 AWG multi-pair copper cables. Voice cables to be sized for 1-to-1 correspondence to horizontal cabling pairs (4-pair riser cross-connects to horizontal cabling system) with additional capacity for future growth.
- Both Ends of Voice riser cabling shall be terminated on single pair modularity Insulation Displacement Contact (IDC) type punchdown termination blocks such as BIX cat. 5 hardware. Termination Blocks shall be mounted on offset plywood backboards to be located in MTER and TCs.
- Data Riser Cabling System shall utilize 12 strand, multi-mode, graded index, 62.5/125 um, 6 strand single mode fibre optics, FDDI-grade fibre optic cable media and 4-pair Category 5 UTP riser cables. Fibre optic cabling shall include physical riser cable diversity for alternate backbone cable path to each TC.
- Data riser cabling shall be terminated on rack mount termination panels to be located in backbone equipment cabinets in TC and MTER. Fibre optic cabling shall be terminated on STconnectors. Category 5 UTP to be terminated on Category 5 8-position RJ45 type modular jack patch panels wired T568A/SP-2840A.

Horizontal Cabling:

- Horizontal Cabling shall be distributed in star wired configuration from the TC to workstations located on the same floor. In areas where access floor is planned, these areas shall have voice and data distribution boxes whereby fixed quantity of data and voice horizontal cables are prewired to a bay distribution box. All workstations within a bay shall be connected by utilizing in-tile service boxes. These boxes shall have 2 duplex receptacles 120V regular ground, 2 duplex receptacles 120V isolated ground, 2 RJ45 data, 1 RJ45 voice and spare port. All cords 7m long with modular connectors.
- Horizontal Cabling shall be routed across floor, below the access floor, and other areas utilizing raceways in ceiling space. All wall outlets shall support a minimum of 4 RJ45.
- Voice Horizontal Cabling System shall utilize 4-pair Category 5 UTP cabling terminated on Category 5 8-position RJ45 type modular jack at workstation end and IDC type wall mounted punchdown termination block in TC.
- Data Horizontal Cabling System shall utilize (2) 4-pair Category 5 UTP cabling terminated on Category 5, (2) 8-position RJ45 type modular jacks at workstation end. At TC end, modular jacks terminations shall be

configured on rack mounted patch panels located in equipment cabinets fully equipped with patch cable management hardware.

Cable Testing and Certification:

- All horizontal cabling shall be tested and certified end-to-end to EIA Category 5 performance and link parameters. All cables shall be tested for dual-ended NEXT.
- All voice riser cabling shall be fully tested end-to-end for polarity and continuity.
- All fibre optic data riser cabling shall be OTDR tested through all splices and connectors.
- All test results shall be tabulated and submitted in hard copy and soft copy.
- All cabling and components shall include a minimum 15 year warranty and a minimum 15 year applications assurance warranty to be certified by cabling system manufacturer.

Cable Management System:

Include a software based cable management system for tracking, management and administration of the cable management system; the system shall track terminations of all devices, termination blocks and through at least two levels of cross-connects or patching.

Computer Rooms (Server Rooms):

- Each alternate floor adjacent to, but separate from Telecommunications Closet (TC) rooms.
- 200sq ft in area.
- Environmentally controlled.
- Secure access system controlled.
- Raised flooring if provided in the adjacent areas.
- Provision for UPS.
- Isolated ground receptacles.
- Will house servers, routers and other adjunct network equipment.
- Compliance to CSA T530 standard.

30. COMPUTER NETWORK SYSTEMS

Computer network systems and adjacent equipment such as servers, hubs, routers, modems, 3270 equipment, etc. will be provided by MAG computer and Telecommunications Services Branch (CTSB).

Obtain requirements from CTSB concerning power, space, environmental control and communications media.

Provide a separate stand-alone computer network system at the main administra-

tion counter area for the WRITS UNIX System. This system is for the registration of WRITS associated with Land Registry Office titles and deeds. For additional requirements, cable specifications, etc. consult with courts administration.

31. WIDE AREA NETWORK (WAN)

Any wide area network equipment (WAN) such as multi-protocol routers or front end processors will be provided by MAG CTSB and MBS CTS.

32. LAND REGISTRY OFFICES

(Use only when Ministry of Consumer and Commercial Relations is occupying space in the court house.)

The lighting is to be provided for common tasks as listed in the Energy Conservation Guidelines and in general as stated in the court house project requirements and is to be controlled similar to the provisions outlined under the court house requirements.

Convenience 15A duplex receptacles are to be located throughout the area. Specific requirements regarding locations and other receptacle ratings and types will be provided by MCCR.

Requirements for voice and data are to be similar to the court house with outlets located to suit the office layouts. Location of all outlets will be provided by MCCR.

A zoned intrusion detection system is to be provided with door contacts at all exit doors and shunt switch at main entrance door to registry office with annunciation at the remote control annunciator.

The master clock system is to be extended to these offices as required.

Requirements for automated equipment will be provided by MCCR during the design phase.

The land registry public announcement system is to be zoned into two speaker zones: one for the public area and the other for the office area, with capability for all call.

Desk paging telephone handsets shall be provided in the office area with the capability of selecting either all call, public or office paging zones.

Wall mounted paging telephone handsets shall be provided adjacent to the public pay phones, capable of making public announcements to the public area speakers only.

SECTION O
MECHANICAL GUIDELINES AND
ENVIRONMENTALLY CONSCIOUS DESIGN STANDARDS

MECHANICAL GUIDELINES

Follow Environmentally Conscious Design Standards for Ontario Government Buildings (latest version) available from Ontario Realty Corporation.

In addition, the following requirements shall apply to court house design.

1. Courtrooms, Motions Rooms and auxiliary spaces related to courtrooms such as jury rooms, retiring rooms, interview rooms and waiting areas shall have separate HVAC systems from the rest of the systems.
2. Heating and cooling capacities of systems in item 1 shall be established based on 100% occupancy including 100% electronic equipment on at any one time in all rooms (no reduction factor shall be used).
3. Controls in courtrooms, motions rooms, jury rooms, jury assembly room and other public areas with fluctuations in occupancy shall have individual environmental controls as follows:
 - (1) temperature control based on room temperature sensors
 - (2) Fresh air control based on carbon dioxide sensors
4. Maintenance access for HVAC systems in the ceiling space shall be located outside the courtroom walls.
5. Noise criteria for mechanical systems shall comply with the acoustical guidelines.
6. The need for local temperature controls in courtrooms and motions rooms shall be reviewed on an individual basis with the judiciary.
7. The HVAC control systems for courtrooms, motion rooms and jury rooms shall be flexible to accommodate the need for extended hours of operation.
8. Holding areas shall be provided with 100% exhaust.
9. Consideration shall be given to operable windows interlocked with the mechanical systems in judicial offices

10. When designing mechanical systems, preference shall be given to indoor equipment as opposed to roof-top mounted equipment.

ENVIRONMENTALLY CONSCIOUS DESIGN STANDARDS FOR ONTARIO GOVERNMENT BUILDINGS

1 SCOPE OF THIS DOCUMENT

- 1.1 **This document sets forth the minimum mandatory standards for planning and designing new (or major renovations of) government buildings, so that they may be constructed, operated and maintained efficiently, in a manner that minimizes the impact of the facility on the environment and also creates proper indoor conditions for the occupants.**

The Architects and Engineers are expected to direct their full creative potential toward exceeding the specified requirements, within a sound economical life cycle framework.

- 1.2 This document shall not be used to circumvent any health and safety codes or standards.
- 1.3 Compliance with the present document shall be substantiated with calculations, computer print-outs and any other relevant information.
- 1.4 This document does not apply to:
 - 1.4.1 Buildings intended for occasional or unheated use, unheated warehouses, garages, sheds or unheated basements.
 - 1.4.2 Single or multi-family residential buildings of three or fewer stories above grade.
 - 1.4.3 Buildings intended primarily for manufacturing or industrial processing.

2 ENERGY

2.1 ENERGY BUDGET

2.1.1 Total energy budget and balance temperature for the building will be either:

- a) provided by the Ministry as a requirement for the project OR,
- b) established through a process of negotiation between the Architect and the Ministry, at the very early stages of design, before proceeding to the preparation of construction documents.

2.1.2 The Architect shall prepare at least 3 conceptual design solutions, each being not only cost effective, but also meeting or improving on the requirements set forth by this document.

All architectural, structural, mechanical and electrical elements, systems and services shall be closely examined, in order to produce coordinated alternative solutions.

If the energy budget was not given as a requirement, these alternatives will constitute the basis for the negotiated energy budget.

An annual computer energy consumption simulation shall be provided for each of the alternatives.

If computer simulations are performed for ascertaining compliance with section 13 of ASHRAE/IES 90.1, they may be used for determining the energy budget only if the input data (i.e. hours of operation, etc.) coincide with the "real" use of the facility. Otherwise, additional simulations shall be required.

2.1.3 The balance temperature shall be 5° C to 10° C below outdoor design temperature.

NOTE: The balance temperature is defined as the ambient temperature at which the internal heat of the building from lights, people, office equipment, fans and pumps, during a typical occupied one-hour period is equal to the heat loss, due to transmission, infiltration and washroom exhaust (with heat recovery) from the building, during the same period. The temperature of the building interior

is assumed to be maintained at the winter building design temperature.

2.1.4 Calculate the capital cost difference between a standard building, meeting the minimum requirements of this document, and each of the designs proposed. A simple pay back period calculation shall be made for each case, using constant dollars and current energy costs.

2.1.5 A separate energy budget shall be established for special areas (ie. laboratories, computer centres, etc.) incorporated within a totally different type of occupancy (i.e. office), when these exceed 20% of the total net area of the building(s).

Separate energy consumption computer simulations shall be prepared.

2.2 FUEL CHOICE

2.2.1 When several sources of fuel are available on site (ie. gas, oil, electricity, etc.) a detailed analysis shall be carried out to select the most economical fuel that minimizes total operating, maintenance, equipment and installation costs over the building's lifetime.

The availability of and the environmental impact to produce and distribute the particular source of energy, shall be included in the economical evaluation.

Energy sources shall be evaluated in the following order of preference: locally reclaimed residual heat, natural gas, propane, electricity, oil.

The production of electricity on site (cogeneration), is another option, that shall be considered on a project specific basis, and substantiated with life costing calculations. Prime candidates for this type of application shall be facilities where the residual heat could be utilized 24 hours/day, throughout the year.

2.3 ENERGY EFFICIENT DESIGN REQUIREMENTS

2.3.1 ASHRAE/IES Standard 90.1 Compliance

The design shall be performed in compliance with ASHRAE/IES Standard 90.1 "Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings" latest edition, including all errata and addenda published by ASHRAE to date, as amended by this document.

Additions, modifications and interpretations to the Standard ASHRAE/IES Standard 90.1 included hereinafter, are intended to bring the building design to a higher level of environmental consciousness, to emphasize the governmental commitment for preservation of energy resources, within a sound economical lifecycle framework

This document includes interpretations made to date y ASHRAE/IES officials. These are indicated as (ASHRAE official interpretation #

Please mark the Standard where underlined chages have been made.

2.3.2 Conversion from Inch - Pound to International System (SI) Units

Users of the Standard 90.1 who need to convert from Inch - Pound to SI shall refer to either ASHRAE 1989 Fundamentals Volume, Chapter 35, "Units and Conversions" or to the ASHRAE publication "SI for HVAC & R" for mechanical and envelope systems, and to IES Lighting Handbook 1984 Reference Volume, Section1, for lighting systems, to obtain accurate conversion factors and units.

2.3.3 Equivalence between ASHRAE/IES 90.1 and Canadian Standards

Standard 90.1 references a number of ASHRAE and IES manuals, standards and publications, which are generally accepted and utilized in Ontario. The Standard also references other product and component testing and rating standards and specifications. These are generally American, and may currently be in use in Ontario, or may be replaced by a Canadian standard.

For the purpose of compliance with this document, the following procedure shall be ensured:

All ASHRAE and IES manuals, standards and publications referenced in Standard 90.1 shall be the most currently available issue of the manual, standard or publication. Where:

- a product or component has been tested or manufactured to a Canadian standard, and not to the American standard referenced in Standard 90.1,
- other documents referenced in Standard 90.1 are not generally used or accepted in Ontario, and for which a different document is used and accepted, the Architect shall contact a Ministry Senior Advisor for a decision on the equivalency of the American and Canadian standards, and therefore the acceptability of the product or component under Standard 90.1.

2.3.4 Changes, additions, substitutions and interpretations to ASHRAE/IES 90.1:

2.3.4.1 ASHRAE/IES 90.1 Paragraph 2.1 Amendment:

"This Standard sets forth design requirements for the efficient use of energy for new buildings, for additions and for major retrofit of existing buildings. (NOTE: In practice, it may be difficult to make an existing building comply with all the envelope requirements, in particular with the items related to below grade and slab insulation. Wherever feasible, most of other requirements of the Standard shall be implemented.). The requirements apply to the building envelope, distribution of energy, systems and equipment for auxiliaries, refrigerating, heating, ventilating, air conditioning, water heating, lighting and energy managing."

2.3.4.2 ASHRAE/IES 90.1 Paragraph 2.3 Interpretation:

The Standard is not applicable to any building space that used energy at a rate less than 3.5 Btu/(h x sq.ft.)

For example, an unheated parking garage with 1.0W/sq.ft. of lighting used energy at a rate of 3.41 Btu/(h x sq.ft.). Therefore, the Standard does not apply to this space; or

In the example of a parking garage consisting of three underground levels

with the uppermost level heated such that the energy use was 3.5 Btu/(h x sq.ft.) or greater, the ASHRAE/IES Standard would apply to the upper level.

2.3.4.3 ASHRAE/IES 90.1 Paragraph 3.4 Interpretation:

The definitions given in the Standard relate to the Inch-Pound system of measurements. Where the user requires a definition in the SI system, such as the Watt as a unit of heat flow rate, the definition may be obtained from ASHRAE publication "SI for HVAC & R" and IES Lighting Handbook 1984 Reference Volume.

2.3.4.4 ASHRAE/IES 90.1 Paragraph 3.5

Interpretation: This section is written for the Standard in Inch-Pound units, thus a small number of the abbreviations, such as HDD65 (Heating Degree Day Base 65degF) relate directly to those units. Where the use of the Standard requires conversion from SI units, the Architect will need to apply the correct interpretation to those abbreviations in the Standard.

2.3.4.5 ASHRAE/IES 90.1 Paragraph 4.4.1.5

Amendment: The use of electric resistance type heating elements (i.e. electric baseboard radiation or electric air coils) shall be avoided.

2.3.4.6 ASHRAE/IES 90.1 Paragraph 5.4.3.1

Amendment: Motors expected to operate more than 500 hours per year shall have a minimum acceptable nominal full-load motor efficiency no less than that shown in the Modified Table 5-1.

MODIFIED TABLE 5-1, MOTOR EFFICIENCY LEVELS

Motor Size (HP)	3600 RPM (%)	1800 RPM (%)	1200 RPM (%)	900 RPM (%)
1	75.5	82.5	80.0	74.0
1.5	82.5	84.0	85.5	77.0
2	84.0	84.0	86.5	82.5
3	85.5	87.5	87.5	84.0
5	87.5	87.5	87.5	85.5
7.5	88.5	89.5	89.5	85.5
10	89.5	89.5	89.5	88.5
15	90.2	91.0	90.2	88.5
20	90.2	91.0	90.2	89.5
25	90.5	91.7	91.3	89.6
30	90.8	91.9	91.4	90.7
40	91.4	92.5	92.3	90.6
50	91.9	92.7	92.3	91.3
60	92.4	93.2	92.9	91.6
75	92.5	93.0	93.1	92.8
100	93.0	93.7	93.5	92.7
125	93.6	93.9	93.6	93.4
150	93.8	94.3	93.2	93.4
200	94.3	94.5	94.6	93.9
250	95.0	95.0	95.0	95.0
300	95.0	95.0	95.0	95.0
350	95.0	95.0	95.0	95.0
400	95.0	95.0	95.0	95.0
450	95.0	95.0	95.0	95.0
500	95.0	95.0	95.0	95.0

EXCEPTION: When the motors are an integral part of packaged unit with an overall rated efficiency as required by Paragraph 10.4.1 of the Standard 90.1, then the motors within the assembly do not have to comply with the minimum efficiencies shown above.

2.3.4.7 ASHRAE/IES 90.1 Paragraph 5.4.3.1.1

Amendment: The modified Table 5-1 applies to T-frame (NEMA specifications), AC three phase motors in the 1 to 200 HP range and any induction motors between 250-500 HP range.

2.3.4.8 ASHRAE/IES 90.1 Paragraph 5.4.3.1.2

Amendment: Motor efficiency levels shall be based on either CSA C390M 1985 or IEEE 112B Standards.

2.3.4.9 ASHRAE/IES 90.1 Paragraph 5.4.3.1.3

Amendment: Values listed in Modified Table 5-1 are minimum motor efficiencies.

2.3.4.10 ASHRAE/IES 90.1 Paragraph 6.2.2

Interpretation: The lighting in refrigerator and freezer cases, both open and enclosed, should not be included in calculating CLP. All requirements regarding commercial freezers and refrigerators are included in Section 7.4.3 (ASHRAE official interpretation 5).

2.3.4.11 ASHRAE/IES 90.1 Paragraph 6.4.2.5

Amendment: Exception- Lighting control requirements for spaces which must be used as a whole may be controlled by lesser number of controls.

Note: This amendment forms part of proposed Addendum 90.1d.

2.3.4.12 ASHRAE/IES 90.1 Paragraph 6.4.4.1.1

Amendment: a) operate at nominal input voltages of 120, 277 or 347 volts.

2.3.4.13 ASHRAE/IES 90.1 Table 6.4

Amendment: Two lamp 4ft nominal 40W rapid start, 347 volt.....1,050.

2.3.4.14 ASHRAE/IES 90.1 Paragraph 6.5 Table 6-5

Amendment: Replace any values of "ULPA" with "0.85 x ULPA"

2.3.4.15 ASHRAE/IES 90.1 Paragraph 6.6 Table 6-6

Amendment: Replace any values of "UPD" with "0.85 x UPD"

2.3.4.16 ASHRAE/IES 90.1 Paragraph 8.4.9.1

Amendment: The R-value and dimensions required for slabs refer only to the insulation materials. Insulative continuity shall be maintained in the design of slab edge insulation systems. Continuity shall be maintained from the wall insulation through the slab/wall/footing intersection to the body of the slab edge insulation.

Where insulative continuity is impossible because of structural constraints, a minimum overlapping of insulation (or equivalent) is acceptable. The insulation must overlap by a distance equal to (or greater than) two times the minimum insulation separation. The overlapping insulation must have a thermal resistance (R-value) equal to or greater than that specified for the

wall below grade in the ACP tables (or from the ASHRAE Envelope Program). An insulation gap of 12.5mm or less may be ignored. i.e. Overlap Distance = 2 x (minimum gap between insulation)

2.3.4.17 ASHRAE/IES 90.1 Paragraph 8.5

Amendment: For the purposes of determining compliance using the Alternate Component Packages (ACP) use the tables in Attachment 8A, pp. 34-73 of Standard 90.1, according to Table A of this document.

For locations not listed below, use the best engineering judgment based on climatic data available in the Ontario Building Code as compared with HDD50 and CDD65 taken from ACP tables of ASHRAE/IES Standard 90.1.

Table A: U.S. Equivalents to Ontario Cities

City No. Table	Ontario City U.S. Equivalent
27 (32)	London Binghamton, New York
195 (36)	S.S. Marie S.S. Marie, Michigan
67 (36)	North Bay Duluth, Minnesota
131 (33)	Ottawa Massena, New York
27 (32)	Simcoe Binghamton, New York
102 (36)	Thunder Bay International Falls, Minnesota
102 (36)	Timmins International Falls, Minnesota
182 (31)	Toronto Rochester, New York
27 (32)	Trenton Binghamton, New York
4 (31)	Windsor Albany, New York

2.3.4.18 ASHRAE/IES 90.1 Paragraph 8.6

Interpretation: The Version 2.3 of the envelope compliance software (ENVSTD23) automatically includes Addendum A of the Standard 90.1 and cities listed in Table B of this document.

For Ontario, use state abbreviation ON to select from this list when using the software.

For the purposes of determining compliance with versions before 2.3 using the microcomputer programs, one may use the equivalent cities according to Table A of this document.

Table B - Cities in ENVSTD23 for ON.

236	Atikokan
241	Big Trout Lake
260	Earlton
270	Gore Bay
277	Kapuskasing
278	Kenora
281	London
287	Muskoka
291	North Bay
292	Ottawa
314	S.S. Marie
319	Sioux Lookout
323	Sudbury
330	Thunder Bay
331	Timmins
333	Toronto
334	Trenton
343	Warton
345	Windsor

2.3.4.19 ASHRAE/IES 90.1 Paragraph 8.6.7 Amendment:

When a space below grade extends beyond the area of the building creating a roof below grade, the insulation R-value for this roof shall be the same as for the walls below grade.

2.3.4.20 ASHRAE/IES 90.1 Paragraph 9.4.7

Amendment: Section 9.4.7 is replaced with the following:

9.4.7.1 Outside air intake for ventilation purposes should be the lowest volume necessary to maintain adequate indoor air quality. Sources of pollutants within the conditioned space should be minimized or eliminated if possible in order to minimize the outside air intake required for dilution. Concentrated sources should be controlled at the source by containment, local exhaust systems, or both.

9.4.7.2 HVAC systems shall be designed to be capable of reducing the supply of outdoor to the minimum ventilation rate required by section 6.1.3 of ASHRAE Standard 62-1989. Systems may be designed to supply outside air quantities exceeding minimum levels, but they shall be capable of operating at no more than minimum levels through the use of return ducts, manually or automatically operated control dampers, fan volume controls, or other devices.

EXCEPTION: Minimum outdoor air quantities may be greater if required to make up air exhausted for source control of contaminants, if required by process systems or local codes, or if additional outdoor air introduction does not increase overall building energy costs.

2.3.4.21 ASHRAE/IES 90.1 Paragraph 9.4.9

Amendment: Systems that recover energy should be considered when rejected fluid, including air, is of adequate temperature and a simultaneous need for energy exists for a significant number of operating hours.

2.3.4.22 ASHRAE/IES 90.1 Paragraph 9.5.2.(A)

Amendment: The minimum volume indicated in paragraph 9.5.2.(a) of the Standard 90.1, should be interpreted as being the volume supplied by the main A/C apparatus.

However, **this volume must be augmented locally** (i.e. by a fan powered box, etc.), without any addition of heating or cooling, up to a volume enough to satisfy the minimum air circulation requirements indicated in the chapter "Indoor Air Quality" of this document.

2.3.4.23 ASHRAE/IES 90.1 Table 10-a Interpretation:

TABLE 10-4A - PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS
For packaged terminal heat pumps (PTACH HPs), the term "EER Above" is defined as the minimum allowable EER when tested with an outdoor temperature of 95° F determined by the formula:

$$\text{EER Above} = 10.0 - (0.19 \times \text{Cap.}/1000)$$

Where Cap is the rated cooling capacity of the product in Btu/h in accordance with the cited ARI Standard. (ASHRAE official interpretation 2)

The 82° F db low temperature rating applied to all packaged thermal air conditioners and heat pumps.

TABLE 10-4A FOOTNOTE A: Multi-capacity equipment is defined as that which has manufacturer's published ratings for more than one capacity mode allowed by the products controls (ASHRAE official interpretation 1).

2.3.4.24 ASHRAE/IES 90.1 Table 10-10 Interpretation:

Table 10-9 lists standard rating conditions and minimum performance requirements for warm air furnaces and combination warm air furnace/air-conditioning units. Table 10-10 lists corresponding data for warm air duct furnaces and unit heaters. A duct furnace is one that requires a fan to be installed at some point before it is operational. A product certified under ANSI Standards as a duct furnace is always considered a duct furnace regardless of whether fan connections are made in the factory or in the field. (ASHRAE official interpretation 6).

2.3.4.25 ASHRAE/IES 90.1 Paragraph 10.4.1.1.

Amendment: Equipment ratings certified under a nationally recognized certification program or rating procedure or data furnished by the equipment manufacturer shall be acceptable to satisfy these requirements. The equipment efficiencies must be tested in accordance with the appropriate Reference Standards as listed in Tables 10-1 through 10-10 to be acceptable.

2.3.4.26 ASHRAE/IES 90.1 Paragraph 11.4.5.2c

Interpretation: The temperature limit on water outlet refers only to the final exit temperature of the water. It has no implication on the source temperature of the water.

2.3.4.27 ASHRAE/IES 90.1 Paragraph 11.4.6.2

Amendment: Heated swimming pools (including lap pools, and permanent, structural whirlpools) shall be equipped with pool covers.

EXCEPTION: Pools deriving more than 60% of their energy for heating (computed over an annual operating season) from site-recovered or site-solar energy.

2.3.4.28 ASHRAE/IES 90.1 Paragraph 12.4.2.1

Amendment: An energy management system shall be implemented in any building exceeding 9293.7sm in gross floor area and should be considered in any building.

2.3.4.29 ASHRAE/IES 90.1 Paragraph 12.4.2.2

Amendment: The minimum energy management capabilities for such a system shall:

a) provide readings and retain daily totals for all electric power and demand, and for external energy, water and fossil fuel use;

[Clauses b) through h) are unchanged]

i) insure that a service contract will be implemented to provide the continued optimum operation of the building automatic control system for a minimum period of five years after installation.

2.3.4.30 ASHRAE/IES 90.1 Paragraphs 13.7.3.1 and

13.7.3.4 Interpretation: Internal shading devices are not accounted for in the Shading Coefficient. Paragraphs 13.7.3.1 and 13.7.3.4 are intended to direct the user to apply a window management strategy of drapes in addition to selecting glass that meets the 0.70 shading coefficient (SC) on its own.

Example for Denver: The user should model the Prototype or Reference building using the percentage of glazing obtained from Table 8A-28. The selection occurs in the second row (SC between 0.709 and 0.60) for an internal load density (ILD) between 1.5 and 3.00 (assumed to be appropriate for an airport). This allows a glazing area of 22% with a U of fenestration of 0.68. The window strategy (drapes) of 13.7.3.4 is then applied.

In Table 8A, there is a range of SC indicated (0.709-0.60). This range size (0.109) is comparable to the differences shown between draped and undraped double glazed assemblies as shown in Fig. 9 and 10 of the ASHRAE Handbook, 1985 Fundamentals Volume (page 17.13). Since this range is allowed in Table 8A, the window management strategy prescribed in 13.7.3.4 is consistent with Table 8A and properly reflects the fact that a 0.70 SC becomes a 0.60 SC when draped. (ASHRAE official interpretation 4).

2.3.4.31 ASHRAE/IES 90.1 Numbered Notes for Table 13-6 Amendment: 8...Energy costs shall be based on actual published rates and costs to the building as defined in this section....

2.3.4.32 ASHRAE/IES 90.1 Paragraph 13.7.6

Interpretation: The Reference Building and Proposed Design Building shall be simulated without Energy Management Control Systems or occupancy sensors.

2.4 ADDITIONAL REQUIREMENTS: GENERAL AND ARCHITECTURAL

2.4.1 Design the building with a minimum of exterior surface area (walls plus roof) to minimize heat transmissions for a given enclosed volume.

2.4.2 Select the most efficient orientation of the building and its parts with

respect to energy conservation.

2.4.3 When selecting construction materials, include as one of the factors in the feasibility studies: the 'embodied energy' and the typical fuel type used to produce, manufacture, transport and install the particular product.

For reference only, here are examples of energy intensities (MJ/Kg) required to produce some construction materials in Canada (mid 1970 - mid 1980 data)*:

Metals: Aluminum 236.3, Nickel 168.3, Steel (general) 25.7, Zinc 64.1.

Non-metallic: Glass (sheet) 10.2, Gypsum 7.4,

Minerals: Brick 4.9, Glass wool 22.3

Cement Products: Cement 5.9, Concrete 1.2, Mortar 2.2

Plastics: Polyethylene 87.0, Polystyrene 105.0, Paint (water base) 76.0

* Figures reproduced from "Environmental Auditing for Building Construction" by R.J. Cole and D. Rousseau, School of Architecture, University of British Columbia.

2.4.4 Consider berming against the building where this is economically feasible and practical.

2.4.5 To avoid the installation of snow melting devices, eliminate the use of ramps where possible. The approach to loading docks, for example, shall be level, or if a ramp is essential, then it should be covered.

2.4.6 Exterior wall and roof assemblies, with their openings, shall be very carefully detailed for complete air and vapor tightness, and all the necessary air seals clearly shown and/or specified.

2.4.7 The building envelope's thermal insulation shall be as continuous as possible.

2.4.8 Minimize cold bridges in the exterior wall and roof assemblies, for example, at the junction of foundation walls and slabs on grade.

2.4.9 Glass shall be minimum double glazed, sealed, argon filled, insulated units low "E" type, having a "U" factor not greater than 12.10 W/sq x °C (0.37 Btu/hr x sq.ft. x °F). Clear triple glazing in lieu of

this, may be provided. The air space between glazing shall be at least 12.5mm.

2.4.10 Floor slabs on grade for offices or other areas used for sedentary type of work activities, shall be insulated throughout, with a minimum of RSI=1.76 (R-10) rigid board.

2.4.11 Avoid go-around windows at building corners.

2.4.12 Metal window frames and sash shall be thermally broken.

2.4.13 Provide vestibules for all entrance and fire exit doors. Minimum depth for main entrance vestibules: 2400mm.

In addition, provide revolving doors where frequent use is anticipated, except at locations where difficulty of obtaining regular maintenance can be expected.

Where the foregoing is not possible and where swinging type of exterior doors are used in other than service areas, exterior doors and frames shall be thermally broken and filled with insulation. The glazed portions shall be of insulating sealed clear double glass units.

2.4.14 The standard ceiling height shall be 2600mm (8'-8") for general purpose office areas. In special cases, this may be raised to 2800mm (9'-2") after prior consultation with the Ministry.

2.4.15 Ceilings, in combination with their lighting fixtures, shall form a system as efficient in lighting as the criteria given hereinafter. Where possible, a typical layout shall be based on a 1500mm x 1500mm module.

2.4.16 Where practical, locate service areas, such as washrooms, stairs and corridors, along the perimeter of the building to make them act as thermal buffer zones.

2.4.17 Windows should be shaded from direct sunlight in the summer months and unshaded in the winter months if solar heat gain is considered an advantage.

2.4.18 Avoid soffits and large roof overhangs; if unavoidable, they shall

be designed to minimize air leakage.

2.4.19 Spaces that have similar environmental control needs shall be grouped together in order to reduce the extent and complexity of the mechanical systems.

2.4.20 In office areas, reflections of room surfaces shall not be less than:

Ceilings - 80%
Walls - 50%
Floors - 20%

2.5 ADDITIONAL REQUIREMENTS: MECHANICAL

2.5.1 Heat recovery systems shall be provided for any source of wasted heat (exhaust air, computer rooms, etc.), when the payback period is 5 years or less. These may be, in the order of preference:

- a) Heat recovery chillers
- b) Air or ground source heat pumps
- c) Heat pipes
- d) Plate type heat exchanger
- e) Glycol run-around system

2.5.2 Use a variable volume supply and exhaust system based on the sash opening of fume hoods, in the case of laboratories.

2.5.3 Use carbon monoxide detectors for all parking exhaust systems.

2.5.4 In all buildings where a Building Automation System is to be provided, in addition to the regular HVAC functions, **all the space temperature controls** (i.e. control of VAV boxes, etc.) shall be networked and integrated within a single overall system.

Lighting and Fire Alarm systems shall also be interfaced with the HVAC systems, but they may be supplied by a different manufacturer. The degree of integration shall be examined on a project specific basis, and could vary considerably. However, the operator shall be able to access any of the above systems, for control or monitoring purposes (such as is the case of Fire Alarm System, from a single terminal, using a common set of software commands).

2.5.5 Include in the specifications, provisions for positive measurement of building exfiltrations, to be performed at the completion of construction.

2.5.6 In calculating the building cooling load for office buildings, allow 32 W/s.m. (3 W/sq.ft.) for electrical office equipment, computers and computer terminals, based on gross office floor area. Allow for 80% diversity factor for sizing the main HVAC apparatus only.

NOTE: Do not use this load for determining compliance with Section 8 of ASHRAE/IES 90.1. Use the values indicated in the standard instead.

2.5.7 During the heating season, in office buildings in particular, use a continuously running air handling system that will transfer the heat from the core of the building to the perimeter areas throughout the night hours. Fan powered boxes with extended return ducts or dedicated fans may be used for this purpose.

2.5.8 Minimize the horse-power required by the air handling systems:

- a) Avoid sizing air ducts for a nominal pressure drop (including fittings) greater than 0.75Pa/m (0.1"/100 ft).
- b) Minimize the number of elbows; avoid using square elbows, square take-offs or non-tapered spin-on connections.
- c) Avoid using take-offs cut into the side of the duct. In particular, when the branches differ greatly in length, position the take-off elbow in such a way as to face the incoming air flow.
- d) Avoid any elbow sharper than 45° within a distance of 10 equivalent diameters of the fan outlet.
- e) Avoid sizing the free area of coils and louvers, at greater air velocities than 2.7m/sec (500ft/min).
- f) Avoid using silencers with internal baffles
- g) Restrict the length of flexible connections to 2.5m (8ft).
- h) Avoid balancing dampers at air terminals. Use balancing dampers at branches.

2.5.9 Use pressure independent primary-secondary circuits, each equipped with its own circulating pumps, when different regimes of temperature are employed in parts of the same closed loop water system.

The common piping between loops shall not be more than 0.6m (2ft).

Exception: When one of the loops is a boiler system, separate the primary-secondary loops by a heat-exchanger to avoid thermal shock or other difficulties generated by the expansion tank location.

2.5.10 Schedule the water temperature for heating and (if feasible) for cooling purposes, based on outdoor temperature.

2.5.11 To provide a better control of the terminal heating coils (installed in air ducting systems), restrict the water temperature to not more than 50° (150°).

2.5.12 Avoid using 2-way control valves for the terminal coils unless variable speed pumps are provided.

2.5.13 For heating underground garages, use surplus or recovered heat, to maintain a minimum indoor temperature of 2° C.

2.5.14 Use building exhaust air to de-ice access ramps.

Use building return air to ventilate and heat mechanical rooms.

(NOTE: For example, the return air could circulate freely through the mechanical room between the discharge of the return fan and the mixing chamber intake.)

2.6 ADDITIONAL REQUIREMENTS: ELECTRICAL

2.6.1 The building lighting fixtures and ceiling shall form an efficient lighting system using the following design principles:

2.6.1.1 All lighting fixture types selected shall have components of high efficiency and shall operate close to their optimum temperature, but shall not exceed their optimum temperature.

2.6.1.2 Task or task/ambient lighting as an alternative should be considered.

2.6.1.3 The lighting system(s), including lamp ballast and fixture specified, shall be both cost effective and efficient.

PROVINCE OF ONTARIO ARCHITECTURAL DESIGN STANDARDS FOR COURT HOUSES

O. MECHANICAL GUIDELINES AND ENVIRONMENTALLY CONSCIOUS DESIGN STANDARDS

- 2.6.1.4** Use of unapproved experimental products or lamps and fixtures without independent test data is not allowed.
- 2.6.1.5** Design of lighting systems shall be based on the optimum performance of the luminaire system. Over design with the intent of using energy saving devices is not allowed.
- 2.6.2** The following principles shall be applied in the design of lighting control:
- 2.6.2.1** In large open office areas, ceiling lights shall be switched in groups from multi-gang wall switch centres. Grouping of lights shall be reasonably small to facilitate the use of any individual section of the space without lighting the unused areas of the floor.
- Individual lighting circuits or switched groups shall be co-ordinated with the corresponding mechanical zones.
- 2.6.2.2** Ceiling lights shall be switched locally in all rooms enclosed with permanent ceiling high partitions. Occupancy sensors shall also be provided in permanent offices, conference rooms or other areas with infrequent hours of operation.
- 2.6.2.3** Lights in corridors, stairways and walk-through passageways shall be provided with multi-point switching at all entrances, where the type of occupancy makes it functionally desirable.
- 2.6.2.4** Switching and control of the special purpose lighting in such areas as auditorium, gymnasium, arena, stage, laboratory, etc., shall be arranged to suit the requirements of the task and functions to be performed in those areas.
- 2.6.2.5** In addition to local and group switching of ceiling lights, centralized manual and automatic over-riding control of the general lighting shall be provided in all office buildings of 1000s.m. or larger. Special purpose lighting, corridor and stairway lighting shall not be included in the centralized control.
- 2.6.2.6** Outdoor lighting shall be controlled using astronomic times.

- 2.6.3** Centralized manual and automatic control of general lighting in large office buildings shall function as follows:
- 2.6.3.1** Lights shall be circuited, grouped and provided with remotely operated control devices for switching.
- 2.6.3.2** Lighting in the building shall be controlled by individual floors and in large floor areas by sections of the floor.
- 2.6.3.3** The remote control shall be operated automatically by timing or sensing devices, but may be overridden by the building operator and/or the off-hours security officer.
- 2.6.3.4** The manual remote control panel shall be provided with on-off control and indication for all floors and sections of floors to be controlled individually.
- 2.6.3.5** If computer control is provided for the HVAC by the Mechanical Division, its operation shall co-ordinate with both the lighting and the environmental systems in the building.
- 2.6.3.6** Automatic switching of the lighting zones shall be done sequentially to prevent high inrush currents.
- 2.6.4** The highest possible system voltage shall be chosen for the service and for the utilization throughout the building, consistent with economy in order to minimize energy losses in the distribution system.
- 2.6.5** Within a building, the combined voltage drop in feeders and branch circuits shall not exceed 3% of the system voltage.
- 2.6.6** Where the loads of a building are such that they create a power factor at the building service of less than 0.9, devices for power factor correction shall be placed at those loads or at the feeders to those loads. Alternatively, high power factor ballasts may be used for the correction of power factor.
- 2.6.7** To limit maximum monthly demand on the main electrical service to an optimum value, the use of a peak load control shall be used where appropriate.

2.6.8 For standard open floor office area larger than 100sm (1000sq ft) having partitions lower than 1.4m below the ceiling, the electrical loading of the interior lighting system shall not exceed 15 W/sm (1.4 W/sq ft)

2.6.9 The maintenance factor used in lighting calculations shall be based on the fixtures being totally cleaned once a year and group re-lamped where lighting levels have dropped below 80% of normal.

2.6.10 Light sources used shall produce not less than 60 lumens per watt including ballast losses. Other less efficient sources may be used for special purpose where more efficient sources cannot be applied.

2.6.11 Maintained illumination levels for common tasks shall be as in the table below:

TASK OR AREA	NOMINAL lux (FOOT CANDLE) LEVEL	EQUIVALENT lux (FOOT CANDLE) LEVEL
Service area or public areas	160 (15)	130 - 200 (12 - 18)
Circulation areas within office space but not at workstations	325 (30)	260 - 390 (24 - 36)
Normal office work, reading, etc., or comparable task	650 (60)	540 - 860 (50 - 80)

2.6.12 For specific or other special lighting tasks (such as for sports activities and laboratories), refer to the latest edition of the IES Lighting Handbook.

2.6.13 The design shall address all factors that affect visibility, such as glare (direct and reflected), contrast ratio, color rendition and visual comfort, so that the desired lighting levels may be provided with the minimum energy expenditure. Energy restrictions in lighting necessitate the use of fewer lighting fixtures and lamps to maintain required lighting levels. To achieve this, the performance of the lighting source, ballast, lens, etc., and the efficiency of the light fixture must have appropriately high quality.

The design shall meet the intent of IES RP 24-1989 "VDT Lighting".

2.6.14 When electrical car block heater outlets are provided, they shall be timed below minus 12°C and provided with automatic cycling temperature above minus 25°C .

2.6.15 Energy efficient power transformers shall be provided.

2.6.16 For general illumination areas, fixtures equipped with T-8 fluorescent tubes and rapid-start electronic ballast shall be used.

2.6.17 The fixtures shall be relocatable within the ceiling grid, to allow in-ceiling task lighting and asymmetrical luminaire patterns.

2.6.18 Where appropriate, use occupancy sensors for light switching.

3. INDOOR ENVIRONMENT

3.1 GENERAL AND ARCHITECTURAL

3.1.1 To facilitate the occupant's access to day lighting, design the floor plate to ensure that **no work station is located further than 10m (33ft) from a daylight source (window, skylight or similar)**

3.1.2 All buildings shall be provided with optional means of natural ventilation in areas where emergency, essential or public operations need to be maintained.

Also natural ventilation shall be provided, when it is identified as a requirement by the occupants. Locations and operational modes of the natural ventilation devices, such as strategically placed key-operated windows and use of natural updraught in shafts and atriums, shall be shown on the design drawings.

Operable windows shall be located to ensure that they do not create any drafts across the floors or within the building. Their preferred location should be in private rooms, rather than in open floor areas. The windows shall be interlocked with the mechanical systems, in such a way that they interrupt the local heating or cooling when opened.

3.1.3 Select only interior finishes and furnishings that will produce a **minimum amount of off-gassing** into the space. Request published data from manufacturers, on off-gassing from their products.

3.2 MECHANICAL

3.2.1 Minimum ventilation rate (outside air used) for the average occupancy shall be based on ASHRAE Standard 62 latest edition, but not less than 0.812L/s x sm (0.16CFM/sq ft) of gross floor area, or 10L/s per person, whichever is greater.

3.2.2 The carbon dioxide level in all occupied areas shall not exceed 800ppm. Equip the building automation system with carbon monoxide sensors (typically located in the common return) and control the outdoor air dampers based on their measurements.

3.2.3 The minimum rate of total air circulation (outside and recirculated) supplied at any room load, to the occupied areas, shall be 4.0L/s x sm, (0.8CFM/sq ft) or 5 air changes per hour, whichever is greater.

This circulation of air shall be maintained throughout the occupied period of the facility.

NOTE: To meet this requirement a Variable Air Volume (VAV) Box shall be equipped either with a reheat coil (supplied with reclaimed heat) or with a recirculating fan.

3.2.4 Air conditioning system shall be capable of flushing out the building at ambient temperature above 0°C .

Flushing shall be achieved with 100% outside air for a minimum of two hours during the unoccupied hours, with not less than 5 air changes per hour.

3.2.5 The humidification system shall be air-atomized, ultrasonic or steam, if without chemical treatment. Recirculating type air-washers or sprayed coils are not desirable.

3.2.6 The air filtration system efficiency shall be 80%-85% minimum, measured as per ASHRAE testing method.

3.2.7 Maximize the amount of **control exercised by the occupant** over

his/her local micro-climate. Design in such a way as to create minimum areas, controlled by locally accessible devices such as thermostats, light switches, etc. Evaluate the cost implication of providing zones of reduced size. Provide also over-ride capabilities by the building automation system over the local controls.

3.2.8 Group together and locate the fresh air intakes in the direction of the prevailing wind (typically on the north-west side of the building). Avoid confined spaces (i.e. wells in the roof line, narrow spaces between buildings, etc.), where pollutants could accumulate and recirculate.

Do not locate fresh air intakes in the proximity of loading docks or parking spaces. Cooling towers, washrooms, labs or emergency generator exhausts, etc. shall also be grouped together and located as far as possible downstream of the prevailing wind, in relation to fresh air intakes.

Arrange for a wind tunnel test simulation in special cases.

3.2.9 For **sealed buildings**, or for buildings where security is a concern (i.e. police stations, correctional institutions, court houses, etc.), provide **stand-by equipment** as a design feature for boilers, pumps, main fans, chillers and cooling towers. Equipment such as main fans, chillers and cooling towers shall provide a minimum of 50% stand-by capacity, boilers shall provide 60% and pumps (when only one per circuit) shall provide 100%.

Ensure the continuity of the operation of major heating equipment with emergency power, where applicable.

When the type of buildings mentioned above are equipped with peak-shifting heating/cooling storage tanks, provide enough heating and cooling capacity built into the equipment to carry 100% of the load in case of storage failure.

3.2.10 When designing an air distribution system, consider the ventilation efficiency of the system by minimizing the by-pass effect between the supply and return air outlets.

Particular attention should be given to **displacement ventilation**, where the air creates a "piston effect" across the occupied area. In

such case, the supply and return outlets are typically located at opposite ends.

3.2.11 In office buildings, when an overhead forced air system is selected, supply the heating air through linear grilles along the windows. Use separate linear grilles or diffusers for cooling purposes. Maintain a minimum distance of 0.3m between the heating and cooling linear grille.

3.2.12 When the mechanical refrigeration contains chemicals, which in accordance with the appropriate ASHRAE and CSA Standards require a special separate ventilation (i.e. some refrigerants, etc.), this equipment shall be located in a separate mechanical room. This room shall not contain any air handling (except for the room itself) or gas fired equipment.

3.2.13 Do not locate air handling and gas fired equipment in the same mechanical room.

3.2.14 Do not connect forced (or induced) draft with natural draft gas fired equipment to the same flue or chimney.

4. WATER CONSERVATION

4.1 LANDSCAPE ARCHITECTURAL

4.1.1 Use **drought-tolerant plants** when designing the landscape.

4.1.2 Consider **sub-surface drip irrigation systems**.

4.1.3 When feasible, store rainwater in **settling ponds** to be used for irrigation.

4.1.4 Avoid creating large paved areas around buildings, when feasible.

4.2 MECHANICAL

4.2.1 Use **reduced flow rate type plumbing fixtures** MAX. 0.189 L/ sec. (3 US-GPM) per shower head.

4.2.2 Consider **utilizing metering type valves** or proximity sensors, to

limit duration of water flow in fixtures used for common washrooms.

4.2.3 Use **low flow water closets** with not more than 13 litres per flush.

5. HAZARDOUS OR HARMFUL MATERIALS

5.1 GENERAL AND ARCHITECTURAL

5.1.1 A full soil investigation shall be conducted prior to design. All contaminated soil shall be removed or treated by injection, as required.

5.1.2 Do not use any building materials containing friable **asbestos**.

5.2 MECHANICAL

5.2.1 Halon fire protection systems shall not be used.

5.2.2 The quality of exhausted air or water waste containing dangerous chemicals or viral material from special facilities such as laboratories, shall be subject to approval by the authorities having jurisdiction.

5.2.3 Do not use CFCs as refrigerants for the cooling systems. When comparing alternatives for non-CFC options, also take into account the following factors:

- using natural or propane gas instead of electricity
- reducing peak electrical demand and consumption

Cost premiums, if any, and the necessity of using licensed operating engineers, should be evaluated on a case-by-case basis and weighed against the environmental benefits.

For buildings larger than 10,000sm (100,000 sq ft) employ one of the following options (listed in the order of preference, based on environmental considerations).

Choice #1: gas-fired absorption refrigeration equipment;

Choice #2: low pressure non-CFC compressors combined with electrical demand peak shifting;

NOTE: Until the Refrigerant R-123 gains wide acceptance in the industry, its use shall be avoided. However, any new low pressure centrifugal chiller should be specified to be compatible with this refrigerant.

Choice #3: high pressure compression refrigeration (R-22 or R-134a) combined with electrical demand peak shifting;

Choice #4: gas-fired engine driven compression refrigeration with high pressure (R-22 or R-134a), or low pressure non-CFC compressor;

Other Choices: refrigeration machines fed by electricity produced on site (cogeneration) or by residual heat of cogeneration, use of local aquifers (lakes, rivers, wells) for producing cooling, etc. These options should be examined on a project specific basis.

6. REUSED/RECYCLED MATERIALS AND WASTE REDUCTION

6.1 OBJECTIVE

6.1.1 To establish direction for designers through the use of performance and evaluative criteria in the design and construction of buildings, optimizing the ratio of new and reused/recycled materials and also contributing to the reduction of waste during construction and operation.

The selection of materials and the development of the various building systems and services shall be directed toward achieving the desired lowest environmental impact, in a cost effective way.

6.2 ARCHITECTURAL

6.2.1 Design and select long-lasting building components and systems, to avoid frequent replacement.

6.2.2 Employ reused/recycled building products in the design. Reuse, as much as possible, materials reclaimed from on-site demolition.

6.2.3 Build in the design, the flexibility necessary for multiple alternate use of floor plates. Design and select building components allowing for possible future space reuse.

6.2.4 Minimize alteration costs, by including features such as but not limited to:
a) raised floors for data cabling, plug-in type power wiring, plug-in type

telephone cabling and, if feasible, for air distribution and sprinkler piping;

b) plug-in type light fixture connectors in the ceiling space.

6.2.5 Design the building with suitable modular components to reduce on-site cuts and wastage.

6.2.6 Provide integrated waste handling systems, to allow for the collection, storage and compaction of waste during the building's operation, with ease and efficiency. Include provisions for separating and storing similar materials (i.e. glass, paper, etc.) in dedicated containers.

6.2.7 Before proceeding with major renovations, explore alternate solutions with the client for achieving similar results, without major disruptions to the building components.

6.3 CONSTRUCTION SPECIFICATIONS

6.3.1 Have a consistent preference for approved high quality reused, re-manufactured or recycled building materials, rather than new virgin products.

Ensure that they meet all the aesthetic, safety and durability requirements of similar new products.

When specifying the reused/recycled products, ensure that other policies such as Canadian Content or Competitive Bidding are also considered.

Refer also to the Ministry's Master Specifications for detailed information on the latest "green" building materials.

6.3.2 Specify the methods of sorting, storage and disposal of waste generated during construction.

6.3.3 Provide direction on the disposal of recyclable material that cannot be used on-site.

6.3.4 Request builders to provide confirmation for meeting or exceeding the waste reduction requirements during the construction.

7 NOISE POLLUTION

7.1 CRITERIA FOR ACCEPTABLE NOISE LEVELS IN UNOCCUPIED ROOMS

7.1.1 Minimum NC levels shall be as follows:

Apartments	30-35
Offices:	
Executive.....	25-30
Conference Rooms.....	25-30
Private.....	30-35
Open-plan Areas.....	35-40
Business Machines/Computers.....	40-45
Public Circulation.....	40-45
Hospitals and Clinics:	
Private Rooms.....	25-30
Wards.....	30-35
Operating Rooms.....	25-30
Laboratories.....	35-40
Corridors.....	35-40
Public Areas.....	30-35
Schools:	
Classrooms.....	25-30
Open-plan Classrooms.....	35-40
Libraries.....	35-40
Courtrooms.....	25
Live Theatres.....	20-35
Movie Halls.....	30-35
Restaurants, Cafeteria.....	40-45
Concert Halls.....	15-20
Recording Studios.....	15-20
TV Studios.....	20-25

7.2.1 Refer to ASHRAE Handbook "Applications-1991" and ASHRAE "A Practical Guide for HVAC System Noise and Vibration Control" for further details.

8. BUILDING'S GREEN IDENTIFICATION

8.1 ARCHITECTURAL

- 8.1.1** The facility must be seen, perceived and identified by the public as being a friendly, environmentally conscious construction.
- 8.1.2** The building shall properly integrate with the site and natural surroundings in a complementary manner; not arrogant, aggressive, flagrant and inconsiderate. The beauty of the construction shall be reflected in its expression of the human spirit and craftsmanship.
- 8.1.3** Site planning and the way the masses of the building are located in relation to the sun, wind pattern, natural slopes, etc., must play a major role in the design. The design shall be conscious of the natural habitat and ecosystems in placing the building to achieve the most harmonious balance with these factors.
- 8.1.4** The building shall be designed in a context with the past (indigenous appreciation of earth, air, water and light), present (limitations of contemporary technologies and materials), and future (stretching out to reach higher levels of living standards).
- 8.1.5** Design and specify a visible permanent public display (plaque), located indoors or outdoors, near the main entrance, containing as a minimum the following information:
- name and year of construction
 - design energy performance index (EPI)
 - main energy efficient features (architectural, mechanical, electrical)
 - main water conservation features
 - maximum design for indoor air carbon monoxide concentration
 - examples of non-CFC, non-asbestos, etc. materials selected
 - examples of recyclable materials used for construction
 - examples of waste reduction measures during construction and operation

The display shall be engraved, and shall be made of a long lasting material, preferably metal.

SECTION P

OUTLINE HOLDING CELL SPECIFICATIONS

THESE OUTLINE HOLDING CELL SPECIFICATIONS ARE INTENDED TO SERVE AS A DIRECTION FOR THE ARCHITECT OR DESIGNER. IT IS MANDATORY THAT THE REQUIREMENTS DESCRIBED IN THIS GUIDELINE BE DISCUSSED IN DETAIL WITH A REPUTABLE MANUFACTURER OF HOLDING CELL HARDWARE SUCH AS STRONGBAR INDUSTRIES OR APPROVED EQUIVALENT.

ALL ASTM, CGSB, CSA, ULC AND AISI SHALL BE THE LATEST EDITIONS AND MAY SUPERSEDE THE SPECIFIC NUMBERS GIVEN BELOW.

SECURITY GRILLE DOORS

MATERIALS:

STRUCTURAL STEEL SECTIONS AND STEEL PLATE

CSA G40.21-M1978, grade 300W (Imperial CSA G40.21, grade 44W)

SHEET STEEL

Cold or hot rolled, commercial quality stretcher-levelled carbon steel sheet coated to requirements of ASTM A525-72, with a minimum 3mm coating designation of Z275(G90) or uncoated conforming to ASTM A366-72.

TOOL RESISTING STEEL

Vertical round bars shall be 31.75mm diameter high strength bars of steel Grade C1045/1050 75,000psi minimum yield strength having a Rockwell hardness of RC 60 minimum at the surface and RC 60 minimum to a depth of 1.27mm from the surface. Hardeners must not penetrate to the core. Case hardening of open hearth steel is not acceptable. Tool resisting steel flat bars and shapes shall conform to ASTM A629-71.

WELDING MATERIALS

Shall conform to CSA W59-1982.

FASTENERS

All exposed screws and nuts shall be security type. Those that are not re-

quired to be removed again or are on the prisoner side of the construction shall be flat or round head having an extra head which will twist off leaving the main head flush or projecting without slots. Where removal is required screws shall have slots or holes that require a special spanner tool for removal and must be such that standard tools will not fit.

PLASTIC GLAZING

The glazing material shall be polycarbonate of appropriate thickness. It may consist of three separate pieces where the principal piece is sandwiched between pieces 3mm thick for replacement purposes.

FABRICATION OF GRILLE FRONTS

Horizontal and vertical framing bars shall be 64 mm x 38 mm x 3 mm HSS tubes with 32 mm toll resisting round bars inserted in the centre of each HSS tube. Intermediate flat horizontal bars shall be 64 mm x 10 mm with holes to receive vertical round bars. Space 32 mm diameter vertical resisting steel bars at 127 mm O.C. maximum. Horizontal flat bars shall have holes to receive vertical bars. Weld vertical bars to extreme top and bottom horizontal members with holes countersunk to accommodate welds. Provide additional flat bar to conceal welding of vertical bars and weld to flat bar.

The leading edge of the sliding door shall be provided with a steel plate stile adequate in width to accommodate a heavy duty detention deadlock. A flush door pull shall also be located above the deadlock.

Provide a continuous vertical receiving column anchored to the wall to accept the sliding door and hook style deadbolt.

Locking devices, which can be operated remotely, shall have a key override. All electric locking devices shall be co-ordinated with the manufacturer of the cell fronts.

CELL BENCHES

Shall be reinforced concrete as shown on Fig. L5 of these standards. Metal benches are not acceptable.

CEILING LIGHTS AND VENTILATION UNITS

Shall be of a type that can be installed in a steel ceiling and are to be totally tamper proof.

WATER CLOSET COMBINATION

Shall be welded type 304 stainless steel. Visible welds shall be ground smooth and the exterior polished to a No. 4 finish. The toilet seat shall be elongated with a No. 7 mirror finish. The fixture is to be secured to the floor and walls with no exposed fastening devices complete with vandal-proof wall and fixture access panel.

The combination shall have a lavatory bowl with self-draining soap tray, hot and cold water, indexed push button faucet with integral check stops. Bowl shall be provided with sanitary drinking bubbler/filler. All valves shall be tamper proof.

SECURITY HOLLOW METAL DOORS AND FRAMES

Doors shall have a thickness of 50mm with a bevelled side clearance to ensure smooth operation without binding. Doors shall have 14-gauge mild steel face sheets full welded on edges with a continuous reinforcement full height and width. Ten-gauge steel and channel banding around complete door perimeter shall be provided, spot welded to face sheets at 75mm on centres.

The inner reinforcement shall be true truss design with triangular form. Flat apexes shall be spot welded on 70mm centres horizontally and 75mm centres vertically. Each flute of reinforcement is to be sound and fire insulated with 6-lb. density mineral wool.

The only acceptable alternative to the above structural requirement is to manufacture the doors with 12-gauge cold rolled steel face sheets with continuous 12-gauge vertical channels 100mm on centres, spot welded 75mm on centres to both faces. Voids between channels to be filled with 6-lb. density mineral wool. Vertical edges of face panels and tops of doors shall be joined and fully welded ground smooth and filled.

The hinge reinforcing channel shall receive an additional back-up reinforcement of 4.8mm plate welded in place, all properly drilled and tapped to receive

hinge screws. Pull reinforcement shall be 9.5mm x 35mm x 255mm. Closer reinforcement shall be 12 gauge x 89mm x 358mm long. Special pocket shall be built into the door to receive remote electrically operated security lock. Detention side of the door shall finish flush with a .32mm back-up plate to protect the lock. Make provision so the removal of the lock is impossible when the lock bolt is extended.

Doors shall be set in pressed steel security frames of minimum 12-gauge mild steel. Frames shall have corners fully mitred continuously welded and ground smooth. For each mortise hinge, provide a 4.8mm thick reinforcement, dull depth of jamb spot welded to frame and completely drilled and tapped. For each surface hinge provide 9.5mm x 35mm x 255mm long reinforcement drilled and tapped to receive prison hinge. Provide drilled and tapped reinforcement for all hardware mountings.

For electric jamb locks provide special 12-gauge perimeter housing with 4.8mm back-up for field attachment of lock.

CONSULTING CUBICLES

As shown on Figs. L9 and L10 supply and build in a window/speaking device between the interviewer and prisoner. The unit shall be similar and equal to the consulting window number L1016 provided by Strongbar Industries Inc. The combination window speaking device shall be complete with a baffled contra-band-resisting speaking device, stainless steel counter top and bullet-resistant glass window meeting ULC No. 752.

Stainless steel stools 304mm in diameter spun from 1.6mm thick type 304 material shall be provided and installed. Telephone communication is not acceptable.

ELECTRIC LOCKS

Shall be Folger Adams or equivalent with key override for all locks.

SECTION Q

GUIDELINES FOR ACOUSTICS AND COURTROOM SOUND SYSTEMS

Note: The Courtroom sound systems outlined in this section will be superseded by more detailed sound system standards currently under development

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I. TECHNICAL BACKGROUND/DESIGN GUIDELINES

1. INTRODUCTION

In spaces within which legal proceedings occur, speech intelligibility is of utmost importance. All participants (and the public where appropriate) must be able to hear properly at all times. Speech intelligibility and an appropriate acoustical environment are also important in other parts of a court house, including public areas.

A variety of factors must be dealt with as part of the architectural design to achieve maximum speech intelligibility and a suitable acoustical environment, especially in courtrooms and motion rooms.

Reverberation

Reverberation is the persistence of sound within a space due to multiple inter-reflections of sound from the room boundaries. In a reverberant space, the same sound arrives at a listener from a multitude of directions, with varying time delays. These reflections (reverberant field) combine with the direct sound to create a blurring effect that interferes with intelligibility even though the sound level at the listener's ears is more than adequate. The greater the reverberation effects, the poorer the speech intelligibility. Thus for optimum communications within a space, there must be adequate acoustical (sound absorbing) treatment as part of the room finishes to reduce sound reflections and reverberation sufficiently. Reverberation effects are directly related to the volume of the space. Thus the larger the volume, the greater the reverberation and the greater the acoustical treatment required. In a large space, the long total travel time of many sound reflections may result in sufficient time delay relative to the direct sound (or some other reflections) to either be perceived as a distinct echo, or to combine and interfere with later syllables of speech. A useful 'rule-of-thumb' is that reflections arriving with a relative time delay of about 50 milliseconds (relative path difference of about 15m) are deleterious.

In a large space (e.g. courtroom) that is properly treated acoustically, the sound level from a person talking will diminish as a function of distance. As a result, inadequate sound level may be received in parts of the room. This may especially be the case for soft-spoken people, or for inexperienced participants who are nervous. These facilities will be fitted with sound-reinforcement systems whose purpose is to provide adequate sound level to each listener, and in effect, electronically reduce the apparent distance between the talker and listener. However, it must be emphasized that the electronic sound reinforcement systems can only partially compensate for inappropriate acoustical environments. For optimum results, both with and without the use of sound reinforcement, the reverberation effects discussed here, as well as sound isolation and background (ambient) noise from building services, discussed below, must be adequately controlled.

A further requirement in courtrooms and motions rooms relates to the need for recording the proceedings as part of the process of obtaining an official record. Up to a certain point, in an environment that is less than ideal for good speech intelligibility, the human brain, with binaural hearing, can compensate for deleterious sound reflections (reverberation). However, the microphone and tape recording system do not have this sophisticated processing capability. Thus achieving adequate control of reverberation, general acoustical conditions and background noise is even more important for purposes of obtaining intelligible recording.

Sound Isolation

In some cases a high degree of sound isolation is required simply for privacy/confidentiality. In others it is a matter of ensuring adequate freedom from distractions during proceedings that may be tense and require maximum concentration. The principles of sound isolation are dealt with in TECHNICAL BACKGROUND/DESIGN GUIDELINES, Architectural Acoustics Section 2.2, "Sound Isolation" and specific guidelines/requirements are presented in Section II "SPECIFIC REQUIREMENTS".

Noise/Vibration Control

The background sound levels from building services such as the heating and ventilating systems must be adequately low where speech intelligibility and recording quality are important. Control of noise and vibration from building services is discussed in TECHNICAL BACKGROUND/DESIGN GUIDELINES, Section 3, "Mechanical/Electrical Noise and Vibration Control" and specific criteria are presented in "Specific Requirements" for individual spaces.

Electronic Systems

Design guidelines and the specific system requirements are presented in TECHNICAL BACKGROUND/DESIGN GUIDELINES Section 4 "Loud-speaker Systems" and in SPECIFIC REQUIREMENTS Sections 2 and 3 which present outline specifications.

2. ARCHITECTURAL ACOUSTICS

2.1 Room Acoustics

Treatment Principles

For spaces such as courtrooms and motions rooms where speech intelligibility and recording quality are important, a sufficient amount of sound absorbing materials must be distributed over the various internal surfaces to control reverberation and discrete sound reflections. The treatment must be distributed over the three axes of the room for proper effect. Carpet, although a mediocre acoustical material, will provide useful sound absorption, as will various furnishings and the occupants themselves. All of these aspects have been taken into account in determining the specific acoustical treatment requirements presented later for each space.

The interior sound absorption treatment also provides the benefit of lowering the internal sound levels produced by intrusions or by building services. However, this is a secondary effect and must not be counted on as the primary means of noise control.

The smaller the space the less critical the need for acoustical treatment. This is because a space with lower volume has less reverberation, and very short time delays between reflections. Nevertheless, smaller spaces such as interview rooms and offices would also benefit from acoustical treatment of the ceiling and 1 wall, or 2 walls at right angles. Although many such spaces often have no acoustical treatment other than a lay-in acoustical ceiling, a quieter, calmer environment that generally would be appropriate to the context would result from such additional treatment. Some spaces such as medium (and larger) meeting rooms (e.g. jury room) can appear to function reasonably well with less than optimum acoustical treatment. However, for protracted use, such an environment can be extremely fatiguing to the participants because of the unconscious extra strain and effort required to concentrate to properly perceive what is going on.

Of course, the hearing impaired and the elderly, whose hearing ability naturally diminishes with age, experience even more difficulty in less than optimum acoustical environments than do those with normal hearing ability.

Public spaces such as corridors, lobbies, reception and waiting areas often have significant people activity either in terms of conversations or traffic. With inadequate sound absorption these spaces can become quite noisy for the reasons explained earlier. Such spaces can suffer from the 'cocktail party' effect because some activity makes the space noisy, others raise their voices, making the space even noisier, prompting others to raise their voices further, etc.

The deleterious results from this effect include reduced intelligibility of paging within the space, and the increased potential for disruptive sound intrusions into adjacent spaces such as offices, courtrooms, interview rooms, etc. For the public spaces under discussion, an acoustical ceiling of sufficiently high sound absorption will generally suffice to produce satisfactory results, unless there are special conditions such as unusually high ceiling heights in relation to the other dimensions.

Some facilities such as prisoner holding cells and associated spaces (prisoner's corridors) must be constructed of hard and sound reflecting surfaces for reasons of safety and vandalism. The acoustical security systems such as audio surveillance of corridors are compromised in performance because of the reverberation effects. For example, in a long corridor fitted with multiple microphones along its length as part of audio surveillance, speech intelligibility is generally poor at the monitoring station. Further, the sound is spread relatively uniformly throughout the corridor by multiple reflections. Although it would be useful to localize an event by having only the closest sensors activated, typically most of the sensors would be activated in such an environment. If non-acoustical requirements dominate, less than ideal performance will result.

Sound absorption treatment could be introduced into secure corridors by protecting the acoustical element with a rugged finish such as heavy gauge perforated metal. Only the ceiling need be treated unless the ceiling height is extraordinarily high. Any wall treatment should be kept above reaching (jumping) height, for non-acoustical reasons. The acoustical element, such as 25-mm thick fibreglass board, could be applied between heavy furring channels, spaced relatively closely (e.g. 300 mm) for strength. The perforated metal could be mechanically fastened using self-tapping screws or pop-rivets. For good acoustical results, the open area in the perforated surface should be a minimum of 20%. (A larger open area is better acoustically.) The ultimate perforation pattern should be chosen in consultation with the acoustical consultant because the hole size and spacing chosen should relate to the thickness of the material. However, a typical pattern could be 1/16" diameter holes spaced on 1/8" centres, in a 60° staggered pattern. This is fine enough not to create any hand or finger holes and thus presents no safety problem.

Sound Absorbing Materials

To be sound absorbing, a material must have porosity to allow air to move through. It must also have sufficient thickness to interact with the sound waves. One technique to enhance sound absorption is to mount the material so that a significant air space is created behind it. In some cases, this can allow reducing the thickness of the acoustical material.

For material mounted directly on a hard backing such as gypsum board, the minimum thickness should be 25 mm. The acoustical performance can be enhanced, especially at the lower frequencies, by spacing the material out from the surface by at least 37 mm. In the case of lay-in ceiling systems, the air cavity behind the material is typically 450 mm or significantly more. Thus, acceptable sound absorption can be obtained from many materials with thickness down to 12 mm, although a greater thickness is still preferred.

Various types of sound absorbing materials are available including glass fibre board panels finished in fabric or perforated vinyl; wood batten systems (strips of various shapes with gaps between strips) with an acoustical element such as fibre glass board behind; perforated metal systems, again with glass or mineral fibre board or blankets behind; various panels intended for ceilings using exposed support (e.g. lay-in tiles in T-bar suspensions) or hidden suspension systems; and spray-on fibre materials. Many of the fabric wall and ceiling systems allow for access to the space behind, which is often a mandatory requirement for building service.

Fabric finished acoustical panel systems for both walls and ceilings are available commercially in prefabricated form or with systems for site applied fabric finish.

Air cavities behind spray-on materials can be achieved by applying to

Because of porosity and surface texture, caution must be used in integrating air systems into acoustical materials. If air is directed across the surface, virtually all good acoustical materials will act as filters and retain dirt. Thus, the design of air distribution systems should take this into account.

It is undesirable to field paint sound absorbing materials to restore appearance since sealing the surface will destroy or severely reduce the acoustical performance.

Good sound absorbing materials generally also have relatively fragile surface finishes. In some cases exposed corners may need protection by mouldings or other visible or hidden trim, or protection from contact with furniture. This can be achieved by rub rails or wainscots.

The sound absorption performance of acoustical materials is specified in terms of sound absorption coefficient, the ratio of sound energy absorbed to that incident. Thus a perfect absorber has a coefficient of one (1). A perfect reflector has a coefficient of zero (0). The sound absorption coefficients vary with frequency, as a function of material characteristics and thickness. Generally it is desired to have a smooth curve of sound absorption coefficients over a wide frequency range. Certain surface finishes such as perforated metal can result in some frequencies being emphasized. Most product information shows the Noise Reduction Coefficient (NRC) for the material. This is the averaged sound absorption coefficient over the frequency bands of 250, 500, 1000, and 2000 Hz, expressed to the nearest multiple of 0.05. The NRC rating is a simple means of indicating and comparing the approximate relative effectiveness of different materials in absorbing sound. In critical applications it is necessary to verify the suitability of the material, not only in terms of NRC rating, but also whether the sound absorption coefficients are adequate over all of the frequencies of interest.

Generally an NRC rating (sound absorption coefficient) of 0.9 and higher is excellent, 0.6 to 0.9 is good to very good; 0.5 to 0.6 is mediocre; less than 0.5 is poor. Hard finishes such as wood, concrete, masonry, and gypsum board generally have NRC ratings of 0.1 or less.

2.2 Sound Isolation

Basics

Sound isolation consists of two components:

A. Airborne sound isolation:

Sound energy created by people activity (e.g. talking) or by equipment (e.g. pumps, chillers) is propagated via the air, impinges on space boundaries such as walls and floors, passes through the boundary and is attenuated, and then is re-radiated as airborne sound energy on the other side of the boundary. The attenuation is dependent on the characteristics of the boundary (e.g. weight, porosity, thickness).

B. Structure-borne sound isolation:

Impacts (e.g. footfalls), or vibration (e.g. from rotating machines such as fans or pumps, etc.) act directly on the structure. Acoustical energy is transmitted to other parts of the building where it is radiated as airborne sound energy (noise).

There are a variety of reasons for requiring a high degree of sound isolation between spaces:

- Need for acoustical privacy, in order to deal with confidential matters. Examples include interview rooms, Crown Attorneys' offices, and jury room.
- Adequately controlled continuous background sound levels to not interfere with good speech intelligibility (e.g. boundaries between mechanical spaces and courtrooms or office space).
- Freedom from transient sound intrusions related to other activities, to avoid distractions and interference (e.g. between corridors or waiting areas and courtrooms).

Airborne Sound Isolation Between Spaces

A common means of specifying airborne sound isolation of building elements is to use the Sound Transmission Class (STC) rating (as per ASTM 413). This is a single number index representing a full set of sound Transmission Loss (TL) data across the spectrum.

The significance of the STC numbers is illustrated in Table Q-1.

TABLE Q-1

STC RATING	DEGREE OF ACOUSTICAL PRIVACY
Less than 45	Poor
45	Marginal
50	Good
55	Very Good
60 or above	Excellent

This interpretation is based on 'normal' conditions (e.g. voice level), taking into account that there is a significant potential variation in individual voice level. For example, a soft-spoken person, or conversation in muted tones in an interview room would not be intelligible on the other side of the room boundary with construction at STC 45. However, with raised voice (e.g. in a tense situation) or a person with a naturally powerful voice, this degree of sound isolation would ensure neither acoustical privacy nor freedom from distraction in a contiguous space such as a courtroom or entrance vestibule/lobby. To ensure that a reasonable minimum standard of sound isolation and acoustical privacy is achieved, construction meeting STC 55 is required in critical applications, with STC 50 considered a minimum. It is important to note that achieving a significant degree of acoustical privacy does not require total inaudibility; only very poor intelligibility. That is, one may be able to tell that there are people talking on the other side of a boundary without being able to eavesdrop on the conversation.

However, to ensure freedom from distraction or disruption, a higher degree of sound isolation may be needed to create effective inaudibility of potentially intrusive sounds.

In practice, the ultimate sound isolation (and privacy) between spaces is the result of the composite effect of all sound transmitting paths through the architectural boundaries, including holes and penetrations for electrical conduits, wiring, electrical boxes, pipes, air ducts, fire hose cabinets; doors; and the air ducts or paths themselves.

The difference in sound level between two spaces is termed the Noise Reduction (NR). In practice this is the aspect of concern. The NR achieved is a function of the STC ratings of the boundaries, as modified (reduced) by the effects of penetrations, as well as of the internal acoustical environment of the spaces. The more sound absorption present in a space, the lower the internal sound levels, as a result of a faster dissipation of sound energy. Thus, for the same amount of sound penetrating into a space (i.e. STC of the boundaries) the NR (sound isolation) will be higher for a space with a greater amount of internal sound absorption. While the interior finishes and acoustical finishes do affect sound isolation, providing boundaries with the appropriate sound isolation (STC) is the primary concern.

For practical purposes in this context, the ratings in Table Q-1 can be considered as the NR values needed between the spaces to achieve the desired results. Where a single or well defined architectural boundary is involved in separating two spaces, the required STC rating for the boundary (including the effects of all penetrations) can be taken as numerically equal to the required NR. However, in some cases, the design and planning of the spaces introduces a buffer that usefully increases the sound isolation. For example, as indicated in Section G, each courtroom will have its public entrance via a vestibule connecting to interview rooms. This vestibule will serve as a 'sound lock' between the courtroom entrance and the public corridor system and waiting area. Thus, the individual sets of doors (and associated wall segments) do not require STC ratings as high as the required NR. It is the combination of elements in the indicated configuration that must provide the specified degree of sound isolation. These factors should be taken into account in determining the final design details.

Impact Noise Isolation

In addition to vertical airborne sound isolation, the floor/ceiling system must provide adequate impact sound isolation. This can be specified in terms of Impact Insulation Class rating (IIC) where the significance of the numbers corresponds to that for STC and NR. The main concern with respect to impact sound isolation is to ensure freedom from distracting sound intrusions. Whenever possible, like spaces should stack. For example, corridors should not be over courtrooms. However, in particular circumstances such as undesirable juxtapositioning may be unavoidable. Even when corridors are not directly over critical spaces, structure-borne noise can impinge.

Unfortunately, simple hard-surfaced floor systems that have adequate airborne sound isolation do not necessarily have adequate impact noise isolation. However, a resilient topping such as carpet and underpad can result in a significant increase in IIC rating (with little or no increase to the airborne sound isolation performance). With these types of floor coverings the impact is cushioned and little energy is transmitted to the structural floor system and then to the space below. Resilient floor coverings also serve to reduce noise produced by abrasive action such as sliding and scuffing. The effectiveness of a floor covering in cushioning or reducing impact noise is dependent on its resilience and thickness.

Of course, the structural floor system also has a significant effect. A structural floor that is lightweight and has greater deflection under live load will generally produce a thumping or booming sound, even with a good resilient covering that will attenuate the high frequency components adequately. Floor systems in this category include open web joist/concrete pan configurations.

When more massive structural floors are used (e.g. reinforced concrete), resilient coverings can solve the problem. It is primarily high frequency components that are transmitted as structure-borne energy by the basic floor, with little or no 'thumping' effect.

In general, the solution is to use structure of adequate mass and stiffness, to avoid long spans where noisy spaces must be above critical spaces, and to use an appropriate floor finish. For this reason, as is also indicated in TECHNICAL BACKGROUND/DESIGN GUIDELINES Section 3, "Mechanical/Electrical Noise and Vibration Control", reinforced concrete structures are preferable to steel framing.

A 150mm (6") or 200mm (8") thick concrete slab by itself or with a hard finish such as ceramic tile, marble, granite or hardwood would typically have an IIC rating of about 35 to 40. Resilient flooring systems can achieve 45 to 55, while carpet and underpad on these thicknesses of concrete can achieve IIC values of 70 to 80. Note that thin cushioned flooring finishes such as vinyl composite tile do not provide adequate IIC ratings.

Where raised "computer flooring" is used, heavy, solid, insert panels should be chosen (e.g. concrete panels or equivalent) to avoid creating drumming sounds when people walk or move chairs. Such undesired sounds could be transmitted to spaces below as structure-borne noise and also be a nuisance within the space, as air-borne noise.

Single-Number Ratings

The single number rating schemes for both airborne sound isolation (STC) and impact sound isolation (IIC) are useful for general rank ordering of construction configurations. However, single number ratings cannot adequately describe the acoustical properties of structures in all circumstances.

The single number ratings are computed from the data obtained from a full frequency spectrum. Sometimes, a major deficiency in one part of the spectrum is counter-balanced by excellent performance in another part. This may lead to a single number rating which is the same or better than another construction which is actually better suited for the application.

In addition, there are certain limitations in the accepted test procedures in terms of conditions actually encountered in use. Therefore, experience and proper interpretation must be included in the selection process, and the designer must not blindly rely only on the numerical ratings.

Wall Partitions

Where a high degree of sound isolation is required, the wall partitions should extend from slab to slab. Flat (e.g. reinforced concrete) floor slabs are preferred because this simplifies implementing a well sealed joint at the partition top. Using the spaces above finished ceilings as common return air plenums is precluded (see TECHNICAL BACKGROUND/DESIGN GUIDELINES Section 3, "Mechanical/Electrical Noise and Vibration Control"). All penetrations through partitions for ducts, conduits, pipes, etc., must be well sealed. Larger penetration openings for ducts should be sleeved (see Appendix Q-A).

Other openings in wall partitions, such as for electrical boxes (switches, power outlet, telephone, computer/communications) can also adversely compromise the sound isolation. Wherever possible, such penetrations in walls between spaces requiring high sound isolation should be avoided. Where such penetrations are mandatory, the openings can be sealed by caulking. Where critical applications are identified in conjunction with the acoustical consultant, the electrical boxes can be enclosed within the partition using gypsum board, lead sheet, or flexible noise barrier material having acceptable fire ratings. In no circumstances should both sides of a critical wall be serviced by back-to-back penetrations.

Placement of other penetrations such as fire hose cabinets, built-in water fountains etc., should receive similar consideration, including the matter of plumbing noise, to ensure that intended wall partition sound isolation is not compromised.

Where raised "computer flooring" is to be used where high sound isolation is required, the wall partitions must be carried on the structural slab and not on the raised floor. Thus, where adjacent spaces both have raised flooring and sound isolation requirements, the floor system must be discontinuous and contained

within each space with no common floor plenum. Any cable pass-throughs must be at designated locations and designed not to reduce the sound isolation of the wall partitions.

Appendix Q-A includes a 'catalogue' of wall partition types and their typical laboratory STC ratings, not accounting for the effects of penetrations, and assuming that they extend from floor to floor. With a high standard of workmanship, field performance can be within 5 points of the laboratory results. With poor workmanship, the sound isolation results can be 15 or more points below that of ideal conditions. These partitions are not necessarily the only configurations that can be used to achieve the desired results. Other details to meet specific requirements can be developed in conjunction with the acoustical consultant.

In more conventional office situations where partitions extend only to the finished ceiling, and the ceiling space is used as a common return air plenum, the ceiling system and return air path are equally (or more) important to the partition design (and supply air duct system) in determining sound isolation performance. Sound can enter the ceiling space via the return air openings, as well as through the ceiling itself, propagate throughout the (typically) relatively reverberant ceiling space, and enter adjacent spaces through their return air openings and ceilings. Thus, the same degree of sound isolation as with partitions extending from slab to slab cannot be achieved. However, the sound isolation can be maximized as indicated below.

There may be valid reasons in terms of future flexibility of space utilization that offices requiring a high degree of acoustical privacy (sound isolation) be built with partitions extending only to the finished ceiling. Many lay-in ceiling panel materials carry STC ratings based on a special test procedure (AMA-I-II) that simulates two adjacent offices and requires sound to pass through the ceiling material twice (once on entering the ceiling space in one office, and once on leaving the ceiling space to reach the adjacent office). The denser materials such as mineral board products have maximum STC ratings of 40-44 based on this test configuration. (Note that this configuration is different than that used for STC and TL ratings of other building elements.) Some lighter materials such as glass fibre ceiling panels

do not carry such ratings because they are essentially transparent to sound passing through. Typically the materials that have higher STC ratings are less effective sound absorbers (lower NRC ratings), and those that are more porous with lower STC ratings often are superior in term of sound absorption within the space.

Aside from choosing ceiling material with the highest STC ratings, sound isolation can be maximized by including a plenum barrier around each space to effectively extend the wall partitions within the ceiling space. Plenum barriers can be constructed using gypsum board as for normal wall partitions, except that they would be suspended from above, so as not to bear on the finished ceiling. Alternative materials include lead sheet, or flexible vinyl (lead or barium loaded) noise barrier sheet, also suspended from above. (These materials must not be used without verifying their acceptability with respect to fire ratings or potential impact on air quality, for the particular application.) Of course, as in the case of full height partitions, all penetrations through plenum barriers must be properly sealed.) Another alternative that can be considered is to tightly pack glass fibre batts (of minimum width of 600 mm) along the partition line, between the finished ceiling and the structure above.

To provide a return air path in the ceiling space, openings in the plenum barrier are required. These can be fitted with acoustical baffles, or cross-talk silencers, as in TECHNICAL BACKGROUND/DESIGN GUIDELINES Section 3 "Mechanical/Electrical Noise and Vibration Control". These openings can be located relative to each other to maximize sound isolation between neighbouring spaces. The same is true of the return air openings in the ceiling.

It must be realized that the plenum barrier concept is a major compromise in sound isolation. The joints between the wall partitions, the plenum barriers and the finished ceiling are acoustical weak points, even if attempts are made to seal the joints. Sound can pass through the ceiling material itself, from one side to the other. With T-bar suspensions, exotic profiles such as box beams that would result in direct openings across the top of the wall partitions must be avoided.

Doors

The sound isolation performance of doors is typically much poorer than the wall partition for several reasons:

- less thickness
- stronger structural coupling between the faces
- less weight
- gap around perimeter
- cavities in frame system

The perimeter gap can be the most important factor, with a good door.

Doors for court house projects are to be wood. Where sound isolation is a concern (as indicated by "SI" entries in the Section "Specific Requirements"):

- Use solid core doors, either staved wood blocks, or high density particle board, to achieve a minimum density of 450 kg/m^3 , although denser is preferred.
- Use a minimum thickness of 44 mm (1-3/4") resulting in minimum face weight of about 20 kg/m^2 (4 lb/ft²).
- Use 'fully-capping' (wrap around) frame with the end of the wall partition extending as far into the frame as possible, to minimize or eliminate a frame cavity (assuming metal frames). In a masonry partition, hollow metal frames can be grouted solid. Solid hardwood frames can be used to avoid cavities.
- Apply high quality perimeter seals (sound stripping). Such seals can act as the stops, requiring a flat frame profile. The most desirable seals have adjustment screws to ensure proper contact to the door for the full length of the seal. Either surface mounted or mortised automatic closers can be used along the bottom.

See Appendix Q-A for typical profile. (Note: latch set dimensioning and position must take presence of seals into account.)

Where double doors are used, the gap between the meeting of the doors is problematic. Acoustically the preferred solution is a rabbetted edge on each door with a compression gasket, so that when closed, an air-tight seal results. However, the disadvantage is that the doors must be opened or closed in a particular order. However, often when double doors are used, only one is needed for routine use, and the other can be locked in position, but openable by panic hardware or released electrically in emergency conditions. This permits maximum sound isolation from double doors.

The choice of hardware is extremely important for spaces such as courtrooms where the public may enter or leave during proceedings. The objective is to be able to open and close doors unobtrusively, without significant metal sounds due to latch sets or panic hardware. Wherever possible latches should be avoided and dead bolts used to lock unoccupied rooms. High quality closer mechanisms can be used to keep doors tightly closed against the perimeter seals. Where panic hardware must be used, it should be such that it can easily be locked OPEN for daily use, to avoid noise from latches.

The use of resilient perimeter seals and closers provides secondary benefits of avoiding the slamming of doors, and of minimizing or eliminating the sounds of closing against the frame.

Where vision panels (windows) are required in sound isolation doors, they should be kept to the minimum size needed for the visual function. The glass should be as heavy as possible (12 mm preferred; 9 mm acceptable; 6 mm minimum if single glazed; 6 mm glass, 12 mm air space, 4 mm glass if sealed double glazing) and set into a resilient (e.g. neoprene) 'U'-channel around the full perimeter, well sealed with the stops. See Appendix Q-A.

The sound lock vestibule concept is very useful to achieve a high degree of sound isolation because of the large separation distance between doors, especially if the vestibule has some sound absorption treatment (e.g. carpet and acoustical ceiling). With sound locks, deficiencies in the door systems have less effect on sound isolation performance than with one set of doors. A further advantage is that for people traffic during proceedings, one door can often be closed before the other is opened, reducing the intrusions of sound. For this reason, the interview rooms have been configured with the courtrooms to create a sound lock buffer between the public spaces which may be busy and noisy at times, and the courtrooms.

2.3 Environmental Noise Control

Introduction

The spaces within the court house must be protected from noise generated outside of the building (environmental noise). No matter how well the noise generated within the building itself is controlled, the acoustic environment will be unacceptable if the environmental noise is not controlled at least as well.

Environmental noise typically involves road traffic noise, rail noise and aircraft noise. However, there are many other possible environmental noise sources ranging from nearby industry to HVAC noise from a neighbouring building. Careful examination of the sources contributing to the ambient noise level is required.

Environmental noise is controlled through appropriate selection of materials (windows, walls, etc.) comprising the exterior of the building to provide the required sound isolation. There are two methods which can be used to determine the sound isolation requirements of the individual components, the AIF method and the STC method. Either method is acceptable as both will produce similar results. Of course, these techniques need only be applied if the site of a court house is such that there is potential impact from exterior sources.

Noise Prediction Methods

To determine the sound isolation requirements, first the sound exposure at the exterior skin of the building must be determined. The exterior sound exposures should reflect the sound exposures expected once the area has reached the mature state of development. Otherwise, sound exposures should be projected at least ten years into the future. This will ensure that as the area develops and the noise generation increases, the sound isolation provided by the building envelope will remain adequate.

Road and Rail Noise

Road and rail noise can be determined by using STAMSON V4.1 (or currently applicable version), the noise prediction model of the Ministry of the Environment and Energy (MOEE). The MOEE model applies the road and rail traffic volumes, the topography of the area and the characteristics (gradient, speed, etc.) of the roadway or railway to determine L_{eq} , the energy equivalent continuous sound level. For the purposes of determining the sound isolation requirements for court houses, the greatest hourly L_{eq} for each noise source should be applied.

Aircraft Noise

The significance of aircraft noise on the site can be determined from the Noise Exposure Forecast (NEF) or Noise Exposure Projection (NEP) contours, available for most airports through Transport Canada, Ministry of Municipal Affairs, or local offices of CMHC.

Other Sources

It is much more difficult to predict the sound exposure from other sources of sound that may be of concern or significance. This will generally require the services of the acoustical consultant and require on-site sound measurement.

Indoor Noise Guidelines

In order to determine the sound isolation requirements of the building envelope, in addition to knowing what the outdoor sound exposures are,

maximum desired indoor noise levels are required. Table Q-2 provides guidelines for indoor sound exposure due to outdoor sound sources.

Sound Isolation Requirements

The needed sound isolation performance requirements of individual building elements can be determined and building elements selected using either the method of Reference 2 (AIF method) or of Reference 3 (STC method).

TABLE Q-2

INDOOR NOISE GUIDELINES REGARDING
SOUND EXPOSURE LIMIT

TYPE OF SPACE	SOUND EXPOSURE LIMIT (L_{eq} in dBA)
<ul style="list-style-type: none"> Courtrooms; Motion Rooms; Simultaneous Interpretation Rooms 	35
<ul style="list-style-type: none"> Individual or semi-private offices; Libraries; Retiring Rooms; Jury Rooms; Interview Rooms 	40
<ul style="list-style-type: none"> General offices; Reception, Waiting, Storage and Holding Cell areas; all remaining non-critical spaces 	50

References

1. STAMSON 4.1, Noise Assessment and Systems Support, Approvals Branch, Ministry of the Environment, September 1990.
2. "Acoustic Insulation Factor: A Rating for the Insulation of Buildings Against Outdoor Noise", J.D. Quirt, National Research Council, Div. Bldg. Res., BRN 148, June 1980.
3. "Controlling Sound Transmission into Buildings", J.D. Quirt, National Research Council, Div. Bldg. Res., BPN 56.
4. "Land-Use Policy Near Airports", MOH, 2M/4-80/PW-43, March 1978 (revised 1980).

3. MECHANICAL/ELECTRICAL NOISE AND VIBRATION CONTROL

Introduction

These are general guidelines that indicate principles of good design. They must be adapted as appropriate for project-specific circumstances, and supplemented with additional noise/vibration control techniques where noisy equipment spaces must be contiguous with noise-sensitive spaces. They are not intended to provide specific solutions or be all encompassing, but only to identify salient concerns that are typically to be expected and indicate noise control solutions that are generally applicable.

Structure

Generally, for easiest implementation of noise and vibration control, concrete structures are preferred over steel structures. The increased mass and stiffness compared to lightweight construction is beneficial with respect to airborne sound isolation, vibration control, and impact noise control (footfalls). Further, a heavier, stiffer floor structure is less prone to perceptible movement (vibration) as a result of people traffic, especially on longer spans associated with larger spaces such as courtrooms.

Even thick, heavy concrete slabs transmit impact sounds (such as footfalls with hard heels), over long distances. Thus, heavily trafficked areas that are beside or above (not necessarily directly) noise sensitive areas should be carpeted or have other suitable resilient floor finish.

Mechanical Equipment Rooms

Avoid placing noise-sensitive uses immediately below, beside, or above mechanical rooms. Certain types of mechanical equipment such as pumps and chillers are often best located in basement spaces. Others, such as cooling towers, must be located on the roof or equivalent outdoor space. Some equipment

such as diesel generators and some fans would also be best located in basement space, were it not for the need for air and exhaust shaft connections to the outside. With rooftop mechanical space, these shafts can be very short or not required. Otherwise, there would be a major amount of internal shaft space, potentially contiguous with noise-sensitive areas and needing acoustical treatment. Wherever possible select inherently quiet machinery. Even if the equipment is more expensive, the ultimate cost could be less if less noise control is required.

Vibration isolate all significant rotating and reciprocating equipment from the building structure. Large pieces of equipment rotating relatively slowly (e.g. less than about 1000 rpm) in sensitive locations should be mounted on heavy inertia bases, with the whole assembly supported on vibration isolators.

Wherever possible, all pipes, ducts and conduits connecting to vibrating mechanical equipment should have flexible connections as close as possible to the equipment.

All supports for pipes connected to vibration isolated machinery should also include vibration isolation mounts within mechanical rooms, or for a distance of 100 pipe diameters from the machinery, whichever is greater.

Where pipes or ducts leave a mechanical room, provide sleeves at penetrations, to avoid direct mechanical contact to the structure, and ensure that the penetrations are sealed air tight with non-hardening mastic or caulking. For penetrations through fire rated assemblies, materials with appropriate fire ratings are available.

Entrances to mechanical rooms should connect to non-critical space, preferably be vestibuled, and use insulated metal (e.g. fire door) construction, with high quality, heavy duty perimeter seals.

Air intakes and exhausts should be located away from noise sensitive spaces and face non-critical directions. Radiation of noise to adjacent properties must also be considered. The use of acoustic baffles, screens, plenums, duct silencers, or combinations may be needed in some situations, to treat such air openings.

Air Systems

With respect to noise control, constant volume air systems are preferred over variable volume (VAV) systems because VAV boxes tend to be noisy (but can be silenced) and the noise generation varies as a function of air volume control setting. However, energy concerns may dictate variable volume systems. The positioning of VAV boxes and treatment of connecting ductwork must take the noise control aspects into account, based on worst case operating conditions. Constant volume systems have the advantage of allowing the design of noise control features for a single, defined operating condition.

Ductwork

There are three main concerns with respect to ductwork layout and design:

- Fan and other equipment noise propagated within ducts;
- Locally generated noise within the ductwork system;
- Compromise of room to room sound isolation via 'crosstalk' through the ducts ('speaking tube effect').

Fan and equipment noise is usually best dealt with by selection and proper placement of duct silencers to adequately attenuate sound of fans as well as 'break-in noise' entering the ducts from other independent noisy equipment in the vicinity of the ductwork. For example, in a large, noisy mechanical room, if silencers are located such that there is unprotected ductwork between the silencer and mechanical room penetration, the ultimate benefit of the silencer is reduced as a result of noise energy penetrating into the duct and then propagating to other spaces.

Whenever possible, silencers should be located on the quiet side of mechanical room boundaries. When this is not possible, the silencer and the quiet ductwork can be protected by using High (sound) Transmission Loss (HTL) duct/silencer wall construction, or boxing in these elements with gypsum board acoustical enclosures.

In some cases, acoustical lining of ductwork by itself, or in combination with the use of duct silencers, is appropriate.

Air terminals should be selected for low noise operation, based on the required volume flow, to achieve the specified noise criteria.

Balancing dampers should be well removed from air terminals.

Table Q-3 provides guidelines for air speed in ductwork, to achieve various noise criteria.

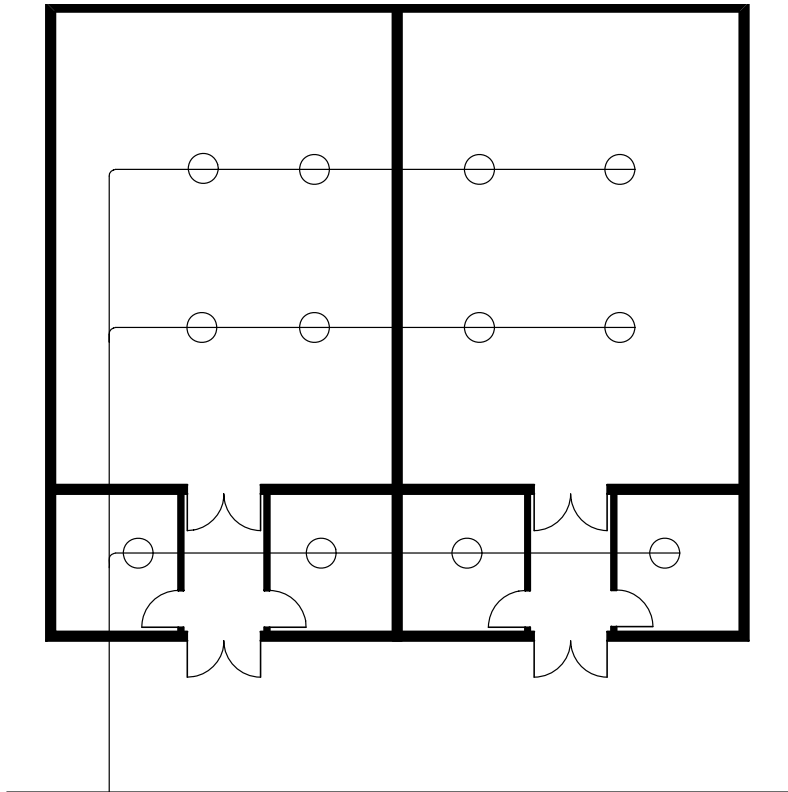
**TABLE Q-3
GUIDELINES FOR AIR SPEED IN HVAC DUCTS**

With regard to noise produced by turbulence at elbows and takeoffs, the limits given below for air speeds apply at square takeoffs and elbows (with or without turning vanes):

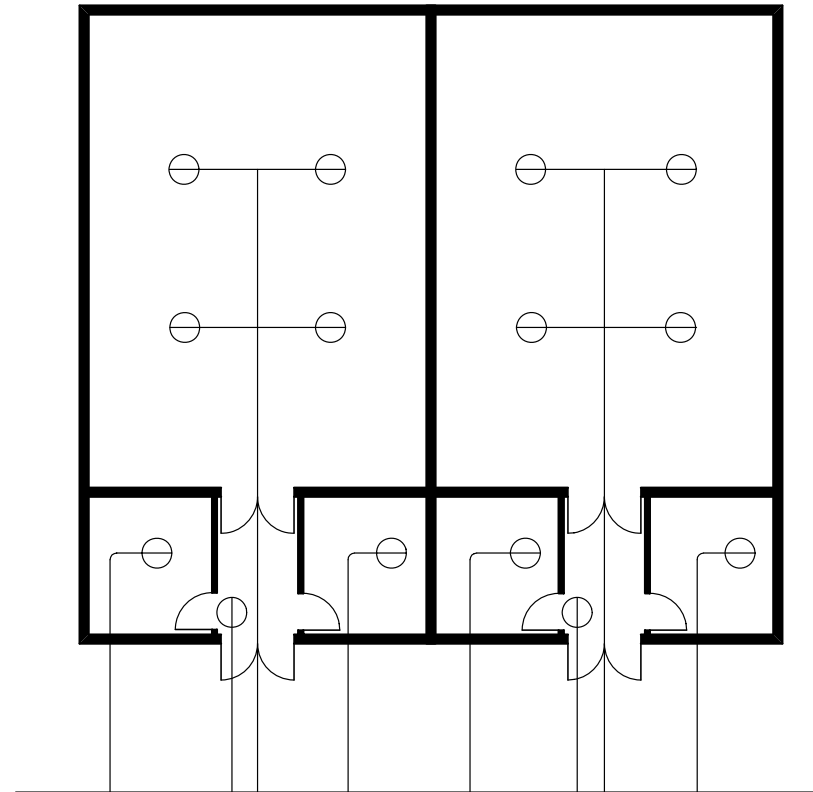
Length of 25 mm Lined Duct Between Outlet and Takeoff or Elbow (m)	Maximum Noise Criterion			
	NC-20	NC-25	NC-30	NC-35
	Maximum Air Speed (mpm)			
0	90	150	210	300
1.5	120	180	260	305
3.0	150	210	305	350
6.0	180	305	350	395

With smooth, well-rounded elbows and splits, instead of square ones (with or without turning vanes), these air speeds may be increased by 10%, unless dampers, diffusers or grilles are located nearby.

Air speed in exposed ducts should not exceed 305 meters per minute, unless the ducts are properly 'lagged' or encased. Air speeds certainly should not exceed 600 meters per minute.



UNACCEPTABLE



ACCEPTABLE

Figure Q1 HVAC Ductwork Concepts to Minimize Crosstalk

To avoid cross-talk, spaces requiring high sound isolation should be serviced by separate ductwork branches. Direct, short duct runs between such spaces and neighbouring rooms should be avoided. See Figure Q-1.

Additional techniques to ensure that ductwork does not compromise sound isolation include cross-talk silencers at the wall penetrations, acoustic lining, and multiple acoustically lined bends.

Spaces requiring high sound isolation will have partitions spanning from slab to slab. Thus, the ceiling spaces cannot be used as common return air plenums over the rooms. The return air terminals must either be ducted (and silenced) back to a common return air plenum, or the enclosed ceiling spaces used as return air plenums coupled to a common plenum (e.g. corridor ceiling space) using properly selected, sized, and positioned cross-talk silencers or equivalent.

Plumbing Systems

Maintain water pressure below 240 KPa (35 psi) and velocity below 1.8 m per/sec (6 ft/sec) in branch lines and 3.0 m/sec (10 ft/sec) in main lines.

Do not locate sinks, toilets, urinals, towel or tissue dispensers, janitor tubs, or drinking fountains on walls adjacent to noise sensitive areas.

Isolate piping from structure at all supporting points adjoining noise-sensitive areas, including wall and floor penetrations, using appropriate resilient sleeves. There should be no other contact to building elements.

Where pipes are contained in a cavity wall, support them on the side of the wall which they serve.

If toilets must be located above or beside noise-sensitive areas choose inherently quiet (centrifugal action) units.

Electrical

The main acoustic problem with transformers is usually not air-borne noise, but structure-borne noise propagation due to vibration.

Large primary transformers are best located in subgrade vaults.

Support large transformers from the floor on isolation pads. Smaller transformers may be suspended using isolation hangers.

Conduit connections to transformers should incorporate a full 360⁰ loop of flexible conduit where conductor size permits. Where busduct or cable size does not permit using this technique, the conductors connecting to transformers should be supported from the structure using vibration isolation mounts/hangers, to minimize coupling of transformer vibration to the structure. Alternatively, or in addition, fully braided flexible connections can be used between large solid conductors and a transformer, to increase vibration isolation.

Unless it can be verified that lighting ballasts will not create audible buzz, mount lighting ballasts for courtrooms and motion rooms remotely in accessible non-critical spaces such as immediately adjacent corridors, lobbies, or service spaces. Take precautions in the mounting of ballasts to avoid sounding board effects that would transmit structure-borne noise.

Fluorescent lighting ballasts that are integral to the fixtures should be low noise Type A.

Conduit (empty or otherwise) penetrating through walls intended to have high sound isolation should be routed to minimize potential reduction of sound isolation. Penetrations should be well sealed. In cavity walls, independent sleeves should be used to avoid bridging between isolated wall wythes. The ends of such conduit should be stuffed with DuxSeal or other removable/re-usable sealant or capped if spare (empty).

4. LOUDSPEAKER SYSTEMS

Sound Reinforcement

For speech reinforcement and audio playback in court, motion and settlement rooms, a combination of two loudspeaker concepts can be used.

The seating positions in the "legal arena" can be served by individual loudspeakers on top of the work surface, below the work surface, or integrated into the work surface (judge, clerk, crown attorneys, court reporter, witness). For the jury, several loudspeakers can be integrated into the jury box, in front of the jury.

The public area would be served by ceiling-mounted loudspeakers.

Small, high quality, loudspeakers with wide frequency coverage are preferred. This is to obtain uniform sound coverage, with minimal 'beaming' effects which otherwise can produce high frequency roll-off at the edge of the loudspeaker distribution pattern.

A relatively dense pattern of loudspeakers is used to ensure uniformity of sound level throughout the space. The design should be based on:

- Assuming a 90° dispersion pattern for each loudspeaker.
- Coverage plane located 1.2 m (4 ft) above the nominal floor level of the space (neglecting raised dais areas).

A variety of ceiling loudspeaker coverage patterns can be used. The "centre-to-centre overlap with square spacing" pattern provides highly redundant coverage and very high sound uniformity. This basic pattern is recommended for critical rooms such as courtrooms, where a high degree of speech intelligibility is important.

Paging

The same considerations and assumptions as above apply, except a less dense loudspeaker layout pattern is acceptable, based on square spacing with minimum overlap.

Spacing Patterns

The spacing patterns and dimensions are shown on Figure Q-2 and Q-3. These patterns should be applied to the spaces in question, and adjusted as necessary for particular circumstances, such as room dimensions and geometry, and encumbrances in the ceiling such as air terminals, lights, sprinklers, etc. without sacrificing the intended sound coverage. Generally the perimeter rows of loudspeakers should be spaced from the boundary walls a distance equal to about one half of the loudspeaker to loudspeaker spacing. Where desired loudspeaker spacing and room dimensions do not inherently match, the spacing should be reduced, adding an additional loudspeaker to each row, where appropriate.

As shown in Figure Q3, the greater the ceiling height, the fewer the ceiling loudspeakers needed for the same degree of sound coverage.

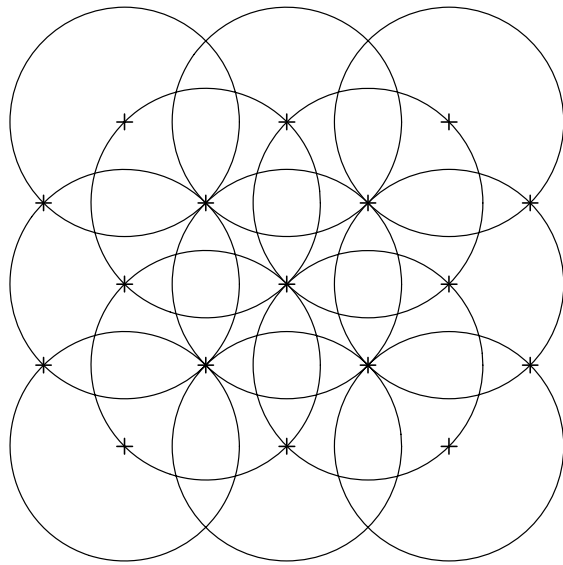
5. BACK-UP POWER REQUIREMENTS

These systems should be powered from the emergency back-up power system, where such is provided for the court house facility:

- All Intercoms
- CCTV Surveillance (and associated emergency lighting)
- Paging
- Fire Alarm
- Security
- Door Control
- Electronic Telephone Systems

In addition, there may be the need for computer-based systems associated with the above and whose proper operation would be disrupted by a power interruption, to have power. This can be achieved by individual UPS units with, for example, 20 minute capability, to provide continuous power until emergency generators come on-line properly. Such UPS units should have the ability to interface with the protected computer, to signal the power outage and allow the orderly shutdown or contingency operation in the event the emergency power generators do not come on-line promptly. The need for this protection and specific requirements should be determined in conjunction with the engineering consultants involved in each system. Where emergency power will not be available in the building, safety and security systems must be designed to take this into account, and provide appropriate facilities and functions during brief or protracted power outages and emergencies.

CENTER-TO-CENTER OVERLAP



MINIMUM OVERLAP

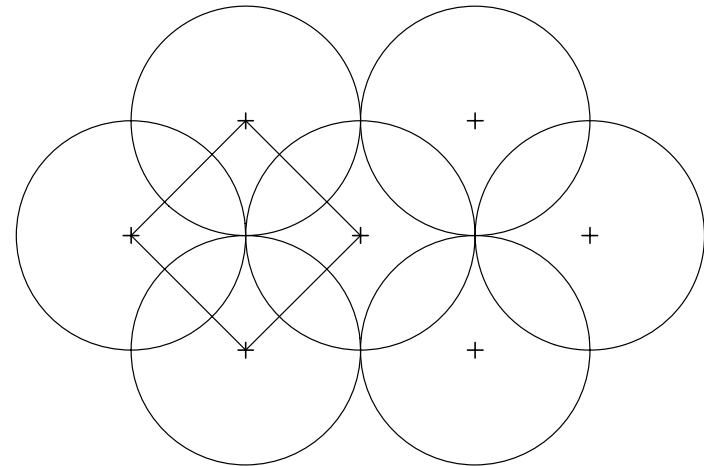
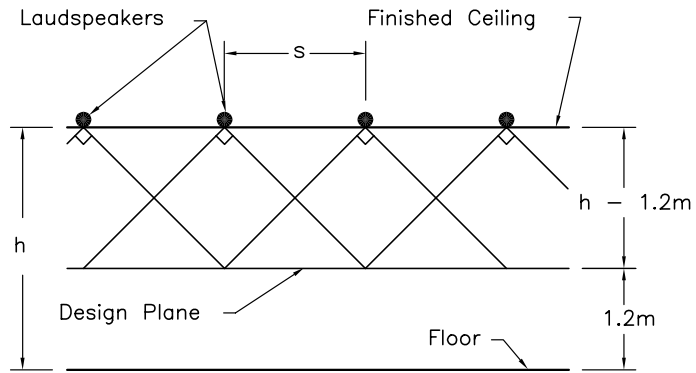


FIG Q2 Loudspeaker Spacing Patterns

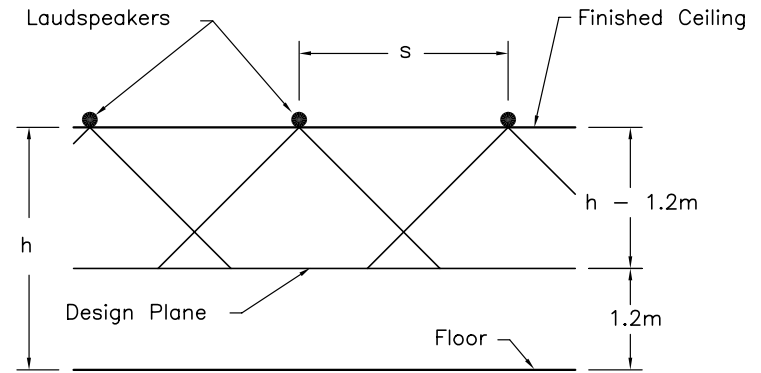
SQUARE CENTRE TO CENTRE
 OVERLAP SPACING



$$s = h - 1.2 \text{ (metres)}$$

Where h is the distance from floor to finished ceiling (and flush mounted loudspeakers).

SQUARE MINIMUM OVERLAP
 SPACING



$$s = \sqrt{2} (h - 1.2) \text{ (metres)}$$

Where h is the distance from floor to finished ceiling (and flush mounted loudspeakers).

FIG Q3 Loudspeaker Spacing Guidelines

II SPECIFIC REQUIREMENTS

1. ARCHITECTURAL ACOUSTICS AND NOISE CONTROL

Introduction

Guidelines and requirements for specific spaces are provided. N/A means not applicable, either because the indicated item is not important for the use, or because the acoustical performance is inherent in the system or product and need not or cannot be specified (e.g. sound absorption of carpet floor finish).

DOORS that are required to have good sound isolation are indicated with the entry "SI". Doors without the SI designation require no special acoustical consideration, except as noted.

With respect to sound isolation, the entry under CEILING means the combination of ceiling and floor slab with respect to space immediately above. In general, it is the structural floor system that will provide the sound isolation, not the ceiling per se. In multi-storey facilities special attention must be paid to stacking of spaces over areas with critical acoustical requirements. It is intended that the floor/ceiling system above have noise isolation (IIC) ratings comparable to the indicated NR ratings. In these cases care must be taken to provide appropriate floor finishes on the level above.

Appropriate FINISHES are indicated for each interior surface, on the basis of sound absorption potential only. This is not to imply that each type of finish is always necessarily appropriate or acceptable architecturally. Other types of materials and finishes that have the requisite acoustical performance may be considered in conjunction with the acoustical consultant. Special care must be taken with finishes (especially on walls) that have strong or distinct repetitive patterns (e.g. battens, linear strips, or perforations), to ensure that there are no visually distracting, confusing, or illusion effects.

In determining the sound isolation requirements of any space, three parameters are important:

- Sensitivity to noise:

Noise sources exterior to the space can be distracting to the occupants and may adversely affect communication. In spaces such as courtrooms, motion rooms and private offices an environment free of external noise is desirable.

- Privacy:

Privacy and preventing overhearing is a concern for spaces where sensitive or confidential issues are discussed. Examples include the jury rooms and interview rooms.

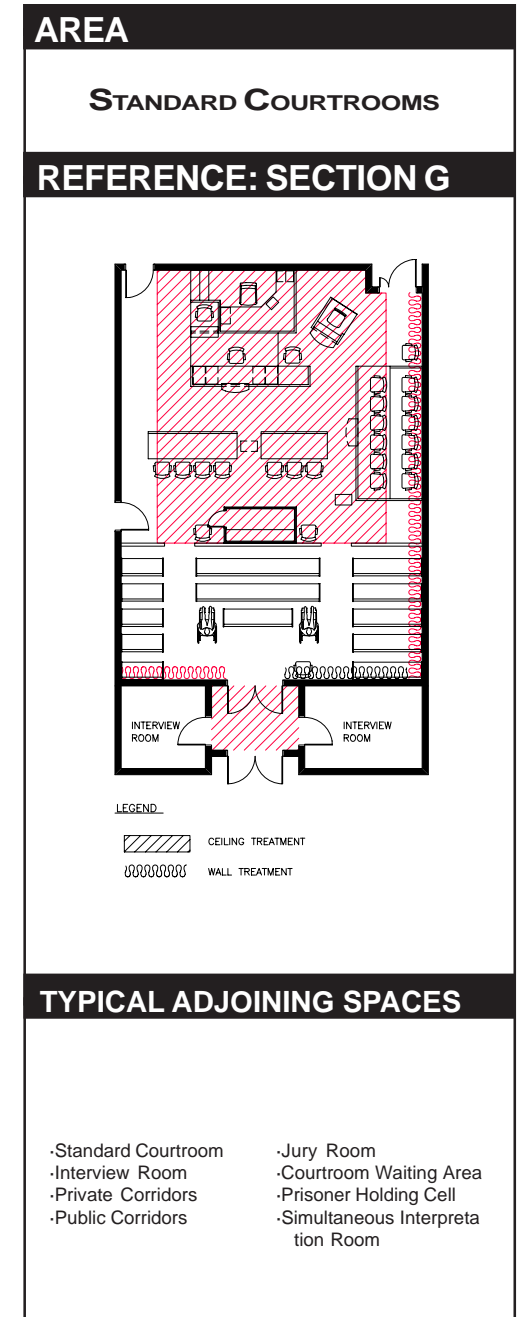
- Noise Generation:

The noise generated within a space can adversely affect contiguous spaces, particularly those which are highly sensitive to noise intrusions. Examples of spaces where the internal noise generated may be of concern are: prisoner holding cells adjacent to a courtroom; mechanical equipment rooms; courtroom waiting areas; public corridors.

Table Q-4 provides general sound isolation requirements and serves as a guideline for determining the required noise reduction of demising partitions between contiguous spaces. Sensitivity and privacy needs are grouped together as they are usually interrelated parameters. A partition which prevents the intrusion of external noise is usually similar in construction to one which prevents overhearing. For spaces where either sensitivity or privacy is more important, the rating should be based on the more stringent need. For example, a library which is highly sensitive to noise but requires little privacy, should be designed to prevent intrusion of external noise.

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	NOTE 3
SOUND ISOLATION	
Walls	NOTE 4
Windows	NOTE 5
Doors	NOTE 4,6
Floor	NOTE 4
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 7
Ceiling	NOTE 7, 8
Floor	NOTE 7

NOTES	
Building Services, Sound Isolation & Finishes	
<p>1. NC 25 is an appropriate design objective for this space. Where HVAC ducts traversing the courtroom are common to other spaces which are noisy, or require a high degree of privacy, special measures may be warranted. These could include one or more of: a) lined ducts; b) GWB enclosed ducts; and c) cross-talk silencers.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise must be isolated and/or in an acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>	
ADJOINING SPACE	MINIMUM NR RATING
	Walls Doors Ceiling
Standard Courtroom	55 - 55
Courtroom Interview Room	55 - 55
Holding Cell	55 B:SI 55
Jury Room	55 Note 6 55
Simultaneous Interpretation Room	50 - 50
Courtroom Waiting Area	55 SI 55
Public Entry	55 A:SI 55
Private Corridors	45 - 55
<p>5. External windows will not be present. Windows between the simultaneous interpretation booth and courtroom should conform to CAN/CGSB-131.1-M88.</p> <p>6. It is assumed that doors C and D are to controlled private corridors, and that Jury Deliberation Room does not connect directly to court, otherwise SI doors are needed.</p>	



CHECKLIST	
BUILDING SERVICES	
NC Level HVAC Electrical Plumbing	
SOUND ISOLATION	
Walls Windows Doors Floor Ceiling	
FINISHES	
Walls	NOTE 7
Ceiling	NOTE 7
Floor	NOTE 7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>7. Appropriate sound absorptive treatments and distribution, based on ceiling height of 3.6 m, are indicated below and on the figure. Adjust wall and ceiling treatment in direct proportion to ceiling height, if different than assumed value. Tolerance of 10% acceptable</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	170	136	136
Total Treated (s.m.)	80	56	136
Min. Treatment NRC	0.6	0.6	
<hr/>			
Appropriate Materials	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal	✓	✓	
Fabric Faced Fibreglass	✓	✓	
Perf. Vinyl & Fibreglass	✓		
Wood Battens	✓	✓	
Carpet			✓
<p>8. Sound lock entrance vestibule ceiling should be sound absorptive.</p>			

AREA
STANDARD COURTROOMS
REFERENCE: SECTION G
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> -Standard Courtroom -Interview Room -Private Corridors -Public Corridors -Jury Room -Courtroom Waiting Area -Prisoner Holding Cell -Simultaneous Interpretation Room

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	NOTE 3
SOUND ISOLATION	
Walls	NOTE 4
Windows	
Doors	NOTE 4
Floor	NOTE 4
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 5
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 25 is an appropriate design objective for this space. Where HVAC ducts traversing the motion room are common to other spaces which are noisy, or require a high degree of privacy, special measures may be warranted. These could include one or more of: a) lined ducts, b) GWB enclosed ducts and c) cross-talk silencers.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise it must be isolated and/or in an acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Standard Motion Room	55	-	55
Interview Room	55	SI	55
Standard Courtroom	55	-	55
Jury Room	55	-	55
Courtroom Waiting Area	55	-	55
Public Corridor	55	-	55
Private Corridor	45	-	55
Public Entry	55	A:SI	55
<p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure. Based on ceiling height of 3.2 m. Adjust wall and ceiling treatment in direct proportion to ceiling height, if different than assumed value. Tolerance of 10% acceptable</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	116	81	81
Total Treated (s.m.)	36	55	81
Min. Treatment NRC	0.6	0.6	-
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass	✓	✓	
Perf. Vinyl & Fibreglass	✓		
Wood Battens	✓		
Carpet			✓

AREA	
MOTIONS/SETTLEMENT ROOM	
REFERENCE: SECTION G	
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT</p>	
TYPICAL ADJOINING SPACES	
<ul style="list-style-type: none"> Standard Motion Rm Interview Room Private Corridors Standard Courtroom 	<ul style="list-style-type: none"> Jury Room Courtroom Waiting Area Public Corridors

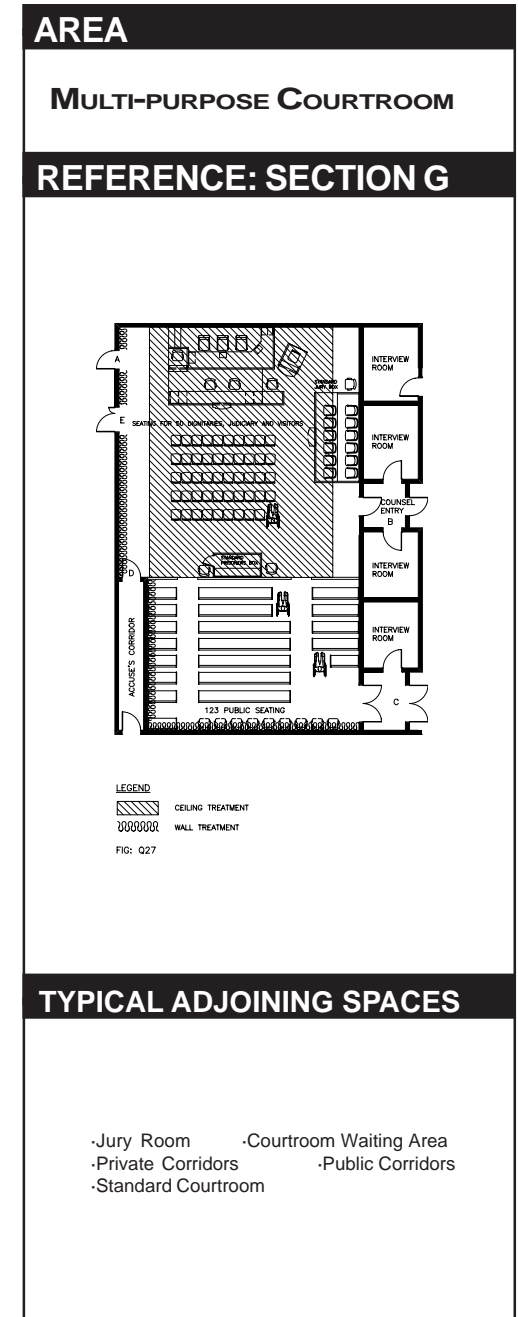
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
SOUND ISOLATION	
Walls	NOTE 4
Windows	
Doors	NOTE 4
Floor	NOTE 4
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 5
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 25 is an appropriate design objective for this space. Where HVAC ducts traversing the motion room are common to other spaces which are noisy, or require a high degree of privacy, special measures may be warranted. These could include one or more of: a) lined ducts, b) GWB enclosed ducts and c) cross-talk silencers.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise it must be isolated and/or in an acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
Standard Motion Room	55	-	55
Interview Room	55	SI	55
Standard Courtroom	55	-	55
Jury Room	55	-	55
Courtroom Waiting Area	55	-	55
Public Corridor	55	-	55
Private Corridor	45	-	55
Public Entry	55	A:SI	55
<p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure. Based on ceiling height of 3.2 m. Adjust wall and ceiling treatment in direct proportion to ceiling height, if different than assumed value. Tolerance of 10% acceptable</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	54	27	27
Total Treated (s.m.)	14	27	27
Min. Treatment NRC	0.6	0.6	-
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Appropriate Materials			
Acoustical Ceiling Tiles		√	
Linear Metal		√	
Perforated Metal	√	√	
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√		
Carpet			√

AREA	
MOTIONS/SETTLEMENT ROOM	
REFERENCE: SECTION G	
TYPICAL ADJOINING SPACES	
·Standard Motion Rm	·Jury Room
·Interview Room	·Courtroom Waiting Area
·Private Corridors	·Public Corridors
·Standard Courtroom	

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	NOTE 3
SOUND ISOLATION	
Walls	NOTE 4
Windows	NOTE 5
Doors	NOTE 4
Floor	
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 5
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 25 is an appropriate design objective for this space. Where HVAC ducts traversing the motion room are common to other spaces which are noisy, or require a high degree of privacy, special measures may be warranted. These could include one or more of: a) lined ducts, b) GWB enclosed ducts and c) cross-talk silencers.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise it must be isolated and/or in an acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Standard Courtroom	55	-	55
Jury Room	55	-	55
Courtroom Waiting Area	55	SI	55
Public Corridor	55	B:SI	55
Private Corridor	45	-	55
<p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure. Based on ceiling height of 3.2 m. Adjust wall and ceiling treatment in direct proportion to ceiling height, if different than assumed value. Tolerance of 10% acceptable</p> <p>6. Appropriate sound absorptive treatments and distribution are indicated below and on the figure for a 5.0m high ceiling. Modify total area treated in proportion to ceiling height</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	336	272	272
Total Treated (s.m.)	168	176	272
Min. Treatment NRC	0.6	0.6	-
Appropriate Materials	Walls		
	Ceiling		
	Floor		
	Acoustical Ceiling Tiles		√
	Linear Metal		√
	Perforated Metal		√
	Fabric Faced Fibreglass	√	√
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√



CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	
Plumbing	
SOUND ISOLATION	
Walls	NOTE 2
Windows	NOTE 3
Doors	NOTE 2
Floor	
Ceiling	NOTE 2
FINISHES	
Walls	NOTE 4, 5, 6
Ceiling	NOTE 4, 5, 6
Floor	NOTE 4, 5, 6

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 to NC40 is an appropriate design objective for this space. Where HVAC ducts traversing the courtroom/lounge are common to other spaces which are noisy require a high degree of privacy, special measures may be warranted. These could include one or more of a) lined ducts; b) GWB enclosed ducts; and c) cross-talk silencers.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Standard Courtroom	55	SI	55
Private Corridors	55		55
Public Corridors	55	SI	55
Jury Deliberation	55	SI	55
Courtroom Waiting Area	55	SI	55
<p>3. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure:</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 5	Note 5	Note 5
Total Treated (s.m.)	Note 6	Note 6	Note 6
Min. Treatment NRC			
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass		✓	
Perf. Vinyl & Fibreglass			
Wood Battens		✓	
Carpet			✓
<p>5. The size of this space will be dependent on the size of the court houses and the number of seats, auxiliary spaces and circulation factors.</p> <p>6. For assembly rooms with normal ceiling height, no acoustic wall treatment is required. For high ceiling spaces, sound absorptive wall treatment may be desirable. This treatment is best placed above door head height to avoid damage to the acoustical medium. The entire ceiling should have sound absorptive treatment and the floor should be fully carpeted.</p>			

AREA
JURORS' ASSEMBLY ROOM & LOUNGE
REFERENCE: SECTION G
<p>LEGEND</p> <p>▨ CEILING TREATMENT</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> ·Standard Courtroom ·Private Corridors ·Jury Deliberation ·Courtroom Waiting Area ·Public Corridors

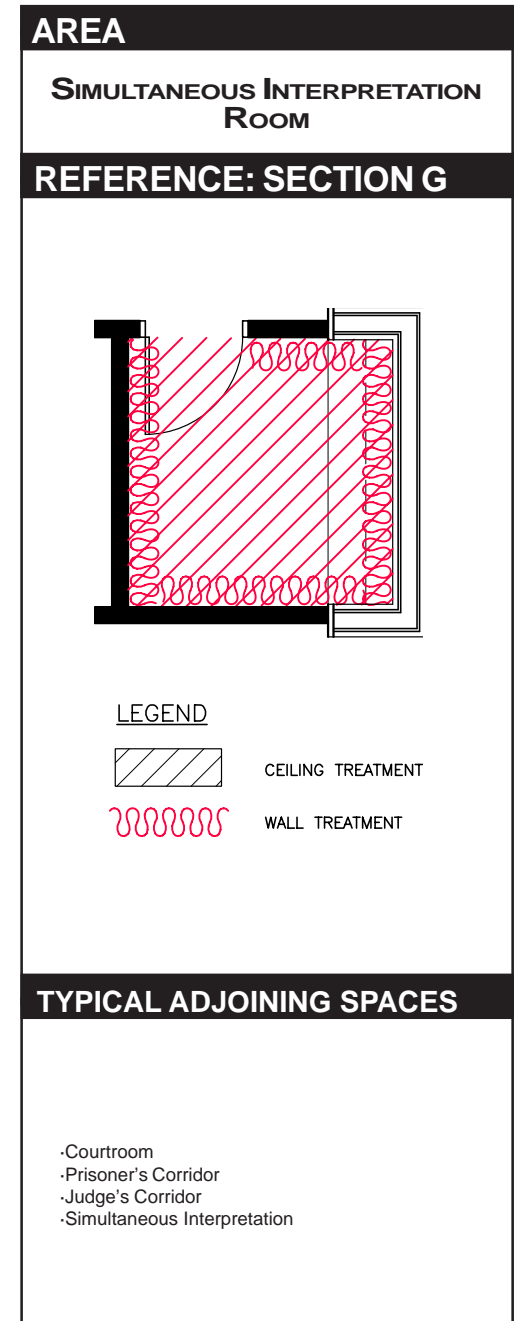
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	
Plumbing	
SOUND ISOLATION	
Walls	NOTE 2
Windows	NOTE 2
Doors	NOTE 2, 3
Floor	NOTE 2
Ceiling	NOTE 2
FINISHES	
Walls	NOTE 4
Ceiling	NOTE 4
Floor	NOTE 4

NOTES				
Building Services, Sound Isolation & Finishes				
<p>1. NC 30 is an appropriate design objective for this space. Where HVAC ducts traversing this room are common to other spaces, special measures may be warranted to maintain privacy. These could include one or more of: a) lined ducts; b) GWB enclosed ducts; and c) cross-talk silencers.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>				
ADJOINING SPACE	MINIMUM NR RATING			
	Walls	Doors	Ceiling	
Standard Motion Room	55	SI	55	Standard
Courtroom/Interview Room	55	SI	55	Jury
Room	55	SI	55	Judge's
Retiring Room	55	SI	55	Ensuite
Washroom	55	SI	55	Public
Corridor	55	SI	55	
Private Corridor	55	SI	55	
<p>3. Access door(s) to the jury deliberation room should be SI, to maintain privacy.</p> <p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure for a 2.74m high ceiling.</p>				
	Walls	Ceiling	Floor	
Total Area (s.m.)	74	39	39	
Total Treated (s.m.)	17	24	33	
Min. Treatment NRC	0.6	0.6		
Appropriate Materials	Walls	Ceiling	Floor	
Acoustical Ceiling Tiles		✓		
Linear Metal				
Perforated Metal				
Fabric Faced Fibreglass	✓	✓		
Perf. Vinyl & Fibreglass	✓			
Wood Battens	✓			
Carpet			✓	

AREA	
JURY ROOM	
REFERENCE: SECTION G	
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT</p>	
TYPICAL ADJOINING SPACES	
<ul style="list-style-type: none"> ·Standard Motion Rm. ·Interview Room ·Standard Courtroom ·Judge's Retiring Room 	<ul style="list-style-type: none"> ·Jury Room ·Private Corridors ·Public Corridors

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	NOTE 3
SOUND ISOLATION	
Walls	NOTE 4
Windows	NOTE 5
Doors	NOTE 4
Floor	
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 6
Ceiling	NOTE 7
Floor	NOTE 7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 25 is an appropriate design objective for this space. HVAC ducts should not pass through the simultaneous interpretation room. Ducts should run in the corridor space with a separate branch for the room.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise it must be isolated and/or in acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
Standard Courtroom	50	SI	50
Simultaneous Interpretation Room	55	SI	55
Judge's Corridor	45	-	45
Prisoner's Corridor	55	SI	55
<p>5. Window to courtroom to be in accordance with CAN/CGSB-131.1-M88, (latest edition).</p> <p>6. As much wall area as possible should be treated with sound absorbing material.</p> <p>7. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	24	6	6
Total Treated (s.m.)	Note 6	6	6
Min. Treatment NRC	0.6	0.6	
<hr/>			
Appropriate Materials	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		Wood
Battens			
Carpet			√



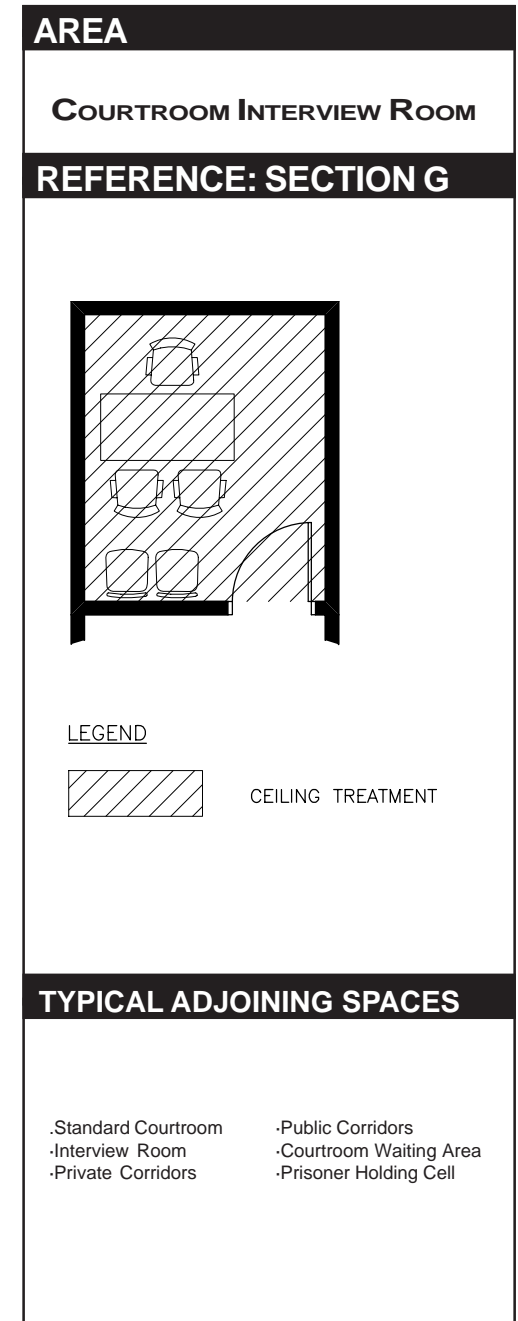
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3,4
Windows	NOTE 4
Doors	NOTE 3,5
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 6,7
Ceiling	NOTE 6
Floor	NOTE 6

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 is an appropriate design objective for this space. HVAC ducts should not pass through the Judge's Retiring Room. Ducts should run in the corridor space with a separate branch for the room.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Courtroom	55	SI	55
Jury Room	55	SI	55
Judge's Retiring Room	50	SI	55
Motion Room	55	SI	55
Private Corridors	50	SI	55
<p>4. External walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Access door(s) to the judge's retiring room should be SI to maintain privacy.</p> <p>6. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	45	23	23
Total Treated (s.m.)	Note 7	23	23
Min. Treatment NRC		0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass	Note 6	✓	
Perf. Vinyl & Fibreglass	Note 6	✓	
Wood Battens		✓	
Carpet			✓
<p>7. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			

AREA
JUDGE'S RETIRING ROOM
REFERENCE: SECTION G
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT (OPTIONAL)</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> ·Courtroom ·Jury Room ·Motion Room ·Judge's Retiring Room ·Private Corridors

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	
Plumbing	
SOUND ISOLATION	
Walls	NOTE 2
Windows	NOTE 2
Doors	NOTE 2,3
Floor	
Ceiling	NOTE 2
FINISHES	
Walls	NOTE 4
Ceiling	NOTE 4
Floor	NOTE 4

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30 is an appropriate design objective for this space. Where HVAC ducts traversing the interview room are common to other spaces, special measures may be warranted to maintain privacy. These could include one or more of: a) lined ducts b) GWB enclosed ducts and c) cross-talk silencers.</p> <p>2. Sound isolation requirements on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Standard Courtroom	55	SI	
Courtroom Interview Room	50	-	50
Holding Cell	55	-	50
Courtroom Waiting Area	50	-	50
Public Corridor	50	-	50
Private Corridor	45	-	
<p>3. Courtroom Interview Room door should be SI to maintain privacy.</p> <p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	30	9	9
Total Treated (s.m.)	-	9	9
Min. Treatment NRC		0.6	
Appropriate Materials	Walls		
	Ceiling	Floor	
Acoustical Ceiling Tiles	√		
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√		
Perf. Vinyl & Fibreglass			
Wood Battens			
Carpet			√



CHECKLIST	
BUILDING SERVICES	
NC Level HVAC Electrical Plumbing	NOTE 1
SOUND ISOLATION	
Walls Windows Doors Floor Ceiling	NOTE 2,3 NOTE 3 NOTE 2 NOTE 2
FINISHES	
Walls Ceiling Floor	NOTE 4,5,6 NOTE 4,5,6 NOTE 4,5,6

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 40 to 45 is an appropriate design objective for this space.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Courtroom	55	A:SI	55
Motion Room	55		55
Interview Room	50		50
Prisoner's Corridor	55		55
<p>3. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 5	Note 5	Note 5
Total Treated (s.m.)	Note 6	Note 6	Note 6
Min. Treatment NRC		0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass		✓	
Perf. Vinyl & Fibreglass		✓	
Wood Battens		✓	
Carpet			✓
<p>5. The size of the space will be dependent on the size of the courthouse and number of seats provided in the space.</p> <p>6. For waiting areas with normal ceiling height, no acoustic wall treatment is required. For high ceiling spaces, sound absorptive wall treatment may be desirable. This treatment is best placed above door head height to avoid damage to the acoustical medium. The entire ceiling should have sound absorptive treatment and the floor should be fully carpeted.</p>			

AREA
COURTROOM WAITING AREA
REFERENCE: SECTION G
<p>LEGEND CEILING TREATMENT</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> •Courtroom •Interview Room •Prisoner's Corridor •Motion Room •Courtroom Waiting Area

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the judge's office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballast should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	51	24	24
Total Treated (s.m.)	14	24	24
Min. Treatment NRC	0.6	0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	✓	✓	
Perf. Vinyl & Fibreglass	✓		
Wood Battens	✓	✓	
Carpet			✓

AREA	
JUDGE'S OFFICE	
REFERENCE: SECTION H	
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT (OPTIONAL)</p>	
TYPICAL ADJOINING SPACES	
<ul style="list-style-type: none"> -Judge's Office -Private Corridor -Judges' Library -Judges' Secretarial Staff 	

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6
Ceiling	NOTE 5,6,7
Floor	NOTE 5,6,7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30 is an appropriate design objective for this space. HVAC ducts should not pass through the judges' boardroom. Ducts should run in the corridor space with a separate branch for each room.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Judge's Office	50	SI	50
Private Corridor	50	SI	50
Judges' Secretarial Staff	50	SI	50
Judges' Lounge	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)		Note 7	Note 7
Min. Treatment NRC		0.6	
Appropriate Materials			
	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass		✓	
Perf. Vinyl & Fibreglass		✓	
Wood Battens		✓	
Carpet			✓
<p>6. The size of this space will be dependent on the size of the court house or number of judges.</p> <p>7. The entire boardroom ceiling should have sound absorptive treatment and the floor should be fully carpeted.</p>			

AREA	
JUDGES' BOARDROOM	
REFERENCE: SECTION H	
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT</p>	
TYPICAL ADJOINING SPACES	
<ul style="list-style-type: none"> ·Judges' Office ·Private Corridor 	<ul style="list-style-type: none"> ·Judges' Lounge ·Judges' Secretarial Staff

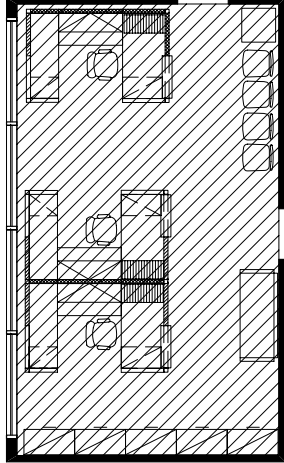

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,8
Floor	NOTE 5,6,8

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 to 40 is an appropriate design objective for this space.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Judge's Office	50	SI	50
Private Corridor	45		45
Judges' Secretarial Staff	45		45
Judges' Boardroom	50	SI	50
Judges' Library	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)	Note 7	Note 8	Note 8
Min. Treatment NRC		0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal	√	√	
Perforated Metal	√	√	
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass		√	
Wood Battens	√	√	
Carpet			√
<p>6. The size of this space is dependent on the size of the court house or number of judges.</p> <p>7. Acoustic treatment of one wall is considered desirable but not mandatory.</p> <p>8. The entire ceiling should be treated and the floor should be fully carpeted.</p>			

AREA
JUDGES' LOUNGE
REFERENCE: SECTION H
<p>LEGEND</p> <p>▨ CEILING TREATMENT</p> <p>▤ WALL TREATMENT</p>
TYPICAL ADJOINING SPACES
<p>Judge's Office · Judges' Boardroom</p> <p>· Private Corridor · Judges' Secretarial Staff</p>

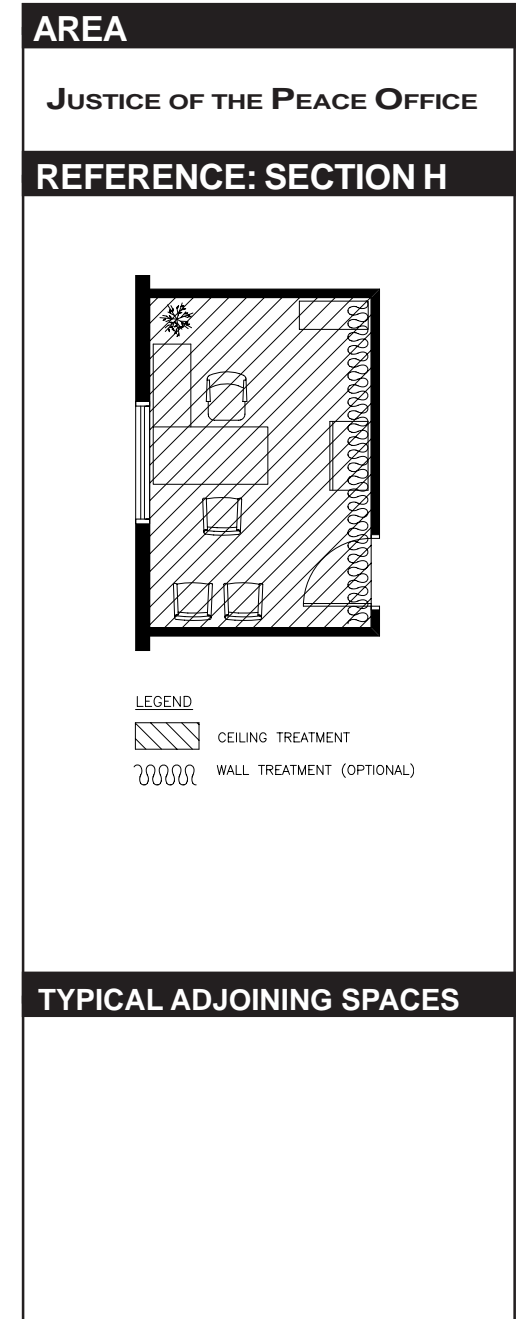
CHECKLIST	
BUILDING SERVICES	
NC Level HVAC Electrical Plumbing	NOTE 1
SOUND ISOLATION	
Walls Windows Doors Floor Ceiling	NOTE 2 NOTE 3 NOTE 2 NOTE 2
FINISHES	
Walls Ceiling Floor	NOTE 4,5 NOTE 4,6 NOTE 4,6

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35-40 is an appropriate design objective for this space.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Judge's Office	50	B:SI	50
Private Corridor	45	B:SI	45
Public Corridor	45	A:SI	45
<p>3. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (m²)	Note 5	Note 5	Note 5
Total Treated (m²)		Note 6	Note 6
Min. Treatment NRC		0.6	
Appropriate Materials	Walls		
	Ceiling	Floor	
Acoustical Ceiling Tiles	✓		
Linear Metal Perforated Metal			
Fabric Faced Fibreglass	✓		
Perf. Vinyl & Fibreglass			
Wood Battens	✓		
Carpet			✓
<p>5. The size of this space is dependent on the number of judges and whether there should be a separate waiting area.</p> <p>6. The entire ceiling should be treated and the floor should be fully carpeted.</p>			

AREA
JUDGES' SECRETARIAL STAFF
REFERENCE: SECTION H

<p>LEGEND</p> <p> CEILING TREATMENT</p>
TYPICAL ADJOINING SPACES
<p>·Private Corridor ·Judge's Office</p> <p>·Public Corridor</p>

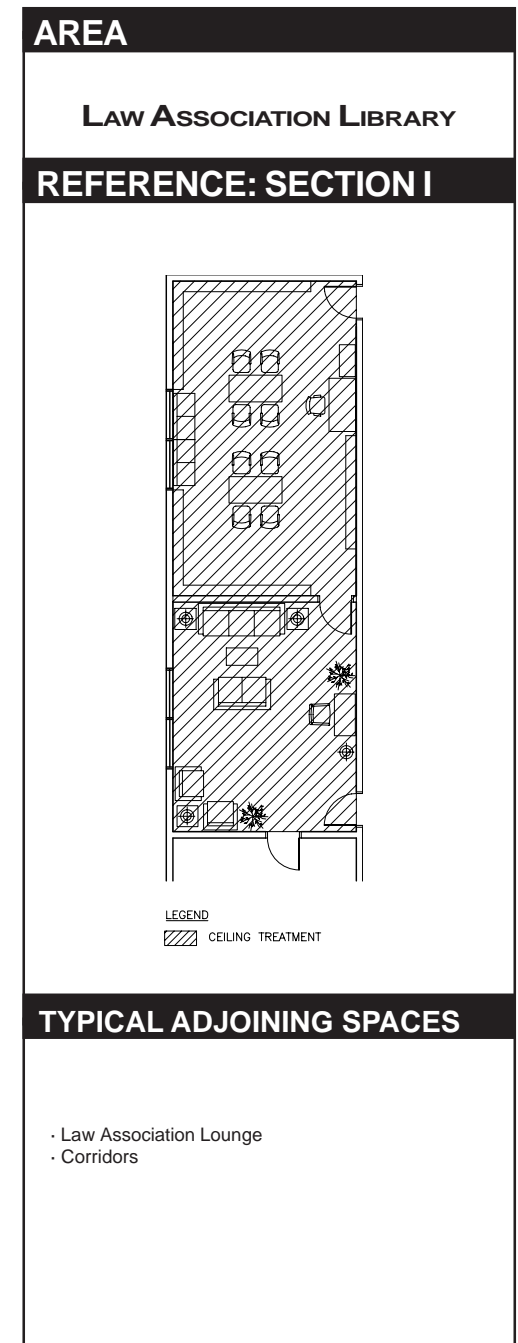
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 6
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	39	14	14
Total Treated (s.m.)	Note 6	14	14
Min. Treatment NRC		0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			



CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6
Ceiling	NOTE 5,6,7
Floor	NOTE 5,6,7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the library. Ducts should run in the corridor space with a separate branch for the library.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
Public Corridor	45		45
Administration	45		45
<p>4. Exterior walls and windows must provide adequate sound isolation as per environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)		Note 7	Note 7
Min. Treatment NRC		0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal		√	
Perforated Metal		√	
Fabric Faced Fibreglass		√	
Perf. Vinyl & Fibreglass		√	
Wood Battens		√	
Carpet			√
<p>6. The size of this space will vary depending on the size of the membership.</p> <p>7. The entire ceiling should be treated and the floor should be fully carpeted.</p>			



CHECKLIST

BUILDING SERVICES

NC Level NOTE 1
HVAC
Electrical NOTE 2
Plumbing

SOUND ISOLATION

Walls NOTE 3
Windows NOTE 4
Doors NOTE 3
Floor
Ceiling NOTE 3

FINISHES

Walls NOTE 5,6,7
Ceiling NOTE 5,6,8
Floor NOTE 5,6,8

NOTES

Building Services, Sound Isolation & Finishes

1. NC 35 to 40 is an appropriate design objective for this space.
2. Any fluorescent light ballasts should be low noise Type A.
3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).

ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	45		45

4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.

5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.

	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)	Note 7	Note 8	Note 8
Min. Treatment NRC		0.6	

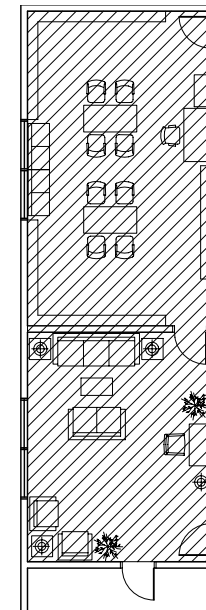
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass		✓	
Perf. Vinyl & Fibreglass		✓	
Wood Battens		✓	
Carpet			✓

6. The size of this space will vary with the size of the membership.
7. Acoustic treatment of one wall is considered desirable but not mandatory.
8. The entire ceiling should be treated and the floor should be fully carpeted.

AREA

LAW ASSOCIATION LOUNGE

REFERENCE: SECTION I



LEGEND
[Shaded Area] CEILING TREATMENT

TYPICAL ADJOINING SPACES

- .Law Association Library
- .Public Corridor

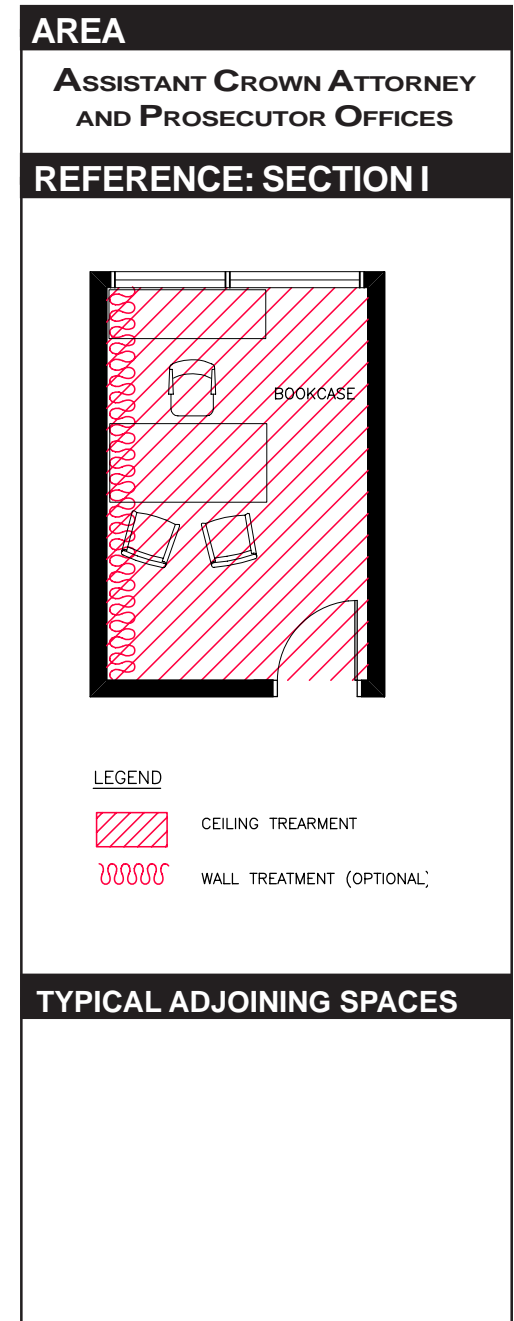
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
All adjoining spaces	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	51	32	32
Total Treated (s.m.)	Note 6	32	32
Min. Treatment NRC		0.6	
Appropriate Materials	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			

AREA
CROWN ATTORNEY'S OFFICE
REFERENCE: SECTION I
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT (OPTIONAL)</p>
TYPICAL ADJOINING SPACES

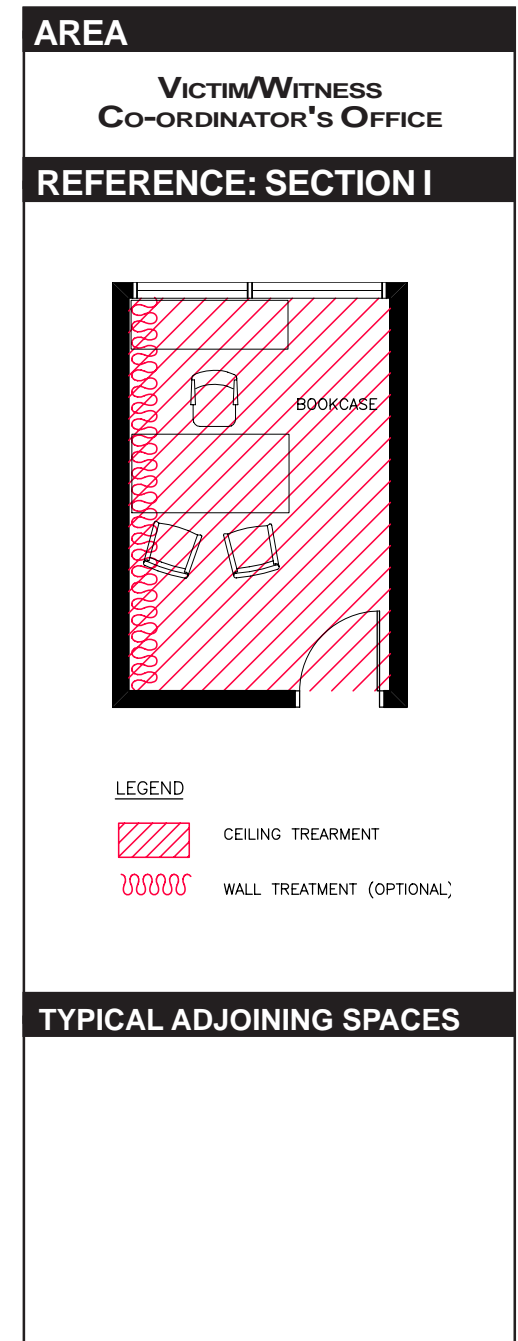
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,8
Floor	NOTE 5,6,8

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)	Note 7	Note 8	Note 8
Min. Treatment NRC		0.6	
Appropriate Materials			
	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. The size of these offices varies with the number of Crown Attorneys and the size of the court house.</p> <p>7. Acoustic treatment of one wall is considered desirable but not mandatory.</p> <p>8. The entire ceiling should be treated and the floor should be fully carpeted.</p>			



CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 6
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
All adjoining space	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	39	14	14
Total Treated (s.m.)	Note 6	14	14
Min. Treatment NRC		0.6	
Appropriate Materials	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Acoustical Ceiling Tiles		√	
Linear Metal Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			



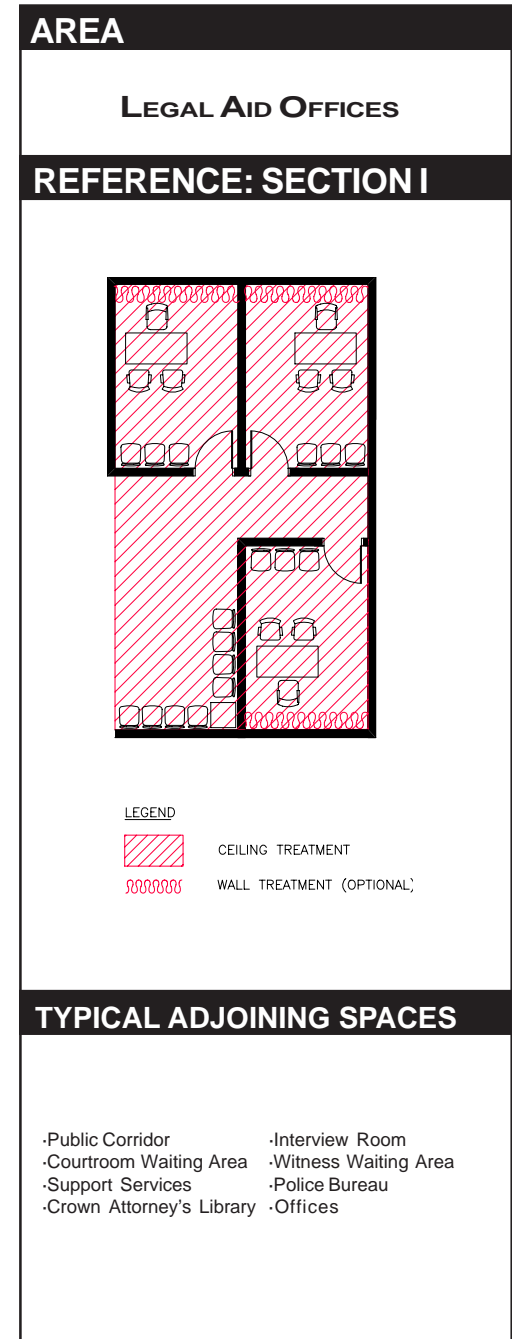
CHECKLIST	
BUILDING SERVICES	
NC Level HVAC Electrical Plumbing	NOTE 1 NOTE 2
SOUND ISOLATION	
Walls Windows Doors Floor Ceiling	NOTE 3 NOTE 4 NOTE 3 NOTE 3
FINISHES	
Walls Ceiling Floor	NOTE 5,6 NOTE 5,6,7 NOTE 5,6,7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 is an appropriate design objective for this space.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
All adjoining spaces	55	SI	55
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)		Note 7	Note 7
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Acoustical Ceiling Tiles		✓	
Linear Metal		✓	
Perforated Metal		✓	
Fabric Faced Fibreglass		✓	
Perf. Vinyl & Fibreglass		✓	
Wood Battens		✓	
Carpet			✓
<p>6. The size of this space varies with the size of the court house.</p> <p>7. The entire ceiling should be treated and the floor should be fully carpeted.</p>			

AREA
CROWN ATTORNEY'S LIBRARY
REFERENCE: SECTION I
<p>LEGEND</p> <p> CEILING TREATMENT</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> • Public Corridor • Courtroom Waiting Area • Support Services • Crown Attorney's Office • Interview Room • Witness Waiting Area • Police Bureau • Offices

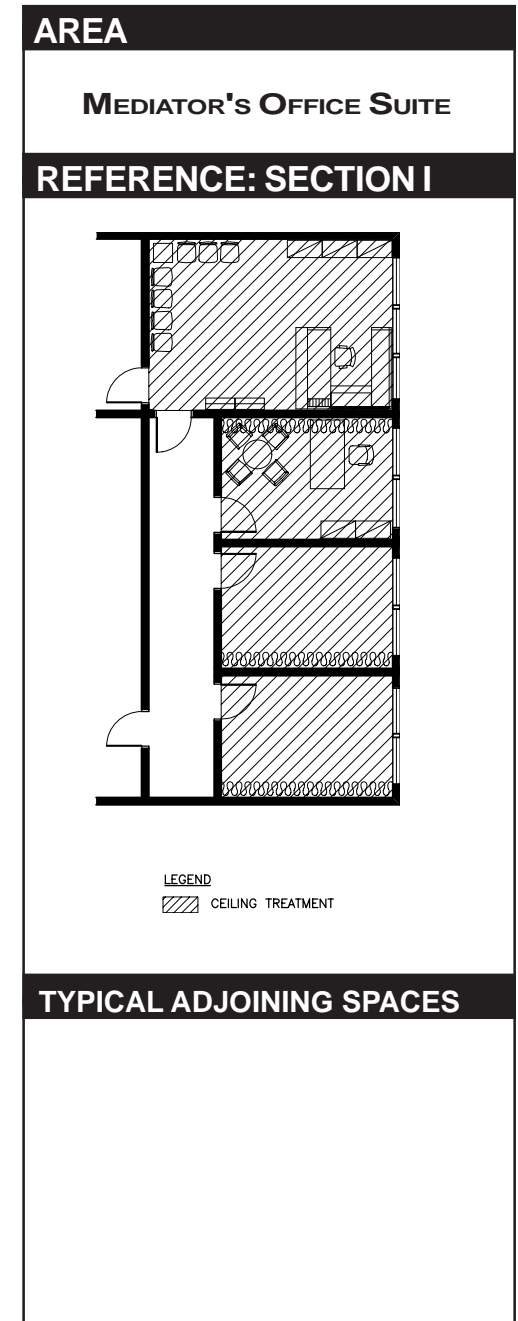
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 4,5
Ceiling	NOTE 4
Floor	NOTE 4

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the Legal Aid office. Ducts should run in the corridor space with a separate branch for each room.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>4. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	39	14	14
Total Treated (s.m.)	Note 5	14	14
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	Walls		
	Ceiling	Floor	
Acoustical Ceiling Tiles	√		
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√		
Perf. Vinyl & Fibreglass			
Wood Battens	√		
Carpet			√
<p>5. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			



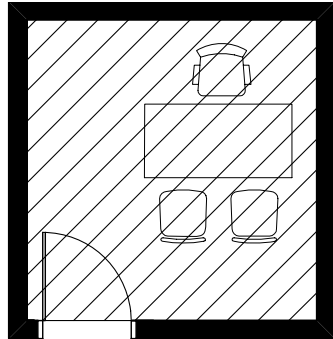

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 6
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	55	SI	55
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	39	14	14
Total Treated (s.m.)	Note 6	14	14
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	Walls		
	Ceiling	Floor	
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			



CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	
Plumbing	
SOUND ISOLATION	
Walls	NOTE 2
Windows	
Doors	NOTE 2
Floor	
Ceiling	NOTE 2
FINISHES	
Walls	NOTE 3,4
Ceiling	NOTE 3
Floor	NOTE 3

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the interview room. Ducts should run in the corridor space with a separate branch for each office space.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Introduction).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>3. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	32	9	9
Total Treated (s.m.)	Note 4	9	9
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass		√	
Perf. Vinyl & Fibreglass			
Wood Battens		√	
Carpet			√
<p>4. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			

AREA	
INTERVIEW ROOMS	
REFERENCE: SECTION I	
	
LEGEND	
	CEILING TREATMENT
TYPICAL ADJOINING SPACES	
·Public Corridor	·Witness Waiting Area
·Support Services	·Police Bureau
·Crown Attorney's Library	·Offices
·Interview Room	

CHECKLIST

BUILDING SERVICES

NC Level NOTE 1
HVAC NOTE 1
Electrical NOTE 2
Plumbing

SOUND ISOLATION

Walls NOTE 3
Windows NOTE 4
Doors NOTE 3
Floor NOTE 3
Ceiling NOTE 3

FINISHES

Walls NOTE 5,6
Ceiling NOTE 5
Floor NOTE 5

NOTES

Building Services, Sound Isolation & Finishes

1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.
2. Any fluorescent light ballasts should be low noise Type A.
3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).

ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining space	50	SI	50

4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.
5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.

	Walls	Ceiling	Floor
Total Area (s.m.)	39	14	14
Total Treated (s.m.)	Note 6	14	14
Min. Treatment NRC		0.6	

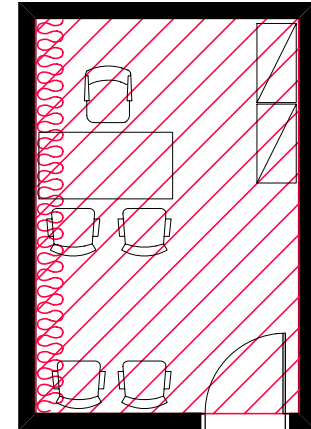
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√

6. Acoustic treatment of one wall is considered desirable but not mandatory.



AREA

SOCIAL AGENCY OFFICE SPACE

REFERENCE: SECTION I



LEGEND

-  CEILING TREATMENT
-  WALL TREATMENT (OPTIONAL)

TYPICAL ADJOINING SPACES

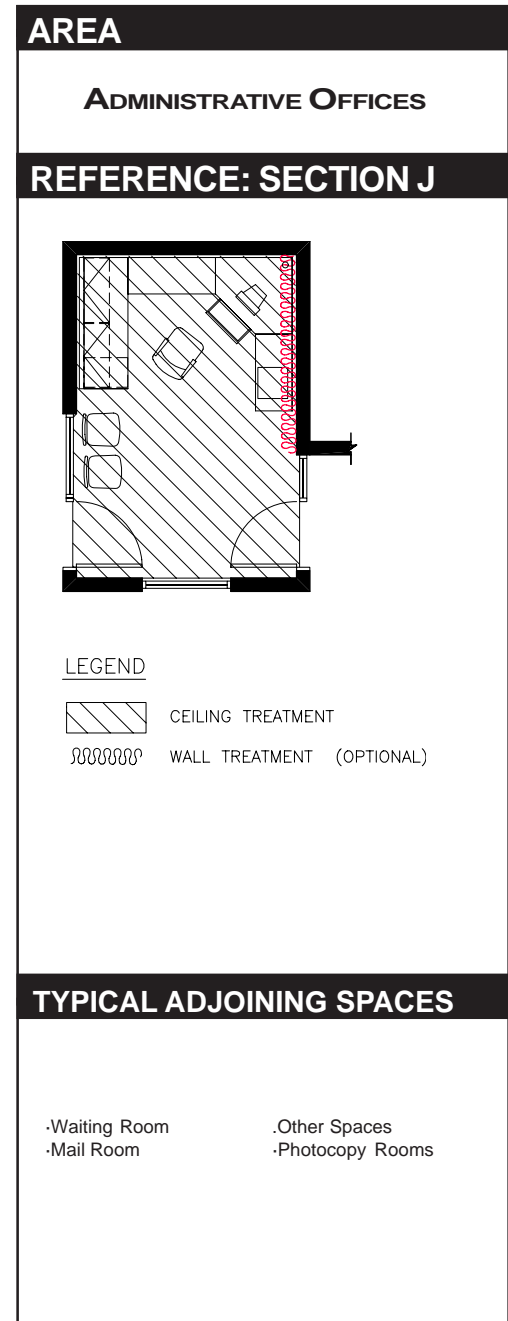
CHECKLIST	
BUILDING SERVICES	
NC Level HVAC Electrical Plumbing	NOTE 1
SOUND ISOLATION	
Walls Windows Doors Floor Ceiling	NOTE 2
Walls Ceiling Floor	NOTE 3

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 40-45 is an appropriate design objective for this space.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix.</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All non-holding area adjoining space	55	SI	55
<p>3. Ceiling in Custodian Console Room to be highly sound absorbing (minimum NRC of 0.9).</p>			

AREA
HOLDING AREA
REFERENCE: SECTION J
<p>The diagram shows a cross-section of a holding area. The ceiling is treated with sound-absorbing material, indicated by diagonal hatching. Below the ceiling, there is an access point to a corridor. The floor is supported by structural beams. A legend below the diagram identifies the hatched area as 'CEILING TREATMENT'.</p>
TYPICAL ADJOINING SPACES

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,8
Floor	NOTE 5,6,8

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining offices	45	SI	45
Photocopy Room	50	SI	50
Mail Room	50	SI	50
Court Services Manager	50	SI	50
Deputy Court Services Manager	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)	Note 7	Note 8	Note 8
Min. Treatment NRC		0.6	
Appropriate Materials	Walls		
	Ceiling	Floor	
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	√	√	
Perf. Vinyl & Fibreglass	√		
Wood Battens	√	√	
Carpet			√
<p>6. These spaces vary in size with intended use and/or occupancy.</p> <p>7. Acoustic treatment of one wall is considered desirable but not mandatory.</p>			



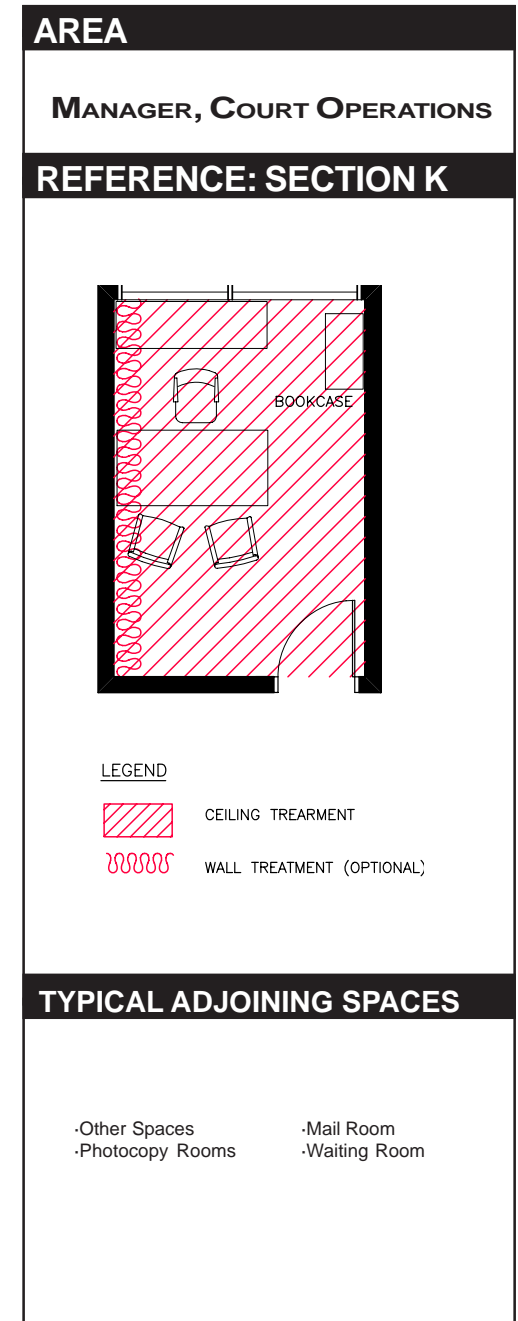
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,7
Floor	NOTE 5,6,7

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the court reporters' area. Ducts should run in the corridor space with a separate branch for the court reporters' office area.</p> <p>2. Any fluorescent light ballast should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	55	SI	55
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Notes 5,6	Notes 5,6	Notes 5,6
Total Treated (s.m.)	Notes 6,7	Notes 6,7	Notes 6,7
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	✓	✓	
Perf. Vinyl & Fibreglass	✓		
Wood Battens	✓	✓	
Carpet			✓
<p>6. The size of this space is dependent on the number of reporters and the size of the court house.</p> <p>7. The entire ceiling should be treated and the floor should be fully carpeted. Acoustic treatment at one wall is considered desirable but not mandatory.</p>			

AREA	
COURT REPORTERS	
REFERENCE: SECTION K	
<p>LEGEND</p> <p> CEILING TREATMENT</p> <p> WALL TREATMENT</p>	
TYPICAL ADJOINING SPACES	
<ul style="list-style-type: none"> -Supervisors' Office -Courtroom Clerks' Office Space 	<ul style="list-style-type: none"> -Private Corridor -Public Corridor

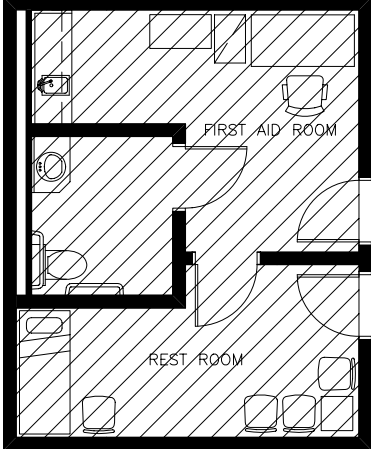

CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	NOTE 3
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,8
Floor	NOTE 5,6,8

NOTES																															
Building Services, Sound Isolation & Finishes																															
<p>1. NC 30-35 is an appropriate design objective for this space. HVAC ducts should not pass through the office. Ducts should run in the corridor space with a separate branch for each individual office.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>																															
ADJOINING SPACE	MINIMUM NR RATING																														
	Walls	Doors	Ceiling																												
All adjoining offices	50	SI	50																												
Photocopy Room	50	SI	50																												
Mail Room	50	SI	50																												
Trial Co-ordinator's Office	50	SI	50																												
Deputy Court Services Manager	50	SI	50																												
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>																															
	Walls	Ceiling	Floor																												
Total Area (s.m.)	Note 6	Note 6	Note 6																												
Total Treated (s.m.)	Note 7	Note 8	Note 8																												
Min. Treatment NRC		0.6																													
<table border="1"> <thead> <tr> <th>Appropriate Materials</th> <th>Walls</th> <th>Ceiling</th> <th>Floor</th> </tr> </thead> <tbody> <tr> <td>Acoustical Ceiling Tiles</td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Linear Metal Perforated Metal</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fabric Faced Fibreglass</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>Perf. Vinyl & Fibreglass</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Wood Battens</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>Carpet</td> <td></td> <td></td> <td>✓</td> </tr> </tbody> </table>				Appropriate Materials	Walls	Ceiling	Floor	Acoustical Ceiling Tiles		✓		Linear Metal Perforated Metal				Fabric Faced Fibreglass	✓	✓		Perf. Vinyl & Fibreglass	✓			Wood Battens	✓	✓		Carpet			✓
Appropriate Materials	Walls	Ceiling	Floor																												
Acoustical Ceiling Tiles		✓																													
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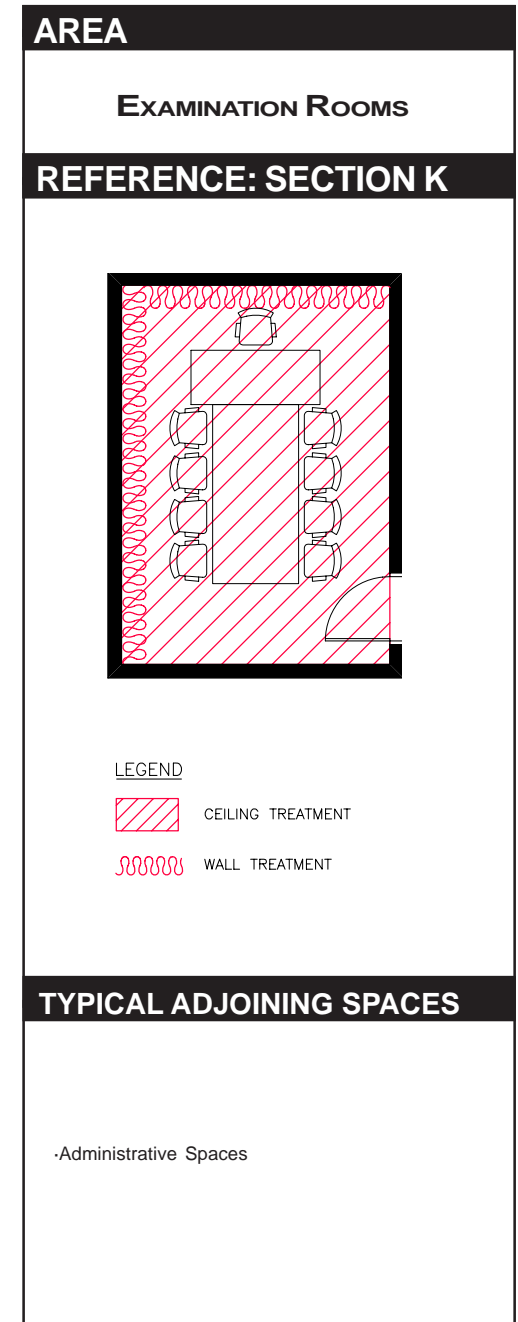
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	
Plumbing	
SOUND ISOLATION	
Walls	NOTE 2
Windows	
Doors	NOTE 2
Floor	
Ceiling	NOTE 2
FINISHES	
Walls	
Ceiling	NOTE 3
Floor	

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 is an appropriate design objective for this space. HVAC ducts should not pass through these rooms. Ducts should run in the corridor space with a separate branch for each room.</p> <p>2. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	<u>Walls</u>	<u>Doors</u>	<u>Ceiling</u>
All adjoining spaces	50	SI	50
<p>3. Appropriate sound absorptive treatments and distribution are indicated below and on the adjacent figure.</p>			
	<u>Walls</u>	<u>Ceiling</u>	<u>Floor</u>
Total Area (s.m.)		28	28
Total Treated (s.m.)		28	
Min. Treatment NRC		0.6	
<hr/>			
Appropriate Materials	Walls		
	<u>Ceiling</u>	<u>Floor</u>	
Acoustical Ceiling Tiles		√	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass		√	
Perf. Vinyl & Fibreglass			
Wood Battens		√	
Carpet			

AREA
FIRST AID AND REST ROOMS
REFERENCE: SECTION K

<p>LEGEND</p> <p> CEILING TREATMENT</p>
TYPICAL ADJOINING SPACES
<ul style="list-style-type: none"> · Administrative Spaces · Public Corridor

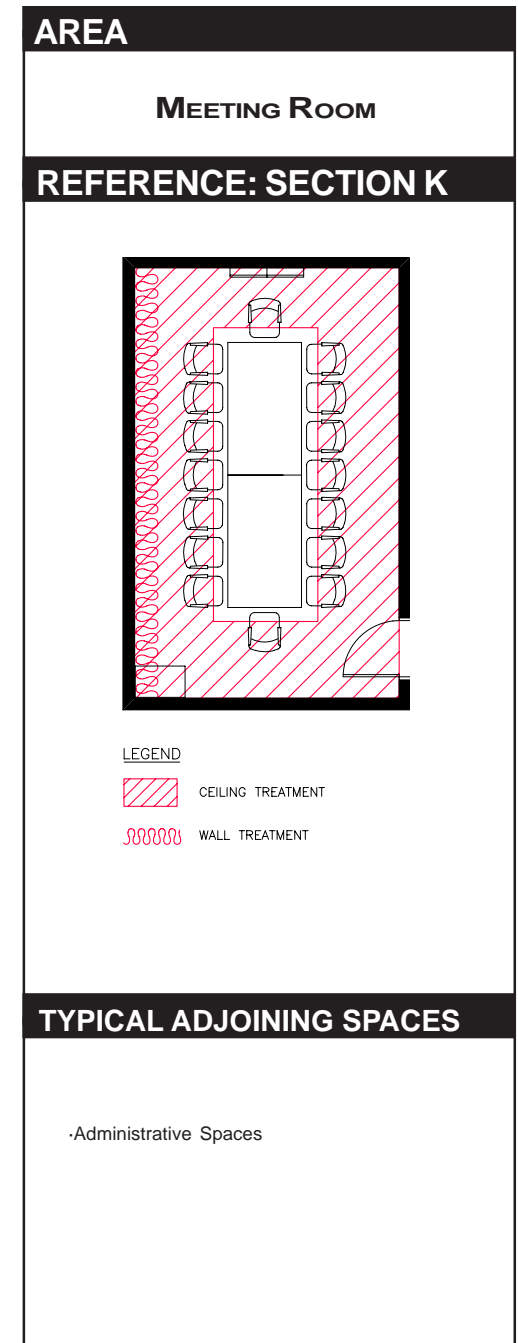
CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	NOTE 3
SOUND ISOLATION	
Walls	NOTE 4
Windows	
Doors	NOTE 4
Floor	NOTE 4
Ceiling	NOTE 4
FINISHES	
Walls	NOTE 5
Ceiling	NOTE 5
Floor	NOTE 5

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 25 is an appropriate design objective for this space. HVAC ducts should not pass through examination rooms. Ducts should run in the corridor space with a separate branch for each room.</p> <p>2. Remotely mount lighting ballasts.</p> <p>3. Avoid plumbing in walls or ceiling space; otherwise it must be isolated and/or in an acoustical enclosure.</p> <p>4. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	55	SI	55
<p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the adjacent figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	50	20	20
Total Treated (s.m.)	25	20	20
Min. Treatment NRC	0.6	0.6	-
Appropriate Materials			
	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		✓	
Linear Metal			
Perforated Metal			
Fabric Faced Fibreglass	✓	✓	
Perf. Vinyl & Fibreglass	✓		
Wood Battens	✓	✓	
Carpet			✓



CHECKLIST	
BUILDING SERVICES	
NC Level	NOTE 1
HVAC	NOTE 1
Electrical	NOTE 2
Plumbing	
SOUND ISOLATION	
Walls	NOTE 3
Windows	NOTE 4
Doors	NOTE 3
Floor	
Ceiling	NOTE 3
FINISHES	
Walls	NOTE 5,6,7
Ceiling	NOTE 5,6,8
Floor	NOTE 5,6,9

NOTES			
Building Services, Sound Isolation & Finishes			
<p>1. NC 35 is an appropriate design objective for this space. HVAC ducts should not pass through meeting rooms. Ducts should run in the corridor space with a separate branch for each room.</p> <p>2. Any fluorescent light ballasts should be low noise Type A.</p> <p>3. Sound isolation requirements based on typical adjoining spaces are shown in the table below. For spaces not listed, consult the general STC rating matrix (Specific Requirements: Information).</p>			
ADJOINING SPACE	MINIMUM NR RATING		
	Walls	Doors	Ceiling
All adjoining spaces	50	SI	50
<p>4. Exterior walls and windows must provide adequate sound isolation as per Environmental Noise Control.</p> <p>5. Appropriate sound absorptive treatments and distribution are indicated below and on the figure.</p>			
	Walls	Ceiling	Floor
Total Area (s.m.)	Note 6	Note 6	Note 6
Total Treated (s.m.)	Note 7	Note 8	Note 9
Min. Treatment NRC	0.6	0.6	
Appropriate Materials	Walls	Ceiling	Floor
Acoustical Ceiling Tiles		√	
Linear Metal Perforated Metal			
Fabric Faced Fibreglass		√	
Perf. Vinyl & Fibreglass			
Wood Battens		√	
Carpet			√
<p>6. The size of this space is dependent on the size of the court house and occupancy needs.</p> <p>7. Acoustic treatment of one wall surface (preferably the longest) is desirable.</p> <p>8. The ceiling excluding that portion above the meeting room table should be sound absorptive. The ceiling above the table should be sound reflective; although the entire ceiling being sound absorbing is acceptable.</p> <p>9. The entire floor should be carpeted.</p>			



2. OUTLINE SPECIFICATIONS - SOUND SYSTEM ELECTRONICS

2.1 DESCRIPTION OF THE SYSTEMS

Sound Reinforcement

All court and motion rooms will have sound reinforcement systems. Signals will originate at any of the microphones within each space, the simultaneous translation system, where provided, and at the line level input from separately connected audio/visual (A/V) equipment. Future A/V equipment may include portable video cassette recorders and large screen monitors in the judicial and public areas. Conduit and cabling will be provided in the designated rooms, to facilitate such presentations. Provision will also be made to input emergency paging signals.

Locate the equipment and main controls in a rack near the Clerk's position or in a separate designated space. Remote master volume and power control will be located at the Clerk's position.

Sound coverage will be by ceiling loudspeaker systems for the public area and individual local loudspeakers at each position in the "legal arena".

Microphones will be provided at these positions:

- Judge
- Clerk/Registrar
- Witness box
- Lectern
- Crown Attorney
- Defense Attorney
- Accused's box (non-jury courtroom only)

Microphone signals will be provided to the Court Reporters' local recording system, the hearing impaired system and the simultaneous translation system where applicable.

Whenever a microphone is gated on, any directly associated local loudspeaker shall be muted, as well as any neighbouring local loudspeakers, where appropriate to avoid feedback; muting control signals to originate at the channel logic outputs of the mixer.

Local Court Recording System

Courtrooms and motion rooms are to be provided with a local, in court, four-track cassette recording system in a single tape deck. The tape deck is to be capable of providing three hours of continuous recording or can have twin tape decks with auto transfer. The recorder unit is to be provided with sufficient microphone inputs to allow independent recording of these groups:

- Judge/Registrar/Clerk;
- Crown Attorney(s);
- Defense Attorney(s) and Witness/Accused.

Additional microphones may be needed at strategic locations to allow continuous recording of the lawyers as they move about or away from their normal position.

Alternately, the recorder shall be capable of being equipped with a stenomask and adaptor. A single channel shall be assigned for this service when required. It must be possible to switch and isolate each tape recorder channel during playback. This system is to be interconnected with the courtroom sound reinforcement system for playback. Locate the recorder unit on the court reporter's desk. If the courtroom is equipped with simultaneous translation facilities, one track shall be assigned to that activity and the four activities above will be compressed into three tracks. The court reporter will have the ability to selectively monitor the recorded signal during recording.

Simultaneous Translation System

Designated courtrooms are to be provided with a simultaneous translation system consisting of selector switches, volume controls, permanently hard-wired earphones and a translator's control console.

The translators' console is to be interfaced with the courtroom sound reinforcement system via a dedicated input on the mixer. All translated courtroom proceedings are also to be fed into the local court recording system on a dedicated recording channel. During the design stage of the project, other systems of transmitting simultaneous translation, based on the principle of FM or IR technology, may be considered, in conjunction with the hearing impaired system. The translation system will also provide a signal to the hearing impaired system. This will permit reproducing the translated proceedings using other than the sound reinforcement system. The translation system is to be designed in accordance with CAN/CGSB-131.2-M88, except reference to operator's equipment and his/her involvement in controlling the system, which should be deleted in its entirety. Reference to conference room, chairperson, delegates and other irrelevant items to courtroom and its proceedings should also be deleted.

Hearing Impaired System

Applies to courtrooms.

Hard-wired jacks with volume controls are to be provided for:

- Judge's dais;
- Attorneys' desks;
- Accused box;
- back row of the jury bench;
- front row of public seating.

In addition, consideration should be given during the design stage to implementation of an infra-red (IR) or inductive loop transmission system, using battery operated pocket receivers and earphones. Depending on the potential needs of the court house, including simultaneous translation, a multichannel system may be required.

As a minimum, conduit and cabling is to be provided at least at the two corners of the room at the ceiling, at the judicial end of each courtroom, to facilitate future addition of IR transmitters. Cabling is to extend to the sound reinforcement equipment rack.

Paging System

Paging systems will be independent of the other sound-reinforcement systems. Paging will be provided to the areas listed below which will be configured as separate zones.

- Public waiting areas; public corridors, elevator lobbies, public washrooms, on a floor by floor basis
- Coffee room or refreshment areas
- Interview rooms and witness waiting rooms (maximum two per zone)
- Small claims reception area
- Family court reception area
- Criminal Court reception area
- Crown Attorneys' reception area
- Police office
- Court Services Manager's office
- All-Call
- Any other area specifically identified to require paging.

Paging will originate at any of:

- Courtrooms (clerk's position)
- Motion rooms (clerk's position)
- Administrative Offices
- Court Services Manager's office
- Deputy Court Services Manager's office
- Police offices - Building Security and Holding Area custodian.

Courtrooms and motion rooms will only have the capability to page witness waiting rooms directly associated with them, as well as the public corridors, washrooms, lobbies and waiting areas deemed to be directly associated (e.g. on same floor). Table Q-5 summarizes the paging relationships. This matrix should be expanded in detail on a room by room basis during detailed design (for all spaces originating or receiving paging). On a project specific basis, consideration should be given to combining zones automatically for particular paging sources (e.g. paging from Court Services Manager's office to all public areas might automatically include all corridor, lobby, washrooms, refreshment and reception areas as one zone, unless there is the need for subdivision). During detailed design, consideration should be given to providing emergency paging inputs to the court and motion rooms.

All microphone stations will connect to a programmable switch (sequencer) which will allow an individual microphone station to access the desired zone or combination of zones.

Alternatively the paging may be provided via the electronic telephone system switch, if such is available and is capable of meeting these functional requirements with a high degree of audio quality, using standard telephone sets and Touch Tone signalling for zone selection.

During paging to a zone, all other microphone stations having access to the zone in use will be locked out, except those with emergency override capability. Emergency announcements will immediately seize the entire system by deselecting and locking out all other microphone stations. The Court Services Manager's station and the Police Office stations shall have priority override to implement this.

If a microphone (or telephone) station attempts to page a zone already in use, it will receive a busy signal or indication.

Compressor amplifiers are used to automatically compensate for varying speaking levels at the microphone. Installation of one or more graphic equalizers in the system permits frequency response tuning to accommodate varying architectural characteristics and optimize speech intelligibility. The frequency response of the system will be adjusted on site to compensate for building resonance and provide even sound distribution in all areas.

The paging system shall be capable of future expansion and zone programming with a minimum of equipment changes. To facilitate this, modular equipment is preferred using plug-in circuit cards and units, preferably with software configuration setup/programming.

Paging to each zone will be by one or more loudspeaker groups mounted in the ceiling. Each loudspeaker group will be connected to a power amplifier using a standard 70 volt distribution system. The audio power to each loudspeaker group will be adjustable via individual 70 volt distribution system.

The audio power to each loudspeaker group will be adjustable via individual 70 volt auto-transformer step attenuators.

2.2 Scope And General Requirements

Scope

Provide complete and satisfactory operating sound reinforcement systems for the indicated spaces.

All systems to be solid-state, independent, complete, modular, and in conformity with the requirements of the relevant inspection authority.

Instruction and Information

Carefully instruct the owner's operating personnel in operation, care, and maintenance of the installation.

Provide a system technical manual containing:

- Manufacturer's printed operating and maintenance instructions.
- Block and schematic diagrams.
- As-built wiring diagrams showing the connections between equipment, cable colour coding and terminal connections of all equipment assemblies and junction boxes.
- Tap connections on all speaker transformers and power amplifier outputs and details of impedance matching networks, and all transducer set-ups.
- Designations and settings of all equalizer, zone, gain or other controls.
- Output voltage of each power amplifier during normal operation of the system.
- Performance data on the completed system as specified under Performance Testing.

Performance Criteria and Adjustments

Variations in sound pressure level as measured in 1/3 octave bandwidths at the centre of the coverage area at 1.5 m above the floor shall not exceed +/- 2 dB from 100 Hz to 2 KHz, with a smooth roll off of 3 dB per octave above 2 KHz. The test signal shall be random pink noise. The sound pressure level of the test signal in each 1/3 octave band shall be at least 20 dB above the ambient sound level in the room.

Each sound reinforcement and paging system shall be capable of providing an average program level of 85 dBA at the listeners' ears, using pink noise over the range of 125 Hz to 4 KHz, without clipping.

Each system shall be free of clicks, thumps or other audible transients resulting from the operation of switching circuitry, including indicator lights.

Performance Testing

After each system is complete and final adjustments have been made, provide a test report including:

- The sound pressure level distribution pattern with all loudspeaker banks turned on.
- The "raw house curve" obtained prior to equalization, with the measurement microphone in the centre of the room.
- The frequency response characteristics of the system (room response) after equalization, with system excited by contiguous 1/3 octave bands of random noise centered between 63 Hz and 16 KHz.

Verify that the system is free from radio frequency pickup, parasitic oscillations, hum, buzzes, rattles, or distortion.

Acceptance Tests

Upon approval of the test report, demonstrate the operation of the systems and their components, using each microphone, all transducers, receivers and loudspeakers furnished, all required inputs, controls and amplification equipment, and all microphone positions.

Assist the owner or his representative in performing acceptance tests:

- Subjective tests by observers located at different positions throughout the area of coverage listening to speech from the different microphone positions, to ensure that the owner is satisfied with both quality and quantity.
- Acoustical (audit) measurements to verify that the specified requirements and adjustments have been satisfactorily completed.

Make available the equipment necessary to carry out these tests and have present an engineer or technician to assist.

Guarantee and Service

The contractor shall guarantee the equipment to be free of defective components (including solid state devices) and faulty workmanship for a period of one year from the date of acceptance of the system by the owner. If any materials or workmanship prove to be faulty within the duration of the guarantee, the contractor shall without cost to the owner:

- answer the service call within 24 hours.
- repair any defective workmanship or replace the defective material within two days.

The contractor shall provide within the guarantee period up to four service calls for instruction of personnel, or checking and adjustment of the systems. Such calls shall be made at the request of the owner without cost to him.

The trial usage or temporary usage of the system or any part thereof by the owner or his representative shall not be construed as evidence of acceptance.

2.3 PRODUCTS

Loudspeakers and Associated Components

See Section 2.5 below, Loudspeaker Systems.

Audio Power Amplifiers

The output circuits shall be suitable for driving a standard balanced or unbalanced 70 volt distribution system and have full overload and short circuit protection for the output transistors. Amplifiers shall create no more than 2% total harmonic distortion over the range of 30 Hz to 18 Khz; at full rated power output. Output power ratings to be based on loudspeaker load plus 50% again. Multiple power amplifiers may be used to provide the total power requirement. All amplifiers in a given system shall be identical and have a minimum power rating of 100 watts rms.

Acceptable manufacturers: Altec, Yamaha, Bryston, Crown, BGW, Ashley, Ramsa or approved alternate.

Remote Volume Control

Provide a remote volume control using a digital control attenuator system; RF suppressed, electronically balanced line level inputs; 20 Hz to 20 KHz; -80 dB THD and IMD; gain range -15 dB to +15 dB; control range 0 to -43.5 dB in 29 steps plus -90 dB (kill) step; LED indicator for each control step; preset button to restore preset gain; remote control disconnectable without affecting gain setting.

Acceptable; Oxmoor DCA-2 and RC-16 remote control, or approved alternate. (At this time this is the only product available that is acceptable.)

Third Octave Band Equalizers

Rack-mounted, using active filters covering the frequency range 25 Hz to 20 KHz with standard ISO band centre frequencies between 31.5 Hz and 16 KHz; and having line level inputs and outputs. Nominal gain 0 dB gain of at least 20 dB to restore equalization loss. THD maximum of 0.5% at full rated output with fully restored gain.

Mount in the rack such that a blank finished metal panel can be mounted over the front, to make the controls inaccessible. After final tuning, clearly mark the proper settings for each band.

Acceptable manufacturers: Altec; Urei; White; Yamaha, or approved alternate.

Equipment Racks

Install all electronic equipment in standard 19 inch wide racks. Provide blank panels labelled spare, over extra space.

Power Control

Provide a rack mounted power switch and pilot light to control power to all equipment in each rack, with a low voltage DC controlled remote power control at the Clerk's position, using an illuminated push-on, push-off switch.

Mixer - Sound Reinforcement

Provide an automatic microphone mixer with a separate input channel for each microphone input channel and one line level input channel with input jack at the Clerk's position; LED for each channel to indicate when gated on; automatic gain adjustment at -3 dB per doubling of number of on channels to avoid feedback; ability to disable automatic gain adjustment; adjustable gating hold time up to one second; adjustable attenuation of 8 dB to infinity for gated channels; individual and mixed signal outputs suitable for recording purposes; minimum gain of 80 dB; mute button at judge's position to mute all microphones (including recording); frequency response of 30 Hz to 20 KHz +/- 2 dB; line level and logic outputs for each channel; individual channel gain and sensitivity controls; master gain control.

Acceptable: Shure AMS 4000/8000 system, or approved alternative.

Compressor/limiter amplifier: solid state, up to 25 dB compression; maximum THD of 1% over the frequency range of 50 Hz to 16 KHz; adjustable attack time between at least 10 to 33 microsec.; bridging line input; line level output.

Acceptable manufacturers: Altec, Yamaha or approved alternate.

Sound Reinforcement Microphones and Accessories

Each microphone shall be capable of operating equally well from any of the microphone receptacles; frequency response of 50 to 16kHz; dual transducer noise canceling principle; acceptance angle of 120 degrees centred on front axis of microphone; balanced signal output, -54 dB re 1 volt per microbar; cardioid directional response; fully compatible with automatic mixer.

Fit each microphone with a solid state light mounted at the base, or as an integral part of the microphone assembly, to indicate when microphone is active. Microphones are not to have on/off switches.

Acceptable manufacturers: Shure AMS24 and AMS26 or approved alternate to match the mixer.

Paging Microphone Stations

Paging microphone stations may be either telephone style handsets with push-to-talk switches and cradles with DTMF (Touch Tone) keypads for control signalling and solid state lights for function indication; or push-to-talk microphones on desk stands, with separate lighted push-button control panels.

When the operator has selected the desired paging zones and these are available, the ready light will illuminate or a ready tone will sound in the handset as appropriate. A nominal one-half second chime will simultaneously sound in the paging zone. The operator will then activate the press-to-talk switch and commence an announcement. The paging zones will be selected either by keying in the appropriate code on the keypad or pushing the desired zone select push-button.

If the station cannot obtain access to the desired paging zones because they are already in use, the operator will receive a busy indication in the handset and will not hear the selection tone; or a busy lamp will flash. After receiving adequate busy indication the operation is automatically canceled. Alternatively, "camp-on" facility may be provided whereby when all selected zones are available the appropriate zone select light will become steadily illuminated and the chime will sound. The operator may then proceed with the page by activating the push-to-talk switch.

At any time the operator may cancel his selections by activating the CANCEL button or code or replacing the handset on the cradle switch. If the paging stations use a push-to-talk (PTT) microphone without a hang-up cradle and switch, the operation will be automatically canceled after five seconds if the PTT switch has not been activated, or within five seconds after the PTT switch is released,

A directory of the call numbers associated with each paging zone or group of zones will be supplied at each microphone station location.

Microphone stations with priority override capability are also to have light indication of zones in use.

Paging Switching Device

The switcher will be required to perform the following functions and any others required to implement the specified operational requirements.

- Acceptance of control signals from microphone stations and connection of same to the appropriate paging zone or grouping of paging zones.
- Provision of call tones/indication and busy tones/indication.
- Provision of a facility whereby stations may access predetermined groups of zones with capability to reconfigure these by either adding or removing certain zones from groups.
- Court Services Manager and Police office paging stations lock out other stations during emergency announcements by disconnecting all other paging paths and establishing paging from one of these stations to all zones. Annunciate on these stations when paging is in use from other stations.
- Provision of a facility whereby any microphone station in the system can be excluded from calling any zone, group of zones or all-calls.
- Provide an indication to stations when the selected zone or any zone in a selected group is already in use, and lock out the station(s) receiving busy indication for these zones or groups, until the busy condition is cleared.
- Simple means of reprogramming or regrouping the loudspeaker zones into paging zones, and of reprogramming the accessibility matrix (i.e. which microphone stations can page which zones).

In the event that a stored program device is used, either a non-volatile, easily reprogrammed, memory system shall be used, or a long life battery back-up power supply shall be provided for the memory. Programming or obtaining a hard copy of memory contents will be facilitated.

Alternatives:

Variations on the details of the above signalling and control implementation can be considered, provided the specified operational functions can be achieved, and provided all proposed variations are clearly documented, and advantages from any deviation are identified.

2.4 EXECUTION

Installation

Ensure that adequate ventilation is provided for each piece of equipment.

All operating controls, switches, jacks, plugs, outlets, transducers and input cables, etc., shall be clearly, logically, and permanently marked during installation.

Electrical Interference

Take adequate precautions, including grounding, to prevent electromagnetic and electrostatic interference and hum.

All permanent electrical connections shall be made with rosin-core solder, or with approved mechanical connectors. All microphone and line level lines shall have soldered connections only.

Conduits and Signal Lines

Where lines are run in conduit, separate conduits shall be utilized for levels below -30 dBm (microphone); -30 dBm up to +30 dBm (line level); loudspeaker circuits; and for power circuits, remote control, and indicator circuits.

Lines in conduit shall not be spliced, except at accessible junction boxes. Lines not in conduit and microphone and line level audio lines shall be continuous without splices.

The electrical continuity of the shield of a line shall be maintained throughout the length of the line. The shield shall be insulated from all metal parts, except at the point where it terminates at the audio-ground bus of the audio unit involved. Take precautions regarding these matters at connection points. Terminate the floating ends of shields by wedge-on collars or with plastic tape.

2.5 LOUDSPEAKER SYSTEMS

Loudspeaker characteristics:

- Nominal diameter 125 mm (5").
- Useful frequency response: 60 Hz to 12 KHz.
- Minimum power handling capability: 10w rms.
- Minimum magnet weight: 280 gm.
- Acceptable: McBride/Marsland 8LS527-14; Arnscott MS4D; Altec 404; or approved alternate.

Mount each loudspeaker on perforated, painted, metal baffle plate flush mounted to ceiling, of shape and colour co-ordinated with owner's representative.

Mount loudspeaker assembly in metal back box, coated on inside with vibration damping compound, and loose filled with sound absorbing material such as Fiberglas Canada AF-110 or approved alternate. Back boxes to each have minimum volume of 0.028 cu m (1 cu ft) unless ceiling space does not permit. In such cases the largest possible backboxes to be used.

Loudspeaker layout to be based on the principles of TECHNICAL BACKGROUND/DESIGN GUIDELINES, Section 4, LOUDSPEAKER SYSTEMS. Typical layouts are shown on Figures Q-4 to Q-7. Final layout to be coordinated with lighting, HVAC and overall reflected ceiling plan.

Fit each loudspeaker with a 70 volt transformer having taps at 1/2, 1, 2, 4 and 8 watts. Set tap to 4 watts.

Sound Reinforcement

Applies to courtrooms and motion rooms.

Layout is to be based on square spacing, centre-to-centre overlap coverage pattern. Wire loudspeakers in banks, with separate sound level adjustment controls located in the equipment rack:

- Judge/Clerk/Reporter/Witness

Provide individual loudspeakers for each of:

- | | |
|------------------|--------------------|
| • Judge | • Accused |
| • Court Reporter | • Jury box |
| • Clerk | • Crown Attorney |
| • Witness | • Defence Attorney |

Minimum backbox volume: 0.01 cu m (1/3 cu ft). Where mounted under work surfaces or otherwise hidden, metal backboxes to be as above (except for volume). Where exposed and free standing mount on matte, black, anodized aluminum baffle plate, minimum 3 mm thick. In metal baffle box finished to match microphone or in wood baffle box to match millwork. All mounting hardware to be Robertson, Phillips or Allen pattern. Fit each unit with a 70 volt transformer as above, with taps set to 2 watts. Provide each loudspeaker unit with a level control on the baffle plate. The individual loudspeakers shall be powered from a separate 70 volt auto-transformer level control for this group.

Loudspeaker Systems

Layout pattern to be based on square spacing, minimum overlap pattern.

III. GLOSSARY OF TERMS

AIF - Acoustic Insulation Factor:

A single number index representing a full set of airborne sound transmission loss data across the frequency spectrum for a specific architectural configuration and sound source spectrum.

Airborne Sound:

Sound that reaches the point of interest by propagation through air.

dB - Decibel:

The 'unit' of sound pressure level. See sound level.

dBA - A-weighted decibel:

A nationally and internationally standardized frequency weighting applied to the sound level spectrum to approximate the sensitivity of the human hearing mechanism as a function of frequency (pitch).

Flutter Echo:

Multiple reflections of sound between parallel hard surfaces.

IIC - Impact Insulation Class:

A single number index representing a full set of structure-borne sound transmission loss data across the frequency spectrum for a specific floor/ceiling configuration.

Leq - The energy equivalent continuous sound level:

The constant sound level over the time period in question that results in the same total sound energy as the actually varying sound. Must be associated with a time period. Usually in dBA.

NC - Noise Criteria (Curves):

A family of standard spectrum curves which specify sound level limits in octave bands. The particular curve providing the set of limits is identified by a single number.

NIC - Noise Insulation Class:

A single number index representing a full set of Noise Reduction data across the frequency spectrum, determined as per STC.

Noise:

Unwanted sound.

NR - Noise Reduction:

The difference in sound level between two adjacent spaces.

NRC - Noise Reduction Coefficient:

The average of the sound absorption coefficients for the frequency bands of 250, 500, 1000, and 2000 Hz, expressed to the nearest multiple of 0.05.

Reverberation:

The persistence of sound within a space due to multiple inter-reflections of sound from the room boundaries.

Sound Absorption:

The property of converting sound energy to heat, due either to propagation in a medium or to dissipation when sound strikes a surface.

Sound Absorption Coefficient:

The fraction of incident sound power which is absorbed by the material.

Sound Lobby/Sound Lock:

A vestibule providing a high degree of sound isolation to the entrance of a room, by requiring passage through two sets of doors.

Sound (Pressure) Level:

Measured in decibels (dB) it is the logarithmic ratio of the instantaneous energy of a sound to the energy at the threshold of hearing.

$$\text{Mathematically: } \text{SPL (dB)} = 20 \text{ LOG } (P/P_0)$$

where P is the pressure due to the sound and P₀ is the pressure at the threshold of hearing, taken as 20 micro Pascals.

Sound Stripping:

Providing a seal around the perimeter of a door such that there are no gaps between the door and frame when the door is closed. Similar to weatherstripping.

STC - Sound Transmission Class:

A single number index representing a full set of airborne sound transmission loss data across the frequency spectrum determined in accordance with ASTM E413.

Structure-borne Sound:

Sound occurring as a result of impacts or vibration acting on elements of a building and transmitted from one space to another through the structure itself.

TL - Transmission Loss:

A measure of the sound isolation properties of a wall, floor, ceiling, window or door.

Mathematically: 10 times the common logarithm of the reciprocal of the Transmission Factor.

Transmission Factor:

The ratio of sound energy transmitted through a boundary surface to the sound energy incident on the surface.

**TABLE Q-5
 PUBLIC ADDRESS PAGING FUNCTIONAL SUMMARY**

PAGING SOURCES

PAGING ZONES	COURTROOMS MOTION ROOMS	ADMINISTRATION OFFICES	POLICE OFFICE
Public corridors, washrooms, elevator lobbies	Note 1	*	*
Refreshment Area(s)	*	*	*
Interview Rooms	Note 1		
Witness Waiting Rooms	Note 1		
Small Claims Reception		*	*
Family Court Reception		*	*
Criminal Court Reception		*	*
Crown Attorney's Reception		*	*
Court & Motion Rooms		Note 2	Note 2
Police Office	*	*	
Local All-Call	Note 1		
Building All-Call	*	*	*

Note 1: Paging only to directly associated Waiting Areas and other public zones on the same level.

Note 2: Emergency paging only.

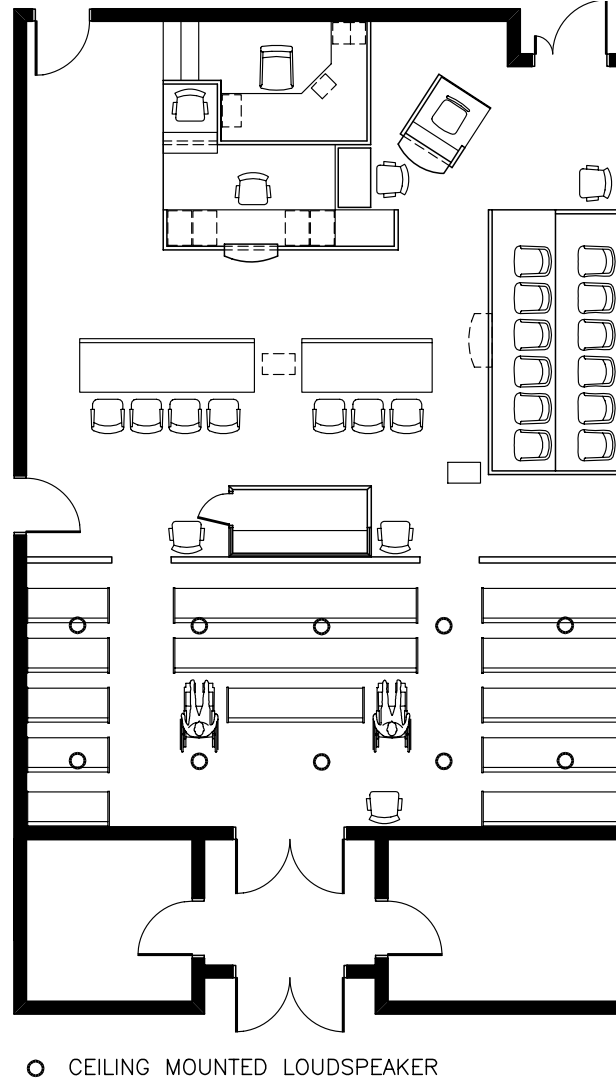


FIG: Q4

FIG Q4 Standard Courtroom Loudspeaker Layout

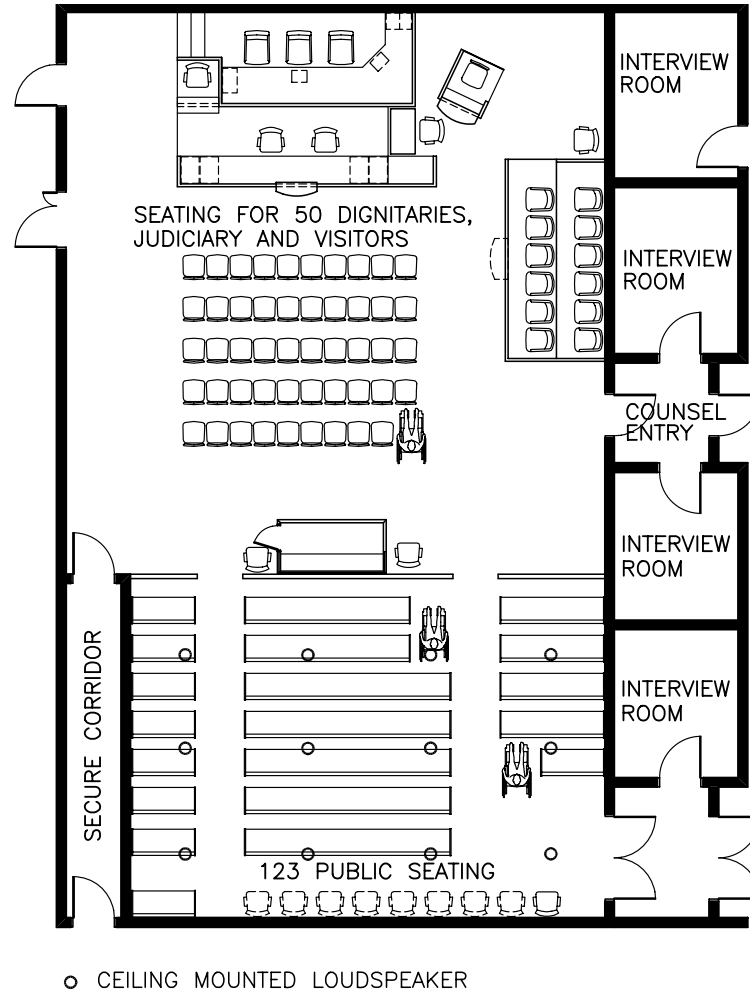
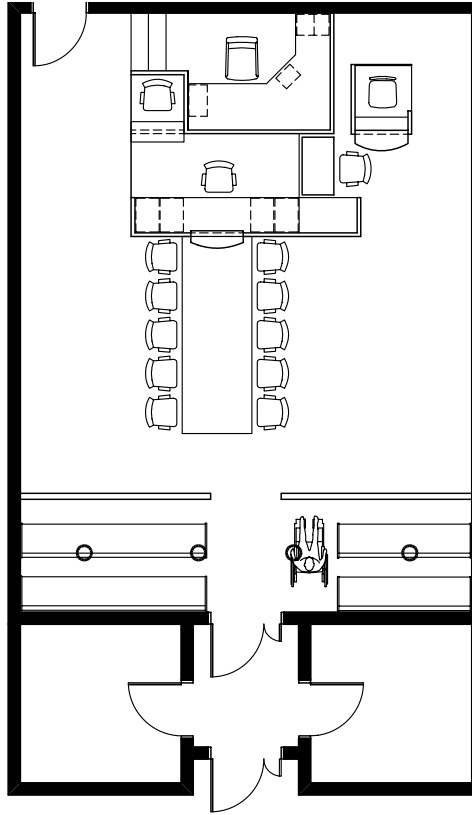


FIG: Q5

FIG Q5 Multipurpose Courtroom Loudspeaker Layout



○ CEILING MOUNTED LOUDSPEAKER

FIG: Q6

FIG Q6 Standard Motion Room Loudspeaker Layout

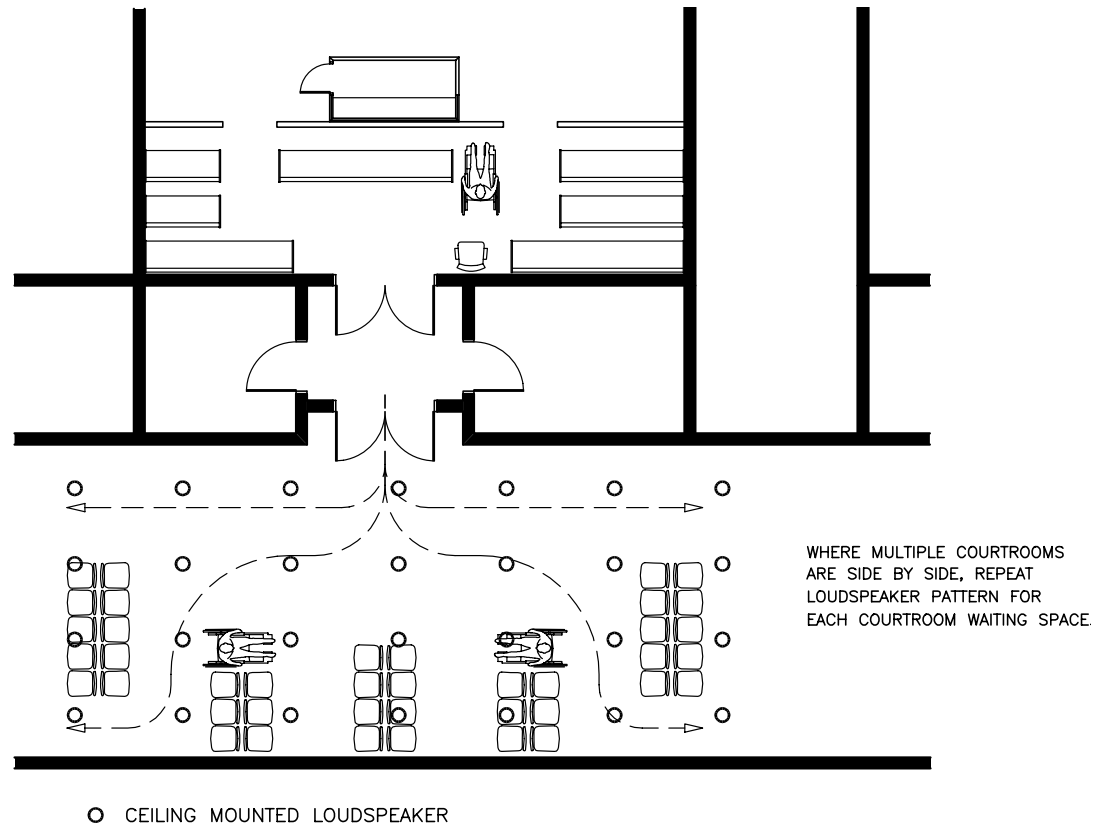


FIG Q7 Courtroom Waiting Area Loudspeaker Layout

APPENDIX Q-A

Miscellaneous Details

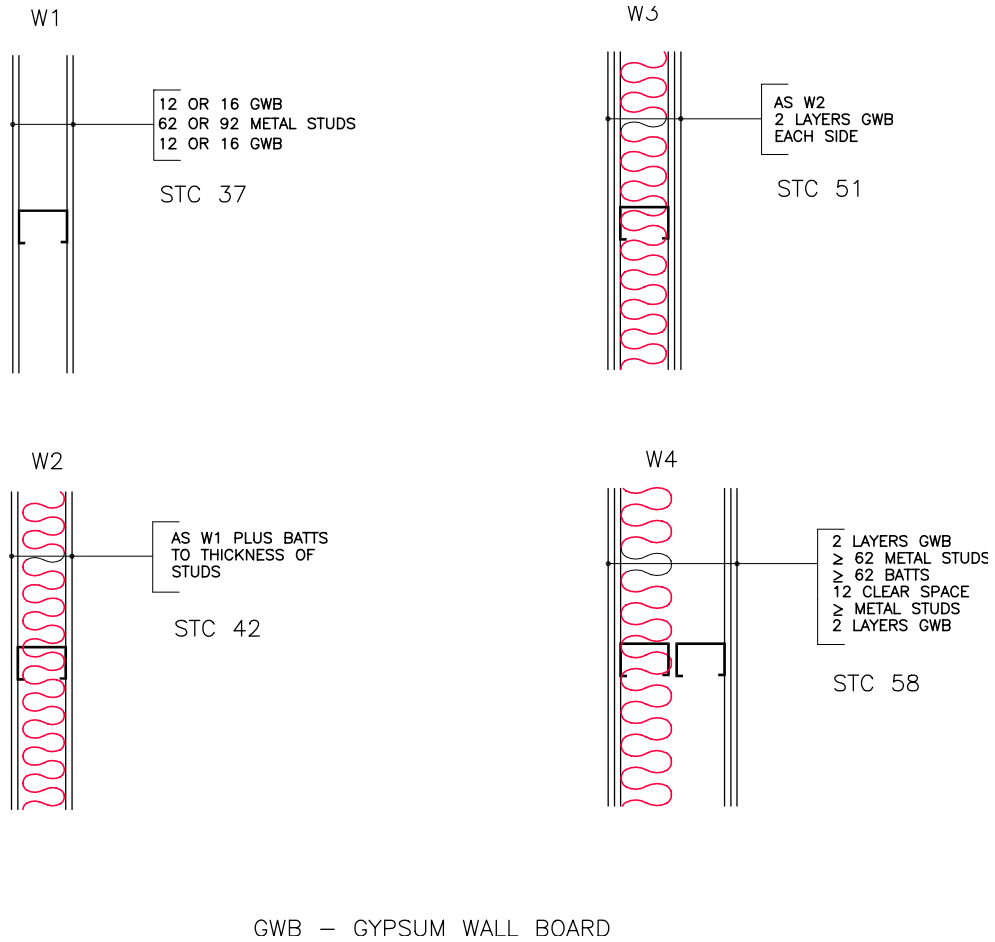
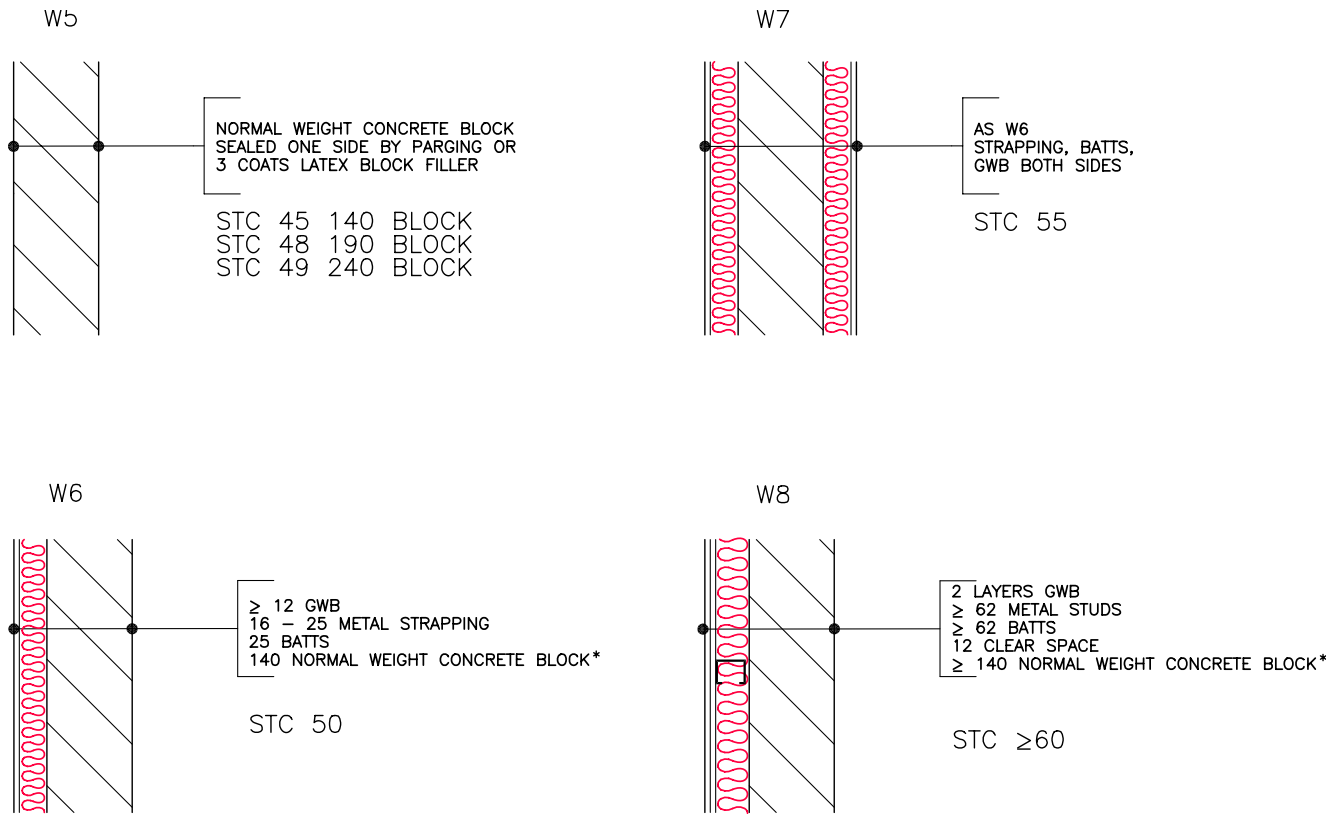


FIGURE Q-A1

Wall Configurations

APPENDIX Q-A

Miscellaneous Details

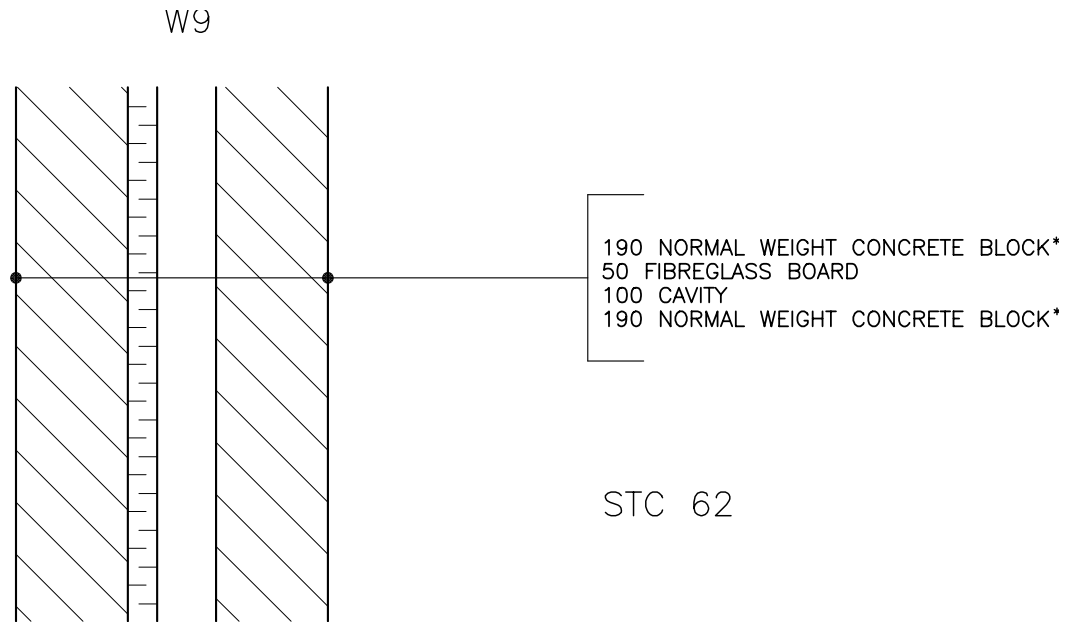


GWB - GYPSUM WALL BOARD
 * SEALED ONE SIDE BY PARING OR 3 COATS LATEX BLOCK FILLER

FIGURE Q-A2

Wall Configurations

APPENDIX Q-A **Miscellaneous Details**



* SEALED ONE SIDE BY PARGING OR 3 COATS LATEX BLOCK FILLER

FIGURE Q-A3 **Wall Configurations**

APPENDIX Q-A

Miscellaneous Details

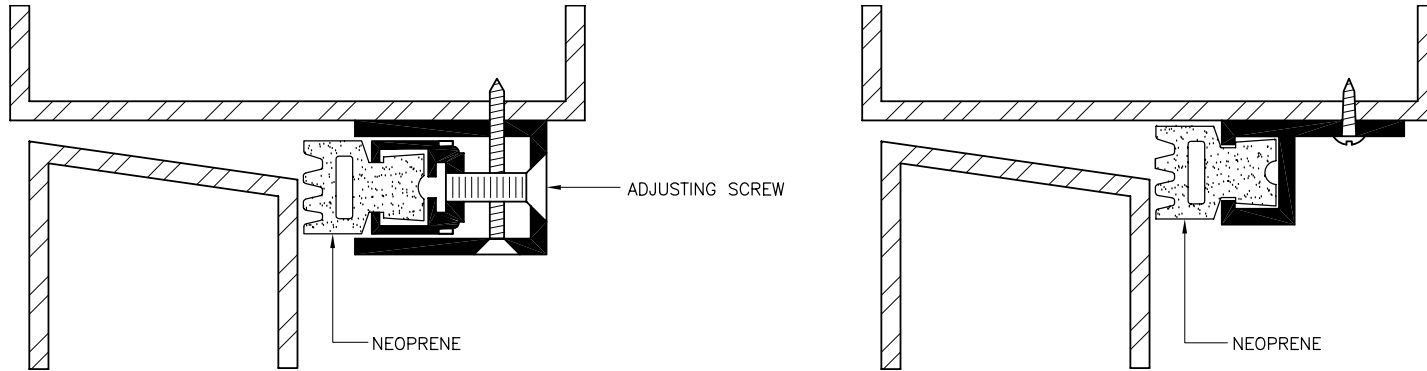


FIGURE Q-A4

Heavy Duty Door Seals

APPENDIX Q-A

Miscellaneous Details

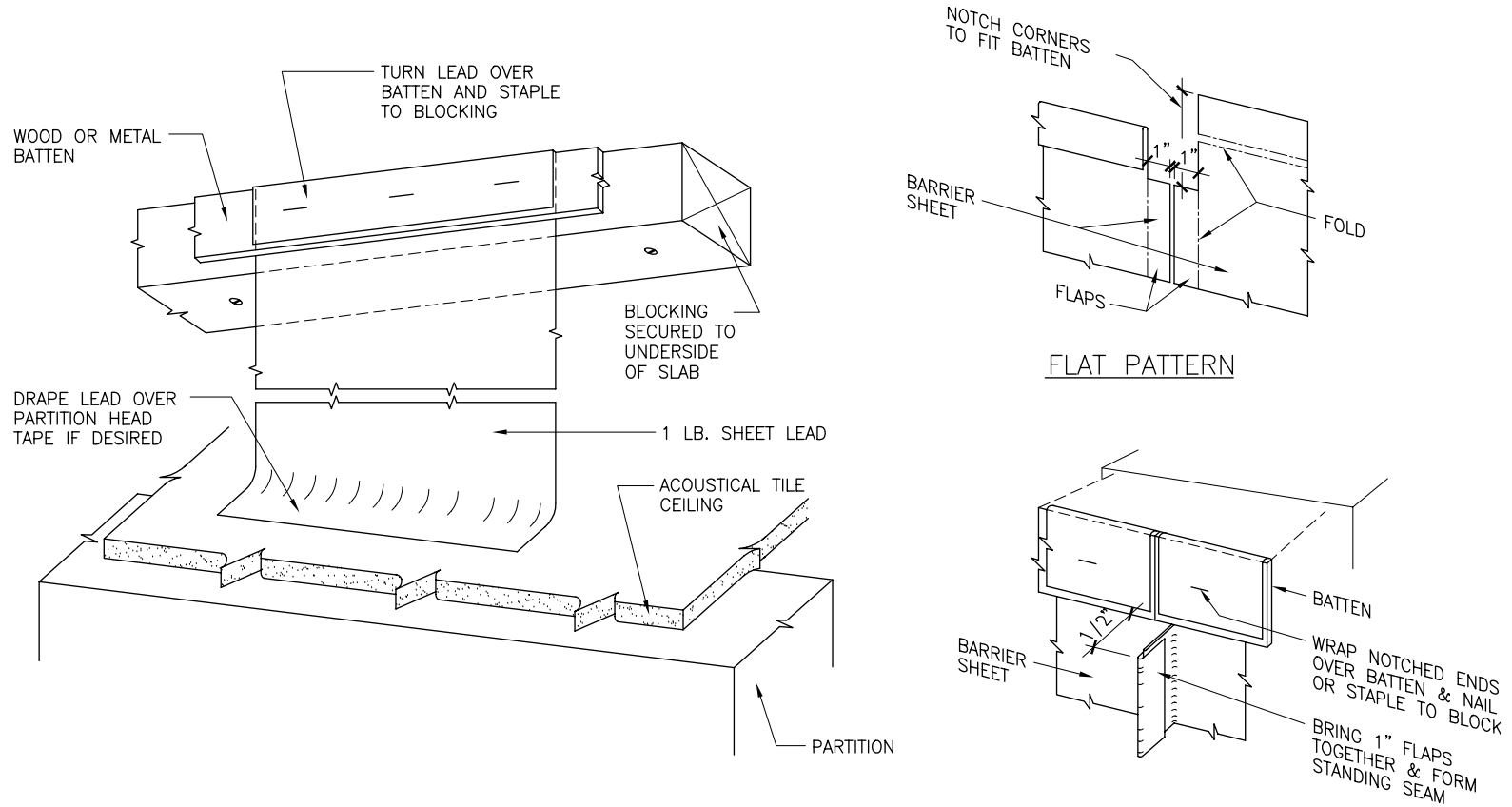


FIGURE Q-A5

Plenum Barrier Concepts

APPENDIX Q-A

Miscellaneous Details

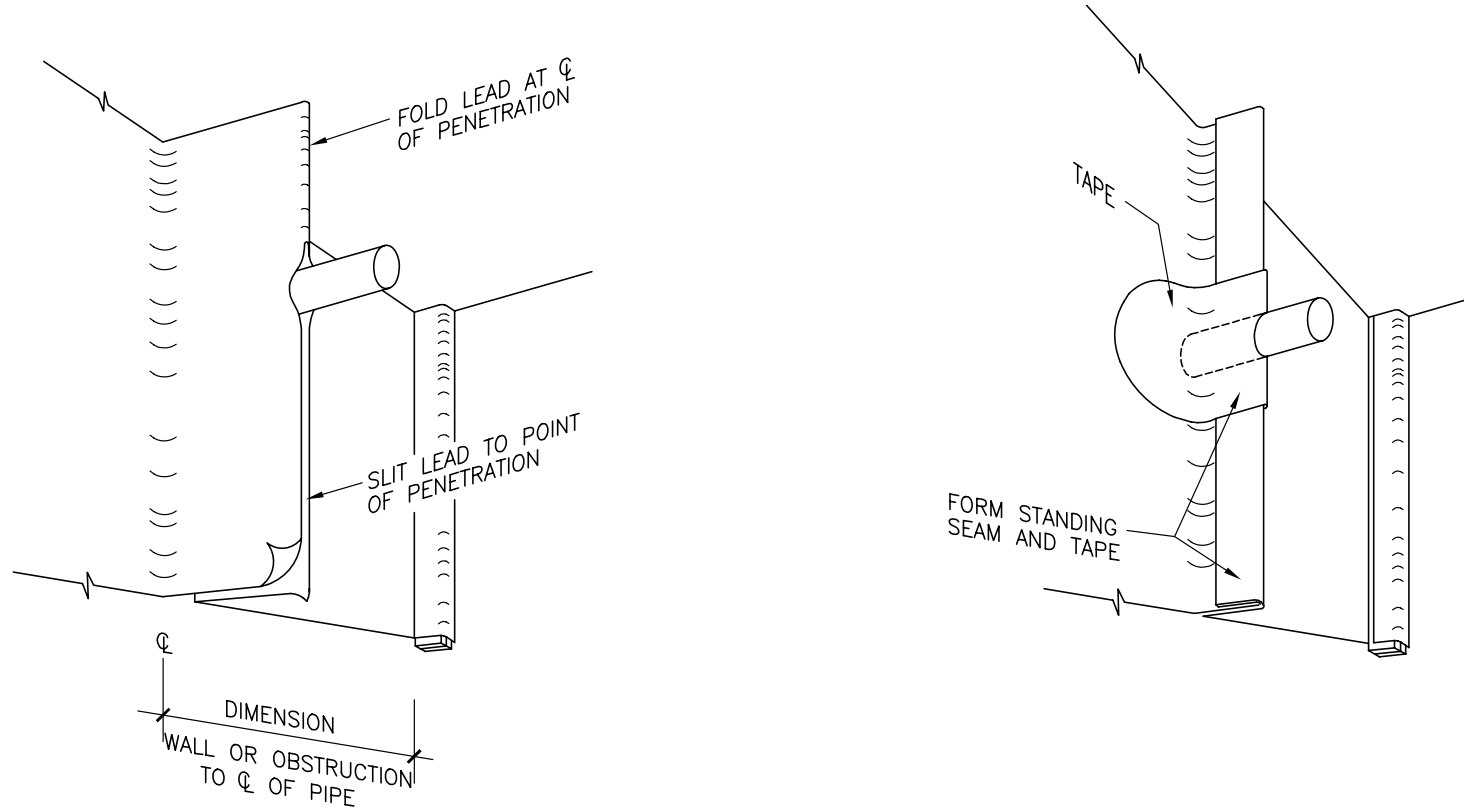


FIGURE Q-A6

Plenum Barrier Concepts

APPENDIX Q-A

Miscellaneous Details

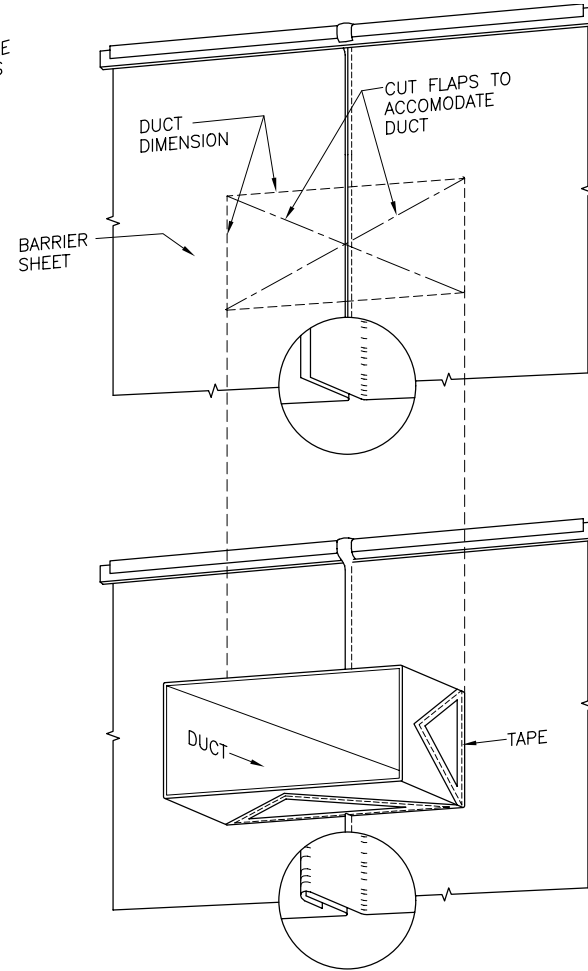
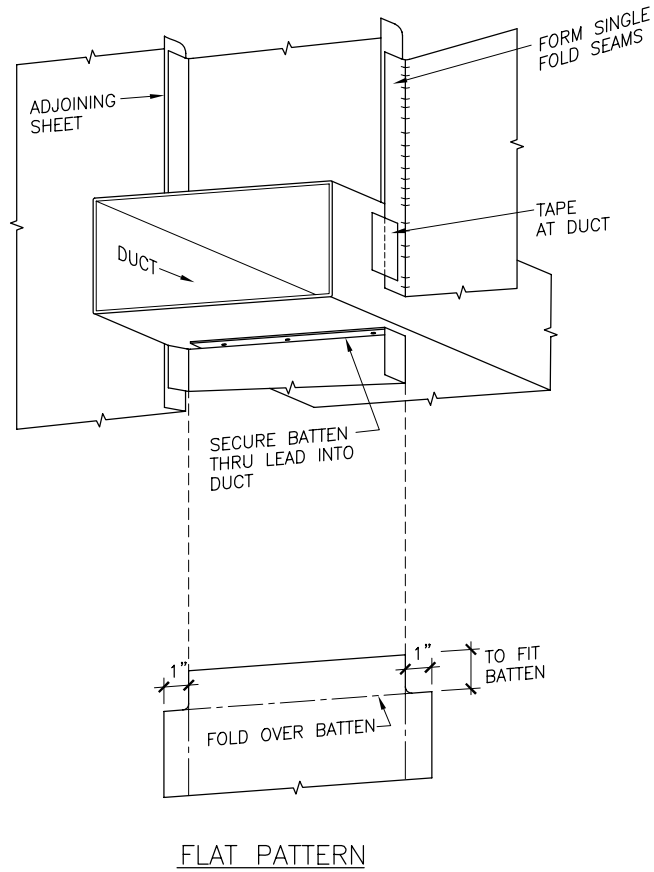


FIGURE Q-A7

Plenum Barrier Concepts

APPENDIX Q-A

Miscellaneous Details

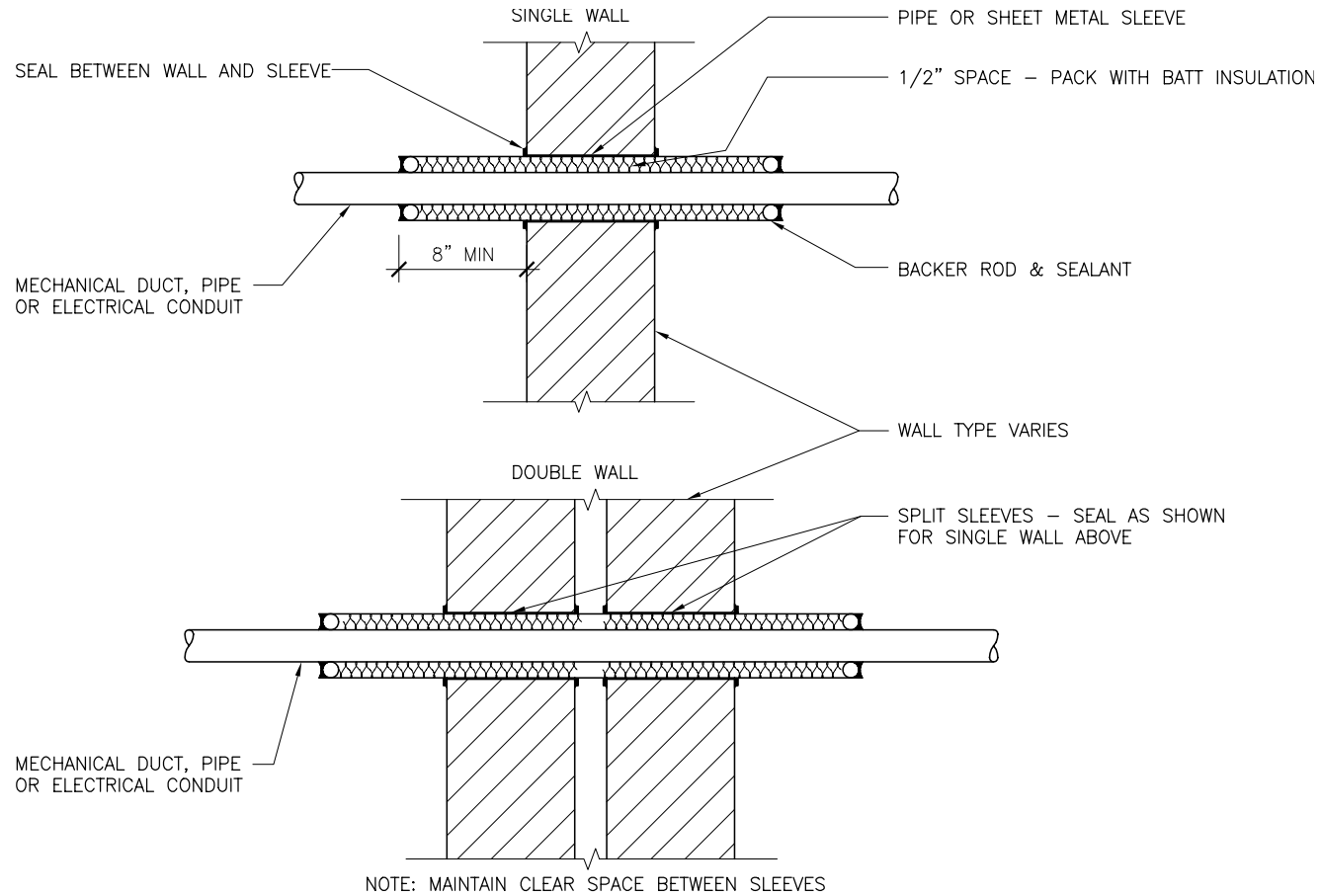


FIG: Q-A8

FIGURE Q-A8

Penetrations at Sound Isolation Wall

APPENDIX Q-A

Miscellaneous Details

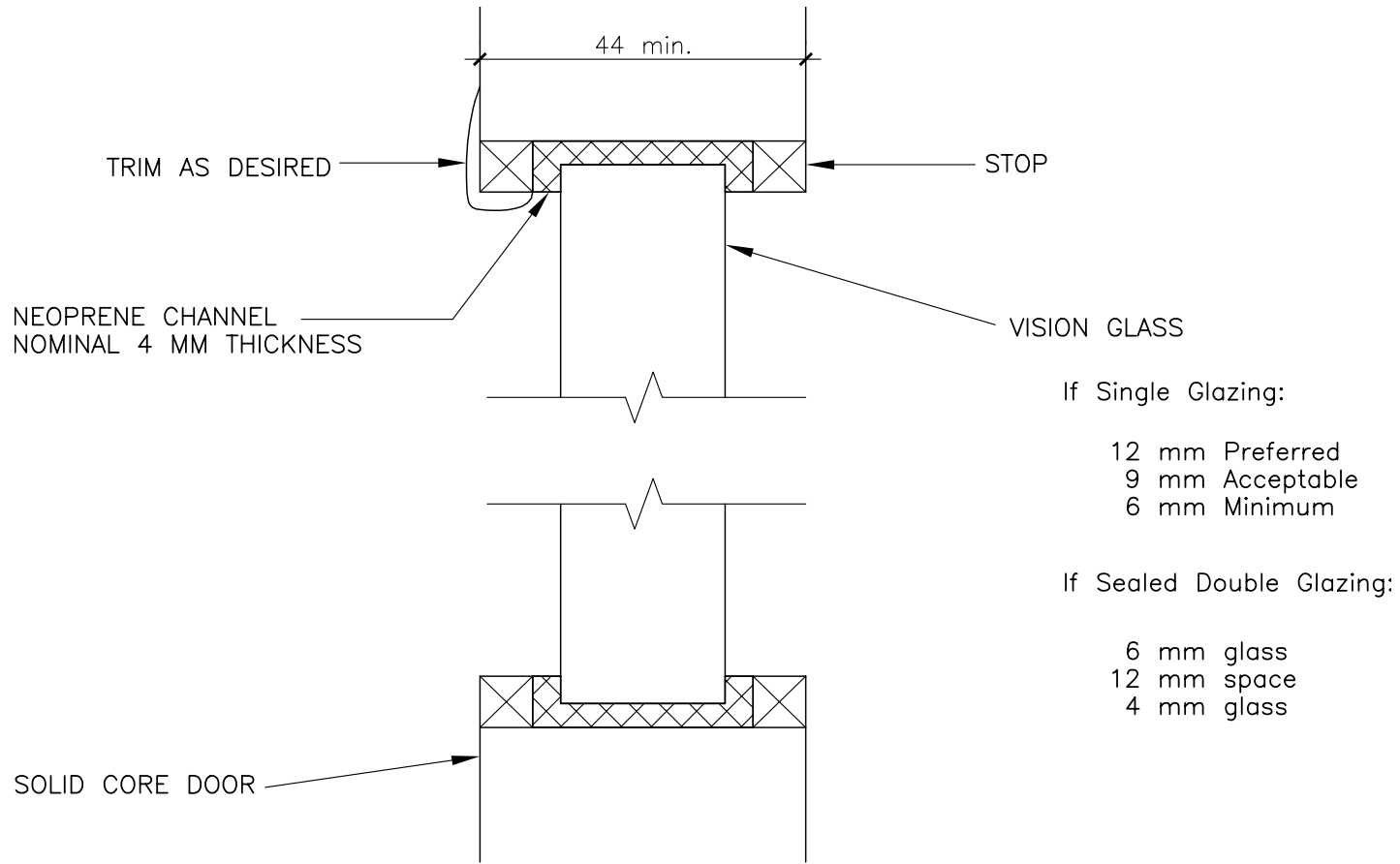


FIGURE Q-A9

Concept for Vision Glass in Door

APPENDIX Q-B

Sound System Functional Block Diagrams

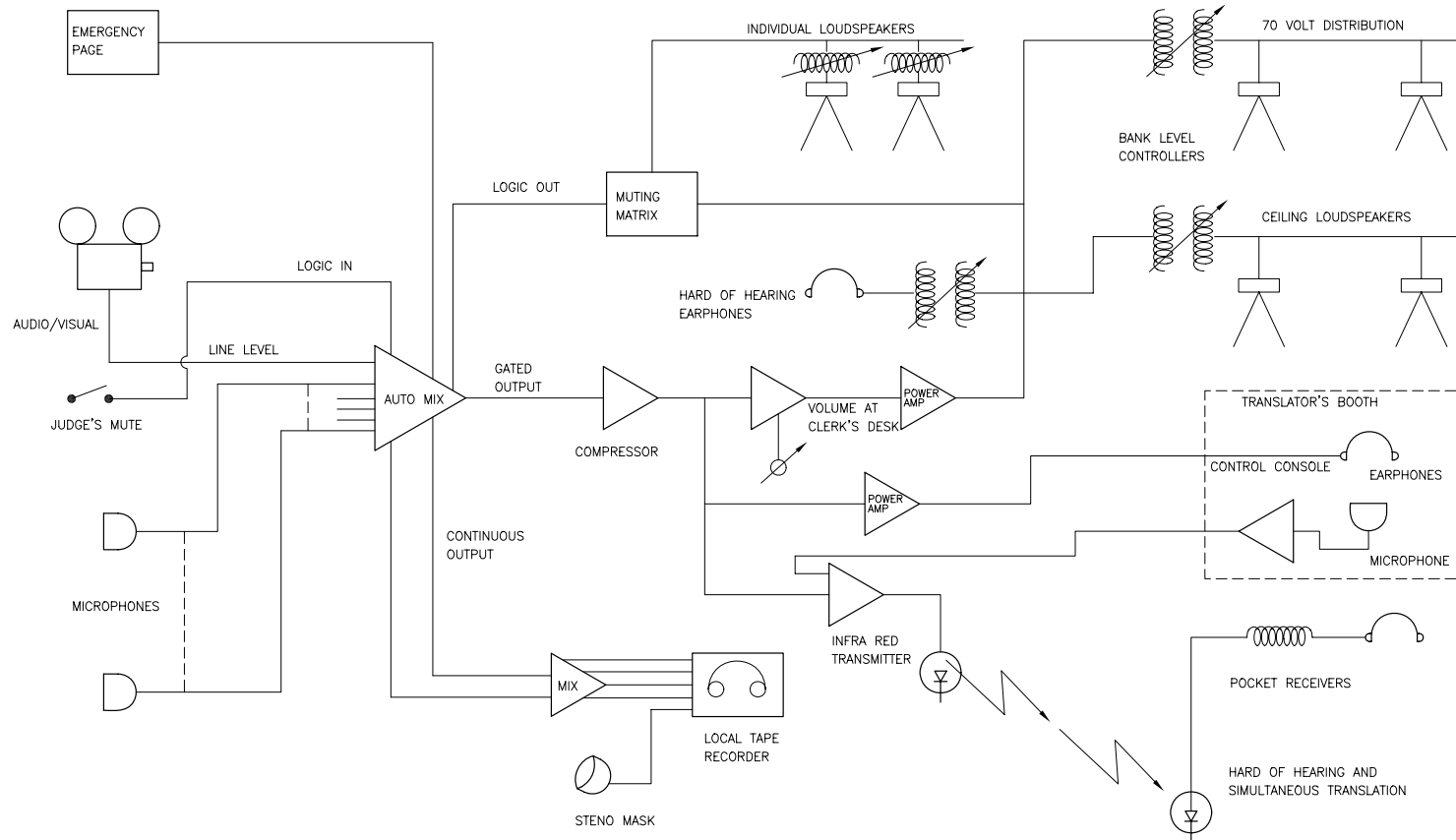


FIGURE Q-B1

Courtroom Audio System Functional Block Diagram

APPENDIX Q-B **Sound System Functional Block Diagrams**

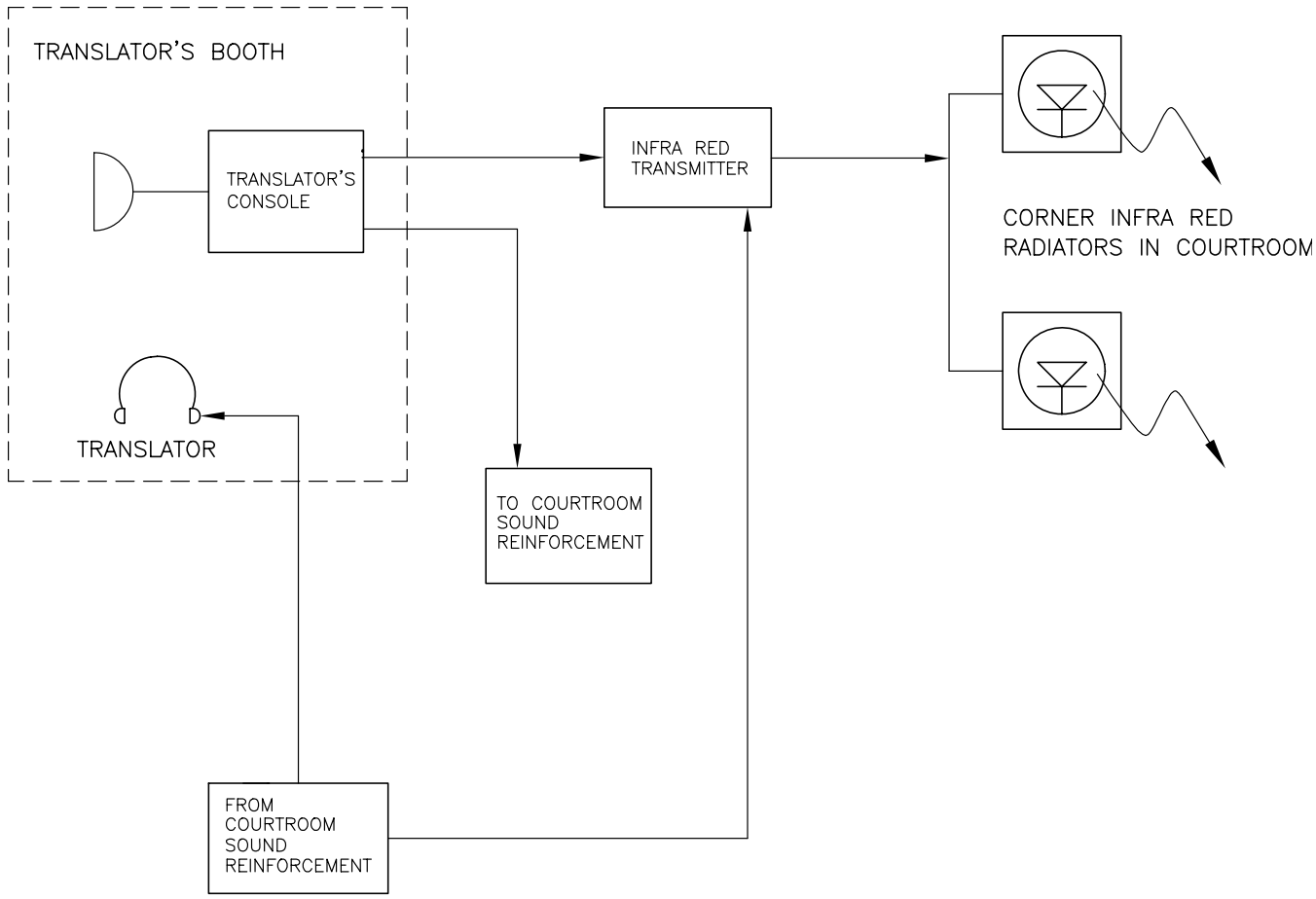


FIGURE Q-B2 Courtroom Simultaneous Translation & Hearing Impaired Wireless System Functional Block Diagram