4th Judicial District
Juab County Court Program

DFCM PROJECT #12271150

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4th JUDICIAL DISTRICT JUAB COUNTY COURT PROGRAM

Nephi, Utah
DFCM Project #12271150

This facility program has been prepared by Scott P. Evans - Architect & Associates P.C. in cooperation with the Administrative Office of the Courts, Division of Facilities Construction & Management and Juab County.

ADMINISTRATIVE OFFICE OF THE COURTS
Review Signatures

We have reviewed the program and warrant that it adequately represents our request for a facility to fulfill our mission and programmatic needs. All appropriate parties in the agency have reviewed it for completeness and accuracy.

Alyn Lunceford Date

DIVISION OF FACILITIES CONSTRUCTION & MANAGEMENT
STATE OF UTAH
Review Signatures

We have reviewed the program and warrant that it adequately represents our request for a facility to fulfill our mission and programmatic needs. All appropriate parties in the agency have reviewed it for completeness and accuracy.

Brian Bales Date

JUAB COUNTY
Review Signatures

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Commissioner / Chairman Chad P. Winn Date

Commissioner Rick L. Carlton Date

DIVISION OF FACILITIES CONSTRUCTION & MANAGEMENT
Brian Bales

ADMINISTRATIVE OFFICE OF THE COURTS
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In response to the critical need to provide an upgraded, secure combined district and juvenile court building that will serve the needs of Juab County and its population, the State of Utah Department of Facilities and Construction Management, in collaboration with the State of Utah Administrative Office of the Courts, Juab County and Scott P. Evans - Architect & Associates have created a design/build program document for a new 4th Judicial District Juab County Court Building in Nephi, Utah.

1.1 PROJECT JUSTIFICATION

EXISTING COURT FACILITY HISTORY

The existing Juab County Courthouse Building was constructed as a high school in 1923 and was used as such until 1980. It is located between 1st and 2nd north on Main Street in Nephi, Utah. In 1980 the building was remodeled into the Juab County Courthouse and Administration Building. The district courtroom was further remodeled in 1995. The County courthouse includes one courtroom that is used by the State of Utah for district and juvenile court functions and one courtroom that is used for the County justice court purposes.

EXISTING COURT FACILITY SHORTCOMINGS

In general, the facility functions fine for a county government administration facility, but for court functions that are a part of county and state operations, it has some serious problems:

- The major problem is that of providing security for the judicial staff, the public and the prisoners. All must co-mingle using the same travel paths to and from the courtrooms. The prisoner is driven to the courthouse from the county jail or youth detention facility and is then walked across the parking lot that is shared with other courthouse users and youth groups using the gymnasium, and patrons of the library. The prisoner is then walked through the basement of the building in a corridor that is also used for elderly daycare, and then up the building stairs or is taken in the elevator that is used by all building users and eventually is taken into the courtroom. All this happens in reverse as the prisoner is escorted from the building.
- The building does not have a secure perimeter because of its use as a county government center. However, recently a magnetometer has been installed outside of the courtroom area and a security person is stationed there only when court is in session. This occurs approximately 8-10 days per month. At all other times, judges and other judicial personnel are not provided with a secure environment.
- The District and Juvenile Court Clerks are located in offices remotely positioned from the courtroom and judges. They have absolutely no security as typically provided in court facilities throughout the State.
- The current standards for State Court Design require court buildings to be designated with four distinct secure areas.
    1. Public access areas
    2. Judicial staff access areas
    3. Prisoner access areas
    4. Courtroom access

  With the exception of the courtrooms, where security is provided when court is in session, users of all of the above areas must be kept separate and protected.

- In all cases the prisoner must walk up and down stairs to arrive at and to depart from the courtrooms. A number of potential undesirable scenarios resulting from this situation include: hostage taking in the basement or other public corridors, with its potential of injuries or death to innocent bystanders, and lawsuits due to the prisoners tripping while under the restraints of leg irons and handcuffs while trying to negotiate the stairs. These and other potential undesirable scenarios create a liability to both the State of Utah and to Juab County.

The main justification for building a new court building is to address these issues of security and safety that couldn't be resolved through renovations of the existing building. Construction of a new facility will allow the building to be designed properly and completely in a way that meets current court and ADA standards.

Projected future growth of Juab County would still only require 1 shared district / juvenile courtroom looking forward through the year 2025.

1.2 VISION AND PRINCIPLES

PROVIDE A FUNCTIONAL, FLEXIBLE FACILITY
The New Juab County Courthouse should be design with enough foresight to allow for future expansion and flexibility. Future expansion may include an additional courtroom and related support spaces. This must be planned in the concept by the design/build team. The exception to this rule would be that the Owner does not want to over design the electrical and mechanical systems for future loads. These can be addressed if expansion ever happens.

PROVIDE A PROTOTYPICAL FACILITY
It is possible that this new facility will could become a prototype for other small court buildings throughout the state serving rural Utah communities. To date, there are no other State Court buildings similar to the vision that the Administrative Office of the Courts has for this new facility.

Although this facility will be a programmatically condensed version of many of the larger court facilities statewide, it should still reflect the most recent courthouse design and security needs. Unless otherwise noted, the security and technology systems should reflect the most current trends for court design in conjunction with the requirements found in the Court Standards.

ENHANCE THE COMMUNITY
The new Juab County Courthouse should reflect the personality of the community and the importance of the judicial system. The design should carefully consider promoting pedestrian access and a visual amenity for the area that the community can be proud of and view as a landmark within Nephi City. The new Courthouse should be an enhancement to the City of Nephi and the immediate neighborhoods surrounding the project site.

PROVIDE A COST EFFECTIVE BUILDING

Due to the process from which the Owner has used to obtain funding for this project, meeting the Owner's budget is extremely important. If through the bidding process it is determined that the Owner's project requirements will not fit within the stated budget, it would be beneficial for the design/build team to propose options for bringing the project back into budget. This must be done without compromising the functionality, durability and sustainability. The Owner is looking for the proposal that provides the most "bang for the buck".

1.3 PROGRAM SUMMARY

The program includes information on the project site, building system narratives, individual space information for spaces with the Judges Chambers, Clerical Offices & Support, Courtroom Set, Holding Cells, Probation Offices and other support spaces. Building massing, courtroom design and site layout is also addressed in this program.

1.4 PROGRAM OBJECTIVES

The purpose of this programming document is to assist the eventual design/build team in understanding the history behind this project, understanding the requirements for the new facility, and to provide the parameters and guidelines by which the new facility should be designed and built.

It is of critical importance that the design/build team understand that although this programming document highlights some specific information and requirements that are unique to this building, they must also comply with the Utah Judicial Facility Design standards found in the Appendix of this document. These standards are simply guidelines for design, and not everything contained therein may apply to this project.

In addition to the Utah Judicial Facility Design Standards, the DFCM and Nephi City standards and requirements for both design and construction should be complied with.

The State of Utah has no rights to exemption from County or City requirements. Nephi City will be the authority having jurisdiction and the Contractor must submit, manage and comply with the Nephi DRC Board. The Contractor should work with Nephi City to obtain and pay for permitting.

In addition to the reviews required by Nephi City for permitting, the Contractor must also submit the final construction documents to the DFCM through their new EDMS (Electronic Document Management System) for review by the State Building Official. This will also include a structural review. It should also be noted that the DFCM will provide inspections.

This facility is being paid for by Juab County through the CIB funding process (mineral lease funds and a County revenue bond). The State of Utah has worked out a lease to purchase agreement with Juab County. This will not be a State owned property or building.

1.5 SPACE REQUIREMENTS SUMMARY

DEPARTMENT Room / Space	**# OF ROOMS**	**S.F.**	**TOTAL S.F.**
COURTROOM SET			**2420**
Client/Attorney Conference Room	1	110	110
Court Storage	1	50	50
Courtroom	1	1900	1900
Jury Room	1	300	300
Vestibule	1	60	60
CHAMBERS			**330**
Judge's Chambers	1	270	270
Judge's Restroom	1	60	60
CLERICAL OFFICE & SUPPORT			**1440**
Clerk of Court	1	150	150
Clerk/ Counter Workstation	2	240	480
Counter Queuing	1	180	180
Evidence Storage	1	180	180
Files Active	1	140	140
Files Inactive	1	140	140
Kitchenette	1	30	30
Work Room	1	140	140
PROBATION OFFICES			**300**
Probation Lobby	1	150	150
Probation Officer	1	150	150
HOLDING CELLS			**760**
Group Holding	1	180	180
Individual Holding	2	50	100
Security Vestibule	1	120	120
Vehicle Sallyport	1	360	360
OTHER SPACES			**1050**
Communications Room	1	110	110
Janitor	1	80	80
Lobby	1	300	300
Public Restrooms	1	300	300
Secure Checkpoint	1	160	160
Staff Restrooms (Men's & Women's Set)	1	100	100
NET TOTAL SQUARE FEET			6300
COMMON AREAS (NET x 36%)			2268
TOTAL			**8568**

1.6 COST MODEL

Refer to DFCM's advertised Request for Proposal.

1.7 PROJECT SCHEDULE

Refer to DFCM's advertised Request for Proposal.

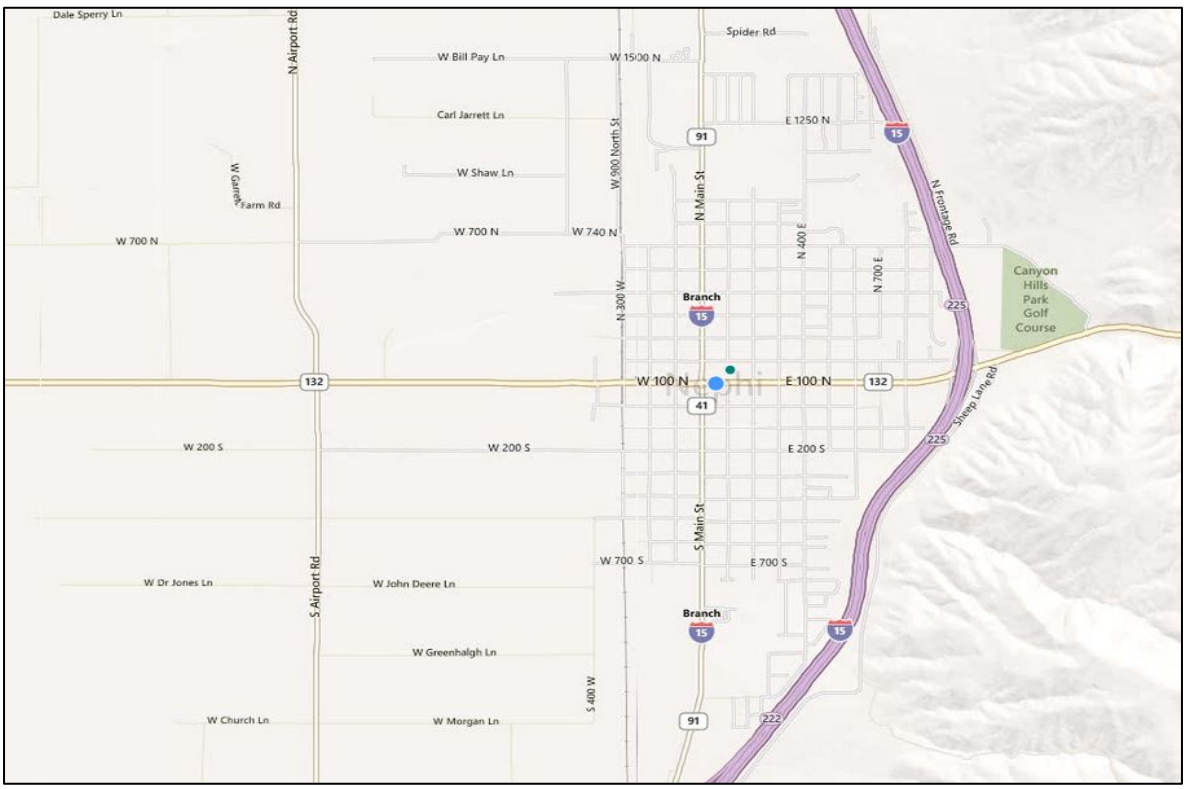
2.1 SITE ANAYLSIS

2.1.1 SITE LOCATION

The New Juab County Court building will be located in Nephi, Utah near the central region of the State of Utah. Nephi is the location of the Juab County seat and is wedged between Mount Nebo, one of the tallest mountains on the Wasatch Range, and the San Pitch Mountains. Nephi is easily accessed from Interstate 15 and S.R. 132. " "Nephi is the friendly city at the cross roads of Utah", not in slogan only, but in reality, for it stands indeed at the crossroads."

Nephi's elevation is set at approximately 5,128 feet with nearby mountains reaching heights of 11,877 ft.

"Juab County was formed in 1852, including portions of what is now Nevada. The size of the county was reduced in 1854 and 1856 along with various other changes through the years until the current borders were set. The first real settlement came in 1851 when Mormon pioneers settled Nephi. They relied mainly on agriculture for their livelihoods. In 1869, silver, gold, copper and other precious metals were discovered in the Tintic region. Many mining towns, such as Diamond, Silver City and Eureka popped up during this era. By 1899, it was considered to be one of the richest mining districts in the entire nation. Mining continued into the mid-1900's with the operations scaling down through the rest of the century." *www.co.juab.ut.us*



2.1.2 SITE SUMMARY

The New Juab County Court building will be located in Nephi, Utah on the block that spans between Main Street and 200 East, and between 100 North and 200 North. The court building will be situated just east of the existing county parking lot and with the buildings entrance facing 200 North (See the Google map below).

The surrounding city blocks include municipal, commercial and residential structures as well as a city park to the east.

Site map showing approximate location of project site and surrounding buildings/neighborhoods.

The existing Juab County office building is located directly to the West of the New Juab County Court site. This facility currently houses the court, senior citizen center and other county administrative functions.

This is what the community calls the "Old Gymnasium". This facility is located Southwest of the project site.

Directly south of project site is a County Fire Station. This facility is accessed via 100 North.

A Nephi City park / baseball field is located to the east of the project site

Nephi City Police Department and Justice Court facility located west of the project site facing 200 North.

Nephi City Office Building, Library and Utilities building located on the corner of Main Street and 100 North.

Residential neighborhoods (see on left side of this picture are located directly north of the project site.

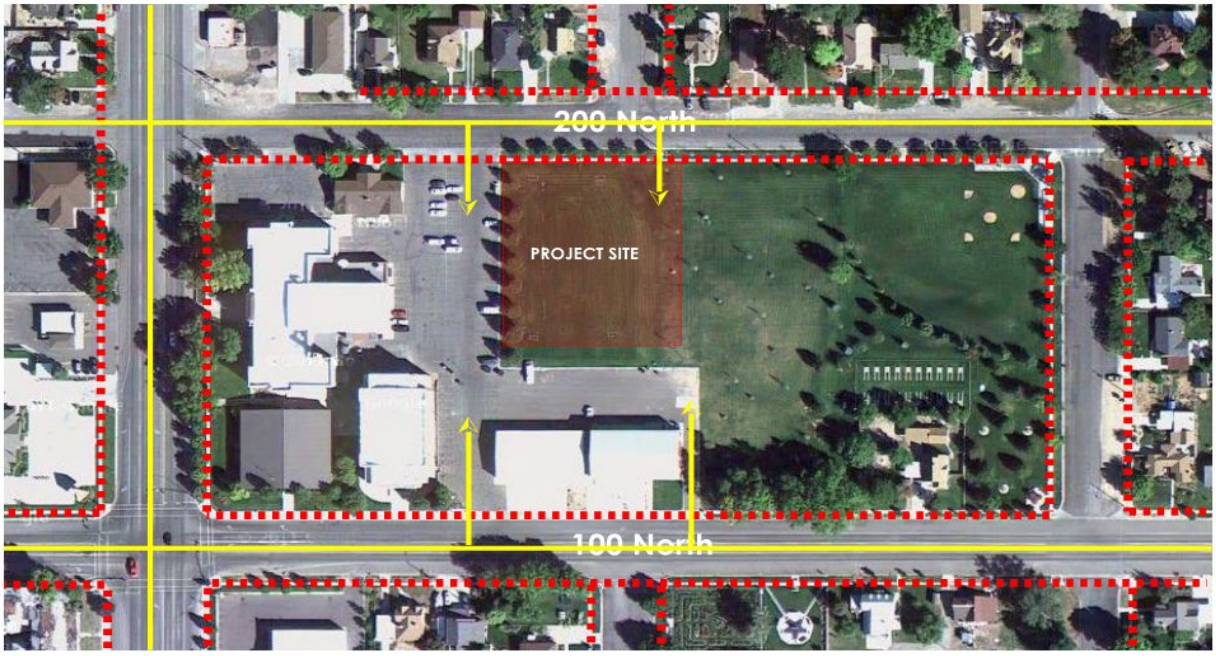
The proposed project site is a combination of two pieces of property. The west piece, which is currently owed by Juab County is approximately 110' wide and 239' deep. The east piece of property, which was owned by Nephi City and was recently given to Juab County is approximately 99' wide and 239' deep. Juab County and Nephi City are working together to officially combine these two properties into one. Refer to the Alta Survey contained in the appendix of this document.

2.1.3 SITE ACCESS

With the project site being just off a major 4 lane street (Main Street) in town, visitors and employees will have excellent access to the New Juab County Courthouse. Visitors can enter the site via 100 North in between the Nephi City Office Building/Library and the County Fire Department, or as a main access, from 200 North between the Nephi City Police Department and the project site. The Owner has expressed a desire to protect the existing trees as much as possible lining 200 North and the parking lot to the west of the site. Design accordingly as you plan vehicle and pedestrian access onto the Court grounds. It is the Owner's intent to leave existing curb and gutters in place except where new access points are to be cut it. Otherwise damaged, existing curb and gutter should be replaced by the Contractor.

Existing sidewalks surround the block on which the new facility is to be built, providing excellent access for pedestrians. Adjacent neighborhoods also have existing sidewalks as shown in the graphic below. It is the Owner's intent to protect and reuse the existing sidewalks as much as possible. Any damage to the existing sidewalks are the Contractor's responsibility to repair or replace.

Prisoner transport should be located on the most private side of the building, and should be secure. The judge should have access for secure parking with direct access into the secure portions of the building without crossing paths with the public. The staff and public parking should be separated from each other. Approximately 32 parking stalls for the public and 7 for the staff should be provided.



2.2 PHYSICAL SITE CHARACTERISTICS

2.2.1 PHYSICAL SITE FEATURES

EXISTING DEVELOPMENT -
The existing development is relatively flat and void of any existing structures. This land was originally used as the old high schools football field. The site is currently covered in turf and features mature trees lining the parking lot to the west and 200 North to the north. These trees should remain protected and reused in the new design if possible.

TOPOGRAPHY -
See the Alta Survey attached to this document in the appendix.

VEGETATION -
There are a number of trees along 200 North and lining the parking lot to the west. These should be protected and reused where possible. Grass also covers the entire site. See the pictures below.

2.2.2 VIEWS FROM PROJECT SITE

Views from the project site vary greatly depending the direction you're looking. As you can see from the pictures below, views from the site range from open green space and mountains to the east, residential neighborhoods to the north, the existing Juab County building to the west, and the Juab County Fire Department to the south.

View to the east.

View to the north.

View to the west.

View to the south.

2.2.3 VIEWS TO PROJECT SITE

View of the project site from the northwest corner of the property looking towards the southeast. There are excellent views of the mountain range to the east.

View of the project site from the southeast corner of the property looking towards the northwest

2.2.4 GEOTECHNICAL INVESTIGATION REPORT

See the recently completed Geotechnical Report attached to this document in the appendix. The Design/Build team must comply with the recommendations contained therein.

2.2.5 ALTA SURVEY

See the appendix for the recently completed Alta Survey. This survey provides site utilities, easements, parcel lines, topography, and existing paving and building areas. This document will be used as the base for site drawings for the project.

2.3 EXISTING SITE UTILITIES

2.3.1 EXISTING UTILITIES SUMMARY

General Notes:
All utility connections and storm water requirements will need to meet Nephi City standards and requirements. The Contractor is responsible for all utility fees with the exception of Qwest service.

Gas:
Existing gas line running inside the West boundary of subject property. This service connects to the fire station building on the site.

Water:
A 8" culinary water line is available in 200 North Street with an existing fire hydrant along the North frontage of the property. Designer to have existing flows and pressure checked with City. New fire and service connection is required.

Sewer:
A 8" sanitary sewer line is available in 200 North Street. Depth is approximately 9 feet deep as indicated by depths of manholes by project location. New service connection is required.

Storm Drain:
There is no storm drain line in the street. Sumps are located around the existing asphalt on the West and South of the subject property. Future sumps may be required for new parking. Meet Nephi City's requirements for storm water mitigation.

Communications:
Existing communication lines run through the property. Lines may have to be relocated. Also refer to electrical narratives for further information.

Electrical:
There are existing electrical lines that feed a transformer on East side of parcel. Line may have to be relocated. Also refer to electrical narratives for further information.

2.3.2 TEMPORARY UTILITIES

The Contractor is responsible for putting all temporary utilities that are needed during construction under their name, and paying for such utilities during construction. At substantial completion utilities will be transferred to the responsible party.

2.4 SITE PLANNING

2.4.1 ORIENTATION

It is the Owner's desire to orient the building with the main entrance facing north (200 North). The design team should also lay out the building to take advantage of the views to the east and to take advantage of day lighting opportunities wherever possible.

2.4.2 ACCESS

Accessibility to and around the site, including accessibility within the building should be well planned and should consider the specific requirements within a court building. Refer to the "Utah Judicial Facility Design Standards". Pedestrian access, bicycle access, vehicle access, service access, secure access and ADA access should all be considered when developing the design of the site.

Prisoner transport to the sally port should be located on the most private side of the building, and should accessed through a motorized gate via card reader. They can access this area relatively discretely through the fire station parking lot which can be accessed from 100 North.

Staff parking, including the Judge's secure parking should be inside a secure, fenced area that is accessed through a motorized gate via card reader. The secure staff parking stalls should allow direct access to the secure staff area of the building without crossing paths with public spaces. (7) staff parking stalls are required. This parking space may be accessed through the existing County parking lot to the west.

Public parking should be separated from the secure staff parking with direct access to the front entry. (32) public parking stalls are required. This parking space may be accessed through the existing County parking lot to the west.

2.4.3 OUTDOOR SPACES

Public and staff parking areas should be accessed from both 100 North and 200 North as shown in section "2.1.3 SITE ACCESS" within this program. Appropriate walkway from the parking areas to the building entrances for both the public and the staff should be well thought through and convenient. The existing parking along the west property line should be considered overflow for the new facility, but should not be included in the count for Nephi City's required stalls for this project.

Public plaza/building entrance space should be located at or near the north entrance and should include adequate connectivity to the parking and walkways. Design of the public plaza/entrance should be simple, yet elegant, and should reflect the importance of a court building. With that said, keep in mind that this project has a minimal budget that can't be exceeded.

Flow between the parking and the building entrances should be both convenient and safe.

2.4.4 FUTURE EXPANSION

The New Court building should be situated on the site such that it can accept a future expansion for an additional courtroom and related support spaces when and if it is ever needed. It should be noted that a 30' set back off of 200 North and 20' set back from the east property line should be adhered to per Nephi City Requirements. A site master plan should be created to outline how growth can occur in the future. The design/build team, in conjunction with the Owner should determine how best to make this happen.

3.1 BUILDING REQUIREMENTS

3.1.1 UTAH STATE COURTS RECENT COURTHOUSE BUILDINGS OF SIMILAR SIZE AND SCOPE

The new Juab County Courthouse is a condensed and space efficient version of the traditionally larger court buildings found in the larger cities and counties around the state. The Administrative Office of the Courts has carefully reviewed which elements/spaces could be eliminated that are typically found in the larger court buildings. The proposed smaller courthouse will be a first of its kind in the State of Utah for newly constructed court buildings. Its design could possibly end up being a prototype for future small court buildings in rural Utah community's state wide. A summary of the spaces required within this courthouse can be found in the "1.0 Executive Summary" at the beginning of this programming document. A more detailed description of the spaces can be found in the "4.0 Space Requirements" section.

3.1.2 ARCHITECTURAL CODES AND STANDARDS

The minimum codes and standards that apply to the design of the new building includes current editions of the following:

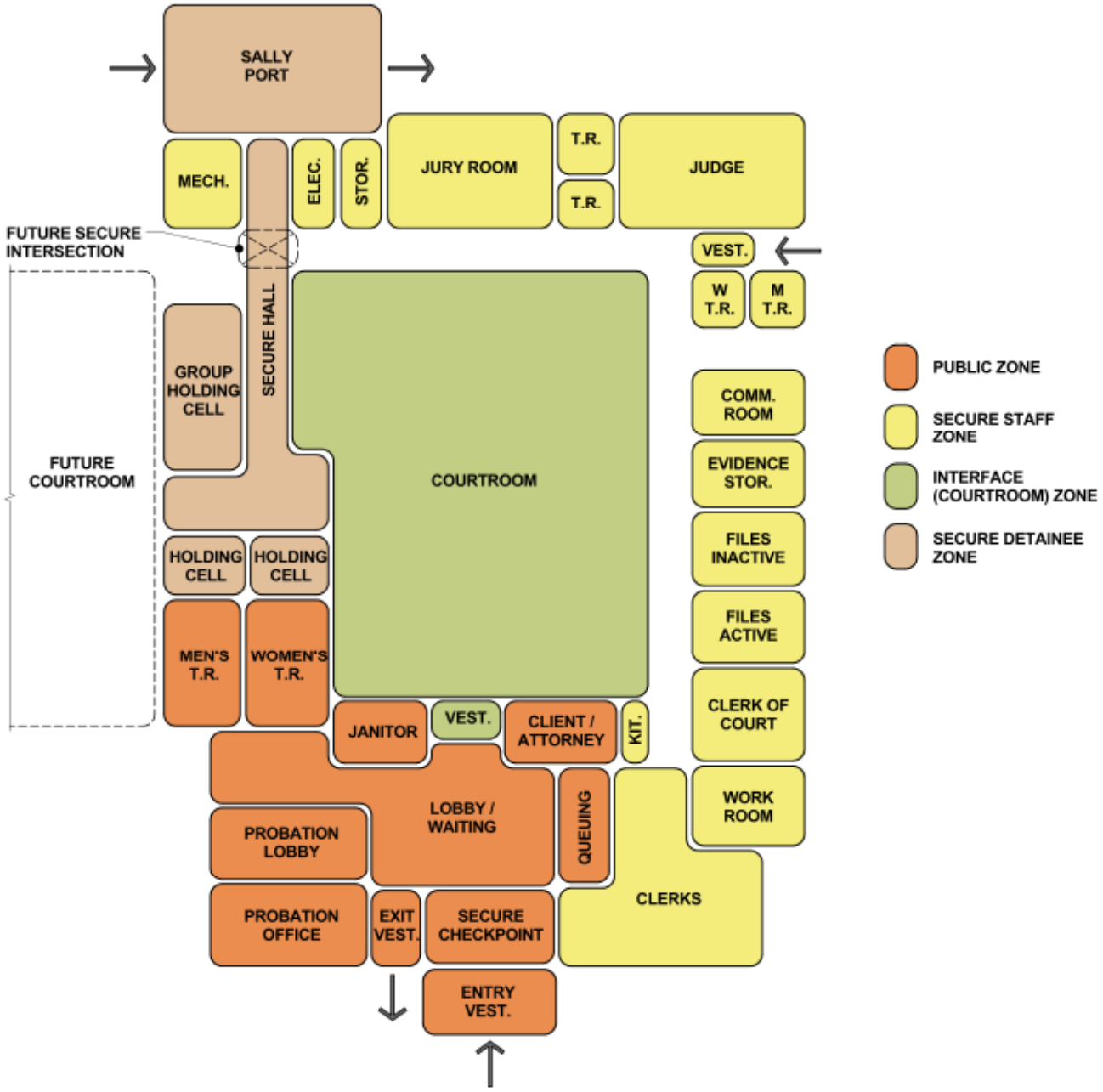
- International Building Code
- DFCM Design Standards (Found on DFCM website)
- State of Utah Courthouse Design Standards
- ADA Accessibility Guidelines
- International Energy Conservation Code
- Fire Marshal Requirements
- Nephi City Codes and Regulations

3.1.3 BUILDING FORM AND MASS

The project site is relatively square allowing for some flexibility in the building form and mass. However, the main building entrance should face 200 North and the secure prisoner entrance should occur at the rear of the building allowing for discrete movement of the detainees. Aside from these requirements, this should be a single story building with forethought in the design to plan for a future courtroom and related support spaces. The courtroom could be massed taller that that of the other portions of the building due to the requirements of the space.

3.1.4 INTERACTION OF BUILDING USERS

This court facility will have 4 areas of distinct separation (Secure Detainee, Secure Staff, Public & Interface (Courtroom)) that should be carefully thought through and considered during design. The public should only have access to public spaces and services that are designated to the general public. With the exception of the controlled/secured environment within the courtroom (interface area) during court proceedings, the public shouldn't be in the same open space as the staff, judges, sheriff or prisoners. The court staff should have their own secure entrance into the building and remain secure throughout the day without crossing paths with the public or prisoners.



3.1.5 CIRCULATION

PUBLIC CIRCULATION

Circulation of the public throughout the building should be handled in a safe and secure manner, never allowing the public to cross paths with either the court staff, or prisoner traffic patterns. The public will not be allowed into the building without first passing through a secure checkpoint which will then allow access to public spaces only.

SECURE STAFF CIRCULATION

The staff's circulation pattern should allow for free movement throughout the court support spaces without crossing paths with the public or prisoners. Staff should remain protected from potential threats at all times. The only times the court staff will be in the same open space with both the public and the prisoners will be during controlled/secure court proceedings. The design of the courtroom spaces should allow for emergency exiting strategies for the court staff.

SECURE PRISONER CIRCULATION

Prisoner movement should only happen through the secure sally port, secure hallways, holding cells etc. while being escorted by local law enforcement authorities. It is critical that prisoners never cross paths with the public or staff. This includes movement in the parking lot and throughout the building. The intent is to keep the staff and public safe, and to provide better privacy for the prisoners.

3.2 SUSTAINABLE DESIGN

The new Juab County Courthouse will not be required to be LEED certified. See section 3.2.5 EFFICIENCY PERFORMANCE STANDARDS and the rest of the programming document for sustainable design guidelines. The facilities design and construction should incorporate systems and materials that will assist in accomplishing this task, thus minimizing the impact on the environment, creating a comfortable place to work and do business and lower the life cycle costs of the building as it relates to energy consumption.

3.2.1 COMMUNITY ENHANCEMENT

The building should reflect the pride the community has in their County and the city of Nephi. This building should be an enhancement to the community and should represent a place the public feels represents their values and history.

3.2.2 SITE DESIGN

As the budget allows, the site should be designed with sustainability in mind.

The design/build team should carefully plan how the site ties into adjacent Juab County parking lots and how new pedestrian and vehicular traffic will affect adjacent facilities.

The site will be designed and lit to ensure a safe environment for pedestrians. The nighttime site lighting should be adequate enough for local police to drive around the building and check the security of the building without leaving their vehicle. The Owner has expressed their desire to be good neighbors and keep the site lighting levels to a minimum.

Landscape planting should be attractive and make use of native drought tolerant plants where possible. The irrigation system should be designed around the types of plantings proposed and should conserve water through use of drip and low water irrigation.

Existing trees lining the street and adjacent parking lot should remain in place as much as the proposed design will allow.

3.2.3 INDOOR ENVIRONMENT

The interior environment should create a healthy, comfortable, calming experience for the building users. This should be accomplished by the flow of the building, use of natural light, selected finish material, HVAC system and supplemental lighting design.

The building should meet the thermal comfort requirements set forth in ASHRAE 60-1. Both thermal and lighting controls should be provided as described in the Mechanical (3.5) and Electrical (3.6) sections in this document.

Use of natural light should be considered in all occupied spaces and as allowed by the budget. The exception to this request would be in the restrooms, holding cells and building support spaces such as the mechanical, electrical and communications rooms etc.

Interior finishes and furnishings should be constructed of high quality materials that will last the daily wear and tear by the building users. The final material selection should also consider the lifespan of the facility. Neutral colors with splashes of accent colors are preferable as they will last longer as trendy color palettes come in and out of popularity.

3.2.4 RESOURCE CONSERVATION

The building systems, including the building envelope, mechanical and electrical systems shall be designed to reduce resource use.

The building envelope will have exterior, continuous insulation to provide a more effective thermal barrier. The envelope shall also be designed to reduce leakage. Each building facade should be designed to respond to the environmental conditions, ensuring the building is as efficient as possible. This includes designing and specifying glazing based on solar orientation, daylight needs, wind exposure and access to views.

The building mechanical systems will be designed to take advantage of the high performing building envelope.

Occupancy sensors and photocell sensors shall be integrated into the design of the building to reduce energy use. Each office and workstation should be designed with individual task lighting to allow a lower overhead lighting level, where feasible. High efficiency lamps and ballasts shall be used to further reduce the energy needed to light the facility.

3.2.5 EFFICIENCY PERFORMANCE STANDARDS

This facility should be design to meet the requirments in ASHRAE Advance Energy Design Guide (AEDG) for Small to Medium Office Buildings achieving 50% energy savings over ASHRAE Standard 90.1.2004.

This facility will not be required to meet the State of Utah's High Performance Building requirements nor will it be required to receive LEED certification.

3.3 STRUCTURAL DESIGN CRITERIA

3.3.1 STRUCTURAL CODES AND STANDARDS

The Juab County Courthouse structural system will be designed to meet the facilities needs for the next 50 years and beyond. The following building codes and standards will be used to meet the minimum structural design criteria:

- 2012 International Building Code
- ASCE Standard 7-10

3.3.2 SITE SPECIFIC CRITERIA

The structural systems will be designed to comply with various site-specific design criteria. Some of these criteria are as follows:

- Roof Dead Load = 20 psf
- Roof Snow Load = 30 psf
- Floor Live Load = 100 psf (80 psf live + 20 psf partition)
- Allowable soil bearing pressure as described in the Geotechnical Investigation
- Minimum frost depth of 30 inches
- Wind velocity of 115 mph, Exposure C
- Seismic ground acceleration including soil profile characteristics as outlined in the Geotechnical Investigation

3.3.3 STRUCTURAL/BUILDING SYSTEMS COORDINATION

The structural framing systems and location will complement the architectural design and facilitate all building functions. The structural system will adapt in size and location to ensure the building's function and architectural requirements are maintained. Below is an outline of our recommended structural system for this facility:

- Footings and Foundations:
  - The structure will be supported on reinforced concrete spread footings as outlined in the Geotechnical Investigation.
  - The spread footings will be installed on competent native material, or on structural fill extending down to competent native material.
- Main Floor
  - The first level will be 4 inch thick unreinforced concrete slab on grade installed over a 4 inch thick layer of granular soil.
  - The granular layer will be installed on top of competent native soils as described in the Geotechnical Investigation.
  - A vapor barrier will be installed between the concrete slab and the granular layer to prevent water vapor from deteriorating the floor coverings on the first level.

- Roof Framing
  - The roof will be framed with open web steel roof trusses. 1.5 inch thick corrugated metal roof deck will span between the open web steel roof trusses spaced at about 6.5 feet on center. The open web steel roof trusses will be supported by open web steel roof truss girders that are supported directly by the steel columns extending down to the spread footings below the first level.
  - Wide flange steel beams will be located at the building perimeter. These steel beams will be designed for a maximum total load deflection of 3/8 of an inch. This maximum deflection is critical to adequately support the exterior finish materials.
- Seismic Resisting System
  - The forces are released into a building during a seismic event. The building's "lateral force resisting system" comprises the building components that resist seismic forces.
  - There are several options to choose from when selecting the lateral force resisting system. The preferred option should be economical and compliment the building's architecture. Below are a few lateral force resisting system options to consider:
    - Masonry shear walls: Masonry walls are constructed to connect the roof framing down to the footings and foundations.
      - Pros: Cost effective
      - Cons: May be difficult to locate an adequate number of shear walls without compromising the building's architecture
    - Braced Frame: Steel members are crossed diagonally between building columns. The diagonal braces connect the roof framing down to the footings and foundations.
      - Pros: Cost effective. Braces are an extension of the building's steel frame.
      - Cons: Unless the braces are located on the exterior of the building, it is sometimes difficult to hide an adequate number of braced frames within interior walls.
    - Moment Frame: The connections of the steel beams to the columns are reinforced to resist seismic forces.
      - Pros: Moment frames are integral with the building's steel frame. Moment frames can be located almost anywhere.
      - Cons: Moment frames cost about $1.50/sf more than braced frames.
- Interior Framing
  - Interior walls will be constructed with non-bearing light gauge metal suds spaced at 16 inches on center.
- Exterior Framing
  - Exterior walls will be constructed with non-bearing light gauge metal suds spaced at 16 inches on center.

3.4 ACOUSTICAL CONSIDERATIONS

When designing Courts, acoustics are of great importance for privacy, control of background noise and clarity of speech. There are well established standards for all three. If these principals are adequately dealt with in the design phase and the contractor carefully builds according to plan, the acoustics will meet the strict requirement of a court setting.

3.4.1 ACOUSTICAL PRIVACY

Design the structure to assure proper, air tight, isolated sealing of all possible sound leakage paths to minimize both speech and other noises between occupied spaces.

3.4.2 CONTROL OF BACKGROUND NOISE

Adequate control of potential sound interference from sources outside occupied spaces. These include: noises inside or outside the facility, and from or into critical spaces (i.e. Courtrooms, Judge's Chambers, Jury Rooms, Private Counsel Rooms, HVAC systems, Street Traffic, etc.)

3.4.3 ACOUSTICAL DESIGN

Proper acoustical design of courtroom space must be adhered to in order to assure good intelligibility between the various participants. Typically, modern courtrooms of any size will incorporate some form of speech reinforcement, in addition to the usual recording equipment for the Court Clerks; this can be combined into a single, coordinated electronic system. This combined with an adequately quiet background noise level in the courtrooms, (NC-30), should assure effective voice communication as well as quality recordings of courtroom proceedings.

All of these requirements can be specified and provided for during design. Coordination between the designers and a qualified acoustical engineer followed by effective, timely inspections during the construction will ensure these criteria are met.

3.5 MECHANICAL DESIGN CRITERIA

3.5.1 MECHANICAL CODES AND STANDARDS

The mechanical systems shall be designed and built in accordance with the following codes and standards:

- International Mechanical Code (IMC) 2009
- International Plumbing Code (IPC) 2009
- International Building Code (IBC) 2009
- International Fuel Gas Code (IFGC) 2009
- International Fire Code (IFC) 2009
- International Energy Conservation Code (IECC) 2009
- ASHRAE 90.1-2007
- ASHRAE 62.1-2007
- NFPA
- Applicable state and local codes

3.5.2 MECHANICAL DESIGN PARAMETERS

Energy Efficiency

The mechanical systems for the new courthouse shall be energy efficient. The new courthouse shall be designed to meet the requirements listed in section "3.2.5 EFFICIENCY PERFORMANCE STANDARDS" of this programming document.

DFCM Design Regulations

The design shall comply with the project programming requirements and the DFCM Design Requirements.

Seismic

All equipment shall be furnished and installed structurally adequate to withstand seismic forces as outlined in the IBC for the project location seismic zone.

Design Criteria

The following design criteria should be considered for the new mechanical systems.

Design Temperatures:

	Winter	Summer
Outdoors	0F db	91F db / 60F wb
Indoors	72F db	75F db
Mechanical Spaces	65 F db	85 db

Ventilation and Exhaust

Ventilation, air changes and exhaust airflows will be designed in accordance with ASHRAE Standard 62.1

Humidity Control

No humidity control is required

3.5.3 MECHANICAL DESIGN CONSIDERATIONS

Building Location
The building is located in Nephi, Utah. See the Site Analysis section for more information regarding the building location and other site conditions.

Existing Utilities
The building utilities will be connected into the nearby sewer, storm drainage, domestic water, fire line and natural gas piping. It is anticipated that utilities of adequate capacity are close by (i.e. either on site or in surrounding streets). See the Civil section for more discussion on site utilities.

Air Handling Systems
The primary building air handling systems shall be high efficiency rooftop units. A rooftop unit provides temperature control for one thermal zone. The building shall be demarcated into reasonable thermal zones based upon occupancy type, internal loads and space exposure. Each thermal zone is served by a single rooftop unit.

Rooftop units use direct expansion cooling and natural gas fired heating.

Economizers and CO2 sensors shall be provided for all rooftop units. Air side economizers with dry bulb temperature controls and demand controlled ventilation shall be provided for all roof top units. The air side economizer should also be capable of cooling the server/data/IT rooms.

Advantages:
- Energy efficient units are available.
- Minimal mechanical space needs.
- Low economic first cost when compared to other available systems.
- Simple maintenance requirements.

Disadvantages:
- One rooftop unit can only serve a single thermal zone.

Rooftop units shall be ducted to the supply diffusers. The return air shall be ducted back to each rooftop unit. Filters shall be placed at the rooftop units.

The courtroom shall be considered a single thermal zone and shall be served by a dedicated rooftop unit. Extra care shall be taken in the design of the courtroom to ensure sound levels in the space do not exceed NC 30.

Gas fired unit heaters may be considered in lieu of rooftop units for the Sally Port and the Mechanical Room. Sufficient ventilation for these spaces shall be provided to prevent extreme temperatures in the summer.

Dedicated computer rooms and server rooms shall be air conditioned by supplementary split system air conditioning rooms. Condensing units will be located on the roof or on grade.

Other rooms, i.e. electrical rooms, storage rooms, mechanical rooms, etc. will be heated and ventilated as required.

The remainder of the building shall be divided into no less than 4 additional thermal zones, each served by a rooftop unit.

Rooms requiring exhaust air, i.e. toilet rooms and janitor closets shall be exhausted thru roof mounted exhaust fans.

Plumbing
All plumbing systems shall be designed in compliance with applicable codes.

All plumbing fixtures shall be in accordance with code requirements. ADA fixtures shall be provided where necessary. Hardwired sensor faucets and flush valves shall be used for toilet rooms. Plumbing fixtures in prisoner accessible areas such as holding cells shall be penal type fixtures.

Water saving fixtures, such as low flow faucets, low flow urinals, etc., shall be used. Waterless urinals shall not be used in this project. The owner would prefer pint flush urinals, 1.2 gpf dual flush water closets, and 0.5 gpm faucets. The owner will have final say in types of water saving fixtures to be considered.

Domestic water systems shall be extended to serve the all fixtures. Copper piping shall be utilized for domestic water piping. Piping shall be insulated in accordance with code. Shutoff valves shall be located as necessary isolate the piping for repairs without unnecessarily shutting down large portions of the building.

Domestic hot water heaters shall be sized to serve the building. A recirculation hot water system with an inline recirculation pump shall be used as needed to ensure that hot water is available, on demand at each fixture.

A water softener is not required in this project. However, a location in the building shall be made available for a future water softener.

Temperature Controls
Each rooftop unit, unit heater and split AC unit shall be provided with a standalone programmable thermostat. The thermostats shall have a digital display. Thermostats in prisoner accessible areas shall be tamper resistant.

A direct digital building automatic temperature control system is not required for this building.

The building shall include a web enabled building automation system with, at a minimum, the following control points:

- Global: Outside air temperature
- Roof top units: Fan status, cooling status, Heating status, Air side economizer position, CO^2 levels, Zone temperature
- Whole building gas and electric consumption

Other requirements include:

- A graphical user interface that includes a floor plan, zone temperatures, and accurately represents all HVAC systems in the facility.
- BACnet and LON open protocol compatible.
- Unlimited remote access with full access available to any internet enabled computer.
- Zone thermostats with override capability.
- Scheduling and night setback capabilities for the RTU's.
- Trend capability and storage to archive 15 minute data for all control points for up to 2 years.
- Wireless sensors and controllers are encouraged.

Testing & Balancing

The systems shall be balanced and adjusted by a person or persons fully familiar with mechanical systems of the type in this project and whose main business is the balancing and adjustment of mechanical systems.

The balancing contractor must be certified either by NEBB, or AABC.

Fire Protection

The new building functions will require a wet fire sprinkler system. The fire sprinkling system shall be designed to comply with NFPA, State Fire Marshal and DFCM design standards.

Non-heated spaces requiring sprinkler protection will use dry type sprinklers or antifreeze solution for freeze protection.

The fire sprinkler heads in any prisoner accessible areas shall be institutional type sprinklers.

The Contractor is responsible for determining where to pull the water from. They are also responsible for providing the fire flow analysis under the design/build process.

Future Additions

The mechanical, plumbing and fire sprinkler systems in this project are not required to include provisions for future additions.

Commissioning

The systems shall be commissioned by an independent agent hired by DFCM. This contractor shall provide mechanical, sheet metal, testing and balancing and ATC contractors to assist the DFCM commissioning agent in the commissioning of the mechanical systems. The Contractor shall be required to document that the installed energy systems (HVAC and service hot water) pass the functional tests provided as part of the commissioning plan. The commissioning agent will verity the systems are working according to the design. If additional deficiencies are identified during the verification process, the contractor will fix all deficiencies and will be responsible for any additional fees required to have the commissioning agent verity that the deficiencies were corrected.

3.6 ELECTRICAL DESIGN CRITERIA

3.6.1 ELECTRICAL CODES AND STANDARDS

Codes, Standards, and Guidelines, which are applicable to the design of the electrical systems, are listed below. Comply with the following publications in editions as mandated by the authority having jurisdiction:

- NFPA, National Fire Protection Association (applicable sections including but not limited to):
- NFPA 70, National Electrical Code
- NFPA 72, National Fire Code
- NFPA 101, Life Safety Code
- International Building Code
- International Fire Code
- International Mechanical Code
- International Energy Conservation Code
- ANSI/ASHRA/IES Standard 90.1
- ADA, Americans with Disabilities Act
- EIA/TIA, Electronics Industries Association/Telecommunications Industry Association
- IEEE 1100-1999, Recommended Practice for Power and Grounding Electronic Equipment
- IESNA, Illuminating Engineering Society of North America, 9th Edition
- UL, Underwriters Laboratories
- Utah State Fire Marshal Laws, Rules and Regulations
- Division of Facilities Construction and Management Design Standards
- Utah Judicial System Master Plan for Capital Facilities,

Please note that conflicting requirements may exist among the codes and standards. Where a conflict exists, the most stringent requirement shall govern, unless specific clarification is noted here.

3.6.2 SITE UTILITIES

Medium Voltage Power Distribution

Medium voltage power distribution shall be provided by the Nephi City Power Company. The contact person at Nephi City is Tony Ferguson at (435) 610-0044. Based on the Alta Survey, there is a three-phase medium voltage line that runs aerially east-west on power poles located on the south side of 200 N. According to Mr. Ferguson, electrical service can be obtained from this line. This will need to be confirmed with Nephi City Power Company as design progresses. An additional power pole may need to be installed in-line with the other poles in order to install fused cut-outs; however, this will need to be determined by Nephi City. All work will need to be provided in accordance with Nephi City Power Company. According to Mr. Ferguson, Nephi City Power Company requirements are identical to Rocky Mountain Power requirements, except that the contractor will need to provide conductors between the transformer and the CT enclosure. It is anticipated that Nephi City will require the contractor to provide raceways, a concrete pad for a pad-mounted transformer, and a CT Enclosure. All power company fees will be paid for by the Contractor; verify all fees with the Nephi City

Power Company prior to submitting bid.

There is a buried medium voltage line that is routed north-south across the site and originates from one of the power poles along the south side of 200 N. It serves a three-phase ground sleeve located on the south side of the property. According to Mr. Ferguson, it serves a single-phase transformer at the Fire House. The line across the site may need to be rerouted based on the position of the new building. All power company fees associated with the work will be paid for by the contractor; verify all fees with the Nephi City Power Company prior to submitting bid. The contractor will be required to provide conduits, etc. in accordance with all Nephi City Power Company requirements as required to re-route the line.

Please note that a redundant electrical service is not a requirement of this project.

Telecommunication Distribution
Currently, telecommunication lines run aerially east-west along the power poles located on the south side of 200 N. below the medium voltage power lines. There is also a telephone pedestal adjacent to the power pole having the medium voltage service drop that serves the line which runs north-south across the property.

There are communication lines that run north-south across the site and may need to be rerouted based on the position of the new building. These lines appear to serve the Ambulance Shed and the Fire House. The Alta survey identifies this as a "Communication Alignment". The contractor will be required to provide conduits, etc. in accordance with all Century Link requirements as required to re-route the line.

Provide (2) 4" conduits from the Communication Room to the Century Link Demarcation point located at the North-west corner of the property. Provide a 36" x 24" x 24" pull box at this location. Coordinate all work with Century Link and Loren Casterline of DFCM prior to bid.

All Century Link fees shall be paid for by the DFCM.

3.6.3 ELECTRICAL DISTRIBUTION SYSTEMS

Electrical Service
The main electrical service and main power panel shall be 120/208 volt, three-phase, four-wire in an amperage rating to accommodate the loads of the building. Although a building expansion is a possibility in the future, the service and main power panel shall not be sized to accommodate an expansion. The main power panel and electrical service shall have 25% excess capacity only. 25% space for future breakers shall be provided in the main power panel. Service conductors shall be copper only. Bussing for power panel may be aluminum. A CT enclosure and meter base shall be provided in accordance with the Nephi City Power Company. The contractor will be required to provide conduit and conductors from the transformer to the CT enclosure and from the CT enclosure to the main power panel.

The main power distribution panel may be in a free standing pad mounted outdoor gear with a utility section. The main electrical room shall be constructed to house branch circuit panel boards that may be required. The main electrical rooms shall have a minimum of 25% additional space for future growth and shall be dedicated to electrical distribution and shall not be used for storage or any other purpose. This room should be located as close as practical to the pad-mounted medium voltage transformers and electrical service entrance to reduce the length of conduit and conductors.

Feeder Distribution

To the greatest extent possible, different types of loads shall be separated onto different feeders and busses, such as HVAC equipment, lighting and convenience power, etc. In general, large motors and equipment shall be served at 208 volt, 3 phase; lighting, outlets, and small equipment at 120 volt. Feeder conductors shall be copper only. Bussing for panel boards may be aluminum.

120/208 volt, three-phase, four-wire lighting and appliance branch circuit panel boards shall be utilized to provide power for lighting, HVAC, and other electrical motor loads. Panel boards shall be dedicated to serve either lighting or HVAC loads but not both.

120/208 volt lighting and appliance branch circuit panelboards shall be utilized to provide power for computer equipment, owner furnished equipment, duplex outlets, small mechanical equipment, etc. Computers and any sensitive equipment shall be tied to separate panelboards to isolate them from other equipment such as small mechanical equipment and general-purpose duplex outlets. All 120/208 volt lighting and appliance branch circuit panelboards shall have 200% neutral busses and feeders.

Motor control centers are not required for this project.

Lighting and appliance panel boards shall have 25% excess capacity for future growth and flexibility and shall also be provided complete with branch breakers.

Surge Suppression

To provide protection against damage to sensitive electronic equipment, due to surges, transient voltage surge protective devices (SPD) shall be provided at the main power panel and at all branch circuit panel boards.

Surge suppression shall also be provided on any low voltage copper cable that enters the building including but not necessarily limited to CCTV, access control, and intercom.

Branch Circuits

Branch circuits shall be loaded to no more than 80% of what is allowed by NFPA 70. Where outlets are intended for a specific piece of equipment, the load of the outlet shall be based on the equipment nameplate. Otherwise, no more than 4 convenience outlets per circuit for computer workstations, and 6 convenience outlets per circuit for general purpose use. Outlets with dedicated branch circuits (one outlet per circuit) are required for vending machines, copy machines, break room counters, A/V cabinets and where the equipment nameplate requires it. Each branch circuit homerun shall have no more than 3 circuits per raceway. All multi-wire branch circuits with shared neutral shall have

an oversized neutral. This neutral shall be at least one trade side larger than the phase conductors. Conductors for branch circuits shall be sized to prevent voltage drop exceeding 3% at the farthest load. The total voltage drop on both feeders and branch circuits shall not exceed 5%. When calculating the voltage drop, the load shall be assumed to be 80% of the ampacity of the branch circuit.

Branch circuit conductor shall be copper conductors installed in conduit, ¾" minimum. Non exposed MC cables are allowed on this project where allowed by the NEC, but homerun circuits shall be routed in EMT conduits.

Provide disconnects, fused disconnects, starters, breakers, conduits and conductors in sizes as may be required for all HVAC and plumbing loads. Roof-top units, gas-fired water unit heaters, and gas-fired water heaters are anticipated, but shall be coordinated with Division 23. Provide connections for all equipment including power for faucets, electric water coolers, controls, etc.

Provide power to weapons screening equipment, security system electronics, motorized gate controllers, information technology equipment, court room audio/visual equipment, systems furniture, etc.

Fault Current, Coordination, and Arc Flash Study

A fault current and coordination study shall be provided by the electrical engineering as may be required to set over current protection devices.

Uninterruptible Power System (UPS)

A single UPS and associated distribution shall be provided in capacity as may be required to serve the following equipment:

1. Telephone and data equipment. Please note that a voice over IP telephone system will be furnished by the owner; a server computer at this particular facility is not anticipated.
2. Security system including access control, intrusion detection, intercom, CCTV, and work station computers and graphic user interfaces at the secure checkpoint.
3. Courtroom technology equipment including, but not necessarily limited to audio/visual systems, video evidence presentation system, etc.
4. All workstations in the court room, Counter Queuing, Clerks, and Clerk of Court.

The UPS shall have 10 minutes of battery backup and shall be provided with an external maintenance bypass. The UPS shall provide a minimum power quality performance of 12% current THD and 3% voltage THD measured at the UPS input terminals; filtering shall be provided in order to meet this requirement.

Power Factor Correction

The facility shall meet the DFCM minimum required of 95% power factor and maximum of 98% power factor. The DFCM representative shall approve the method and layout of power factor correction capacitors prior to installation.

Standby Power Distribution System

A 120/208 volt standby diesel generator shall be provided. The generator shall be located exterior to the building. An enclosure is not necessary unless required by Nephi City. A double-wall, skid-mounted tank with leak detection shall be provided and sized for 24 hours of operation at full load. Standby generator shall have approximately 10% excess capacity for future growth and flexibility. The generator shall be monitored via the building automation system if a building automation system is provided; otherwise a remote annunciator shall be provided and located in the building at a location directed by DFCM.

A dedicated automatic transfer switch and distribution shall be provided for the emergency branch. A dedicated automatic transfer switch and distribution shall also be provided for the optional stand-by branch.

The following loads shall be backed up:

Emergency Loads:

1. Egress lights
2. Fire Alarm

Optional Standby Loads:

1. UPS System (see above for load descriptions)
2. Any/all HVAC equipment serving the Court Room, Holding Cells, Counter Queuing, Clerks, Clerk of Court, Secure Checkpoint, and Communications Room.
3. Motorized gate controllers on site.
4. All site and exterior-mounted lights.

3.6.4 LIGHTNING PROTECTION

Although a lightning protection system is specifically indicated in the Utah State Courts Judicial Design Guidelines and in the DFCM Guideline, a lighting protection system is not a requirement of this project.

3.6.5 OUTLETS

The following shall be used as a general guideline. Outlet location shall be coordinated with the end user during Stage 2 of the design-build competition:

Court Rooms: Outlets at work stations, lecterns, audio / visual equipment cabinets, etc. shall be provided. At least one outlet for each 10' of wall space shall be provided. Floor outlets where stations or equipment cannot be served directly from the wall without crossing aisle space shall also be provided; please note that it is anticipated that the court rooms shall have a raised flooring system. Power outlet shall be mounted directly into the millwork where required.

Offices: For each workstation, one outlet dedicated to computer terminals and one normal outlet, and one additional normal outlet for every 10' of wall space.

Jury: One outlet for every 10' of wall space, plus one outlet dedicate to computer terminals on two walls. Combination power/communication floor outlets underneath conference room tables shall be provided.

Kitchenettes: GFI Outlets on dedicated circuits every 4' on counter top plus dedicated outlets for refrigerator, microwave, and disposal (switched at counter top), plus one outlet for every 10' of other wall space in room.

Counter tops (in general): One outlet every 4'; GFI where within 8' of a sink.

Telephone / Data Closets: Two (2) 208 volt outlets near each telecommunications rack on UPS power shall be provided. Please note that three racks are anticipated. Two 120 volt quad outlets on emergency power on the telephone terminal board, plus one outlet on normal near the door shall also be provided.

Electrical Rooms: At least one outlet on normal power.

Restrooms: One GFI outlet near each lavatory counter top. Power to hand dryers shall be provided as required.

Corridors, Lobbies: At least one outlet every 25', on alternating sides of the corridor or lobby.

Storage Rooms (small), Janitors Closets: One outlet.

Building Exterior: One WP / GFI outlet near each entrance.

3.6.6 GROUNDING: GROUNDING CONDUCTORS

Grounding conductors shall be installed with all feeder and branch circuits. An additional isolated grounding conductor shall be provided to all 120/208 volt branch panel boards.

A ground conductor shall be provided from the ground bus of the main electrical panel to the telephone terminal board in the main communications room. An additional ground conductor shall be routed from the telephone terminal board to building steel if available.

3.6.7 ROOF AND GUTTER HEAT CABLE

Heat cables shall be provided in roof gutters, downspouts, and at sloped overhangs near building entries/exits. Cables shall be self-regulating and shall be controlled via moisture temperature sensors, Rachem or equivalent. Roof and gutter heat cable shall be furnished, installed, and connected in accordance with all manufacturers' written recommendations. Each heat cable power circuits shall be protected by a 30 milliamp equipment protector.

3.6.8 INTERIOR LIGHTING

General Design Criteria

The interior lighting system will be designed in accordance with ASHRAE's AEDF. Standard fixtures shall be utilized to meet the illumination requirements while maintaining high efficiency and requiring minimal maintenance. Fixtures shall be installed in locations such that special equipment is not required for lamp replacement. Task lighting shall be provided where practical to reduce the overall energy consumption. Lighting intensity and uniformity should provide shadow-free and glare-free illumination of work surfaces. Lighting intensity control using dimmers or multi-level switching should be incorporated where computer or other electronic equipment monitors are used. Pendant indirect or direct / indirect fixtures are ideally suited for the environments that will be encountered and should be used where ceiling heights will allow for suspension of 18 inches or more below the finished ceiling. If pendant fixtures are used in rooms with ceiling projectors, pendant fixtures shall be coordinate with the projected image to eliminate any conflicts. Detention grade fluorescent fixtures shall be provided in the Holding Cells.

Task Illuminance

Lighting levels shall be in accordance with the Recommended Illuminance Categories and Illuminance Values for Lighting Design, IES Lighting Handbook, 9th Edition. Total lighting load for the facility should not exceed the calculated lighting power budget as allowed by the 2009 IECC. The lighting levels listed below in footcandles should be used for design purposes. The values listed are average maintained illuminance levels using a maintenance factor of 75%. The numbers listed are target values and should be adjusted to meet the special requirements of individual areas.

Task lights shall be provided by the Construction Contract if part of any systems furniture.

Function / Space	Illuminance (Avg. Footcandles)
Offices	35 (ambient) – 50 (task)
Commission Chambers	50
Court Room	0-70 (variable)
Spectator Seating	25
Conference / Meeting Spaces	0-50 (variable)
Holding Cells	20
Lobby/Corridors	10-20
Toilet Rooms	30
General Storage	30
Mechanical / Electrical Rooms	20
Reading Stacks	30

Lamps

The number of different lamps that are used should be kept to a minimum so that replacement stock will be minimal and the opportunity for replacement errors will be reduced. The design should strive to utilize only one type of T8 or T5 fluorescent lamp and one type of compact fluorescent lamp; however, this requirement should not override the goals of maximizing energy efficiency and proper task illumination. T8 lamps characteristics should include rapid-start, low-mercury, minimum color rendering index of

82, 3500 K color temperature, and average rated life of 20,000 hours. If T8 lamps are used they should be super T8 lamps and ballast combinations. A ballast factor of 0.8 or less and low wattage lamps (30 watts or less) or lamps with at least 3100 lumens should be used. T5 lamps characteristics should include programmed-start, low-mercury, minimum color rendering index of 85, 3500 K color temperature, and average rated life of 20,000 hours. Compact fluorescent lamp characteristics should include minimum color rendering index of 80, 3500 K color temperature, 10,000 hours average rated life at 3 hours per start. All fluorescent lamps should comply with the Federal Toxic Characteristics Leaching Process (TCLP) test, and yield less than 0.2 mg of mercury per liter when tested according to NEMA LL 1.

Ballasts for linear fluorescent lamps should be electronic programmed start with not greater than 10% total harmonic distortion. Ballasts for compact fluorescent lamps should also be electronic and should operate at minimum 90% power factor.
Incandescent lamps should not be used, except for special cases where a CRI of 100 and / or a dimming range of 0% -100% is critical to the task involved. Incandescent lamps, if used, should be tungsten halogen IR type par lamps.

Interior Lighting Control
Occupancy sensors should be used in areas such as offices, break rooms, conference rooms, utility rooms, storage rooms, and restrooms to shutdown lighting when the areas are not occupied. Lighting in common areas such as corridors and lobbies should be controlled by a programmable networked lighting relay control system with the capability of timed control, sensor inputs and building automation system integration. Low voltage wall station override switches are required in convenient locations throughout the facility to allow for on / off override to suit the specific needs of the building occupants.

Dimmer systems equivalent to Lutron Graphic Eye shall be installed in the Court Room and Jury Room and shall be integrated with the audio visual systems controller. Electrically-controlled blinds may be required in the court room if daylight is utilized. The control shall be integrated with the dimmer systems.

Daylight harvesting shall be considered in areas where natural illumination alone provides sufficient lighting levels. Photoelectric sensors should be used to shutdown or dim the artificial lighting when it is not needed. In offices where day lighting control is used, continuous dimming should be utilized to negate the noticeable affects of the on / off cycles of the artificial illumination.

As required by the room use, variable lighting levels shall be provided by multiple level switching or dimming. In rooms with audio / visual (AV) equipment, variable and zoned lighting control shall be provided, from front to back, to allow for flexibility in lighting scenes for the various room functions.

3.6.9 EXTERIOR LIGHTING

Design Criteria

The exterior lighting fixtures should be selected to harmonize with the architectural style of the building. In general, all outdoor lighting shall have full cut-off optics as defined by the IESNA. Wall mounted decorative fixtures may be used to draw attention to main entry or circulation areas. Wall mounted fixtures at other locations should be non-decorative with cutoff optics that are designed for the intended use. Fixtures for parking surface areas and walkways are to be pole mounted and shall harmonize with existing parking areas. Ground-mounted flood lights shall be utilized to illuminate flag poles.
Façade lighting is not desired or required for this building. LED lighting should be selected for use in all exterior fixtures to minimize the maintenance stock requirements where practical. All exterior light fixtures should be robust and suitable for the harsh exterior environment. Preference should be given to fixtures that have design features such as hinging reflectors and removable ballast trays that reduce the cost of lamp replacement and fixture repairs. Parking lot lighting should be programmable based on both a timer and photocell.

Illuminance

Lighting levels should be in accordance with the Recommended Illuminance Categories and Illuminance Values for Lighting Design, IES Lighting Handbook. Total lighting load for the facility should not exceed the calculated lighting power budget as determined by ASHRAE 90.1 - 2007. The lighting levels listed below in footcandles should be used for design purposes. The values listed are average maintained illuminance levels using a maintenance factor of 75%.

Function	Iluminance (Avg. Footcandles)
Parking	1-2 with 4 to 1 max/min
Exterior Entries/Exits	5
Walkways	1-2

Emergency Illuminance

Standard building lighting shall be selected as may be required to achieve the illuminance criteria set forth in the NFPA Life Safety Code, IBC, and local codes. These fixtures shall be designated as egress lighting fixtures. Where lamp sources of building lighting are not instant on, battery/inverter units shall be provided to prevent lamp source from extinguishing until emergency power can be supplied. Branch circuiting from the emergency power branch shall be dedicated for emergency power only. Emergency lighting shall be provided on all paths of egress including but not necessarily limited to corridors, large open office or instructional spaces, restrooms, mechanical rooms, electrical rooms, and communication rooms. With the exception of a designated egress fixture at each interior building entry, all emergency lights shall be switched off at night; in the event of power failure, all egress lights shall be switched on.

Illuminated exit signs shall be provided in locations as required by the NFPA Life Safety Code, IBC, and local codes. Exit sign shall be cast aluminum LED type. Dedicated branch circuiting from the emergency power branch shall be provided.

3.6.10 FIRE ALARM SYSTEM

The fire alarm system shall be designed to comply with the requirements of the IBC, IFC, NFPA, and local codes to meet the requirements of a B occupancy. The building shall be fully sprinkled. An intelligent addressable system shall be provided. The only approved manufacturers for this project are Silent Knight or Fire-Lite.
Initiation Devices: Monitor modules shall be provided for monitoring flow and tamper switches. Duct smoke detectors and fan shutdown shall be provided for air systems 2,000 CFM and greater. Initiating circuits shall be Class A, Style D. Smoke detectors shall be provided at the main fire alarm panel.

Indicating Devices: Strobes shall be located in corridors, Counter Queuing, Clerks, Judge, Court Room, Jury Room, restrooms, and Lobby/Waiting, and other similar rooms. Horn installation shall comply with NFPA including for higher ambient noise requirements. Weatherproof horns shall be installed exterior to the building for annunciation into parking areas. Control modules shall be provided for the control of fire smoke dampers. Indicating circuits shall be Class A, Style Z.

Annunciation: A main fire alarm panel shall be located behind the main counter at Secure Checkpoint. An annunciator panel shall be provided in the Sally Port.

3.6.11 TELECOMMUNICATION SYSTEM

General
The voice and data system shall consist of two main categories: 1) Pathways and Spaces to support the voice and data system, and 2) The structured cabling system.

Pathways and Spaces
There shall be one main communication room. This room shall house the main phone equipment that serves the building. The room shall be a minimum of 120 square feet (10' x 12') in size.

There shall be no ducts or piping (except for fire protection lines) above the communication room. The communication room shall have access directly from a hallway without needing to go through another room.

The main floor shall have a cable tray system extending in a looped configuration back to the communication room. Generally, it shall be routed in corridors and coordinated with ducts, piping, and electrical conduits. Basket-type cable tray shall be provided. It is anticipated that a 12" wide by 4" deep tray should be sufficient; however, this should be carefully evaluated during design. The tray should be trapeze-hung and seismically braced; center-hung trays are not allowed. The location of the tray should be coordinated with duct work and piping during design. Mechanical fire stop systems should be utilized where the cable tray passes through fire rated partitions to allow for moves, additions, and changes in a flexible and easy manner.

Wherever possible, the communication room should have cable tray entering the room from two directions to maximize flexibility and future moves, additions, and changes. The cable tray in communication rooms shall be a minimum of 18" wide with a 4" loading depth.

Each telephone/data outlet shall utilize a 4" square by minimum 2-1/8" deep junction box with a single-gang plaster –ring. One 3/4" conduit with nylon pull rope shall be run from each junction box to the nearest cable tray and a protective bushing should be provided at the end of the conduit at the cable tray. Conduit to tray clamps shall be employed. Conduits designated for horizontal telecommunication wiring shall not be routed below the slab.

Provide a minimum of two (2) telephone/data outlets in each private office, one on each of the opposing walls. For areas other than in private offices, provide a minimum of one (1) telephone/data outlet at each workstation. Provide outlet boxes and raceways for connections to systems furniture.

The user desires that the building be provided with reliable wireless local area network coverage. Data outlets shall be provided at owner designated locations for wireless points to cover all interior areas.

3.6.12 STRUCTURED CABLING SYSTEM

General
The structured cabling system shall be provided by the DFCM.

3.6.13 SECURITY SYSTEMS

Security systems are defined to include access control, intercom, video surveillance, and intrusion detection. All systems shall be completely integrating together in a PLC-based control system with touch-screen graphical interface.

Secure Checkpoint shall be provided with the following equipment:

1. Graphic touch-screen.
2. Desk-top intercom with goose neck microphone.
3. Two (2) 19" LCD monitors.
4. Computer interface device (mounted below desk top).
5. Mouse.
6. Keyboard.
7. Joystick and keypad for CCTV control.

Wiring Methods: All Security Systems cables are shall be routed in conduit and/or cable tray. Each outlet shall utilize a 4" square by minimum 2-1/8" deep junction box with a single-gang plaster–ring or as otherwise required by the application. Conduit shall be run from each junction box to the nearest cable tray and a protective bushing should be provided at the end of the conduit at the cable tray. Conduit to tray clamps shall be employed. Cables routed in the cable tray shall be plenum-rated.

Access Control
A complete access control system will control entry to all perimeter entry/exit points, sally ports, holding area, department areas, main communication room, at each site gate controller, and other selected entry points as directed by the owner. Card readers will be the proximity type and utilized in locations selected by the owner. Magnetic locks and/or

electric strikes will be utilized to secure access-controlled door. It is anticipated that locks for cell doors in the holding area will be electronically controlled. A door position switch shall be installed at each secure access-controlled door and wired in series with the lock. Door position switches may also be utilized at other selected doors that are not access controlled. Each access-controlled door and associated lock shall be shown on its respective graphics touch screen. The operator shall be able to control access via a double function operation. The first operation will identify the door; the second operation will unlock it. The head end equipment shall be located in a free-standing enclosed cabinet in the Communication room. The only approved manufacturers for this project S2 with Xceed card readers. Proximity cards will be provided by DFCM.

Intercom

An intercom shall be installed on each side of selected secured doors in secure corridors/vestibules, Holding area, Sally Port, in each Holding cell, and at each site gate controller. All intercoms shall have the ability to report back to Secure Checkpoint. Depressing an intercom button will signal any respective PTZ camera to monitor a preprogrammed location and picture. The head-end equipment shall be located in the Communication Room in a free-standing enclosed cabinet if possible; otherwise, it shall be located on one of the walls. Intercoms should meet the requirements set forth in the "Utah Judicial Facility Design Standards".

Video Surveillance

A complete video surveillance system with control for visual monitoring of building perimeter, all building entry / exit points, sally ports, select main building thoroughfares, Court Room, at select sensitive interior areas, and at each site gate controller. PTZ cameras will monitor exterior areas including the building perimeter. Fixed cameras will monitor designated locations inside the building where PTZ operations are not required. Cameras will be installed in appropriately rated enclosures. Signals from cameras will be connected to a central switching / multiplexing system with 19" LCD monitors for viewing. All camera images will be digitally recorded by DVR's. IP cameras shall be provided. Monitors shall be provided at Secure Checkpoint and at the workstation by the Holding Cells. Cameras shall be located on the floor plan of the graphics touch screens. If selected, the view of that particular camera shall be immediately displayed on the graphics touch screen and shall be depicted on a large LCD monitor if so selected. It is imperative that a PC based, non-proprietary hardware system be provided with a non-renewable software license (1 time only fee). The head end equipment shall be located in a free-standing enclosed cabinet in the Communication room.

Intrusion Detection

A complete intrusion detection system will be installed for electronic monitoring and status reporting of all building entry / exit points, select building thoroughfares, and at select sensitive interior areas. Sensing devices will include door position switches and motion sensors in the corridors. Duress pushbuttons shall be located at each clerk and or clerical workstation, Judges Bench, Judge's Chambers, work station near the Holding Cells, and at the Court Recorder's desk. An audible alarm shall sound at the graphic user interface located at Secure Check Point if any duress pushbutton is activated. The intrusion detection system will be integrated with the video surveillance system for priority viewing of security breach areas. Each intrusion detection points shall have the ability to report back to central command. A keypad shall be provided at Secure Checkpoint, at the door between the corridor and the Sally Port, and at the employee entrance door.

The head-end equipment shall be rack-mounted in a free-standing enclosed cabinet in the Communication room if possible; otherwise, it shall be located on one of the walls.

3.6.14 AUDIO AND VIDEO SYSTEMS

The contractor shall provide Courtroom, Judge's Chamber's, Jury Room and other Court Room electronics and audio/visual systems. These requirements have not yet been determined. It is the requirement of the design/build contractor to assess the needs of the users during Stage II meetings of the design/build submission process and propose equipment and systems that will meet those needs. The Contractor shall review all Utah State Courts Judicial Design Guidelines pertaining to these systems prior to the Stage II meetings and come prepared ready to lead the discussions. The work may include but is not limited to providing labor and materials for "Computer in Courtroom" (CIC), Security Cameras/Systems, Courtroom Electronics, Audio/Visual and other such systems as determined during design. The Contractor will be required to obtain adequate information regarding the specifics of these systems during design and should provide submittals for the Owners review and approval prior to ordering and installation.

Wiring Methods: All audio and video system cables are shall be routed in conduit and/or cable tray. Each outlet shall utilize a 4" square by minimum 2-1/8" deep junction box with a single-gang plaster–ring or as otherwise required by the application. Conduit shall be run from each junction box to the nearest cable tray and a protective bushing should be provided at the end of the conduit at the cable tray. Conduit to tray clamps shall be employed. Cables routed in the cable tray shall be plenum-rated.

TV Distribution System
A TV distribution System is not a requirement of this project.

Clocks
Clocks are not a requirement of this project and will be provided by the user (if any).

3.6.15 SUSTAINABLE DESIGN - ELECTRICAL

Although LEED certification is not a requirement for this project, DFCM requires that a minimum LEED Silver rating be achieved and that energy consumption be 10% better than the energy code. The following is a list of potential opportunities related to the electrical design together with strategies that that should be considered to maximize the energy efficiency and performance of a building:

Optimize Energy: Through careful design of the lighting and control systems, energy usage can be greatly reduced while still providing a pleasing and functional atmosphere to the building occupants. Below are some strategies that are identified:

- Utilize task lighting for specific functions where possible to reduce the overall ambient lighting levels.

- Where day lighting is available, day lighting control systems shall be provided. For offices, continuous dimming of fluorescent lights shall be provided to supplement the natural daylight and adjust with less noticeable effect. In corridors and

- common areas, stepped switching may be used at reduced cost where the expense of dimming is not justified.
- All building lighting shall be controlled through a programmable lighting relay system or occupancy sensors. Override switches shall be provided so that the
- occupants can always turn lights off. If lights are normally off and overridden on, the lights will be timed off after a specified period of time.
- Premium efficiency lamps and ballasts shall be utilized that have longer lives and use less energy.

Metering: A whole building electric meter will be included in the design that is capable of connecting to the building automation system and reporting electric energy consumption and peak demand at 15 minute intervals.

Indoor Environmental Quality/Controllability of Lighting: Lighting zones and switching shall be designed to allow all occupants or groups of occupants to have access to lighting control for the individual tasks, areas or common spaces. Carefully follow all Utah State Court Judicial Design Guidelines if implementing this strategy.

3.8 SYSTEM COMMISSIONING

3.8.1 COMMISSIONING ROLE

The State of Utah will hire a Commissioning Agent (CxA) that will be involved with the Design/Build team from the design development phase through construction and final training. The (CxA) purpose is to assure that the design meets the Owner's requirements and that the installed systems operate effectively and efficiently. The CxA will be involved in the design reviews and will act as a "middle man" between the Owner and the design/build team to assure Owner requirements are met. The CxA will be involved during design charettes and will be available to "bounce ideas off of", but will not be responsible for putting designs together. This is the responsibility of the Design/Build team. Additionally the CxA does not have the authority to make or approve changes to the design, but rather will suggest modifications and clarifications to be made to the project design. The Owner, Design/Build team and CxA should work together as a team throughout the duration of the project to minimize errors. An atmosphere of collaboration and cooperation will greatly benefit the project.

3.8.2 COMMISSIONED SYSTEMS

Per the State of Utah requirements, the following systems will be commissioned.

- Electrical Systems
- Mechanical and Plumbing Systems
- Operable Building Control Systems
- Audio and Visual Systems
- Telephone and Data Systems
- Building Security Systems
- Scheduled or Occupancy Senor Lighting Controls
- Daylight Dimming Controls
- Refrigeration Systems
- Emergency Power Generators and Automatic Transfer Switching
- Uninterruptible Power Supply Systems
- Life Safety Systems (fire alarm, egress pressurization, fire protection, smoke evacuation)
- Domestic and Process Water Pumping Systems and Testing
- Paging Systems
- Building Envelope Systems
- Court Security Systems
- Emergency Systems & Hardware

3.9 LANDSCAPE DESIGN CRITERIA

The design build team should consider native or drought tolerant plants with a good history of thriving in Juab County thus minimizing the irrigation costs. If turf is used, provide a drought tolerant variation. Landscape edging should be durable and require minimal maintenance.

3.9.1 IRRIGATION GUIDELINES

Provide an automatic irrigation system using high quality materials to minimize the ongoing maintenance of the system. Drip irrigation systems should be considered in lieu of a sprinkler system at locations that make sense.

4.1 SPACE PROGRAM & AREA SUMMARY

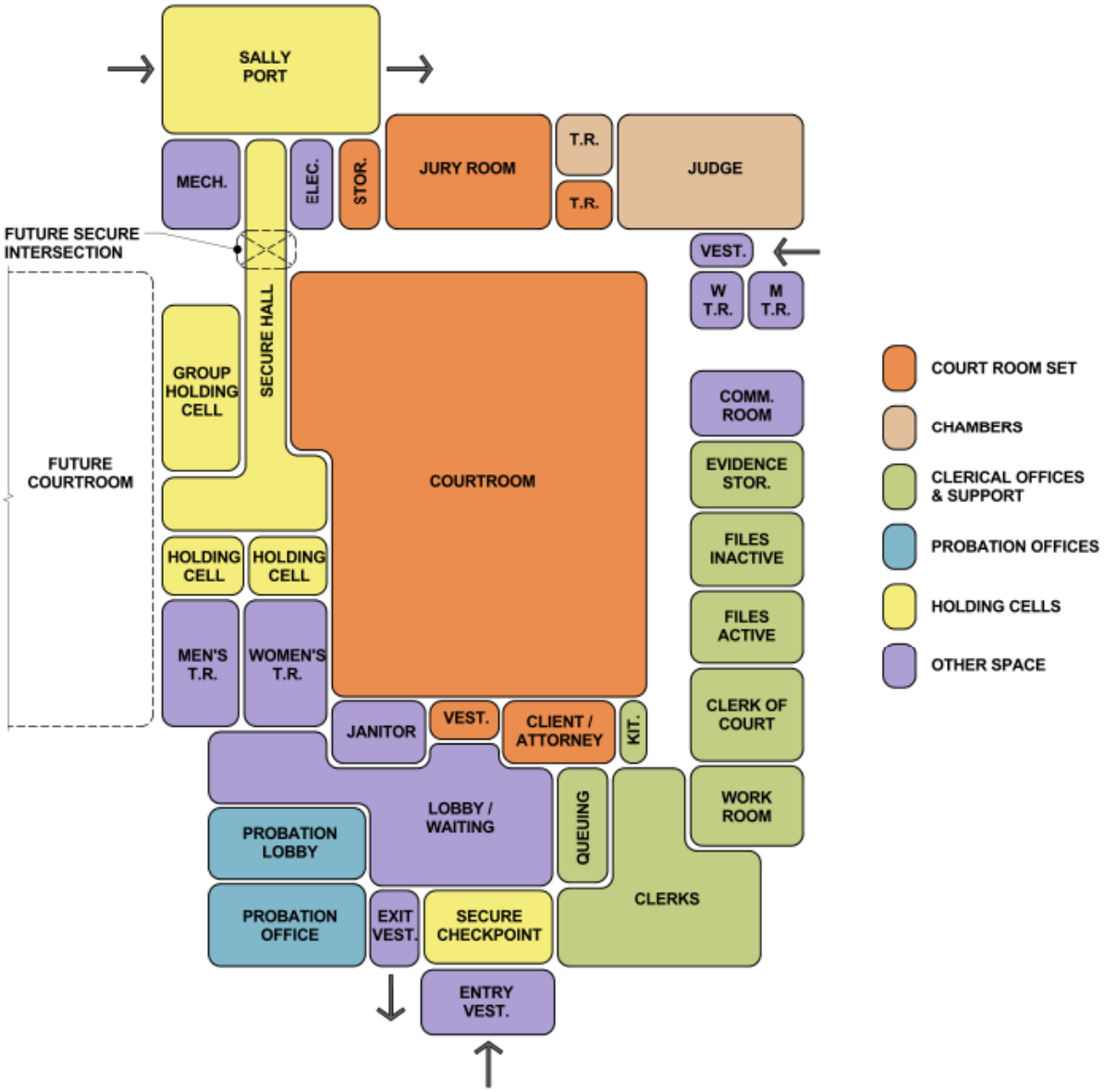
The "Common Area" provides for space such as public circulation areas - including corridors, boiler & mechanical rooms, pipe chases, wall thickness and other building elements that are not included in the net square footage numbers.

DEPARTMENT Room / Space	**# OF ROOMS**	**S.F.**	**TOTAL S.F.**
COURTROOM SET			**2420**
Client/Attorney Conference Room	1	110	110
Court Storage	1	50	50
Courtroom	1	1900	1900
Jury Room	1	300	300
Vestibule	1	60	60
CHAMBERS			**330**
Judge's Chambers	1	270	270
Judge's Restroom	1	60	60
CLERICAL OFFICE & SUPPORT			**1440**
Clerk of Court	1	150	150
Clerk/ Counter Workstation	2	240	480
Counter Queuing	1	180	180
Evidence Storage	1	180	180
Files Active	1	140	140
Files Inactive	1	140	140
Kitchenette	1	30	30
Work Room	1	140	140
PROBATION OFFICES			**300**
Probation Lobby	1	150	150
Probation Officer	1	150	150
HOLDING CELLS			**760**
Group Holding	1	180	180
Individual Holding	2	50	100
Security Vestibule	1	120	120
Vehicle Sally Port	1	360	360
OTHER SPACES			**1050**
Communications Room	1	110	110
Janitor	1	80	80
Lobby	1	300	300
Public Restrooms	1	300	300
Secure Checkpoint	1	160	160
Staff Restrooms (Men's & Women's Set)	1	100	100
NET TOTAL SQUARE FEET			6300
COMMON AREAS (NET x 36%)			2268
TOTAL			**8568**

4.2 BUILDING ORGANIZATION

4.2.1 Department Adjacencies

Adjacencies between departments and separation between secure and public spaces are critically important within Court facilities. The graphic below illustrates an adjacency plan that works for a small court building and one that is desired by the Administrative Office of the Courts. This graphic represents a preliminary program level adjacency plan and is not necessarily reflective of how the floor plan will layout during the final design phase. The final floor plan layout should be developed over time with the Owner using this adjacency plan as a guideline.



4.2.2 Planning Charettes

Successful Design/Build teams that will be allowed to design and bid under Stage II of the selection process will have opportunities to be involved in design charettes with the Owner and to ask questions or obtain further clarifications from this program document. These Design/Build teams should take full advantage of this opportunity to assure the Owner's intent is reflected in the proposed design and bid. Further information regarding these design charettes will be given in the DFCM's RFP for Design/Build teams.

4.3 FURNITURE, FIXTURES & EQUIPMENT

A $10,000.00 FF&E allowance should be included in the Contractor's bid to the Owner. It is the intent of the Owner to use this allowance for movable furnishings in the Court Room and Jury Room. This would include the council table and seating, judge's seating, in court clerk seating, witness seating, jury room conference table & chairs etc. Fixed furnishings in the courtroom should also be included in the contractor's bid and outside the $10,000.00 dollar allowance. This would include fixed jury seating and pews. All other movable furnishing and equipment will be provided by the Courts.

4.4 INDIVIDUAL ROOM DATA SHEETS

The following sheets represent individual room requirements. The State of Utah Court Design Standards are referenced throughout these sheets. These standards can be found in the Appendix of this document. These standards are to be a companion document to this program. All State of Utah Court Design Standards are to be adhered to unless specifically shown or noted otherwise in the program. DFCM design requirements should also be adhered to.

Graphic representations of the individual spaces are also presented the sheets. These images are representations of the space and arrangement, but do not represent the final design or configuration of the space. Many spaces also have furniture shown. It is important that the furniture be verified with the users.

JUAB COUNTY COURTHOUSE

DEPT:	COURTROOM SET
SPACE:	CLIENT/ATTORNEY CONF. ROOM

QUANTITY:	1	CEILING HGT.	9'
NET AREA:	110	SECURITY ZONE:	Public Zone
OCCUPANTS:	0	VISITORS:	4

FUNCTIONS:

- Space for private client / attorney meetings

RELATIONSHIP:

- Near public lobby.
- Near Courtroom

SECURITY REQUIREMENTS

- Comply with Court Standards

MILLWORK

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. boards
Base:	Wood or Rubber
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Tile

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	Yes
Audio/Video:	None
Outlets:	Yes - Several
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Table
- Chairs (4)

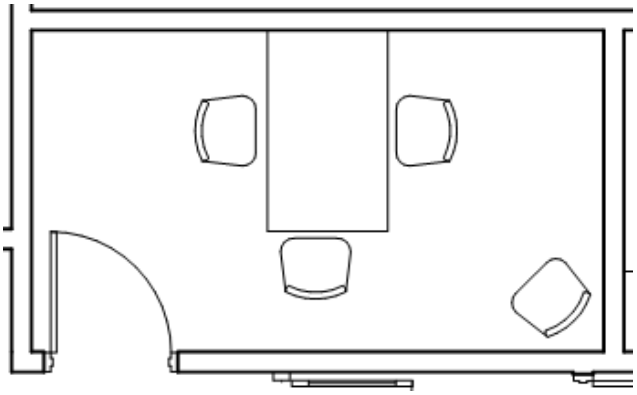
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer - Solid Core Wood
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	Comply with Court Standards

NOTES:

- Acoustics should comply with Court Standards.
- STC 50 min. for privacy

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	COURTROOM SET
SPACE:	COURT STORAGE

QUANTITY:	1	CEILING HGT.	9'
NET AREA:	50	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	0

FUNCTIONS:

- Storage for various exhibits and furniture used during court proceedings.

RELATIONSHIP:

- Near courtroom

SECURITY REQUIREMENTS:

- None

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber
Floor:	Resilient Flooring
Ceiling:	Acoustical Lay-In or Gyp. Board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Shelving - Standards & Brackets

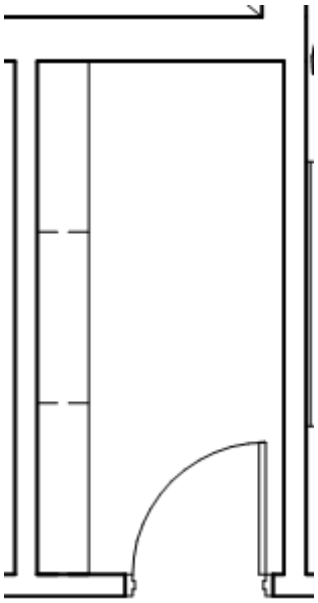
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	None

NOTES:

None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	COURTROOM SET
SPACE:	COURTROOM

QUANTITY:	1	CEILING HGT.	10' - 15'
NET AREA:	1,900 s.f.	SECURITY ZONE:	Interface Zone
OCCUPANTS:	0	VISITORS:	115

FUNCTIONS:

- This courtroom will be shared for both district and juvenile court.

RELATIONSHIP:

- Near judge's chamber, jury room, holding cells, bailiff, sally port, public corridors and other court support spaces.

MILLWORK

- Judge's Bench
- Witness Stand
- Clerk's Area

FINISHES / ENVIRONMENT:

Wall:	Wood Panels- Quarter sawn oak matched vertically and horizontally. Painted gyp. board Acoustical Panels
Base:	Wood to match wood panels
Floor:	Carpet tiles
Ceiling:	Painted gyp. board and acoustical lay-in panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes - Zoned
Plumbing:	No
Ventilation:	Yes
Climate Ctrl:	Yes
Misc.	CO2 sensor connected to BAS
ELECTRICAL:	
Telephone:	Comply with Court Standards
Voice/Data:	Comply with Court Standards
Outlets:	Comply with Court Standards
Audio/Visual:	Comply with Court Standards
Lighting:	Comply with Court Standards
Other	Security Cameras (including CCTV) that meet the Court Standards will be by the Contractor. Activities in the courtroom should be able to be seen and heard by the security officers at the front security station. A duress button for the Judge, Bailiff and Clerk communicating with the front security station should also be installed by the contractor. CCTV associated with the court recordation equipment including sound recording, speakers, phone connection and remote hearing equipment (including raceways) will also be by the Contractor. Comply with Court Standards.

EQUIPMENT / FURNITURE:

- The Contractor will budget a $10,000.00 allowance for furnishings throughout the building. This is to go toward movable (non-millwork) furnishings. Beyond this allowance, all movable furniture will be provided by the Owner. The $10,000 allowance is intended to be used on movable furnishings in the courtroom and jury room first.
- AV equipment that complies with court standards.
- A security system that meets Court Standards, including security cameras and access control shall be included in the contractors bid. (2) cameras should be installed for security. One on the wall behind the judge, and the other on the wall behind the spectators.
- Whiteboard
- Projection screen
- Other items in compliance with Court Standards.
- Bench seats

SECURITY REQUIREMENTS

- Comply with Court Standards

WINDOWS, DOORS & HARDWARE:

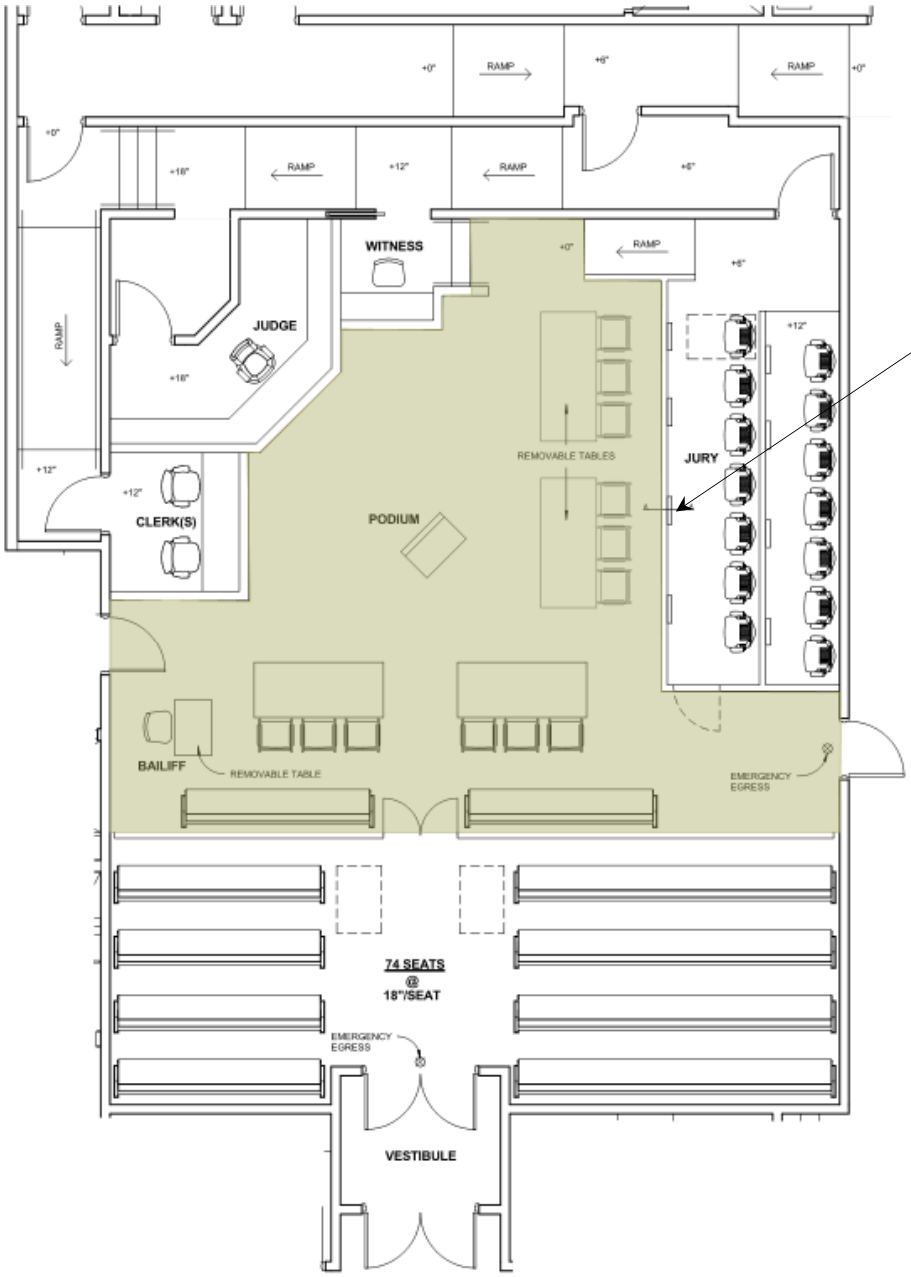
Windows:	Possible clerestory windows with remote controlled shading devices.
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	Yes
Electronics:	Comply with Court Standards. Emergency egress shall be done in accordance with Resolution #2006-1 of the Utah Building Code Appeals Board.

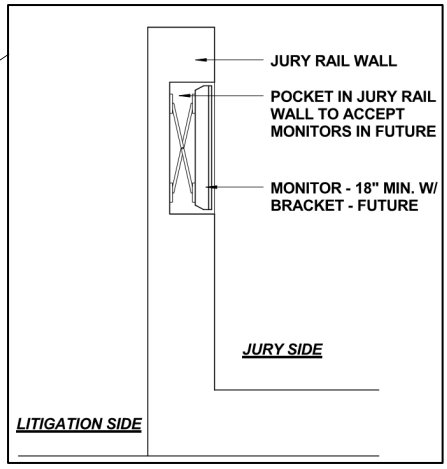
NOTES:

- The litigation well (shown highlighted in the space graphic) should include a raised flooring system for maximum flexibility of future needs.
- The locations of the courtroom electronics should be very carefully coordinated with the court AV and special systems specialists.
- The panel on the millwork for the jury side separation rail should be removable allowing for future technologies to be added and/or accessed in the wall at a later date.
- The jury rail in front of each row of jurors should be constructed to handle future monitors between jurors. Monitors will be attached to arms that will allow them to pull out, raise up, and tile up and down and side to side. See graphic on next page for the generic concept.
- Daylighted court rooms will require auto shade capability.

SPACE GRAPHIC:

- See attached.





THIS DETAIL CONCEPT IS TYPICAL AT (8) LOCATIONS SHOWN.

ACCESS
FLOOR SYSTEM

JUAB COUNTY COURTHOUSE

DEPT: COURTROOM SET

SPACE: JURY ROOM

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	300	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	14

FUNCTIONS:

- Jury deliberations
- Attached toilet room
- Conference room

RELATIONSHIP:

- Near Courtroom
- Connected ADA toilet room

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet Tiles
Ceiling:	Acoustical Lay-In Panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. With CO^2 Sensors
Plumbing:	Yes - Toilet Room
Ventilation:	None
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	None
Voice/Data:	Yes
Audio/Visual:	Yes
Outlets:	Yes
Lighting:	Preset lighting scenes for general illumination, presentation and task lighting over the table. Occupancy and daylight sensors as needed.
Other	Duress Alarm

EQUIPMENT / FURNITURE:

- Conference table for 12
- 12 chairs + 2 extra
- Whiteboard
- Large wall mounted monitor
- Connected ADA toilet room
- Portable hot and cold water dispenser
- Other item in compliance with Court Standards

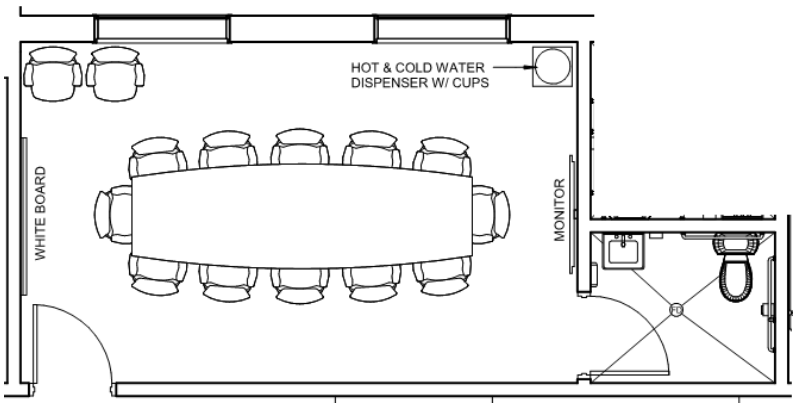
WINDOWS, DOORS & HARDWARE:

Windows:	Yes. Comply with Court Standards.
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	Comply with Court Standards
Electronics:	Comply with Court Standards

NOTES:

- Acoustics
  - NRC: .65 to .75
  - Noise Criteria: 20-30
  - STC: 50

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	COURTROOM SET
SPACE:	VESTIBULE

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	60	SECURITY ZONE:	Public Zone
OCCUPANTS:	0	VISITORS:	0

EQUIPMENT / FURNITURE:

- None

FUNCTIONS:

- Space to screen foot traffic into and out of courtrooms.
- Controlling sound from out side of the Courtroom.

WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer. Solid core with side lite @ courtroom side set.
Hardware:	Comply with Court Standards
Glazing:	Comply with Court Standards
Electronics:	Comply with Court Standards / Sound Control

RELATIONSHIP:

- Near public corridor.
- Attached to Courtroom.
- Near Courtroom waiting.
- Near Client / Attorney conference room

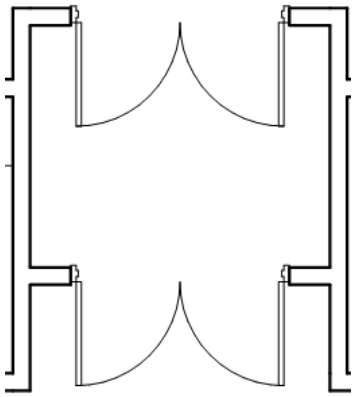
NOTES:

- Provide sound insulation at walls and ceilings.

SECURITY REQUIREMENTS:

- Comply with Court Standards

SPACE GRAPHIC:



MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Standard
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Visual:	None
Outlets:	None
Lighting:	Fluorescent
Other	None

JUAB COUNTY COURTHOUSE

DEPT: CHAMBERS

SPACE: JUDGE'S CHAMBERS

FUNCTIONS:

- Office for the Judge
- Small conferences / group meeting with counsel
- In Chamber hearing & A.V. video arraignments

RELATIONSHIP:

- Near courtroom
- Adjacent secure corridor
- Adjacent secure parking
- Adjacent to Judge's toilet room

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK

- None

FINISHES / ENVIRONMENT:

Wall:	Gyp. Board with fabric wall coverings
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Painted gyp. board / Acoustical Panel

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard with thermostat
Plumbing:	No
Ventilation:	No
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	Yes
Voice/Data:	Yes - 3 locations
Audio/Visual:	Comply with Court Standards
Outlets:	Yes - 4 minimum
Lighting:	Indirect fluorescent with occupancy sensor
Other	Duress button

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	270	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	1	VISITORS:	2

EQUIPMENT / FURNITURE:

- Desk
- Credenza
- Judge's chair
- Visitor's chairs (4)
- Sofa / Soft chairs
- Computer and printer
- Book shelf
- A.V. Equipment

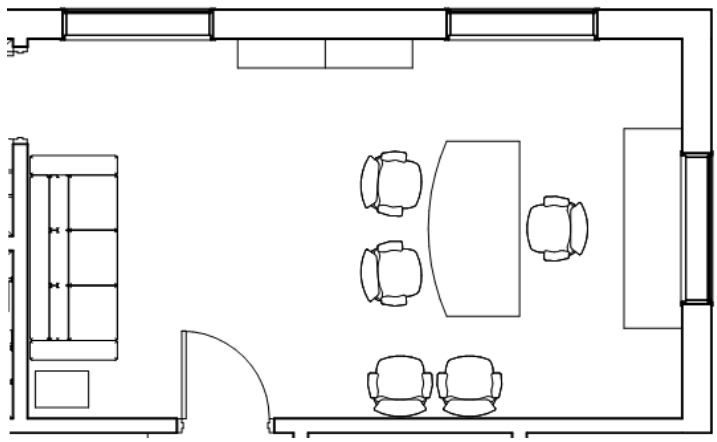
WINDOWS, DOORS & HARDWARE:

Windows:	Exterior windows with coverings. Judge's chambers shall have access to natural light, but visual and physical security should be considered when locating windows in chambers.
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards. Include card reader.
Glazing:	None
Electronics:	Comply with Court Standards. Include card reader.

NOTES:

- Not accessible to the public
- Adjacent or easily accessible to court support staff
- Acoustics should be in line with court standards
- A duress button should be included
- Design for future video arraignment
- Technology should be in compliance with the Court Standards.

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: CHAMBERS

SPACE: JUDGE'S RESTROOM

QUANTITY:	1	CEILING HGT.	9'
NET AREA:	60	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1

FUNCTIONS:

- Dressing area
- Private restroom for the Judge

RELATIONSHIP:

- Direct access to Judge's chamber

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Ceramic Tile / Painted gyp. board
Base:	Coved ceramic tile
Floor:	Ceramic mosaic tile
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard
Plumbing:	Water closet and lav.
Ventilation:	Yes
Climate Ctrl:	No
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes - GFI
Lighting:	Yes
Other	None

EQUIPMENT / FURNITURE:

- Coat hooks for judge's robe/jacket
- Mirror at dressing area - back of door
- Toilet room accessories including ADA compliant grab bars

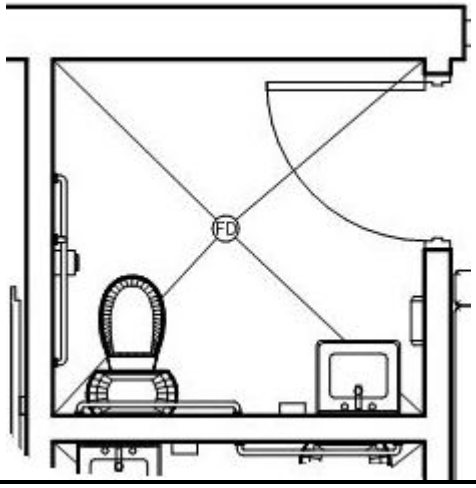
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	None

NOTES:

- Provide sound rated wall and sound control hardware

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	CLERK OF COURT

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	150	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	1	VISITORS:	3-4

FUNCTIONS:

- Office space for the Clerk of Court

RELATIONSHIP:

- Near file clerk
- Near public clerical counter

SECURITY REQUIREMENTS:

- Located in the secure zone of the building.

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber / Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Panel

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	Yes
Voice/Data:	Yes - 2
Audio/Video:	None
Outlets:	Yes - 4
Lighting:	Fluorescent w/task lighting and occupancy sensor
Other	None

EQUIPMENT / FURNITURE:

- System's furniture
- Desk chair
- Computer
- Printer
- Visitor chair (2)
- White board
- File cabinet
- Verify furniture arrangement with the user

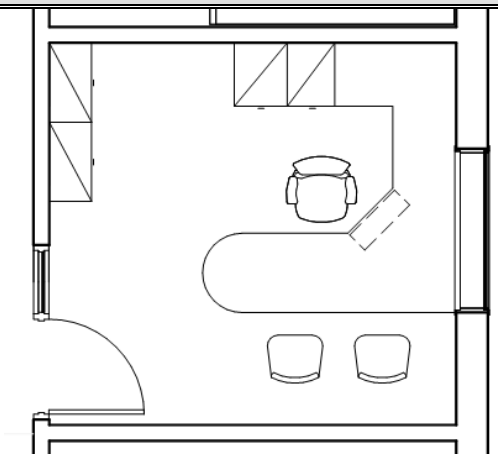
WINDOWS, DOORS & HARDWARE:

Windows:	Yes
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	Sidelight
Electronics:	Yes

NOTES:

- Vision from office to the Clerk's Counter
- Acoustics should be per Court Standards

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	CLERK/COUNTER WORKSTATION

QUANTITY:	2	CEILING HGT.	10'
NET AREA:	120 Each	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	2	VISITORS:	0

FUNCTIONS:

- Space for the public to interface with judicial clerks.

RELATIONSHIP:

- Adjacent the reception area
- Near Clerk of Court office

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- Reception counter. Stand up counter for public side and sit down height for Clerk's side. Counter should comply with ADA. Clerks side should include under counter storage cabinets and drawers with opening for leg space.
- Millwork extends to ceiling with glass partition between public and clerks with document pass through space.
- Work Counter with under counter cabinets/drawers.
- All counter tops should be solid surface

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber/Wood
Floor:	Carpet Tiles
Ceiling:	Acoustical Lay-in Panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	Yes - 1 per work station
Voice/Data:	Yes - 2 per work station
Audio/Video:	Yes - Security camera.
Outlets:	Yes - 4 per work station
Lighting:	Fluorescent with task lighting and occupancy sensor
Other	

EQUIPMENT / FURNITURE:

- System's furniture work stations (2)
- Chairs - (2) at work stations, (3) at public counter
- Computers at each work station
- Printer
- Security Camera with view of public counter

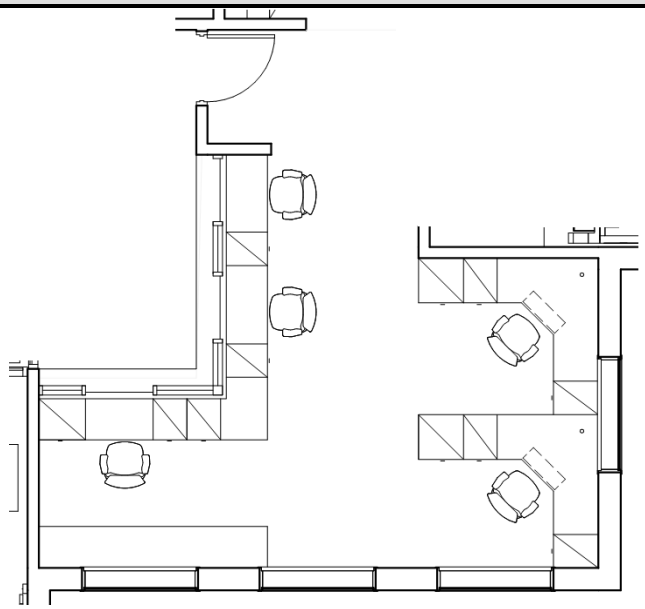
WINDOWS, DOORS & HARDWARE:

Windows:	Yes
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	Comply with Court Standards

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	COUNTER QUEUING

QUANTITY:	1	CEILING HGT.	
NET AREA:	180	SECURITY ZONE:	Public Zone
OCCUPANTS:	0	VISITORS:	4

FUNCTIONS:

- Public queuing at counter

RELATIONSHIP:

- Adjacent to clerk counter workstations
- Adjacent to public lobby/waiting.
- Near main entrance

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- Reception counter. Stand up counter for public side and site down height for the Clerk's side. Counter should comply with ADA.
- Millwork extends to ceiling with glass partition between public and clerks with document pass through space.
- All counter tops should be solid surface.

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Tile

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	Security Camera
Outlets:	Yes - Several
Lighting:	Indirect fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Security camera of public at queuing counter

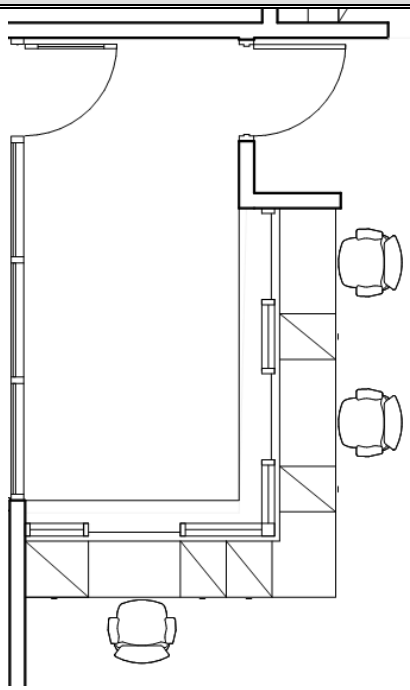
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	Sidelights
Electronics:	None

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	EVIDENCE STORAGE

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	180	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	2

FUNCTIONS:

- Room for evidence of ongoing trials

RELATIONSHIP:

- Adjacent to clerks / court clerk

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- Storage shelving (this could be a equipment/furniture item)
- Lockable cabinets (this could be a equipment/furniture item)

FINISHES / ENVIRONMENT:

Wall:	Painted CMU wall that extends to the deck.
Base:	Rubber
Floor:	Carpet tiles
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes - code minimum
Lighting:	Fluorescent with occupancy sensor
Other	None

EQUIPMENT / FURNITURE:

- Storage shelving (this could be a millwork item)
- Safe
- Lockable cabinets (this could be a millwork item)

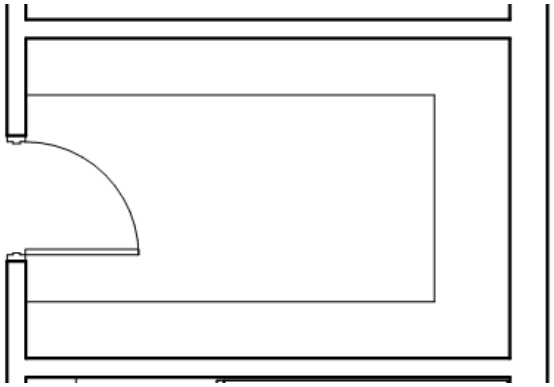
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with court standards
Glazing:	None
Electronics:	Door position indicator / monitor / card reader

NOTES:

- Separate key from the rest of the building
- Secure door
- Solid ceiling

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	FILE - ACTIVE

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	140	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1-2

FUNCTIONS:

- Storage of active files for easy access to current cases

RELATIONSHIP:

- Near clerks

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber
Floor:	Carpet Tiles
Ceiling:	Acoustical Lay-In Panel

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes - code minimum
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Mobile shelving (Provided by Courts). New rails will be by the contractor. Contractor should coordinate with the Owner

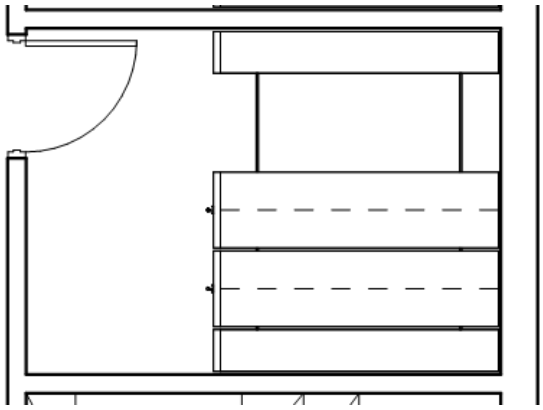
WINDOWN, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	None

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	FILE - INACTIVE

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	140	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1-2

FUNCTIONS:

- Storage of inactive files.

RELATIONSHIP:

- Near clerks

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- Counter for imaging equipment

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber
Floor:	Carpet Tiles
Ceiling:	Acoustical Lay-In Panel

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes - code minimum
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Mobile shelving (Provided by Courts). New rails will be by the contractor. Contractor should coordinate with the Owner
- Imaging equipment

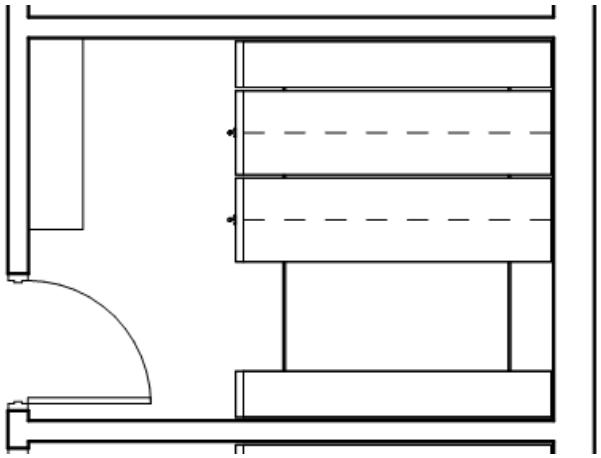
WINDOWN, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	None

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	KITCHENETTE

QUANTITY:	1	CEILING HGT.	8'-10'
NET AREA:	30	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1-2

FUNCTIONS:

- Space for small under counter refrigerator
- Space for microwave and sink.

RELATIONSHIP:

- Easily accessible to all court staff.

SECURITY REQUIREMENTS:

- None

MILLWORK:

- Solid surface counter with under counter storage cabinets/drawers.
- Wall cabinets above counter.

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard.
Plumbing:	Yes. Sink
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes. (2) above counter. (1) below sink. (1) for under counter refrigerator. All outlets GFI.
Lighting:	None
Other	None

EQUIPMENT / FURNITURE:

- Microwave
- Under counter refrigerator

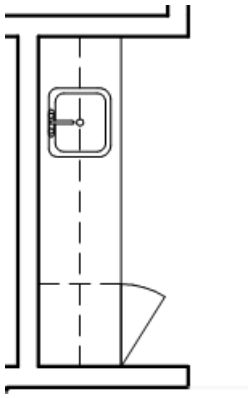
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	None
Hardware:	None
Glazing:	None
Electronics:	None

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE	
DEPT:	CLERICAL OFFICES & SUPPORT
SPACE:	WORK ROOM

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	140	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	2

FUNCTIONS:

- Work/copy room for court staff
- Document assembly
- Storage of copy/printer supplies

RELATIONSHIP:

- Easily accessed by court staff.
- Adjacent the clerks.

SECURITY REQUIREMENTS:

- None

MILLWORK:

- Plastic laminate base and wall cabinets
- All cabinets lockable
- Solid surface counters

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Rubber/Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	Yes. Independent exhaust to roof exhaust fan system
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	Yes. 1
Voice/Data:	Yes. 2
Audio/Video:	None
Outlets:	Yes. Several above counters.
Lighting:	Fluorescent with occupancy sensor
Other	None

EQUIPMENT / FURNITURE:

- 4 in 1 machine

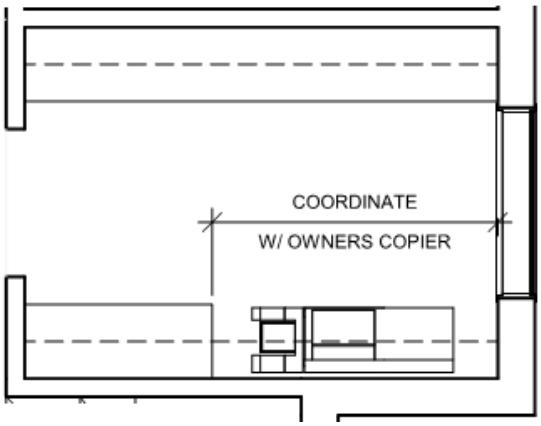
WINDOW, DOORS & HARDWARE:

Windows:	Yes.
Doors:	None
Hardware:	None
Glazing:	None
Electronics:	None

NOTES:

- Coordinate the space needed for the copy machine with the Owner.

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: PROBATION OFFICES

SPACE: PROBATION LOBBY

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	150	SECURITY ZONE:	Public Zone
OCCUPANTS:	1	VISITORS:	2

FUNCTIONS:

- Waiting lobby for probation officer
- Clerical space for probation

RELATIONSHIP:

- Near main lobby

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Tile

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	Yes (2)
Voice/Data:	Yes (4)
Audio/Video:	None
Outlets:	Several
Lighting:	Fluorescent and task lighting. Include occupancy sensor
Other	None

EQUIPMENT / FURNITURE:

- (1) systems furniture work station
- (1) desk chair
- (4) waiting chairs
- File cabinets adequate for needs

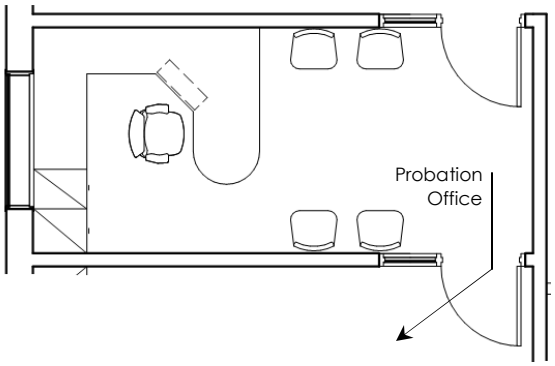
WINDOWS, DOORS & HARDWARE:

Windows:	Yes
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	Comply with Court Standards

NOTES:

- None

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: PROBATION OFFICES

SPACE: PROBATION OFFICER

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	150	SECURITY ZONE:	Public Zone
OCCUPANTS:	1	VISITORS:	2

FUNCTIONS:

- Office for probation functions

EQUIPMENT / FURNITURE:

- Systems furniture
- Desk chair
- Visitor chair (2)
- Computer
- Printer
- File cabinets
- Duress button

RELATIONSHIP:

- Near main lobby
- Adjacent probation lobby

WINDOWS, DOORS & HARDWARE:

Windows:	Yes
Doors:	Quarter sawn oak veneer
Hardware:	Standard
Glazing:	Sidelight
Electronics:	None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board
Base:	Wood
Floor:	Carpet tiles
Ceiling:	Acoustical Lay-In Panels

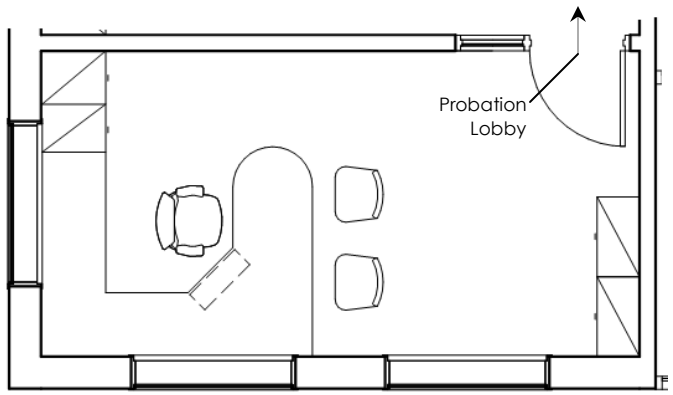
NOTES:

- Acoustics should be in compliance with court standards

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	Yes (1)
Voice/Data:	Yes (2)
Outlets:	Yes. Several
Lighting:	Fluorescent and task lighting. Include occupancy sensors
Other	Duress button

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	HOLDING CELLS
SPACE:	GROUP HOLDING

QUANTITY:	1	CEILING HGT.	9'
NET AREA:	180 s.f.	SECURITY ZONE:	Secure Detainee Zone
OCCUPANTS:	0	VISITORS:	1-8

FUNCTIONS:

- Group holding for juvenile or adult detainees while waiting to appear in court

RELATIONSHIP:

- In secure corridor between sally port and detainee entrance to courtroom.

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Epoxy painted CMU walls
Base:	None
Floor:	Sealed Concrete
Ceiling:	Painted cement plaster

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes - Toilet/Sink Combo
Ventilation:	Yes - Toilet/Sink Combo unit, and floor drains
Climate Ctrl:	Yes. With security grilles
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	Security Camera
Outlets:	None
Lighting:	Secure Fluorescent
Other	Intercom

EQUIPMENT / FURNITURE:

- Concrete bench around perimeter of room
- Toilet/Sink combo unit. Penal quality.
- (1) Security Camera
- Intercom system to bailiff station outside of holding cell

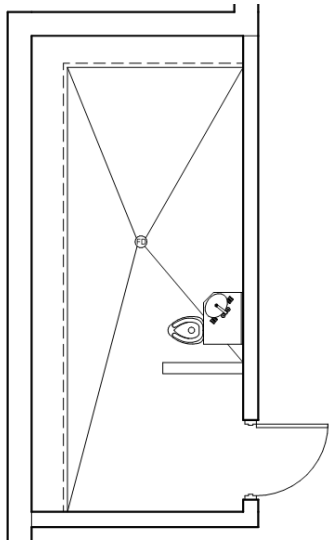
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Steel. Comply with Court Standards
Hardware:	Secure. Comply with Court Standards
Glazing:	Security. Comply with Court Standards
Electronics:	Comply with Court Standards

NOTES:

- Detainee movement through from Sally Port to Holding Cells and Courtroom should be through a secure corridor only. There should be no comingling of detainees with either staff or public.
- Space must be ADA compliant

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	HOLDING CELL
SPACE:	INDIVIDUAL HOLDING

QUANTITY:	2	CEILING HGT.	8'
NET AREA:	50 EA.	SECURITY ZONE:	Secure Detainee Zone
OCCUPANTS:	0	VISITORS:	1

FUNCTIONS:

- Single holding for either male and female adult or juvenile detainees while waiting to appear in court

RELATIONSHIP:

- In secure corridor between sally port and detainee entrance to courtroom.

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Epoxy painted CMU walls
Base:	None
Floor:	Sealed Concrete
Ceiling:	Painted cement plaster

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes - Toilet/Sink Combo
Ventilation:	Yes - Toilet/Sink Combo unit, and floor drains
Climate Ctrl:	Yes. With security grilles
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	Security Camera
Outlets:	None
Lighting:	Secure Fluorescent
Other	Intercom

EQUIPMENT / FURNITURE:

- Concrete bench around perimeter of room
- Toilet/Sink combo unit. Penal quality.
- (1) Security Camera
- Intercom system to bailiff station outside of holding cell

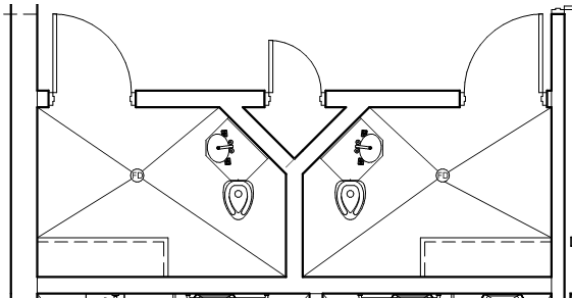
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Steel. Comply with Court Standards
Hardware:	Secure. Comply with Court Standards
Glazing:	Security. Comply with Court Standards
Electronics:	Comply with Court Standards

NOTES:

- Detainee movement through from Sally Port to Holding Cells and Courtroom should be through a secure corridor only. There should be no comingling of detainees with either staff or public.
- Space must be ADA compliant.

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: HOLDING CELLS

SPACE: SECURE VESTIBULES

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	120	SECURITY ZONE:	Secure Detainee Zone
OCCUPANTS:	0	VISITORS:	1-10

FUNCTIONS:

- Secure corridor between sally port and holding cells for movement of detainees without crossing paths with the court staff or public.

RELATIONSHIP:

- Adjacent sally port
- Adjacent holding cells
- Adjacent courtroom

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- Bailiff desk

FINISHES / ENVIRONMENT:

Wall:	Epoxy painted CMU
Base:	Rubber
Floor:	Carpet
Ceiling:	Acoustical tile on gyp. board with limited, lockable access points.

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	None
Ventilation:	None
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	Yes. At bailiff desk.
Voice/Data:	Yes. At bailiff desk.
Audio/Video:	Security Camera
Outlets:	Yes. For cleaning equipment.
Lighting:	Fluorescent
Other	Intercom from bailiff station to holding cells

EQUIPMENT / FURNITURE:

- Intercom from holding cells to bailiff.
- Small desk and chair for bailiff.
- (2) Security Cameras. One at each end of the vestibule

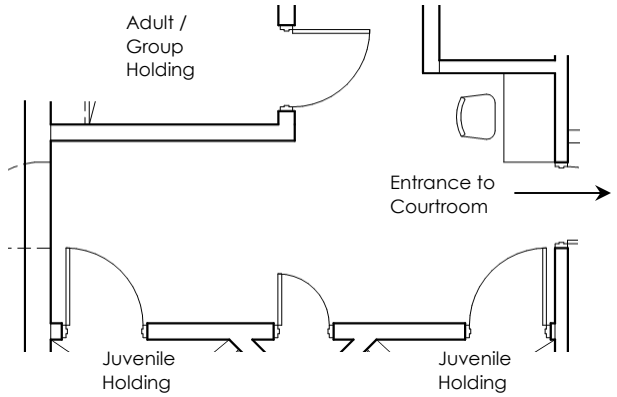
WINDOWS, DOORS & HARDWARE:

Windows:	Security on holding side. Comply with Court Standards
Doors:	(1) H.M., (1) HM with wood veneer on courtroom side
Hardware:	Secure. Comply with Court Standards
Glazing:	None
Electronics:	Comply with Court Standards

NOTES:

- Special attention to sound isolation from courtrooms

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: HOLDING CELLS

SPACE: VEHICLE SALLYPORT

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	360	SECURITY ZONE:	Secure Detainee Zone
OCCUPANTS:	0	VISITORS:	1-8

FUNCTIONS:

- Secure vehicular vestibule for detainees and police to arrive in building
- Gun locker storage
- Parking for (1) vehicle

RELATIONSHIP:

- Easy vehicle access
- Adjacent exterior
- Adjacent to secure corridor and holding cells

SECURITY REQUIREMENTS:

- Comply with Court Standards
- Door control
- Accommodate van transport

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Epoxy painted CMU
Base:	None
Floor:	Sealed concrete
Ceiling:	Painted exposed structure

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Unit heaters
Plumbing:	Yes. Floor drains and grease trap. Hose bib
Ventilation:	Yes. Emissions exhaust
Climate Ctrl:	Yes. Unit heaters
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	Security camera
Outlets:	110 as required
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- 3-4 capacity metal gun lockers
- (1) Security camera to view the entire sally port

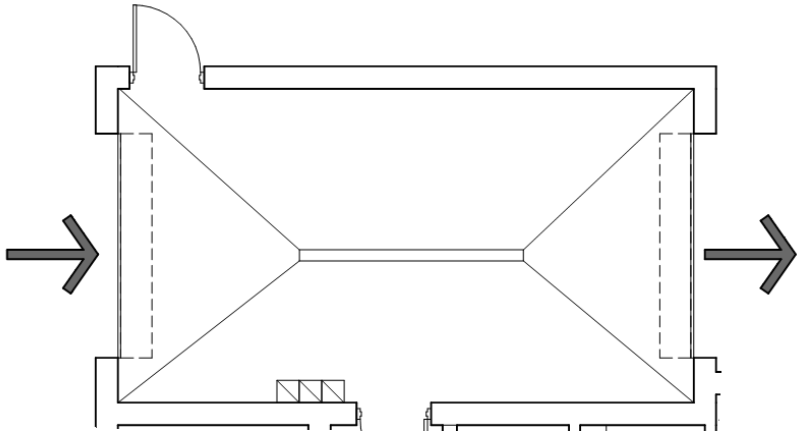
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	(2) steel roll-up, and (2) H.M. man doors
Hardware:	Secure. Comply with Court Standards
Glazing:	None
Electronics:	Secure. Comply with Court Standards

NOTES:

- Provide (3) parking stalls for security vehicles just outside of sally port.

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	OTHER SPACES
SPACE:	COMMUNICATIONS ROOM

QUANTITY:	1	CEILING HGT.	10
NET AREA:	110	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1

FUNCTIONS:

- Room to house phone panels & central collector panels for all communication systems
- House all computer network panels and central wire needs for all location
- House owners equipment racks

RELATIONSHIP:

- In secure zone of the building

SECURITY REQUIREMENTS:

- None

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted plywood over gyp. board
Base:	Rubber
Floor:	Resilient flooring
Ceiling:	Painted open structure

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Split system
Plumbing:	None
Ventilation:	Yes
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	Head end
Voice/Data:	Head end
Audio/Video:	None
Outlets:	Several
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- UPS emergency power
- Equipment racks

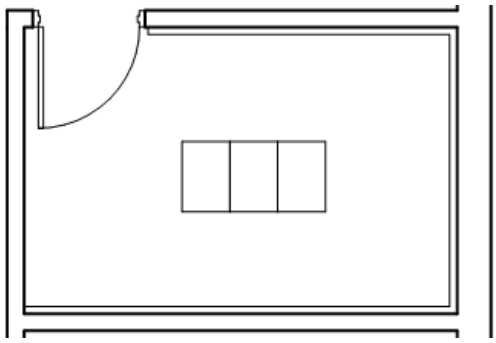
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Comply with Court Standards
Glazing:	None
Electronics:	Comply with Court Standards

NOTES:

- Coordinate arrangement and number of equipment racks required with the Owner.
- UPS emergency power
- Coordinate with ITS
- Cable tray terminates in this room

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	OTHER SPACES
SPACE:	JANITOR

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	80	SECURITY ZONE:	Public Zone or Staff Secure
OCCUPANTS:	0	VISITORS:	1

FUNCTIONS:

- Space to store janitorial equipment and supplies
- space for map and daily cleanup

RELATIONSHIP:

N/A

SECURITY REQUIREMENTS:

- None

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board / Ceramic tile
Base:	Rubber
Floor:	Resilient flooring
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes - Mop sink
Ventilation:	Yes. Independent exhaust to roof exhaust fan system
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	1 GFI outlet
Lighting:	Fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Mop rack
- Shelving
- Ladder to roof hatch may possible be included in this space. If not here, find another suitable location

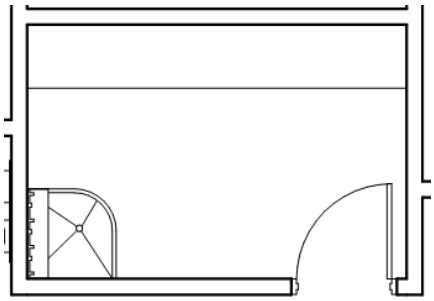
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Standard
Glazing:	None
Electronics:	None

NOTES:

- Locate mop rack such that the mops hang over the sink
- Ceramic tile wainscot at sink - 4' high each side

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	OTHER SPACES
SPACE:	LOBBY / COURT WAITING

QUANTITY:	1	CEILING HGT.	10-15'
NET AREA:	300	SECURITY ZONE:	Public Zone
OCCUPANTS:	0	VISITORS:	10-15

FUNCTIONS:

- Main entry
- Space for public assembly and gathering prior to entering court
- Point of reference to familiarize visitors with building

RELATIONSHIP:

- First space entered by public
- Adjacent clerk's queuing.
- Adjacent courtroom
- Located just after security check point
- Adjacent public restrooms and drinking fountains

SECURITY REQUIREMENTS:

- Comply with Court Standards

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board along with higher end finishes appropriate for the space and building design.
Base:	Wood
Floor:	Nicely finished endurable hard surface. Could be colored sealed concrete, tile, terazzo etc.
Ceiling:	Painted gyp. board and/or Acoustical Panels

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes - Drinking fountains
Ventilation:	None
Climate Ctrl:	Yes
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	Security cameras
Outlets:	Several
Lighting:	Decorative lighting appropriate for the space
Other	None

EQUIPMENT / FURNITURE:

- Waiting seats (10)
- End tables (2)
- (2) security cameras at each end of the lobby

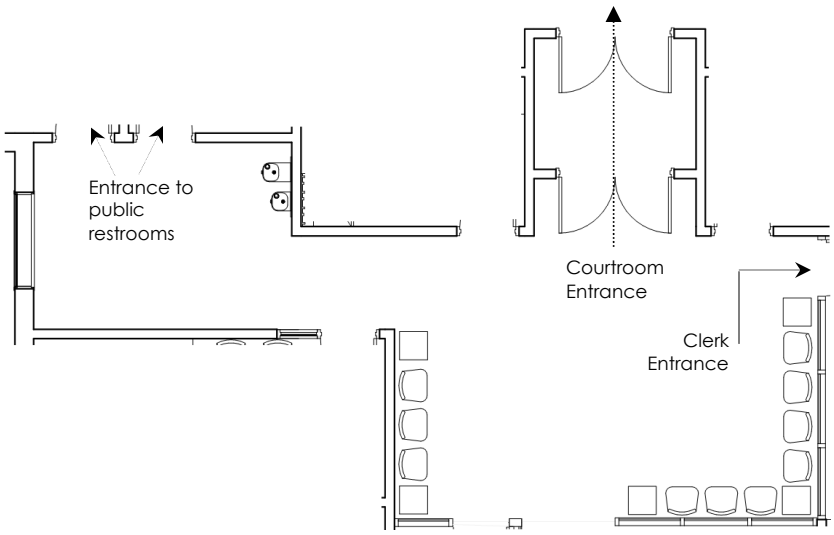
WINDOWS, DOORS & HARDWARE:

Windows:	Yes
Doors:	N/A
Hardware:	N/A
Glazing:	N/A
Electronics:	N/A

NOTES:

- Entry into the lobby should be through a secure checkpoint. Exit from the lobby should be separate from the entry
- High quality finishes in this space
- Adequate amount of daylight
- Avoid blind spots in the lobby from view of the security staff
- Provide sound absorptive materials to minimize noise heard from those in waiting by those in the courtroom

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT:	OTHER SPACES
SPACE:	PUBLIC RESTROOMS

QUANTITY:	1 set	CEILING HGT.	9'
NET AREA:	300	SECURITY ZONE:	Public Zone
OCCUPANTS:	0	VISITORS:	2 each

FUNCTIONS:

- Male and Female restroom functions for the public

RELATIONSHIP:

- Adjacent lobby

SECURITY REQUIREMENTS:

- None

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Ceramic tile wainscot / Painted gyp. board
Base:	Coved ceramic tile
Floor:	Ceramic mosaic tile
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes. W.C. / Lavatories / Urinals / Floor Drain
Ventilation:	Yes. Exhaust to roof exhaust fan system
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Yes. GFI per code minimums
Lighting:	Fluorescent with occupancy sensor
Other	None

EQUIPMENT / FURNITURE:

- Toilet / Urinal partitions
- Toilet room accessories

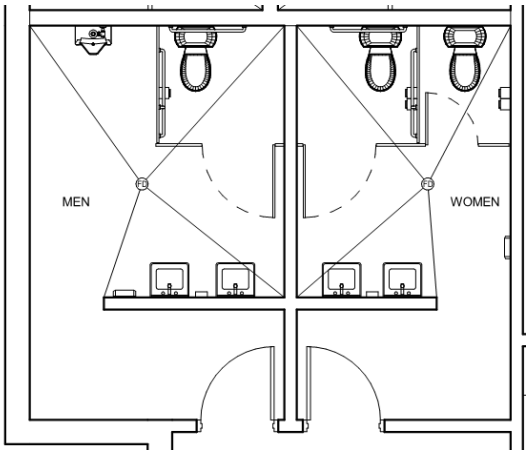
WINDOW, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Standard
Glazing:	None
Electronics:	ADA door operators

NOTES:

- Must be fully ADA accessible

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: OTHER SPACES

SPACE: SECURITY CHECKPOINT

QUANTITY:	1	CEILING HGT.	10'
NET AREA:	160 (not including entrance and exit vestibules)	SECURITY ZONE:	Public Zone
OCCUPANTS:	2	VISITORS:	5

FUNCTIONS:

- Space at front doors / main entry where full-time security guard and conveyor/x-ray activities take place

RELATIONSHIP:

- Main access to building
- Near main lobby.
- Full vision of main lobby without any blind spots of use security cameras.

SECURITY REQUIREMENTS:

- Magnetometer
- Security Station
- Security Officer's can watch and hear what's happening in the courtroom when the court duress button is pushed
- Comply with Court Standards

MILLWORK:

- Built-in secure check point desk.

FINISHES / ENVIRONMENT:

Wall:	Painted gyp. board / Aluminum-glass
Base:	Wood
Floor:	Nicely finished endurable hard surface. Could be colored sealed concrete, tile, terrazzo etc.
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes. Standard for building entry. None in the vestibule
Plumbing:	None
Ventilation:	None
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	Yes
Voice/Data:	Yes - 2
Audio/Video:	Yes - Security camera monitors for covering entire building including front entrance. (1) camera in vestibule
Outlets:	Yes - Adequate amount for the required equipment in this space
Lighting:	Yes. Fluorescent
Other	Response to duress button on court days

EQUIPMENT / FURNITURE:

- Magnetometer (by owner)
- Conveyor / x-ray machine (by owner)
- (2) chairs
- Table(s)
- Security camera monitors (At least (1) 32" scrollable)
- Audio / Video connection to courtroom when in duress.
- Gun lockers

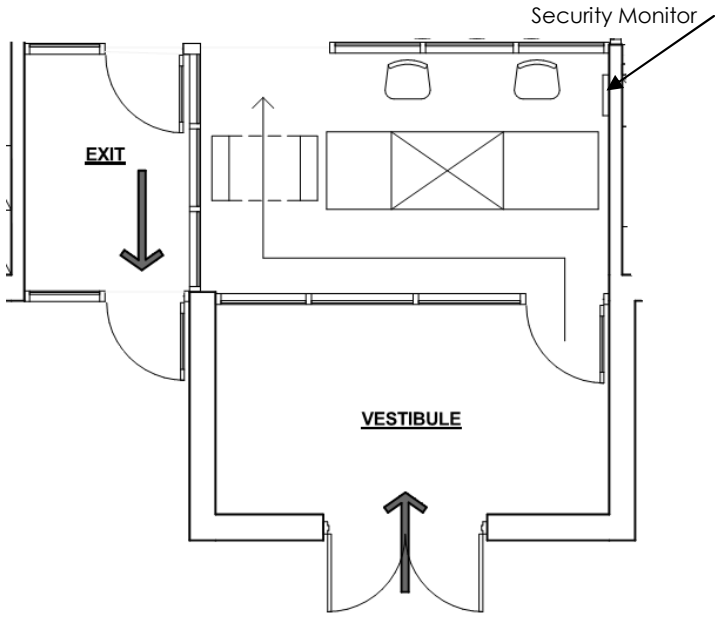
WINDOWS, DOORS & HARDWARE:

Windows:	Determined by design
Doors:	Aluminum & glass
Hardware:	Comply with Court Standards
Glazing:	Yes
Electronics:	Comply with Court Standards. ADA door operator for inside & outside vestibule doors.

NOTES:

- Part of main lobby space
- Includes exit vestibule
- Glass separation of Entrance and Exit vestibules
- Provide ample daylight
- The security station should be shaded from direct sunlight to avoid impacting visibility
- Security monitor should be a minimum of 32" with the ability to scroll through all building security cameras. Monitor should be located such that only the security staff could view the cameras
- All duress buttons throughout the building alert the security officers

SPACE GRAPHIC:



JUAB COUNTY COURTHOUSE

DEPT: OTHER SPACES

SPACE: STAFF RESTROOMS

QUANTITY:	1 set	CEILING HGT.	9'
NET AREA:	50 s.f. each	SECURITY ZONE:	Secure Staff Zone
OCCUPANTS:	0	VISITORS:	1 each

FUNCTIONS:

- Male and Female restroom functions for employees only

RELATIONSHIP:

- Locate in an area that is convenient for the staff.
- Locate in secure zone of the building

SECURITY REQUIREMENTS:

- None

MILLWORK:

- None

FINISHES / ENVIRONMENT:

Wall:	Ceramic tile wainscot / Painted gyp. board
Base:	Coved ceramic tile
Floor:	Ceramic mosaic tile
Ceiling:	Painted gyp. board

MECHANICAL / ELECTRICAL:

MECHANICAL:	
HVAC:	Yes
Plumbing:	Yes. W.C. / Lavatories / Urinals / Floor Drains
Ventilation:	Exhaust to roof exhaust system
Climate Ctrl:	None
ELECTRICAL:	
Telephone:	None
Voice/Data:	None
Audio/Video:	None
Outlets:	Minimal GFI
Lighting:	Strip fluorescent
Other	None

EQUIPMENT / FURNITURE:

- Toilet room accessories

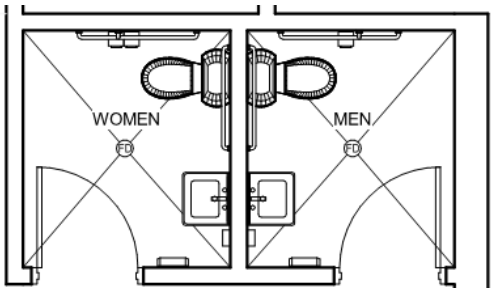
WINDOWS, DOORS & HARDWARE:

Windows:	None
Doors:	Quarter sawn oak veneer
Hardware:	Standard
Glazing:	None
Electronics:	None

NOTES:

- Must be fully ADA accessible

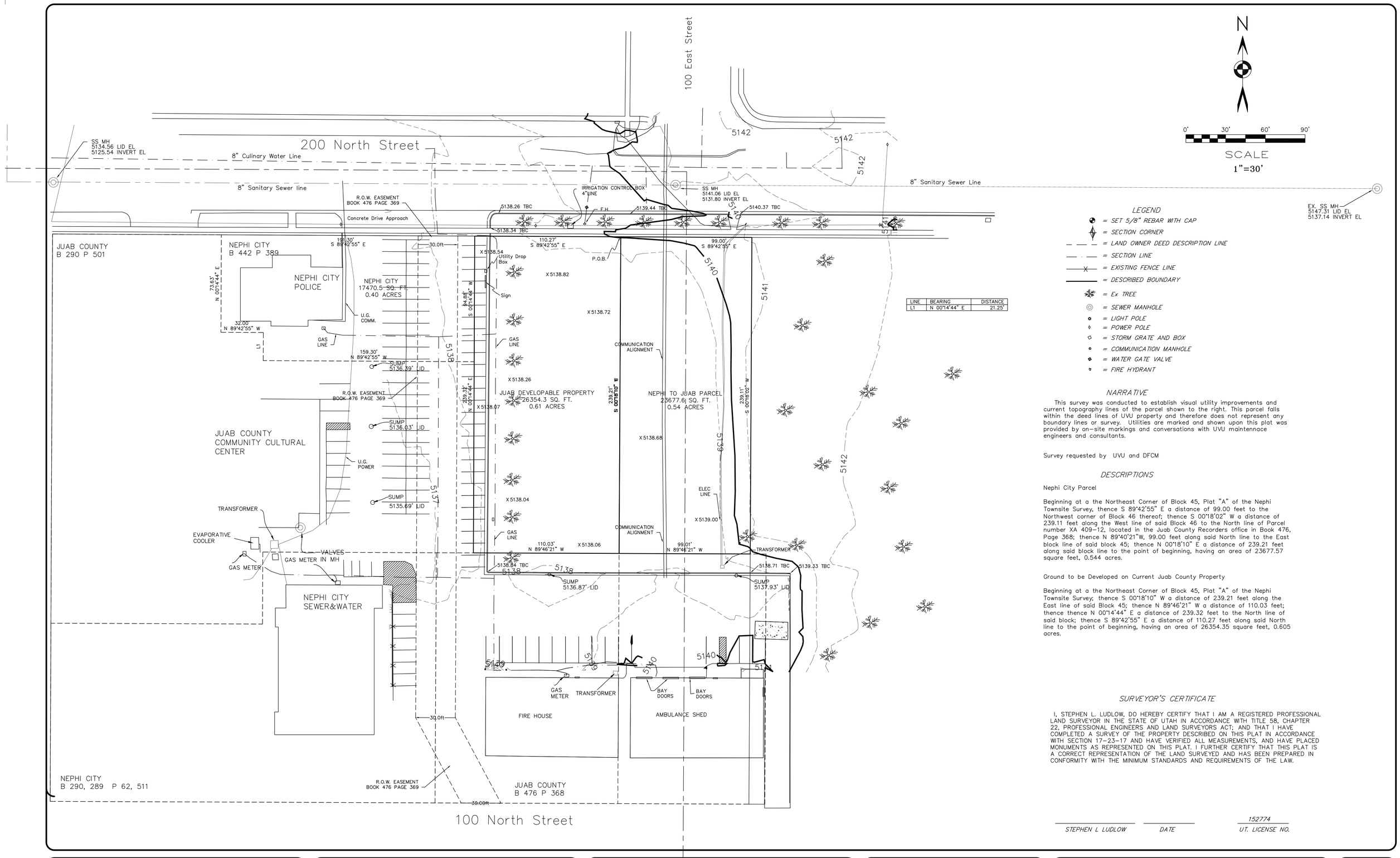
SPACE GRAPHIC:



5.1 COST ANALYSIS & SCHEDULE

Refer to DFCM's advertised Request for Proposal.

APPENDIX A - ALTA SURVEY



LINE	BEARING	DISTANCE
L1	N 00°14'44" E	21.25'

LEGEND

- = SET 5/8" REBAR WITH CAP
- = SECTION CORNER
- = LAND OWNER DEED DESCRIPTION LINE
- = SECTION LINE
- = EXISTING FENCE LINE
- = DESCRIBED BOUNDARY
- = Ex TREE
- = SEWER MANHOLE
- = LIGHT POLE
- = POWER POLE
- = STORM GRATE AND BOX
- = COMMUNICATION MANHOLE
- = WATER GATE VALVE
- = FIRE HYDRANT

NARRATIVE

This survey was conducted to establish visual utility improvements and current topography lines of the parcel shown to the right. This parcel falls within the deed lines of UVU property and therefore does not represent any boundary lines or survey. Utilities are marked and shown upon this plat was provided by on-site markings and conversations with UVU maintennace engineers and consultants.

Survey requested by UVU and DFCM

DESCRIPTIONS

Nephi City Parcel

Beginning at a the Northeast Corner of Block 45, Plat "A" of the Nephi Townsite Survey, thence S 89°42'55" E a distance of 99.00 feet to the Northwest corner of Block 46 thereof; thence S 00°18'02" W a distance of 239.11 feet along the West line of said Block 46 to the North line of Parcel number XA 409-12, located in the Juab County Recorders office in Book 476, Page 368; thence N 89°40'21"W, 99.00 feet along said North line to the East block line of said block 45; thence N 00°18'10" E a distance of 239.21 feet along said block line to the point of beginning, having an area of 23677.57 square feet, 0.544 acres.

Ground to be Developed on Current Juab County Property

Beginning at a the Northeast Corner of Block 45, Plat "A" of the Nephi Townsite Survey; thence S 00°18'10" W a distance of 239.21 feet along the East line of said Block 45; thence N 89°46'21" W a distance of 110.03 feet; thence thence N 00°14'44" E a distance of 239.32 feet to the North line of said block; thence S 89°42'55" E a distance of 110.27 feet along said North line to the point of beginning, having an area of 26354.35 square feet, 0.605 acres.

SURVEYOR'S CERTIFICATE

I, STEPHEN L. LUDLOW, DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS ACT; AND THAT I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17 AND HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THIS PLAT. I FURTHER CERTIFY THAT THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND SURVEYED AND HAS BEEN PREPARED IN CONFORMITY WITH THE MINIMUM STANDARDS AND REQUIREMENTS OF THE LAW.

STEPHEN L LUDLOW | DATE | 152774 UT. LICENSE NO.

REVISIONS
1. 4.
2. 5.
3. 6.

PROJECT NO.: LE 2792 FIELD SURVEYOR: M. PIERCE
DATE: SEPTEMBER 2012 DRAWN: D. PENROD
SCALE: 1" = 30' CHECKED: B. LUDLOW

LUDLOW ENGINEERING & LAND SURVEYING
Subdivisions * Boundary Surveys * City Lot Surveys * ALTA Surveys
Claim Surveys * Control Networks * Construction Surveys * Topography
Civil * Sewer & Water Design * Residential & Commercial Structure
Subdivision Design * Site Plans * Road Design
645 North Main, Nephi, Utah 84648 (435) 623-0897 FAX (435) 623-2381

Current Improvement Survey

SURVEY FOR
DFCM / JUAB COUNTY
JUAB COUNTY, UTAH
SEPTEMBER 2012

SHEET 1 OF 1 SHEETS

APPENDIX B - GEOTECHNICAL STUDY

Earthtec Engineering, Inc.

133 North 1330 West
Orem, Utah - 84057
Phone (801) 225-5711
Fax (801) 225-3363

1596 W. 2650 S. #108
Ogden, Utah - 84401
Phone (801) 399-9516
Fax (801) 399-9842

GEOTECHNICAL STUDY
JUAB COUNTY BUILDING
100 EAST 200 NORTH
NEPHI, UTAH

Project No. 121454

October 25, 2012

Prepared For:

Mr. Brian Bales
DFCM
4110 State Office Building
Salt Lake City, UT 84114

Prepared By:

EARTHTEC ENGINEERING, INC.
Orem Office

Sterling M. Howell
Staff Engineering Geologist

William G. Turner, P.E.
Senior Geotechnical Engineer

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1.0 EXECUTIVE SUMMARY

This report presents the results of our geotechnical study for the proposed Juab County Building in Nephi, Utah. We understand the proposed building, as currently planned, will consist of a one-story structure, possibly including a parking lot and drive areas.

The field exploration consisted of drilling a total of six test holes to depths of about 16½ to 21½ feet below the existing ground surface. We did not encounter groundwater within the depths explored. The subsurface soils we encountered generally consisted of topsoil (sod) overlying clay, followed by various layers of silt, silty clay, sand and gravel. The topsoil/sod should be removed beneath the entire building footprint and beneath exterior flatwork and pavement areas. The native silt/clay soils have a negligible potential for collapse under increased moisture and anticipated load conditions. The silt and sand layers have a low potential for liquefaction during a moderate to large earthquake event.

Based on the results of our field exploration, laboratory testing and engineering analyses, it is our opinion that the subject site is suitable for the proposed development, provided the recommendations presented herein are followed and implemented during design and construction. Conventional strip and spread footings may be used to support the structure, with foundations placed entirely on undisturbed, uniform native clay/silt soils or entirely on a minimum 18 inches of properly placed and compacted structural fill.

This executive summary provides a general synopsis of our recommendations. Details of our findings, conclusions and recommendations are provided within the body of this report. Failure to consult with Earthtec regarding any changes made during design and/or construction of the project from those discussed above in Section 3.0 relieves Earthtec from any liability arising from changed conditions at the site. We also strongly recommend that Earthtec observe the building excavations to verify the adequacy of our recommendations presented herein, and that Earthtec perform materials testing and special inspections for this project to provide consistency in implementing our recommendations during construction.

2.0 INTRODUCTION

This report presents the results of our geotechnical study for the proposed Juab County Building to be located at approximately 100 East 200 North in Nephi, Utah. The general location of the site is shown on Figure 1, *Vicinity Map*, at the end of this report.

The purposes of this study were to evaluate the subsurface soil conditions at the site, assess the engineering characteristics of the subsurface soils, and provide geotechnical recommendations for general site grading and the design and construction of foundations, concrete floor slabs, miscellaneous concrete flatwork, and asphalt paved parking/drive areas. The scope of work completed for this study included field reconnaissance, subsurface exploration, field and laboratory soil testing, geotechnical engineering analysis, and the preparation of this report.

3.0 PROPOSED CONSTRUCTION

We understand that the proposed structure will be a one-story office building. The building will likely be founded on spread footings with slab on grade floors established at or near existing site grades. We have based our recommendations in this report on the assumption that foundation loads for the proposed structures will not exceed 6,000 pounds per linear foot for bearing walls, 60,000 pounds for column loads, and 200 pounds per square foot for floor slabs. If structural loads will be greater our office should be notified so that we may review our recommendations and, if necessary, make modifications.

In addition to the construction described above, we anticipate that:

- Exterior concrete flatwork will be placed in the form of curb, gutter, and sidewalks,
- Utilities will be installed to service the proposed buildings, and
- Asphalt paved parking and drive areas will be constructed.

4.0 GENERAL SITE DESCRIPTION

At the time of our subsurface exploration the site consisted of a grass sports field. The ground surface appeared to slope slightly downward to the west. The lot was bounded on the

north by 200 East Street, on the east by other grass sport fields, on the south by an existing office building, and on the west by a parking lot and the existing Juab County Building.

5.0 SUBSURFACE EXPLORATION

Under the direction of a qualified member of our geotechnical staff, subsurface explorations were conducted at the site on October 11, 2012 by drilling six exploratory test holes to depths of about 16½ to 21½ feet below the existing ground surface using a truck-mounted hydraulic drill rig. The approximate locations of the test holes are shown on Figure 2, *Approximate Locations of Test Holes*. Graphical representations and detailed descriptions of the soils encountered are shown on Figures 3 through 8, *Test Hole Log* at the end of this report. The stratification lines shown on the logs represent the approximate boundary between soil units; the actual transition may be gradual. Due to potential natural variations inherent in soil deposits, care should be taken in interpolating between and extrapolating beyond exploration points. A key to the symbols and terms on the logs is presented on Figure 9, *Legend*.

Samples of the subsurface soils were collected in the test holes at depth intervals of approximately 2½ to 5 feet. Relatively undisturbed samples were collected by pushing thin-walled "Shelby" tubes into undisturbed soils below the augers. Disturbed samples were collected with a 1⅜ inch inside diameter split spoon sampler. The split spoon sampler was driven 18 inches into undisturbed soil with a 140 pound hammer free-falling through a distance of 30 inches. The blows required to drive the sampler through the final 12 inches of penetration is called the "N-value" or "blow count" (uncorrected for overburden and hammer energy) and is recorded as "blows per foot" on the attached test hole logs at the respective sample depths. The blows for each 6 inch interval (or less) are noted on the logs when more than 50 blows per 6 inches (or less) of sampler driving were achieved. The blow count provides a reasonable indication of the in-place relative density of sandy soils, but provides only a limited indication of the relative stiffness of cohesive (clayey) materials, since the penetration resistance for these soils is a function of the moisture content. In gravelly soils, the blow count may be higher than it otherwise would be, particularly when one or more gravel particles are larger than the sampler diameter.

The soil samples collected were classified by visual examination in the field following the guidelines of the Unified Soil Classification System (USCS). The samples were transported to our Orem, Utah laboratory where they will be retained for 30 days following the date of this report and then discarded, unless a written request for additional holding time is received prior to the 30 day limit.

6.0 LABORATORY TESTING

Representative soil samples collected during our field exploration were tested in the laboratory to assess pertinent engineering properties and to aid in refining field classifications, if needed. Tests performed included natural moisture content and dry density tests, liquid and plastic limits determinations, mechanical (partial) gradation analyses, and one-dimensional consolidation tests. The following table summarizes the laboratory test results, which are also included on the attached test hole logs at the respective sample depths, and on Figures 10 through 13, *Consolidation-Swell Test.*

Table 1: Laboratory Test Results

Test Hole No.	Depth (ft.)	Natural Moisture (%)	Natural Dry Density (pcf)	Atterberg Limits		Grain Size Distribution (%)			Soil Type**
				Liquid Limit	Plasticity Index	Gravel (+ #4)	Sand	Silt/Clay (- #200)	
TH-2	7½	5	---	---	---	27	59	14	SM
TH-2	10	17	111	32	16	---	---	---	CL
TH-3	5	11	108	18	Non-Plastic	---	---	---	ML
TH-4	7½	29	93	29	9	---	---	---	CL
TH-5	5	9	---	---	---	35	39	26	SM
TH-6	15	16	113	22	6	---	---	---	CL-ML

**Detailed descriptions of the soils encountered are presented on the test hole logs

As part of the consolidation test procedure, water was added to the samples to assess moisture sensitivity when the samples were loaded to an equivalent pressure of approximately 1,000 psf. This part of the consolidation test indicated negligible potential (less than ½ percent) for collapse (settlement) under increased moisture and anticipated load conditions.

7.0 SUBSURFACE CONDITIONS

7.1 Soil Types

On the surface of the site, we encountered topsoil (sod) which we estimated to extend about 6 inches in depth at the test hole locations. Below the topsoil we encountered Lean Clay with sand (CL) followed by various layers of Sandy Silty Clay (CL-ML), Sandy Silt to Silt with sand (ML), Silty Sand with/without gravel (SM) overlying Silty Gravel with sand (GM), extending to the maximum depths explored of about 16½ to 21½ feet below the existing ground surface. Based on the blow counts obtained during field exploration, the clay/silt soils ranged from soft to very stiff in consistency and the sand/gravel soils had a relative density varying from loose to dense. Consolidation test results indicate the clay/silt soils are slightly to moderately compressible and have a negligible potential for collapse (settlement).

7.2 Groundwater Conditions

Groundwater was not encountered during our field exploration to the maximum depths explored. Note that groundwater levels will fluctuate in response to the season, precipitation and snow melt, irrigation, and other on and off-site influences. Quantifying these fluctuations would require long term monitoring.

8.0 SITE GRADING

8.1 General Site Grading

All surface vegetation and unsuitable soils (such as topsoil, organic soils, undocumented fill, soft, loose, or disturbed native soils, and any other inapt materials) should be removed from below foundation, floor slab, and exterior concrete flatwork. We encountered topsoil/sod on the surface of the site which we estimated to extend about 6 inches below the existing ground surface. The topsoil (including soil with roots larger than about ¼ inch in diameter) should be completely removed, even if found to extend deeper, along with any other unsuitable soils that may be encountered.

Fill placed over large areas, even if only a few feet in depth, can cause consolidation in the underlying native soils resulting in settlement of the fill. If more than 3 feet of grading fill

will be placed above the existing surface (to raise site grades), Earthtec should be notified so that we may assess potential settlement and make additional recommendations if needed. Such recommendations will likely include placing the fill several weeks (or possibly more) prior to construction to allow settlement to occur.

8.2 Temporary Excavations

Temporary excavations that are less than 5 feet in depth and above groundwater should have side slopes no steeper than ½H:1V (Horizontal:Vertical). Temporary excavations extending up to 10 feet in depth should not be made steeper than 1H:1V. If unstable conditions or groundwater seepage are encountered, flatter slopes, shoring, or bracing may be required. All excavations should be conducted in accordance with all applicable OSHA[1] requirements.

8.3 Fill Material Composition

The existing native clay/silt and sand soils within the upper 5 feet do not appear suitable for use as structural fill. Excavated soils, including clays and silts, may be stockpiled for use as fill in landscape areas. We recommend that a professional engineer or geologist from Earthtec verify that the structural fill to be used on this project meets our requirements, given below.

Structural fill is defined as fill material that will ultimately be subjected to any kind of structural loading, such as those imposed by footings, floor slabs, pavement, etc. We recommend that structural fill consist of imported sandy/gravelly soils meeting the following requirements:

Table 2: Structural Fill Recommendations

Sieve Size/Other	Percent Passing (by weight)
4 inches	100
3/4 inches	70 – 100
No. 4	40 – 80
No. 40	15 – 50
No. 200	0 – 15

[1] OSHA Health And Safety Standards, Final Rule, CFR 29, part 1926.

Sieve Size/Other	Percent Passing (by weight)
Liquid Limit	35 maximum
Plasticity Index	15 maximum

In some situations, particles larger than 4 inches and/or more than 30 percent coarse gravel may be acceptable, but would likely make compaction more difficult and/or significantly reduce the possibility of successful compaction testing. Consequently, more strict quality control measures than normally used may be required, such as using thinner lifts and increased or full time observation of fill placement.

We recommend that utility trenches below any structural load be backfilled using structural fill. Note that most local governments and utility companies require that Type A-1 (AASHTO classification A-1-a or A-1-b) soils be used as backfill above utilities in certain areas. In other areas or situations, utility trenches may be backfilled with the native soils, but the contractor should be aware that native clayey/silty soils (as observed in the explorations) may be time consuming to compact due to potential difficulties in controlling the moisture content needed to obtain optimum compaction. All backfill soil should have a maximum particle size of 4 inches, a maximum Liquid Limit of 35 and a maximum Plasticity Index of 15.

Where needed, we recommend that free draining granular material (clean sand and/or gravel) meet the following requirements:

Table 3: Free-Draining Fill Recommendations

Sieve Size/Other	Percent Passing (by weight)
3 inches	100
No. 10	0 – 25
No. 40	0 – 15
No. 200	0 – 5
Plasticity Index	Non-plastic

Three inch minus washed rock (sometimes called river rock or drain rock) and pea gravel materials usually meet these requirements and may be used as free draining fill. If free draining fill will be placed adjacent to soil containing a significant amount of sand or

silt/clay, precautions should be taken to prevent the migration of fine soil into the free draining fill. Such precautions should include either placing a filter fabric between the free draining fill and the adjacent material, or using a well graded, clean filtering material approved by the geotechnical engineer.

8.4 Fill Placement and Compaction

The thickness of each lift should be appropriate for the compaction equipment that is used. We recommend a maximum lift thickness of 4 inches for hand operated equipment, 6 inches for most "trench compactors" and 8 inches for larger rollers, unless it can be demonstrated by in-place density tests that the required compaction can be obtained throughout a thicker lift. The full thickness of each lift of structural fill placed should be compacted to at least the following percentages of the maximum dry density, as determined by ASTM D1557:

- In landscape and other areas not below structurally loaded areas: 90%
- Less than 5 feet of fill below structurally loaded areas: 95%
- Between 5 and 10 feet of fill below structurally loaded areas: 98%

If more than 10 feet of fill will be placed, Earthtec should be consulted since settlement of the fill itself could exceed 1 inch. Generally, placing and compacting fill at a moisture content within ±2 percent of the optimum moisture content, as determined by ASTM D1557, will facilitate compaction. Typically, the further the moisture content is from optimum the more difficult it will be to achieve the required compaction.

Fill should be tested frequently during placement and we recommend early testing to demonstrate that placement and compaction methods are achieving the required compaction. The contractor is responsible to ensure that fill materials and compaction efforts are consistent so that tested areas are representative of the entire fill.

8.5 Stabilization Recommendations

Near surface layers of clay/silt were encountered during our field exploration. These soils may rut and pump during grading and construction. The likelihood of rutting and/or pumping, and the depth of disturbance, is proportional to the moisture content in the soil, the

load applied to the ground surface, and the frequency of the load. Consequently, rutting and pumping can be minimized by avoiding concentrated traffic, minimizing the load applied to the ground surface by using lighter equipment and/or partial loads, by working in dry times of the year, or by providing a working surface for equipment.

During grading the soil in any obvious soft spots should be removed and replaced with granular material. If rutting or pumping occurs traffic should be stopped in the area of concern. The soil in rutted areas should be removed and replaced with granular material. In areas where pumping occurs the soil should either be allowed to sit until pore pressures dissipate (several hours to several days) and the soil firms up, or be removed and replaced with granular material. Typically, we recommend removal to a minimum depth of 24 inches.

For granular material, we recommend using angular well-graded gravel, such as pit run, or crushed rock with a maximum particle size of four inches. We suggest that the initial lift be approximately 12 inches thick and be compacted with a static roller-type compactor. A finer granular material such as sand, gravelly sand, sandy gravel or road base may also be used. We recommend that the fines content (percent passing the No. 200 sieve) be less than 15 percent, the liquid limit be less than 30, and the plasticity index be less than 10.

Using a geosynthetic fabric, such as Mirafi 500X or equivalent, may also reduce the amount of material required and avoid mixing of the granular material and the subgrade. If a fabric is used, following removal of disturbed soils and water, the fabric should be placed over the bottom and up the sides of the excavation (to the top of the stabilization fill). The fabric should be placed in accordance with the manufacturer's recommendations, including proper overlaps, and equipment should not be driven directly on the fabric. The granular material should then be placed over the fabric in compacted lifts. Again, we suggest that the initial lift be approximately 12 inches thick and be compacted with a static roller-type compactor.

9.0 SEISMIC CONSIDERATIONS

9.1 Faulting

Based upon published geologic maps[2], no active faults traverse through or immediately adjacent to the site and the site is not located within local fault study zones. The nearest mapped fault trace is the Wasatch Fault located about 1 mile southeast of the site.

9.2 Liquefaction Potential

Liquefaction can occur when saturated subsurface soils below groundwater lose their intergranular strength due to an increase in soil pore water pressures during a dynamic event such as an earthquake. Loose, saturated sands are most susceptible to liquefaction, but some loose, saturated gravels and relatively sensitive silt to low-plasticity silty clay soils can also liquefy during a seismic event. Subsurface soils were composed of silt/clay with some thin layers of loose to medium dense sandy soils. Given that the soils encountered were unsaturated, it is our opinion that the liquefaction potential at the site is low.

9.3 Seismic Design

The State of Utah has adopted the 2009 International Building Code (IBC) for seismic design and the structure should be designed in accordance with Chapter 16 of the IBC. The Site Class definitions in the IBC are based upon the soil properties in the upper 100 feet of the soil profile. These properties are determined from sampler blow counts, undrained shear strength values, and/or shear velocity measurements. The code states, "When the soil properties are not known in sufficient detail to determine the site class, Site Class D shall be used unless the building official or geotechnical data determines that Site Class E or F soil is likely to be present at the site." Considering our experience in the vicinity of the site and based on the results of our field exploration, we recommend using Site Class E.

The site is located at approximately 39.711 degrees latitude and -111.834 degrees longitude. Using Site Class E, the design spectral response acceleration parameters are given in the table below.

[2] Hecker, S., 1993, Quaternary Faults and Folds, Utah, Utah Geologic Survey, Bulletin 127.

Table 4: Design Accelerations

S_S	F_a	S_{MS}	S_{DS}
1.065 g	1.074	1.144 g	0.763 g
S_1	F_v	S_{M1}	S_{D1}
0.397 g	1.607	0.637 g	0.425 g

S_S = Mapped spectral acceleration for short periods
S_1 = Mapped spectral acceleration for 1-second period
$S_{DS} = \frac{2}{3}S_{MS} = \frac{2}{3}(F_a \cdot S_s) = 5\%$ damped design spectral response acceleration for short periods
$S_{D1} = \frac{2}{3}S_{MS} = \frac{2}{3}(F_v \cdot S_1) = 5\%$ damped design spectral response acceleration for 1-second period

10.0 FOUNDATIONS

10.1 General

The foundation recommendations presented in this report are based on the soil conditions encountered during our field exploration, the results of laboratory testing of samples of the native soils, the site grading recommendations presented in this report, and the foundation loading conditions presented in Section 3.0, *Proposed Construction*, of this report. If loading conditions are significantly different, Earthtec should be notified so that we can re-evaluate our design parameters and estimates (higher loads may cause more settlement), and to provide additional recommendations if necessary.

Conventional strip and spread footings may be used to support the proposed building after appropriate removals as outlined in Section 8.1. Foundations should not be installed on topsoil, undocumented fill, debris, combination soils, organic soils, frozen soil, or in ponded water. If foundation soils become disturbed during construction they should be removed or recompacted.

10.2 Strip/Spread Footings

We recommend that conventional strip and spread foundations be constructed entirely on firm, undisturbed, uniform soils (i.e. completely on silt/clay soils, or completely on sand soils, etc.), or entirely on a minimum 18 inches of structural fill placed on native soils. For foundation design we recommend the following:

- Footings placed directly on undisturbed, uniform native soils may be designed using a maximum allowable bearing capacity of 1,500 pounds per square foot. Footings founded on a minimum 18 inches of structural fill may be designed using a maximum allowable bearing capacity of 2,000 pounds per square foot. These bearing pressures may be increased by 33 percent for transient loadings.

- Continuous and spot footings should be uniformly (non-eccentrically) loaded and should have a minimum width of 20 and 30 inches, respectively.

- Exterior footings should be placed below frost depth which is determined by local building codes. Generally 30 inches of cover is adequate for this site. Interior footings, not subject to frost, should extend at least 18 inches below the lowest adjacent grade.

- Foundation walls on continuous footings should be well reinforced. We suggest a minimum amount of steel equivalent to that required for a simply supported span of 12 feet.

- The bottom of footing excavations should be compacted with at least 4 passes of an approved non-vibratory roller prior to erection of forms or placement of structural fill to densify soils that may have been loosened during excavation and to identify soft spots. If soft areas are encountered, they should be stabilized as recommended in Section 8.5.

- Footing excavations should be observed by the geotechnical engineer prior to beginning footing construction to evaluate whether suitable bearing soils have been exposed and whether excavation bottoms are free of loose or disturbed soils.

- Structural fill used below foundations should extend laterally a minimum of 6 inches for every 12 vertical inches of structural fill placed. For example, if 18 inches of structural fill are required to bring the excavation to footing grade, the structural fill should extend laterally a minimum of 9 inches beyond the edge of the footings on both sides.

10.3 Estimated Settlements

If the proposed foundations are properly designed and constructed using the parameters provided above, we estimate that total settlements for non-earthquake conditions will not exceed 1 inch and differential settlements will be one-half of the total settlement over a 25-foot length of foundation. Additional settlement could occur during an earthquake due to ground shaking, if more than 3 feet of grading fill is placed above the existing ground surface, and/or if foundation soils are allowed to become wetted.

10.4 Lateral Earth Pressures

Below grade walls act as soil retaining structures and should be designed to resist pressures induced by the backfill soils. The lateral pressures imposed on a retaining structure are dependant on the rigidity of the structure and its ability to resist rotation. Most retaining walls that can rotate or move slightly will develop an active lateral earth pressure condition. Structures that are not allowed to rotate or move laterally, such as subgrade basement walls, will develop an at-rest lateral earth pressure condition. Lateral pressures applied to structures may be computed by multiplying the vertical depth of backfill material by the appropriate equivalent fluid density given below. Any surcharge loads in excess of the soil weight applied to the backfill should be multiplied by the appropriate lateral pressure coefficient and added to the soil pressure. Resultant forces occur at about 1/3 the height of the wall for both static and seismic conditions, measured from the bottom of the wall. The lateral pressures presented in the table below are based on native silt/clay soils remaining behind the wall as backfill material using a 26 degree friction angle and an in-place unit weight of 120 pounds per cubic foot.

Table 5: Lateral Earth Pressures

Condition	Lateral Pressure Coefficient (Rankine Values)	Equivalent Fluid Pressure (pcf)*
Active	0.39	47
	0.55	67
At-Rest	0.56	67
	0.75	90
Passive	2.56	307
	2.98	358

*Seismic values combine both static and dynamic values

These pressure values do not include any surcharge, and are based on a relatively level ground surface above the top of the wall and drained conditions behind the wall. It is important that water is not allowed to build up (hydrostatic pressures) behind retaining

structures. Retaining walls should incorporate drainage behind the walls as appropriate, and surface water should be directed away from the top and bottom of the walls.

Resistance to sliding may incorporate the friction acting along the base of foundations, which may be computed using a coefficient of friction of 0.45 for native silt/clay and 0.70 for structural fill meeting the recommendations presented herein. These values may be increased by one-third for transient wind and seismic loads.

The friction and lateral earth pressure values given above are ultimate, and appropriate factors of safety should be applied for design, particularly when utilizing both the coefficient of friction and passive earth pressure to resist sliding.

11.0 FLOOR SLABS AND FLATWORK

Concrete floor slabs and exterior flatwork may be supported on competent native soils or properly placed and compacted structural fill after appropriate removals and grading as outlined in Section 8.1 are completed. We recommend placing a minimum 4 inches of free-draining fill material (see Section 8.3) beneath floor slabs to facilitate construction, act as a capillary break, and aid in distributing floor loads. For flatwork, we recommend placing a minimum 4 inches of roadbase material. Prior to placing the free-draining fill or roadbase materials, the native subgrade should be proof-rolled to identify soft spots (any soft spots should be stabilized as discussed above in Section 8.5).

To help control normal shrinkage and stress cracking, we recommend that floor slabs have adequate reinforcement for the anticipated floor loads with the reinforcement continuous through interior floor joints, frequent crack control joints, and non-rigid attachment of the slabs to foundation and bearing walls. Special precautions should be taken during placement and curing of all concrete slabs and flatwork. Excessive slump (high water-cement ratios) of the concrete and/or improper finishing and curing procedures used during hot or cold weather conditions may lead to excessive shrinkage, cracking, spalling, or curling of slabs. We recommend all concrete placement and curing operations be performed in accordance with American Concrete Institute (ACI) codes and practices.

12.0 DRAINAGE

As part of good construction practice, precautions should be taken during and after construction to reduce the potential for water to collect near foundation walls. Accordingly, we recommend the following:

- Adequate compaction of foundation backfill should be provided i.e. a minimum of 90 percent of ASTM D1557. **Water consolidation methods should not be used.**
- The ground surface should be graded to drain away from the building in all directions. We recommend a minimum fall of 6 inches in the first 10 feet.
- Roof runoff should be collected in rain gutters with downspouts designed to discharge well outside of the backfill limits, or at least 10 feet from foundations, whichever is greater.
- Sprinklers should be aimed away, and all sprinkler components (valves, lines, sprinkler heads) should be placed at least 2 feet from foundation walls. Sprinkler systems should be well maintained, checked for leaks frequently, and repaired promptly. Overwatering at any time should be avoided.
- Any additional precautions which may become evident during construction.

13.0 PAVEMENT RECOMMENDATIONS

We assume that asphalt paved parking and drive areas will be constructed as part of the project. The near-surface soils beneath the topsoil primarily consisted of native clay. We estimate that a California Bearing Ratio (CBR) value of 3 is appropriate for these soils.

We anticipate the traffic volume will be about 200 vehicles a day or less for the parking/drive areas, consisting mostly of cars and pickup trucks, with a daily delivery truck and a weekly garbage truck. Based on these traffic parameters, the estimated CBR given above, and the procedures and typical design inputs outlined in the *UDOT Pavement Design Manual (1998)*, we recommend one of the minimum asphalt pavement sections presented in the table below.

Table 6: Pavement Section Recommendations

Asphalt Thickness (in)	Compacted Roadbase Thickness (in)	Compacted Subbase Thickness (in)
3	10*	0
3	6	6*

* Stabilization may be required

If the pavement will be required to support construction traffic, more than an occasional semi-tractor or fire truck, or more traffic than listed above, our office should be notified so that we can re-evaluate the pavement section recommendations. The following also apply:

- The subgrade should be prepared by proof rolling to a firm, non-yielding surface, with any identified soft areas stabilized as discussed above in Section 8.5.
- Site grading fills below the pavements should meet structural fill composition and placement recommendations per Sections 8.3 and 8.4 herein.
- Asphaltic concrete, aggregate base and sub-base material should meet local or UDOT requirements.
- Aggregate base and sub-base should be compacted to local or UDOT requirements, or to at least 95 percent of maximum dry density (ASTM D1557).
- Asphaltic concrete should be compacted to local or UDOT requirements, or to at least 96 percent of the laboratory Marshal density (ASTM D6927).

14.0 GENERAL CONDITIONS

The exploratory data presented in this report were collected to provide geotechnical design recommendations for this project. The explorations may not be indicative of subsurface conditions outside the study area or between points explored and thus have a limited value in depicting subsurface conditions for contractor bidding. Variations from the conditions portrayed in the explorations may occur and which may be sufficient to require modifications in the design. If during construction, conditions are different than presented in this report, please advise us so that the appropriate modifications can be made.

The findings and recommendations presented in this geotechnical report were prepared in accordance with generally accepted geotechnical engineering principles and practice in this area of Utah at this time. No other warranty or representation, either expressed or implied, is intended in our proposals, contracts or reports.

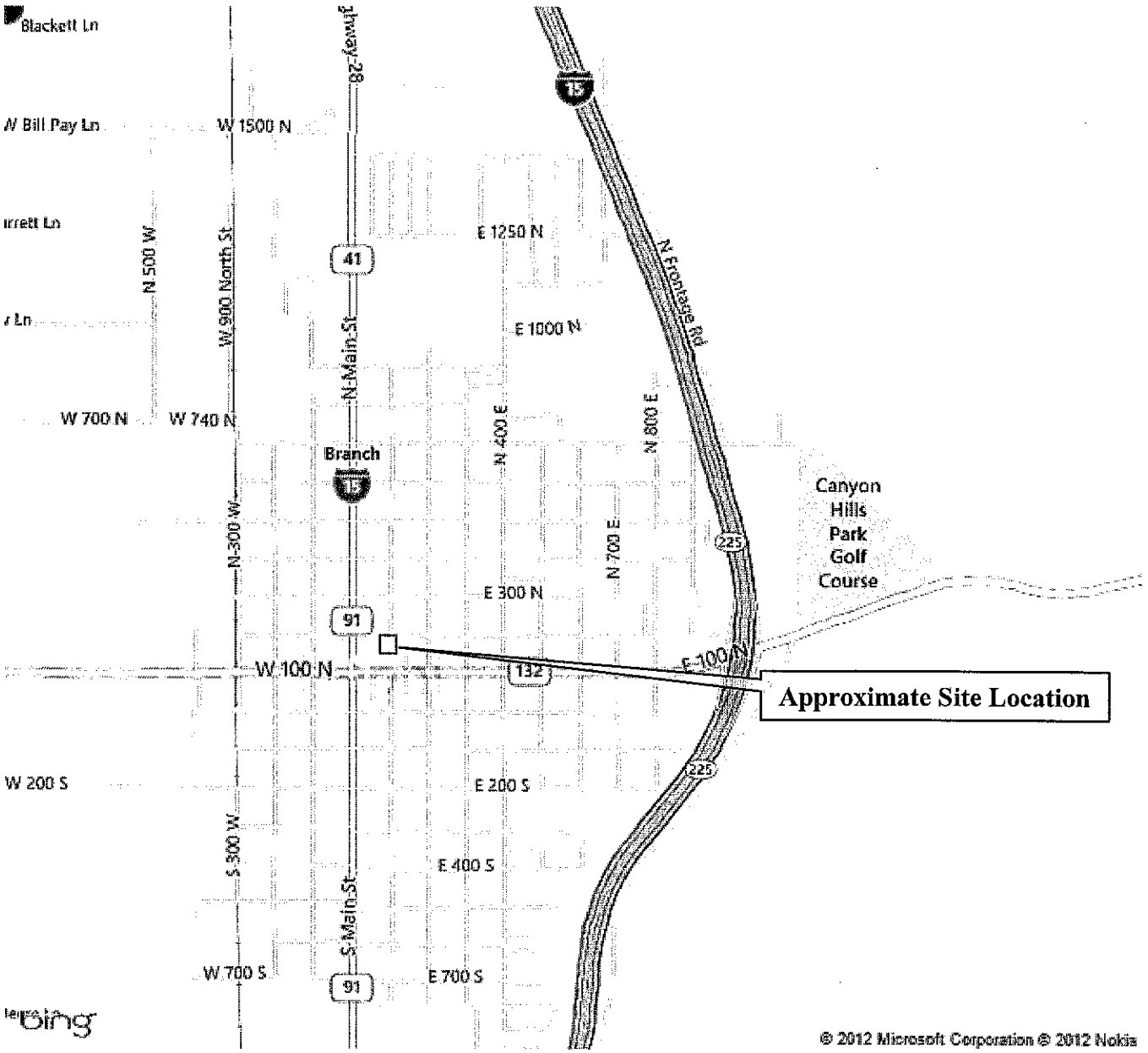
This geotechnical report is based on relatively limited subsurface explorations and laboratory testing. Subsurface conditions may differ in some locations of the site from those described herein, which may require additional analyses and possibly modified recommendations. Thus we strongly recommend consulting with Earthtec Engineering, Inc. (Earthtec) regarding any changes made during design and construction of the project from those discussed above in Section 3.0. Failure to consult with Earthtec regarding any such changes relieves Earthtec from any liability arising from changed conditions at the site.

For consistency, Earthtec should also perform materials testing and special inspections for this project. The recommendations presented herein are based on the assumption that an adequate program of tests and observations will be followed during construction to verify compliance with our recommendations. We also assume that we will review the project plans and specifications to verify that our conclusions and recommendations are incorporated and remain appropriate (based on the actual design). Earthtec should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Earthtec also should be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please contact us at your convenience.

VICINITY MAP

JUAB COUNTY BUILDING, NEPHI



N

Not to Scale

PROJECT NO.: 121454	Earthtec Engineering Inc.	FIGURE NO.: 1

APPROXIMATE LOCATIONS OF TEST HOLES

JUAB COUNTY BUILDING, NEPHI

Approximate Test Hole Location

N

Not to Scale

PROJECT NO.: 121454	Earthtec Engineering Inc.	FIGURE NO.: 2

TEST HOLE LOG

NO.: TH-1

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	TEST RESULTS Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, medium stiff, red-brown.										
3				◣	7								
		ML	SILT with sand, moist, medium stiff, red-brown.										
6				◣	5								
		SM	Silty SAND, moist, medium dense, red-brown.										
9				◣	16								
		CL-ML	SILTY CLAY with sand, moist, medium stiff, red-brown.	◣	7								
12													
15		CL	Lean CLAY with sand, moist, stiff, red-brown.	◣	9								
18			Bottom at approximately 16½ feet.										
21													
24													

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 3

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

TEST HOLE LOG

NO.: TH-2

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, very stiff to stiff, red-brown.										
3					20								
6					8								
		SM	Silty SAND with gravel, moist, medium dense, red-brown.										
9					15	5				27	59	14	
		CL	Lean CLAY with sand, moist, medium stiff to stiff, red-brown.										
12						17	111	32	16				C
15					10								
18													
		GM	Silty GRAVEL with sand, moist, medium dense, gray.										
21					25								
24			Bottom at approximately 21½ feet.										

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 4

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

TEST HOLE LOG

NO.: TH-3

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, medium stiff, red-brown.										
3					6								
6		ML	Sandy SILT, moist, medium stiff, red-brown.			11	108	18	NP				C
9		CL	Lean CLAY with sand, moist, stiff, red-brown, some interbedded sand lenses.		6								
12					8								
15		CL-ML	Sandy SILTY CLAY, moist, medium stiff, red-brown.		6								
18			Bottom at approximately 16½ feet.										
21													
24													

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 5

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

TEST HOLE LOG

NO.: TH-4

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, medium stiff, red-brown.										
3				◣	5								
6		SM	Silty SAND, moist, loose, red-brown.	◣	6								
		CL	Lean CLAY with sand, moist, medium stiff, red-brown.										
9						29	93	29	9				C
				◣	7								
12													
		CL-ML	Sandy SILTY CLAY, moist, stiff, red-brown.										
15				◣	9								
18													
21		GM	Silty GRAVEL with sand, moist, medium dense, gray.	◣	34								
24			Bottom at approximately 21½ feet.										

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 6

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

TEST HOLE LOG

NO.: TH-5

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, very soft, red-brown.										
3					1								
6		SM	Silty SAND with gravel, moist, loose, red-brown.		8	9				35	39	26	
9		ML	Sandy SILT, moist, medium stiff, red-brown.										
12					7								
15		CL	Lean CLAY with sand, moist, medium stiff, red-brown.		7								
18			Bottom at approximately 16½ feet.										
21													
24													

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 7

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

TEST HOLE LOG

NO.: TH-6

PROJECT: Juab County Building
CLIENT: DFCM
LOCATION: See Figure 2
OPERATOR: Great Basin Drilling
EQUIPMENT: CME 55
DEPTH TO WATER; INITIAL ▽:

PROJECT NO.: 121454
DATE: 10/11/12
ELEVATION: Not Measured
LOGGED BY: S Howell
AT COMPLETION ▼:

Depth (Ft.)	Graphic Log	USCS	Description	Samples	Blows per foot	Water Cont. (%)	Dry Dens. (pcf)	LL	PI	Gravel (%)	Sand (%)	Fines (%)	Other Tests
0			Topsoil (sod)										
		CL	Lean CLAY with sand, moist, very soft, red-brown.										
3		SM	Silty SAND, moist, medium dense, red-brown.	◣	11								
		CL	Lean CLAY with sand, moist, soft, red-brown.										
6				◣	3								
9				◣	3								
		ML	SILT with sand, moist, soft, red-brown.										
12				◣	3								
		CL-ML	SILTY CLAY with sand, moist to very moist, medium stiff to stiff, red-brown.										
15						16	113	22	6				C
18													
21				◣	9								
24			Bottom at approximately 21½ feet.										

Notes: No groundwater encountered in test hole.

Tests Key

CBR = California Bearing Ratio
C = Consolidation
R = Resistivity
DS = Direct Shear
SS = Soluble Sulfates
UC = Unconfined Compressive Strength

PROJECT NO.: 121454

Earthtec Engineering Inc.

FIGURE NO.: 8

LOG OF TESTHOLE 121454 LOGS.GPJ EARTHTEC.GDT 10/25/12

LEGEND

PROJECT: Juab County Building **DATE:** 10/11/12
CLIENT: DFCM **LOGGED BY:** S Howell

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR SOIL DIVISIONS			USCS SYMBOL	TYPICAL SOIL DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% retaining on No. 200 Sieve)	GRAVELS (More than 50% of coarse fraction retained on No. 4 Sieve)	CLEAN GRAVELS (Less than 5% fines)	GW	Well Graded Gravel, May Contain Sand, Very Little Fines
			GP	Poorly Graded Gravel, May Contain Sand, Very Little Fines
		GRAVELS WITH FINES (More than 12% fines)	GM	Silty Gravel, May Contain Sand
			GC	Clayey Gravel, May Contain Sand
	SANDS (50% or more of coarse fraction passes No. 4 Sieve)	CLEAN SANDS (Less than 5% fines)	SW	Well Graded Sand, May Contain Gravel, Very Little Fines
			SP	Poorly Graded Sand, May Contain Gravel, Very Little Fines
		SANDS WITH FINES (More than 12% fines)	SM	Silty Sand, May Contain Gravel
			SC	Clayey Sand, May Contain Gravel
FINE GRAINED SOILS (More than 50% passing No. 200 Sieve)	SILTS AND CLAYS (Liquid Limit less than 50)		CL	Lean Clay, Inorganic, May Contain Gravel and/or Sand
			ML	Silt, Inorganic, May Contain Gravel and/or Sand
			OL	Organic Silt or Clay, May Contain Gravel and/or Sand
	SILTS AND CLAYS (Liquid Limit Greater than 50)		CH	Fat Clay, Inorganic, May Contain Gravel and/or Sand
			MH	Elastic Silt, Inorganic, May Contain Gravel and/or Sand
			OH	Organic Clay or Silt, May Contain Gravel and/or Sand
HIGHLY ORGANIC SOILS			PT	Peat, Primarily Organic Matter

SAMPLER DESCRIPTIONS

- SPLIT SPOON SAMPLER (1 3/8 inch inside diameter)
- MODIFIED CALIFORNIA SAMPLER (2 inch outside diameter)
- SHELBY TUBE (3 inch outside diameter)
- BLOCK SAMPLE
- BAG/BULK SAMPLE

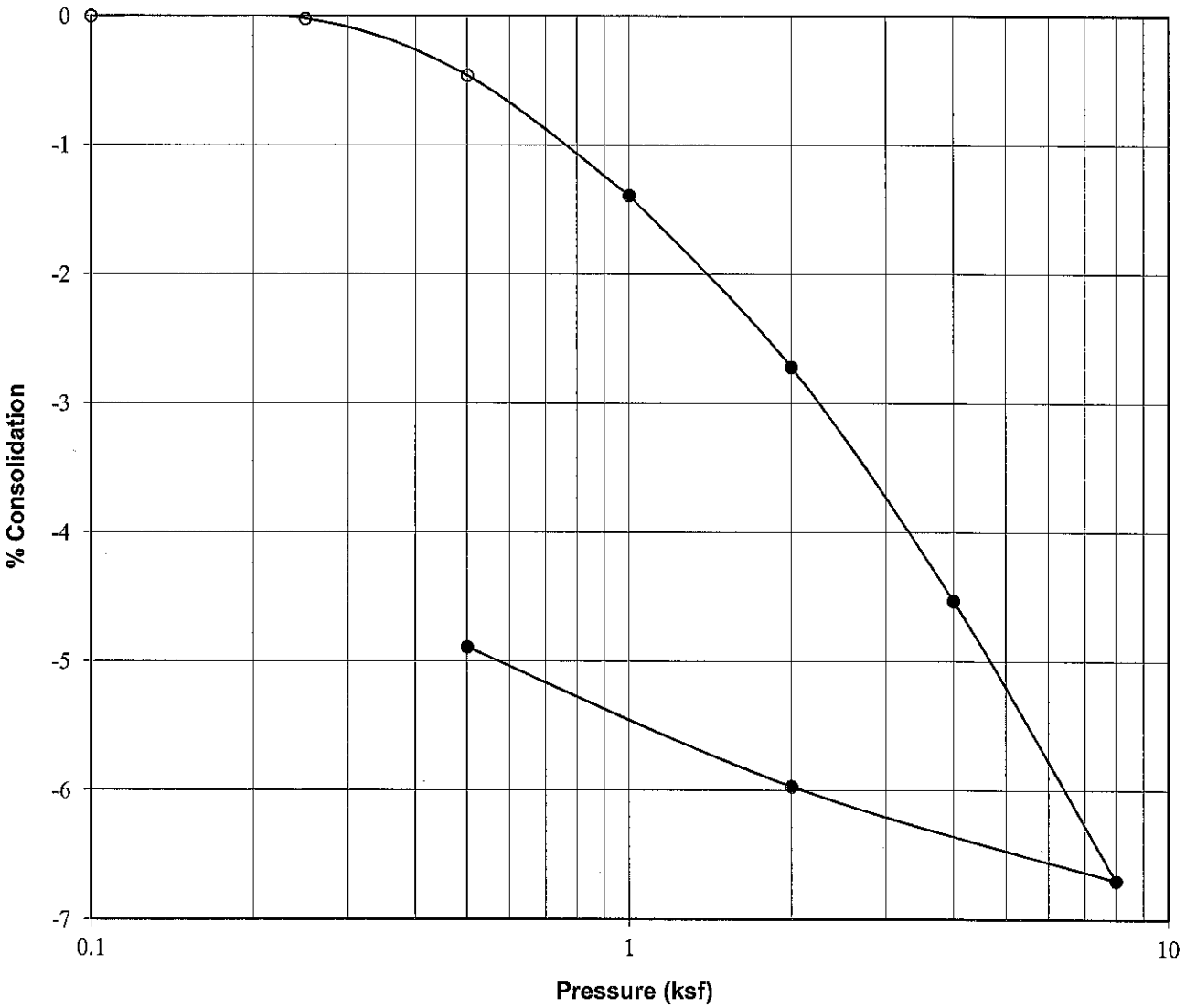
WATER SYMBOLS

- ∇ Water level encountered during field exploration
- ▼ Water level encountered at completion of field exploration

NOTES:
1. The logs are subject to the limitations, conclusions, and recommendations in this report.
2. Results of tests conducted on samples recovered are reported on the logs and any applicable graphs.
3. Strata lines on the logs represent approximate boundaries only. Actual transitions may be gradual.
4. In general, USCS symbols shown on the logs are based on visual methods only: actual designations (based on laboratory tests) may vary.

PROJECT NO.: 121454 Earthtec Engineering Inc. **FIGURE NO.:** 9

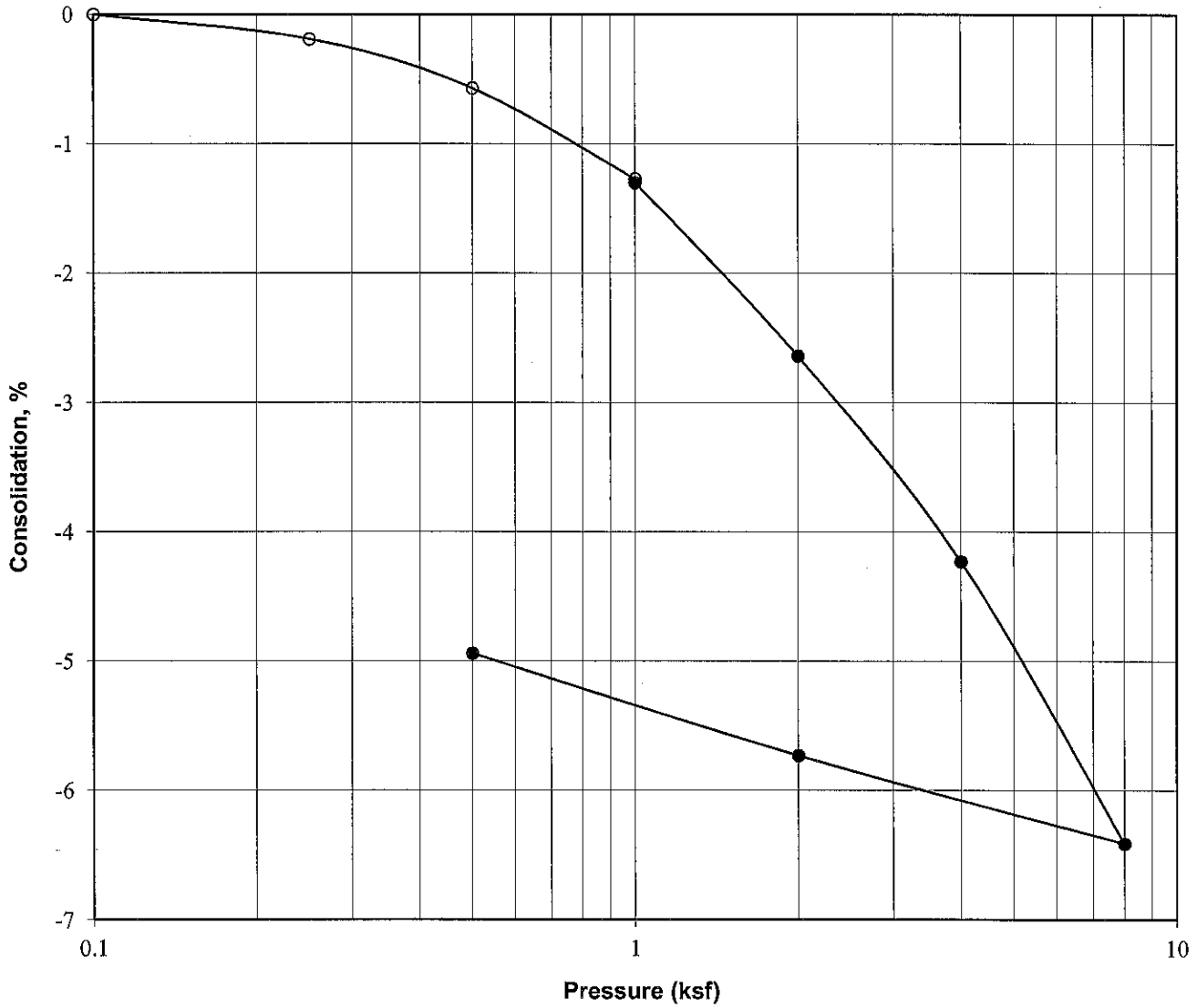
CONSOLIDATION - SWELL TEST



Project:	Juab County Building
Location:	TH-2
Sample Depth:	10
Description:	Shelby Tube
Soil Type:	Lean CLAY with sand (CL)
Natural Moisture, %:	17
Dry Density, pcf:	111
Liquid Limit:	32
Plasticity Index:	16
Water Added at:	1 ksf
Percent Collapse:	0.0

PROJECT NO.: 121454	Earthtec Engineering Inc.	**FIGURE NO.:** 10

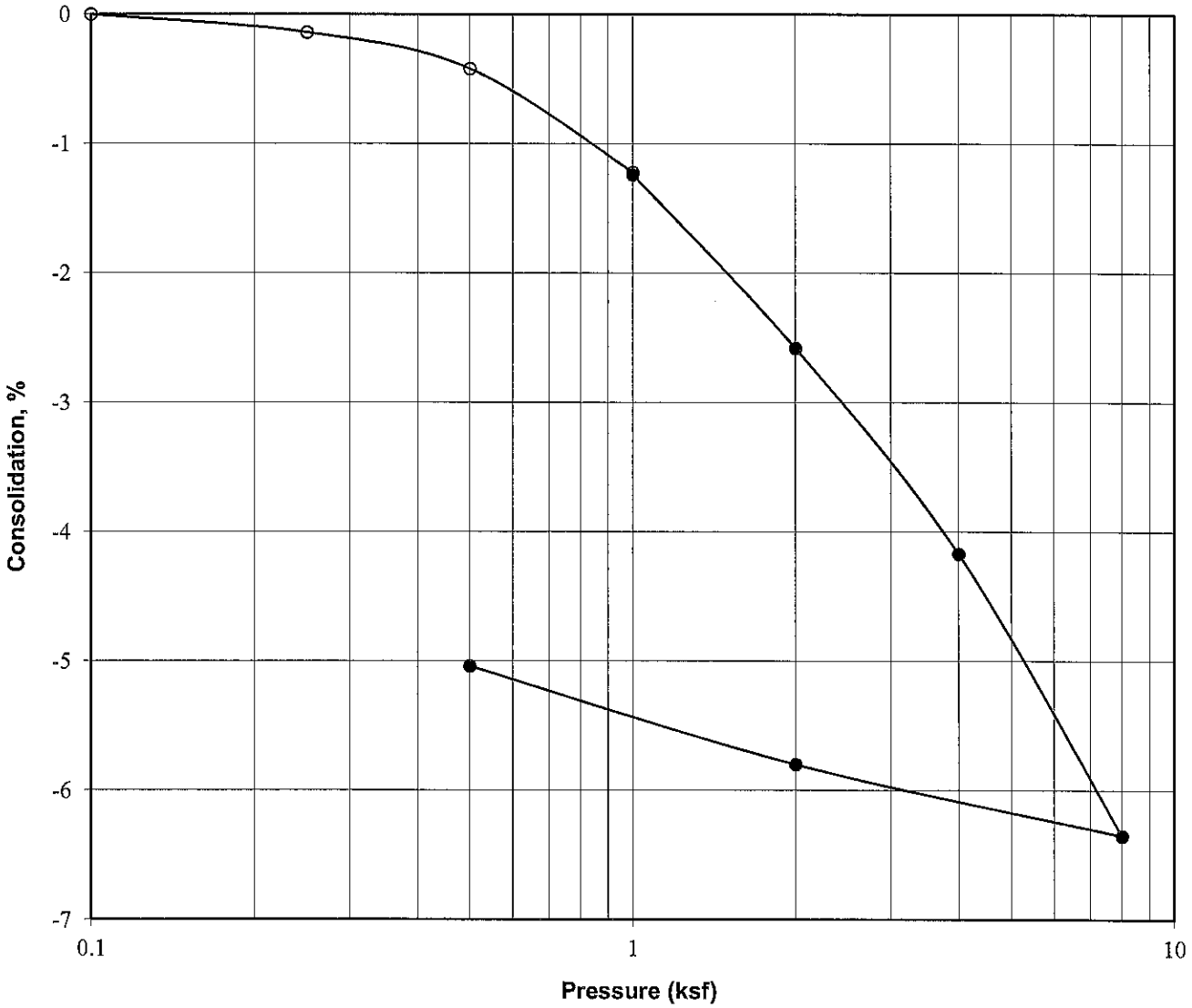
CONSOLIDATION - SWELL TEST



Project:	Juab County Building
Location:	TH-3
Sample Depth:	5
Description:	Shelby Tube
Soil Type:	Sandy SILT (ML)
Natural Moisture, %:	11
Dry Density, pcf:	108
Liquid Limit:	18
Plasticity Index:	Non-Plastic
Water Added at:	1 ksf
Percent Collapse:	0.0

PROJECT NO.: 121454	Earthtec Engineering Inc.	**FIGURE NO.:** 11

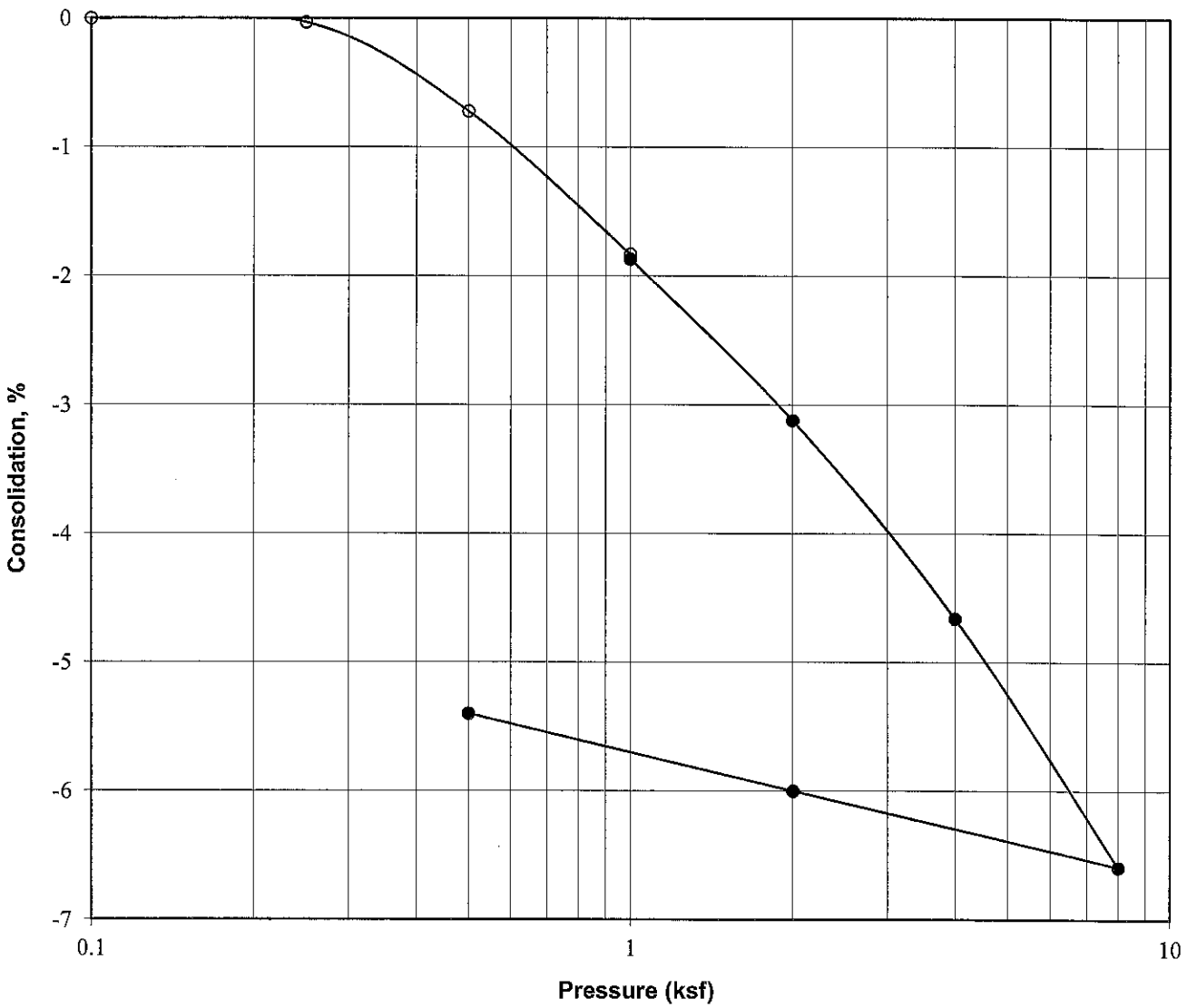
CONSOLIDATION - SWELL TEST



Project:	Juab County Building
Location:	TH-4
Sample Depth:	7½
Description:	Shelby Tube
Soil Type:	Lean CLAY with sand (CL)
Natural Moisture, %:	29
Dry Density, pcf:	93
Liquid Limit:	29
Plasticity Index:	9
Water Added at:	1 ksf
Percent Collapse:	0.0

PROJECT NO.: 121454	Earthtec Engineering Inc.	**FIGURE NO.:** 12

CONSOLIDATION - SWELL TEST



Project:	Juab County Building
Location:	TH-6
Sample Depth:	15
Description:	Shelby Tube
Soil Type:	SILTY CLAY with sand (CL-ML)
Natural Moisture, %:	16
Dry Density, pcf:	113
Liquid Limit:	22
Plasticity Index:	6
Water Added at:	1 ksf
Percent Collapse:	0.0

PROJECT NO.: 121454	Earthtec Engineering Inc.	**FIGURE NO.:** 13

APPENDIX C - UTAH JUDICIAL FACILITY DESIGN STANDARDS

The following design standards are for reference only. Where differences between the Utah Judicial Facility Design Standards and the Program document occur, the program document should be followed. Because the new 4th District Juab County Court will be a condensed version of traditionally larger courts found throughout the State, many portions of the following standards will not apply.

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1.0 Operational and Facility Planning Principles

These guidelines have been developed by the Judicial Branch of Government of the State of Utah pursuant to Rule 3-409 of the Rules of Judicial Administration, in order to meet the stated intentions of the Rule and to promote the creation of facilities that support effective and efficient Court operations. All Judicial facility planning and design will reflect the organizational, operational and facility management goals of the Utah Judicial System.

1.1 GOALS OF AN EFFECTIVE JUDICIAL FACILITY

All Judicial facilities in the State of Utah should respond to the following goals:

1.1.1 Provide appropriate service to the public

Court facilities should be centrally and conveniently located to serve the citizens of all 29 Counties, in addition, they should be located to contribute to the quality and character of the community in which they sit. They should be fully accessible to all.

1.1.2 Provide an appropriate setting for the administration of justice

Courthouses should be designed to reflect an appropriate image of dignity and quality representative of the State Judicial System. See Section 2, Judicial Building Requirements, for additional guidance.

1.1.3 Provide for the co-location of key judicial programs, services and related agencies

Court facilities should be planned to include all organizations, agencies and services operated by the Court and/or necessary to support the effective and efficient processing of cases.

1.1.4 Provide for the management of growth

Capital expenditures with respect to renovation, expansion and new construction of judicial facilities should reflect an awareness of statewide system growth and be part of a comprehensive strategy for responding to that growth.

1.1.5 Provide for the timely delivery of judicial resources

Judges, courtrooms, juries, information systems and court management personnel and policies should maximize the ability of the judicial system to resolve disputes in a timely and expeditious manner.

1.1.6 Provide for the uniformity of process and procedure

Physical facilities, judicial and staff resources and policies and procedures should promote the statewide uniformity of process and procedures, thereby insuring equity and consistency through the system.

1.1.7 Provide for the flexible use of facility and staff resources

Court facilities and court management and operations staff should take maximum advantage of opportunities to collocate, to cross-train, and to co-utilize personnel. Judicial facilities should be flexible and promote collaboration and integration of services.

1.1.8 Provide for the economical use of facility and staff resources

Facility and operations planning should recognize and take advantage of opportunities to economically combine facilities and personnel and to share facilities and responsibilities and reduce expenses.

1.1.9 Provide for the longevity of facilities and ease of maintenance

Judicial facilities exist in and contribute to the community for decades, if not centuries. All judicial facilities should be designed to be durable, maintainable and upgraded to accommodate new technologies and systems as they become available and pertinent.

1.1.10 Provide for the protection of Judicial resources

Security is an integral component in judicial facility design. All new facilities should integrate and enhance security technologies in a way that ensures the well being of the occupants and minimizes the burdens on building staff.

1.2 JUDICIAL SYSTEM OBJECTIVES/INITIATIVES

Judicial facilities in the State of Utah should be planned, programmed and designed to support the policy and operational objectives of the Judicial System. These objectives may change from time to time as circumstances, issues, and initiatives may develop. At this time, the following objectives should be accommodated:

1.2.1 Expanded access for persons with disabilities

It is the objective of the Judicial System to promote the participation of persons with disabilities in the judicial process and to provide reasonable accommodation for all participants and litigants in both new and existing facilities. All new and remodeled facilities should comply with the current ADA guidelines referenced later in these standards.

1.2.2 Extended hours of operation

It is the objective of the Judicial System to improve public access to the Courts and court related services and facilities through the use of extended or alternative hours of operation. Facilities should be planned to facilitate off-hours and flexible access to appropriate services while maintaining security for and minimizing the impact on unaffected operations and areas.

1.2.3 Enhanced utilization of technology

It is the objective of the Judicial System to make maximum use of technology to enhance court information and operations, to improve public access to court information and services, to reduce the costs of litigation and administration and to promote timely and efficient case processing. This increased reliance on technology should not infringe on the privacy rights of individuals using the Judicial System. All judicial facilities will be planned and designed to provide maximum flexibility in the choice, installation and use of court-approved technologies.

1.2.4 Enlarged use of alternatives to litigation

It is the objective of the Judicial System to encourage the development and use of alternative forms of dispute resolution within the Court's administrative and service framework. Facilities should be planned and designed with the flexibility to implement mediation and other programs that may be adopted to accomplish this objective.

1.2.5 Expanded service center concept

It is the objective of the Judicial System to improve public access to the courts through the clustering of important services at common locations. Facilities should be planned and designed to enhance public service and to minimize the number of locations to which the public must go to accomplish court related business. Additionally, this concept is intended to improve the efficiency of court related services through closer functional adjacencies.

1.2.6 Enhanced working environment

It is the objective of the Judicial System to provide a safe, comfortable and healthy working environment for its staff and for all users of its facilities. Facilities should be planned and designed to use natural lighting and ventilation as effectively as possible and to avoid the use of materials which adversely affect the indoor air quality.

1.2.7 Enhanced civic use of Court facilities

It is the objective of the Judicial System to provide facilities that are open and available for use by the Bar and other civic and professional groups.

1.3 COURTHOUSE OCCUPANTS

1.3.1 Where feasible, Courthouses should include all levels of trial courts including District and Juvenile Courts. Co-location of Courts will allow economies of scale and will enable potential shared use of courtrooms, Judges, court administrative personnel, Clerk of the Court and staff and security personnel.

1.3.2 Courthouses should include all organizational and functional units falling under the administration of the Courts including Judicial Officers and staff, Court Administration, Clerk of the Courts, Guardian ad Litem, Court Attached Mediation, Probation and Security.

1.3.3 Courthouses should provide flexible space for the accommodation of Court Programs and court annexed initiatives. These spaces should allow for multi-use meeting facilities with telephone, teleconference, audio recording and visual and sound display equipment.

1.3.4 Other Court related organizations may be considered for location within the Courthouse provided that they have adequate funding resources and their presence in no way infringes on the integrity of the judicial process or the security of the Court facility. Additionally, provision of space to other court related organizations will be contingent upon the availability of space and assignment of that space will not preclude subsequent relocation to permit court expansion within the facility.

1.3.5 The Court retains the right to review and approve all candidates for courthouse occupancy. Occupancies that cannot be accommodated within the Court's security envelope will not be approved.

In addition, the location of each entity within the courthouse is subject to review and approval by the Court.

1.4 PLANNING PROCEDURES

1.4.1 The role of the Administrative Office of the Courts (AOC)

In order to promote the goal of a flexible Judicial System and to assure the implementation of its objectives, the Judicial Council, through the AOC, reserves the right to participate in the planning and the design of all major renovation or new facility construction projects, regardless of funding source. The AOC should be viewed as a planning resource mandated and available to assist in interpreting and implementing the goals of the Judicial System and the space standards embodied in this report.

The AOC's involvement in major renovation and new facility construction commences with the earliest stages of planning at the local level. This will permit a common understanding of the nature and scope of the project and early communication regarding facility goals and design guidelines. The AOC will be involved in all key phases of facility planning and will review and approve all master plans, programs, schematic design, design development and construction documents associated with renovation or new construction projects.

The key phases of facility planning are:

Phase One
Problem/Project Identification, Task Force Formation and Consultant Selection

All court facility projects whether they involve a correction of deficiencies, programming, planning, renovation or construction must first be presented to the Judicial Council's Standing Committee on Court Facilities Planning, see Rule 1-205 (vii), Utah Court Rules Annotated. Requests will be submitted through the AOC Facilities Director, who serves as staff to the Committee. The Committee will formulate its recommendations with regard to each proposed project and submit requests on construction projects to the Utah Judicial Council at the Council's annual budget and planning meeting. All court facilities planning will be governed by Rule 3-409, Rules of Judicial Administration.

Upon recognition of deficiencies in existing facilities and a commitment to plan for future renovation or new court facility construction, initial contact will be made with the AOC regarding these initiatives. A specific AOC staff person should be assigned as liaison between AOC and the local court. This staff person should become a permanent member of any task force or planning group formed to develop operational and architectural recommendations

The staff person should be involved in the development of any requests for proposals for project related consulting services and the selection of planning, programming or architectural consultants. This will insure that selected consultants have appropriate expertise and experience with the specialized requirements of Judicial facilities.

Continuous consultation between the local court and AOC should be affected through this liaison position with specific review and comment by AOC. These reviews should take place at critical stages throughout the process but at a minimum should occur prior to the publication of the Master Plan, Program, Schematic Design, Design Development and Construction Documents.

Phase Two
Project Planning and Site Selection

The formal planning process commences with the development of a mutual understanding of the existing system dynamics as well as an understanding of the goals and objectives of the facility renovation or new construction project. The product of Phase Two planning might be:

simple - minimal renovation of an existing structure to achieve limited objectives;

complex - extensive renovation or new construction to substantially change or increase facilities or to collocate courts or other government services; or

comprehensive - master planning new and/or renovated facilities as a component of total jurisdiction growth with appropriated forecasting and site analysis.

Whatever the ultimate focus, AOC will participate as a resource to ensure continuity with State master planning efforts and to assist in the collection and review of system workload indicators which help to determine short term and long term needs. In addition, an assessment of factors external to the jurisdiction which could impact long term facility planning such as new or proposed Rules of Court or planning guidelines, application of technology and funding implication should be conducted with AOC assistance.

Additionally, AOC will participate in any site selection discussions or studies effecting the potential placement of Judicial facilities. The purpose of this involvement will be to insure compliance with the considerations outlined in Section II of this volume.

Phase Three
Pre-architectural Programming and Conceptual Design

The product of Phase Three should be a document which incorporates the goals, objectives and assessment of short term and long term needs identified in Phases One and Two into a specific architectural solution. The involvement of AOC is critical in ensuring the consistent application of space standards and design guidelines and in sharing the positive and negative design experience of other districts throughout the state.

Phase Four
Facility Design and Construction

The continuing design process, from schematic design through construction documents and the actual construction of the facility will occupy a period of years rather than months. AOC will provide assistance throughout the process by:

- Conducting regular project reviews,
- Coordination of judicial input,
- Interpretation of the content and intent of design guidelines and space standards,
- Resolution of critical issues during design; and,
- Progress inspections during construction.

Phase Five
Ongoing Facility Review and Planning Coordination

Even beyond the renovation or construction of facilities, AOC should continue to maintain a liaison role, monitoring system growth, acting as an innovation and technology resource and carrying the perceptions of the users of the new or renovated facilities regarding what they do or do not like about the new facilities to other jurisdictions throughout the State.

AOC will ensure that the planning and design process represents the combined experience of all judges, court clerks, probation, jurors, attorneys, law enforcement officers, trial court executives and members of the public from the separate jurisdictions of the State.

1.4.2 Integrated Design Process

The design of court facilities is a complex and unique challenge. It takes an integrated team of key stakeholders and design and construction professionals to meet all of the functional requirements of a court facility. The list of stakeholders includes, but is not limited to the team members listed below:

- AOC Facilities Director
- DFCM Project Manager
- DFCM Facilities Manager
- Trial Court Executive
- Judicial Representative
- Architect
- Civil Engineer
- Structural Engineer
- Mechanical and Plumbing Engineer
- Electrical Engineer / Lighting Designer
- Electronic Security Specialist
- Audio / Video Engineer
- Landscape Architect
- Door Hardware Consultant
- Acoustical Engineer
- Commissioning Agent
- Contractor

Each and every one of these participants plays an integral role in the design and successful integration of systems in a court facility.

Project Phase						
Team Member	**Programming**	**Schematic Design**	**Design Development**	**Construction Documents**	**Construction**	**Post-Occupancy**
AOC						
Local Court Representative						
DFCM						
Architect						
Engineers						
Commissioning Agent						
Contractor						

Key stakeholders are the Administrative Office of the Courts Representatives, the DFCM Project Manager and the DFCM Facilities Operator and Manager. It is important that these team members all be involved throughout the programming, design and construction processes.

1.4.3 Standards Use and Compliance

All Court facility projects, regardless of source of funding should be developed in accordance with the Judicial Facility Design Standards and the State Division of Facilities and Construction Standards where these are not inconsistent with the Court's guidelines. All applicable building and fire codes shall also be followed.

1.4.4 Budget Considerations

Court facilities should be recognized as a highly specialized building type. The special requirements of court facilities impact the costs of construction as well as the related project "soft" costs. The following guidelines should be observed in developing court construction related budget estimates:

1.4.4.1 Unique Components of Courthouse design

Courthouse construction is more complex and costly than typical office space construction. This is because courthouses have specialized requirements that are not commonly included in office buildings. Among these are the following:

- Large bay sizes to provide column free courtroom space.
- Higher ceiling heights to create proper proportions in courtrooms.
- Specialized acoustical requirements to insure audibility in litigation spaces and to isolate sensitive areas (including courtrooms, jury rooms, prisoner holding areas and Judicial chambers) from noise.
- Extensive built-in security provisions to assure the safety of the public, public records and judicial staff and to insure the integrity of the judicial process.
- Additional circulation to provide for the separation of public circulation from that of prisoners and judicial officers as well as to provide sufficient public circulation to accommodate the high volumes of system clients.
- Holding areas for prisoners and the attendant structural hardening necessary to prevent escape.
- Specialized HVAC requirements to minimize vibration and to provide flexibility in control of courtrooms and to insure that systems do not prevent the proper recording of proceedings or transfer unwanted sounds from other portions of the building.
- Specialized and integrated technology applications including courtroom evidence presentation technology, internal and remote video conference capability, closed circuit television (CCTV) and Computer Integrated Courtroom (CIC) technology.
- Specialized design strategies to meet the State of Utah High Performance Building Design Standards.

- Specialized millwork to provide for the appropriate arrangement of courtrooms, and;
- Special design features and materials to support the importance of the structure and to convey the appropriate image of justice.

1.4.4.2 Impact of value engineering

While value engineering has proven valuable in identifying project economies, experience has shown that immediate cost savings have sometimes resulted in reduced durability, increased maintenance and lower quality products. As a result, the following guidelines are recommended:

- Representatives of the Department of Facilities Construction and Management, Facility Management and Maintenance Division, the design team and the commissioning agent shall be part of any Court related value engineering study.
- Value engineering recommendations will be evaluated on the basis of both construction cost impacts and potential operational and maintenance impacts.
- Life cycle cost benefits should be favored over short-term facility construction cost reductions.

1.4.4.3 Typical budget factors and multipliers

Because of the specialized conditions of Courthouse construction the following should guide the preparation of preliminary cost estimates:

Project budgets should reflect the following major categories: construction costs, project costs, site acquisition and/or off-site improvement costs, financing costs and operating costs.

- Construction costs should reflect the actual expenditures necessary to build the finished structure and should include cost of materials, cost of labor and the contractor's overhead and profit.
- Project costs should reflect professional fees, permits, inspections, site preparation, site infrastructure, FFE (furniture, fixtures & equipment), technology infrastructure, escalation factors, taxes and any other special costs over and above basic construction including site acquisition (if required), off site infrastructure and any costs of financing (if relevant).
- Site acquisition and/or off-site improvements costs should reflect the estimated or actual purchase price of land for the facility and/or the expected costs of any road or other infrastructure upgrades that must be provided in order to provide access or use of the site (i.e. expanded utilities, new turning lanes, new traffic lights, etc.).
- Financing costs should provide an estimate of the anticipated interest rates, annualized payments and total payout associated with any long term funding plans.
- Operating costs should reflect the annualized expenses of running the facility and should include the cost of maintenance and replacement technology.

2.0 Judicial Building Requirements

Planning and designing a Courthouse is a very unique process. There are a number of special requirements for court facilities. The first and foremost requirement of a judicial facility is that the building site selection and design reflect the purpose of the courthouse while enhancing the community in which it is located.

The Courthouse is among the most important and symbolic of public buildings. It represents the government of the people and the ideals of the American system of justice: the rule of law, equal justice and the peaceful resolution of disputes. It gives tangible form to the community's respect for law and order. The Courthouse has great significance as a place of public service. It is here that disputes are resolved and justice pursued. It is here that important records are kept and made available for public use. It is here that Judges and responsible citizens consider together the difficult questions of guilt, innocence, responsibility and equity.

A courthouse must be practical and functional, meeting the needs of the Courts and agencies that will be in it. It must create an appropriate image: an image that will reflect the honor of the Court and engender respect for its rulings. It must also be economical, making wise use of public funds and natural resources, and not be seen as wasteful or extravagant.

The guidelines provided in this section are intended to support the courthouse design process and to further the interest of the development of high quality courthouse facilities that are accessible, functional, flexible, secure, economical and dignified.

2.1 GENERAL COURTHOUSE CONSIDERATIONS

2.1.1 A Judicial facility should be located on a prominent site and central to the community that it serves, per section 2.2.3 of this document. Proximity to other government agencies is not critical, and co-location of a courthouse and holding facility is not preferred. In addition, a Judicial facility should be designed to reflect the decorum typical of a courthouse, as described in this section.

2.1.2 In smaller facilities, preference should be given to the provision of general trial courtrooms as opposed to specialized courtrooms. This will allow the greatest flexibility in assignment and usage.

2.1.3 Specialized courtrooms may be planned in multi-court facilities where Judges have secure access to all types and sizes of courtrooms.

2.1.4 Assignment ratios may be considered for Attorney/Client conference rooms, prisoner holding facilities and jury deliberation rooms in multi-court facilities. Ratios of jury rooms to courtrooms should be less than one to one and should be developed on a floor-by-floor basis. Single Courtroom facilities shall have at least one jury deliberation room.

2.1.5 Courtrooms should be used for all formal court proceedings. Hearing rooms may be used for informal activities, case conferences or other case management activities. These rooms are also well suited to alternative dispute resolution activities such as arbitration and mediation.

2.1.6 Alternative hours of operation (evening sessions) may be considered for certain types of court functions and proceedings.

2.1.7 Courtrooms should be designed with enough space to be universally accessible even when lifts are not provided. In larger court facilities a reduction of accessible courtrooms can be provided at a ratio of one courtroom in four being fully accessible. When non-accessible courtrooms are provided they shall be easily adaptable to accessible courtrooms without major construction. All necessary power and structure is to be provided during the initial construction of the building at locations necessary to facilitate the addition of ramps, elevators or lifts. Holding facilities and prisoner transport routes are to be accessible. Systems such as TDD (Telecommunication Device for the Deaf) and assistive listening systems are to be provided in courtroom and jury spaces.

2.1.8 Infrastructure is the space, conduit and pathway necessary to hold and connect the many systems found within modern buildings. It is also imperative that these spaces, conduits and pathways be designed to not only connect current systems but to be sized to accommodate the many anticipated technologies of the future courthouse. Infrastructure shall support the Computer Integrated Courtroom (CIC) operation and all related functions such as real time court reporting, on-line legal research, video court reporting, video conference, evidence presentation and records management. Infrastructure requirements and guidelines for courthouses shall be as provided in the standards published by the Department of Administrative Services, Division of Facilities Construction and Management; the Department of Technology Services and the Administrative Office of the Courts. All infrastructure and technology planning for court facilities will be subject to review and approval by technology staff at the Administrative Office of the Courts.

Planning Documents:

- AOC Judicial System Technology Master Plan
- DTS Courtroom Cable Communications Standards
- DFCM Design Requirements

2.1.9 Community Engagement. Public Workshops, open houses and posting project information on project or AOC web sites are a few examples of ways in which the design team and owner can provide information on the project. This sharing of information will allow the local community to be engaged with and aware of the project activity and status. This will enhance the public and community government support of judicial projects.

2.2 SITE SELECTION CRITERIA

2.2.1 Courthouse siting is an issue of great public importance and should not be made without careful consideration of all relevant issues including the following:

- Relationship to the community civic center
- Proximity to other government buildings and programs
- Relationship to other services such as restaurants, office supplies, libraries, copy centers and attorney offices
- Ease of public access
- Availability of public transportation and parking
- Impact on surrounding neighborhoods
- Prominence of site
- Availability and cost of site
- Expansion potential
- Site amenities
- Physical constraints of the site
- Site Access
- Site use restrictions
- Community planning goals, related to the site
- Separation from holding facilities

2.2.2 A comprehensive site analysis should be completed during the site selection phase of project to assess the following:

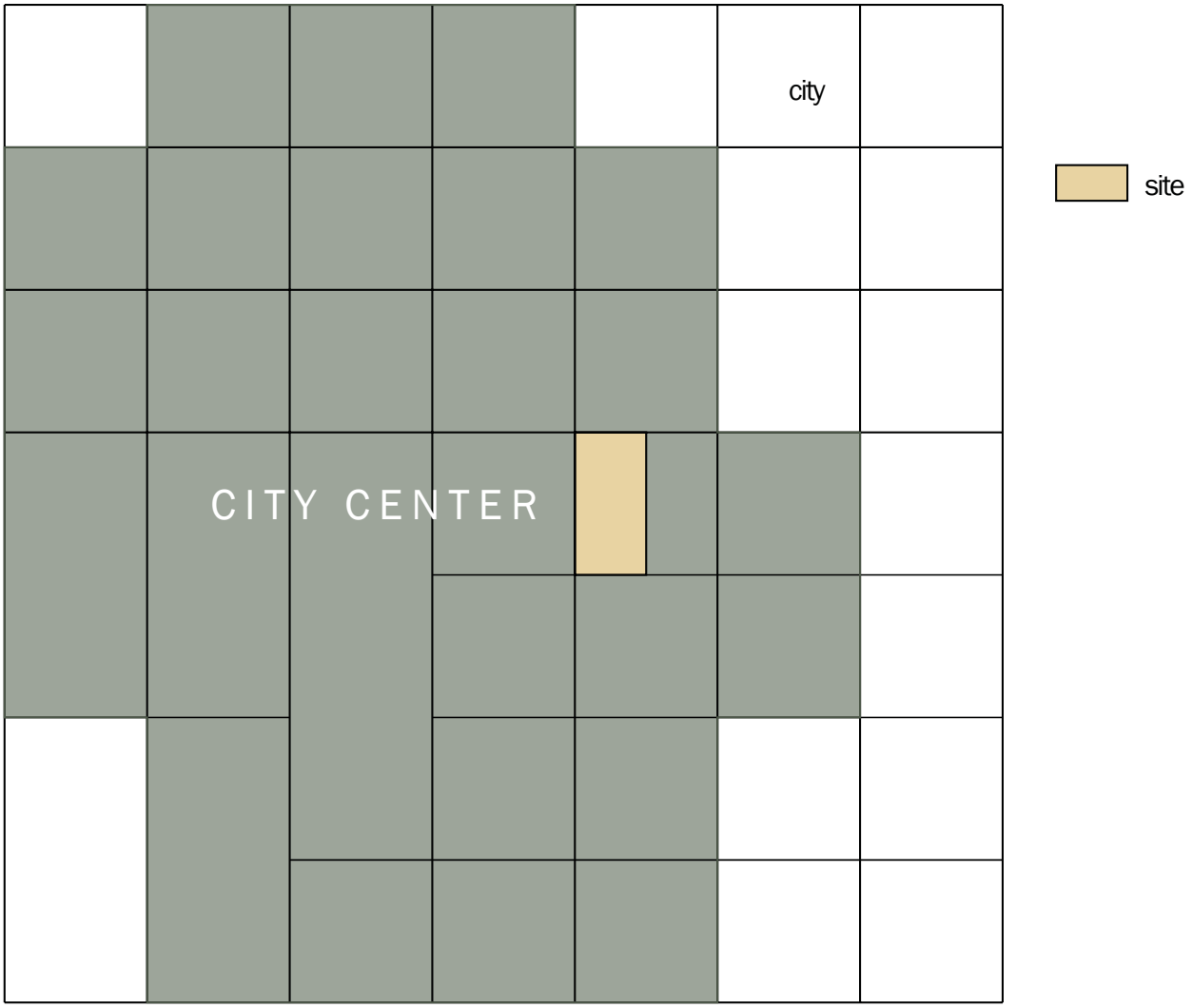
- Vehicular, mass transit and pedestrian site access
- Site orientation and potential building orientation
- Municipality site land use and planning goals
- Physical site characteristics
- Utility access
- Adjacencies

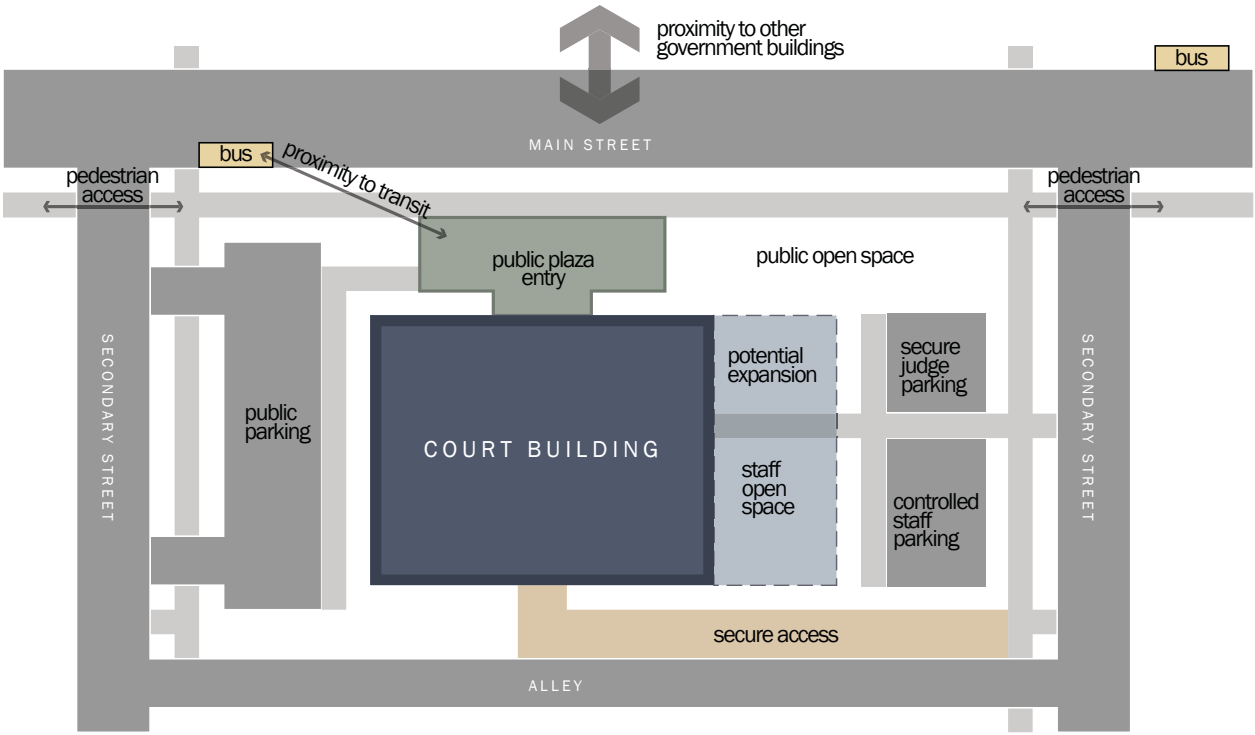
An analysis of each of these site components will help the project team understand the benefits and pitfalls associated with each site under consideration.

Once a comprehensive site analysis is complete for each of the sites being considered, additional considerations such as prisoner transport, parking and land cost should be taken into account.

2.2.3 Priority consideration should be given to civic center and commercial business district sites.

2.2.4 Where possible, The State of Utah should involve local governments and citizens in the site selection process.





2.3 SITE DESIGN

2.3.1 Orientation

The courthouse should be oriented with the front door toward the main street. The orientation of the building should also respond to the solar orientation of the site.

2.3.2 Access

The main entry should be oriented for convenient pedestrian access. Parking areas should be accessed from the secondary sides of the site. The prisoner transport area should be located on the most private side of the site

Parking for Judges should be in an area that is secure and protected from public access. Judges should have passage to and from this parking area through a secure entryway directly into the secure or private zone of the building, and accordingly should not pass through public areas for ingress and egress to parking.

Staff parking should be separated from public parking with a gate and landscape barriers at a minimum.

2.3.3 Outdoor spaces

The front entry should be framed by an aesthetically pleasing landscaped area. In addition, usable site area should be created for building users to have enhanced access to the outdoors.

The outdoor spaces should be designed to meet the sustainability criteria outlined in section 2.6.1 Site Considerations.

2.3.4 Future expansion

All courthouse buildings should be designed for future expansion. The site design should allow for future facility growth, but does not necessarily need to provide for parking expansion.

2.4 ARCHITECTURAL DESIGN

2.4.1 Reflect the community character and respond to the environment and neighborhood context

As stated earlier in this section, the first and foremost requirement of a judicial facility is that the building site selection and design reflect the purpose of the courthouse while enhancing the community in which it is located.

The quality of building materials and plant materials used will ensure that the project remains a neighborhood landmark and benchmark of design for future development for the next half century and beyond.

The building should also be designed to respond to the environment and natural influences of the site to ensure a contextually appropriate building.

The site should also be designed with safe, comfortable sidewalks and pedestrian ways as well as a beautiful pedestrian plaza at the main entry, to enhance the pedestrian experience and the greater community.

2.4.2 Portray the character of a court facility

A justice facility should invoke a sense of permanence, quality, stature and dignity. While some courthouses utilize traditional iconography to invoke these attributes it is by no means a necessity. Tradition, however, does play a large role in the workings of a court facility and thus must be studied and expressed appropriately. The following attempt to briefly summarize these qualities in a more quantitative manner:

- Permanence – site selection; massing; material selection
- Quality – durable, decorative materials; quality of design and of construction
- Stature – building placement; honoring of court traditions
- Dignity – public accessibility; spacious public lobbies and halls

2.4.3 Portray the character of the community

Each judicial facility shall be designed to reflect the architectural character of historic civic facilities within the community or region in which it is built. This will ensure the building contributes to the built environment, responds to the environment and climate in which it is located and aligns with the history of the place in which it stands.

2.4.4 Meet the requirements of current codes and standards

The minimum codes and standards that apply to the design of new buildings include current editions of the following:

- International Building Code (Current Edition)
- International Fire Code (Current Edition)
- NFPA 101 Life Safety Code (Current Edition)
- DFCM Design Standards (Current Edition)
- Codes and Standards referenced in the most current LEED rating system
- ADA Accessibility Guidelines (Current Edition)

2.4.5 Building form and massing

A building's massing must conform to many project specific restraints such as site size, program restrictions and budget, but the exterior mass of a courthouse should always provide a sense of being a public building, define a clear public entry and impart the character of a court facility as described above. The rigid requirements of security, courthouse function and circulation will have a dramatic effect on the building form. High courtroom ceilings will affect the overall height of the building. As with all new structures, a courthouse should be studied within its context to fully determine its form and mass.

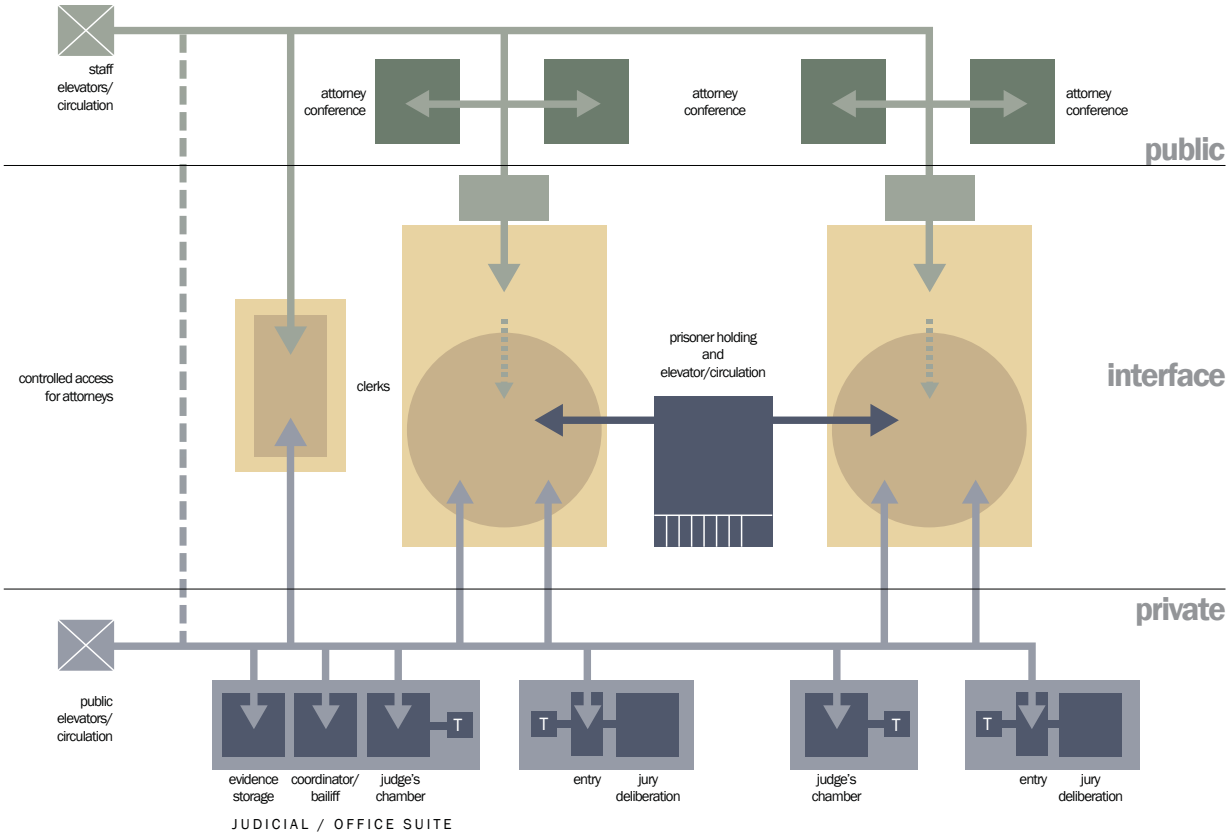
Courthouse buildings shall have inviting and prominent entry ways that welcome the public, house the required security areas and systems and portray the image of the court facility. Many court facilities have an entry atrium to provide the scale and quality desired in a court building. If an atrium is included in the building, it must meet all applicable building and fire code requirements.

2.4.6 Interaction of building users

There are three distinct groups of building users in a courthouse. The first is the public, the second is the staff and the third is the Sheriff and prisoners. The only location in which the three groups merge is in the courtroom. The public should be limited to access only public spaces and services designated to the general public. It is important that the public be separated by secure interfaces from staff areas to ensure security for the staff and preservation of the judicial processes. It is also vital that the public and staff not have access to secure holding cell areas outside the courtroom.

The staff area should be secured so that there is no threat from unauthorized public or prisoner interference. The staff should be able to move around the secured areas without having to enter into public areas.

The interstitial space, or area occupied by the Sheriff's and prisoners, will be completely separate from all other building areas. The prisoners will only interact with other building users in the courtrooms or through secured conference areas.



2.4.7 Circulation

Courthouses should provide separate circulation areas as follows:

- Judges and other court personnel should be able to access courtrooms, chambers, jury deliberation rooms and staff offices without interacting with the public. Separate circulation areas alleviate much of the potential for hostile confrontation.
- While members of the Bar and the public should have access to Judges, and court staff, such access should be controlled through checkpoints where visitors can be identified and screened.
- The same principle of separate circulation applies to prisoner movement. Defendants in custody should be transported from their place of confinement to their court destination without passing through any public areas. Shared or intersecting staff/prisoner corridors are advisable only with proper security staffing, training and procedures. Once in the courthouse, prisoners should be kept in secure areas, such as group or individual holding cells, until their appearance in the courtroom is required. Such holding areas must comply with all life-safety requirements, have secure space for attorney/client meetings, and should be sound proof.
- The principle of separate circulation areas can be best expressed in terms of “zones” which are as follows:

  Public Zone - This includes jury assembly areas, attorney/client conference rooms, public corridors, food service areas, as well as spectator seating in courtrooms and waiting areas.

  Private Zone - This includes Judge’s chambers, access to judicial parking areas and the courtroom, jury deliberation rooms, staff offices, copier/work rooms, conference rooms and libraries.

  Prisoner Zone - The prisoner zone requires a holding area adjacent to the courtroom, attorney/detainee conference areas, prisoner circulation (including a secure sally port) to and from the jail, and security officer support areas. Juvenile and adult prisoners shall be separated by both sight and sound.

  Interface Zone - The principle interface zones are courtrooms and mediation rooms. These zones also include those spaces where attorneys and the public meet (e.g. public corridor conference rooms), and space where court staff and the public interact. In general, these zones require access from two different kinds of circulation patterns.

  Three different circulation systems will need to be considered in the design of a judicial facility. The first is the public circulation. This route will be accessible once a visitor has been through security. The courtrooms, attorney-client conference rooms and other public uses will be accessible from the public circulation route. The second circulation route will be the secured areas, within which the staff can move freely, without concern for unauthorized public entry or prisoners being present. Secure parking with secure building access should be provided for the judiciary. The third circulation system will be the interstitial space, which will be used to transport prisoners. This circulation path needs to be secured and separated from the rest of the court facility.

2.4.8 Building Envelope Design

The building envelope, composed of the floor, wall and roof elements that separate the interior of the building from the exterior environment, should be designed to be aesthetically pleasing as well as a high performing thermal and air barrier between the indoor and outdoor environments. The following components should be considered in the design of the building envelope:

- The envelope should be designed to reflect the quality and character of a judicial facility as well as the character of the community.
- The envelope should be designed with durable materials to withstand up to a century of use
- The envelope should be designed to reduce air infiltration.
- The envelope should be designed to exceed code requirements for thermal insulation.
- The envelope should be designed with appropriate window to wall ratios for optimal performance.
- The envelope should vary on each elevation to respond to the site and solar orientation.
- The envelope should include integrated, appropriate exterior solar shades.
- The envelope should create a complete barrier from the exterior environment with continuous air and thermal barriers from the slab and foundation, up the exterior walls and around the roof enclosure.
- The envelope will be commissioned as a part of the building commissioning process.
- The glazing should have an appropriate visible light transmittance, solar heat gain coefficient and u-value for the climate, orientation and location.

Building envelope design is ever evolving. The Whole Building Design Guide, published by the National Institute of Building Sciences can be used as a reference for appropriate building envelope design practices. In addition, envelope design and construction standards as developed by the State of Utah Division of Facilities and Construction Management apply to all judicial facilities.

2.4.9 Building Security Design

Except under rare circumstances all courthouses should be planned with a single point of public entry to the facility.

The public entry of each courthouse should provide for the installation and operation of weapons and contraband screening equipment in a way that is as unobtrusive as possible and in a way that promotes efficiency. Extended delays at screening are not acceptable.

Dock and delivery areas should be secured and sized to permit the installation of screening equipment. Intercom and camera connection to the building security office should be provided. No one should be admitted without proper authorization.

Under normal circumstances, public parking should not be located under court buildings for security reasons.

Perimeter Security, defined as detection systems in staff and equipment used to monitor and safeguard public entrances, staffing, and monitoring security control rooms, and patrolling of interior and exterior areas of courthouses, shall be budgeted and included as part of the ongoing operations and maintenance costs (O & M) of a courthouse.

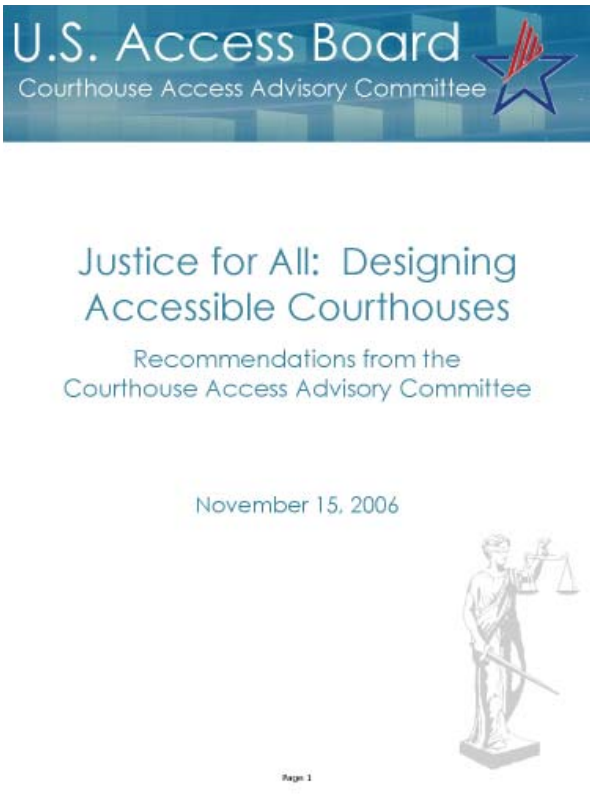
Visibility of public areas and screening areas is crucial in courts facilities. Creating pockets of exterior or interior space not readily visible from public areas should be avoided.

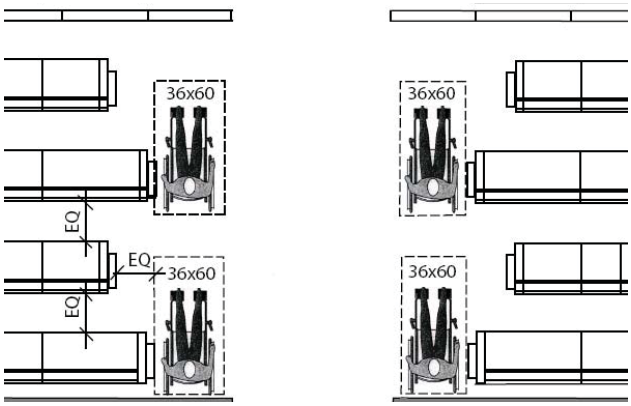
Escape routes for court staff to exit interface areas without traveling through public spaces should be provided. Protection of these routes via bullet resistant walls or millwork should be considered.

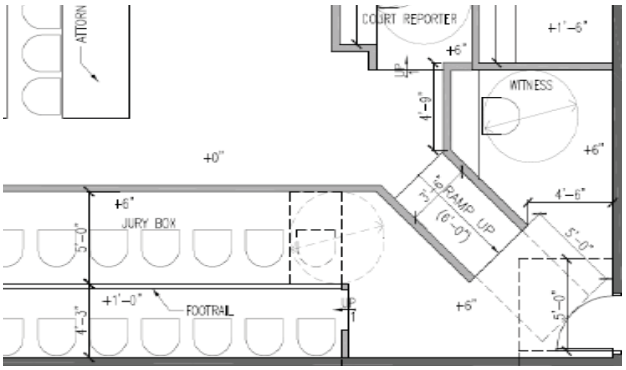
Holding facilities should be positioned within the building to accommodate efficient transport of prisoners throughout the courthouse. Prisoner transport routes should not interact with staff or public circulation paths. Holding areas should be designed to provide a clear view of prisoners from security monitoring stations. Adult holding and juvenile holding areas should be separated by both sight and sound and be designed to meet all applicable standards.

2.4.10 Interior Design Principles

The interior design and finishes in court facilities should be aesthetically pleasing, durable and permanent. Materials such as stone, wood and tile should be used in lieu of plastics where feasible to portray the quality and character of the building while providing a more pleasing and durable finish. Interior materials should also be chosen to avoid adversely affecting indoor air quality.







2.5 ACCESSIBILITY AND UNIVERSAL DESIGN

All judicial facility grounds and buildings should be fully adaptable. This goes beyond basic Americans with Disabilities Act. The public spaces of any new State of Utah judicial facility should be universally accessible. The site as well as the building should be designed for optimal access, avoiding secondary accessible routes and inaccessible ramps. In addition, the primary building entrance should be universally accessible from the main street to the building entry. In addition, a minimum of one in four courtrooms must be accessible, with all courtrooms being adaptable.

The U.S. Access Board Courthouse Access Advisory Committee has created a whitepaper on accessible design for courthouse facilities, Justice for All: Designing Accessible Courthouses. This document presents common issues and conditions related to accessible design in courthouse spaces and should be used as a reference manual when designing judicial facilities.

2.6 SUSTAINABLE DESIGN

Sustainability will be integral to the design and construction of all new court facilities. All new judicial facilities shall be designed to meet the State of Utah High Performance Building Standards.

2.6.1 Site Design

The project site shall be designed with sustainability in mind. The paved areas should be minimized and concrete will be used in lieu of asphalt where possible to reduce the urban heat island effect.

Both stormwater quality and quantity should be controlled and stormwater should be retained and filtered on site to the extent feasible. Green roofs, porous paving, rain gardens, retention basins and other alternative landscape methods that control stormwater should all be considered.

The landscape will be primarily native or adapted vegetation and use drip and low water irrigation system. The use of drought tolerant plants is also encouraged. The irrigation system should have a weather station integrated into the system to ensure the irrigation responds to the temperature and precipitation levels. This will also make sure the irrigation levels are appropriate for the various seasons.

The site shall be designed and lit to ensure a safe environment for pedestrians. The site lighting will also be designed with full cut off light fixtures to minimize night sky light pollution.

2.6.2 Construction Practices

Sustainable practices should also be followed during the construction of the project. A construction waste reuse and recycling program should be created and followed to minimize the amount of construction waste that is taken to the municipal landfill. An indoor air quality plan during construction shall also be required and followed through construction to ensure construction practices minimize potential contaminants in the building. This plan should address a number of items, including the cleanliness of the job site, proper installation and cleanliness of building air systems and proper ventilation of the building when hazardous materials are being installed.

Sustainable building materials, including local materials, materials with recycled content and low and no VOCs (volatile organic compounds) should be used to the extent feasible.

2.6.3 Indoor Environment

The interior environment should create a healthy, comfortable, calming experience for the building users. This should be accomplished through the design of the building systems as well as the design of the building and finishes used.

The building shall be designed to meet the thermal comfort requirements set forth in ASHRAE standards. Both thermal and lighting controls should be provided in all occupied spaces. Operable windows should be considered to allow ventilation, daylight and views.

To provide a connection to nature and create a more comfortable interior environment, all courtrooms and individual offices should have access to daylight as well as photocell sensors to ensure the lights dim when ample daylight is available. Corridors and waiting areas should also have access to daylight if feasible.

Interior finishes and furnishings should meet all applicable sustainable standards. They should also be able to withstand the daily wear and tear by building users, as court facility users can be especially hard on finishes and furnishings. The final material selection should also consider the lifespan of the facility. A more natural palette with splashes of accent colors will last longer, thus being more sustainable than a trendy color palette that the users may want to replace within a decade.

2.6.4 Resource Conservation

The building systems, including the building envelope, mechanical and electrical systems shall be designed to reduce resource consumption.

The building envelope shall have exterior, continuous insulation to provide a more effective thermal barrier. The envelope shall also be designed to reduce leakage. Each building facade should be designed to respond to the environmental conditions, ensuring the building is as efficient as possible. This includes designing and specifying glazing based on solar orientation, daylight needs, wind exposure and access to views.

The building mechanical systems will be designed to take advantage of the high performing building envelope. Effective and efficient building mechanical systems such as evaporative cooling, chilled beams, thermal ice storage and thermal displacement ventilation should be considered with each project. The building mechanical systems needs to provide a comfortable indoor environment while reducing energy use and promoting a healthy environment.

Occupancy sensors and photocell sensors shall be integrated into the design of the building to reduce energy use. Each office and workstation should be design with individual task lighting to allow a lower overhead lighting level, where feasible. High efficiency lamps and ballasts shall be used to further reduce the energy needed to light the facility.

Individual meters should be used to provide data on the energy used for the lighting systems and major mechanical systems in the building. This metering system can be tied to a display terminal in the public lobby area to help the building users understand the energy use and the efficiency measures implemented within the facility

2.6.5 State of Utah High Performance Building Standard

Currently, all buildings in the State of Utah must meet the State of Utah High Performance Building Standards. It is vital that the sustainable measures pursued align with the goals of the facility and do not negatively affect the durability or performance of the facility.

2.7 STRUCTURAL SYSTEMS

Courthouse structural systems shall be designed to support the function of the facility and ensure the building is structurally stable and operational for the next 60 to 100 years. This will require consideration of various structural systems to find a solution that meets the many requirements of the facility, including overall performance, flexibility and durability.

2.7.1 Meet the current structural codes and standards

New projects shall comply with each of the latest adopted publications of the following codes and standards. In case of conflicts between these standards, or between standards and other information contained in program criteria, obtain written clarification from the Owner's representative prior to submitting proposal. Where discrepancies or differing interpretations occur, the most stringent (usually recognized as being the most costly) interpretation shall be enforced.

- International Building Code (Current Edition)
- American Institute of Steel Construction (AISC) with Commentary
- ACI 318 Building Code Requirements for Reinforced Concrete
- American Iron and Steel Institute (AISI) specifications for the Design of Cold Formed Steel Structural Members
- American Welding Society ANSI/AWS D1.1 Structural Welding codes
- Steel Joist Institute (SJI) for Joists and Girders
- Steel Deck Institute (SDI)
- DFCM Design Standards (Current Edition)

2.7.2 Site Specific Criteria

The structural systems in the facility shall be designed to meet specific site-driven requirements. Some of these requirements include:

- Soil bearing pressure characteristics based on a site specific Geotechnical Investigation for the referenced site
- Wind velocity and exposure
- Roof live load and roof snow load
- Floor live load including partitions.
- Footing depth, minimum.
- Soil profile characteristics for ground acceleration - used for design.
- Seismic criteria, with soil profile as directed in the Soils Report.

2.7.3 Structural Design Considerations

The structural framing system and framing components may vary depending upon different architectural requirements, service load needs, desired performance, and availability and economics of material. Additionally, column spacing is usually dictated by occupancy and functional needs. Different column spacing can suggest different framing scenarios.

Courthouse facilities are considered to be important services and community structures, and therefore need to reflect an importance factor for structural design. These important facilities should be designed for higher seismic forces in order to provide additional seismic resistance to prevent catastrophic collapse.

The environmental impacts of structural systems and materials should also be considered.

2.7.4 Structural Flexibility, and Performance

Courthouse facilities need to be designed for optimal flexibility. The design of the structural system should allow for future additions and renovations to the facility.

Courthouse buildings typically have a variety of floor and ceiling heights within a single level. The structural system design should not impede the functional space needs of the facility.

Courthouse buildings also have very specific acoustic requirements. The structure should be designed to reduce vibration and meet all applicable acoustic criteria.

2.7.5 Structural Systems

The structural system will be composed of the following components:

- Footing and Foundation system
- Ground Floor
- Upper Floors
- Roof
- Exterior Walls
- Steel Frame Structure (typical but not required)

The structural system shall be coordinated with the architectural systems as well as the mechanical, electrical and plumbing systems. Locations of exceptionally sized structural members shall be highlighted to allow coordination at interstitial spaces and avoid conflicts through the design and construction processes.

2.8 MECHANICAL SYSTEMS

The building mechanical system should be designed to provide a quiet, comfortable and healthy indoor environment while reducing building energy use.

2.8.1 Meet the current mechanical codes and standards

New projects shall comply with each of the latest adopted publications of the following codes and standards. In case of conflicts between these standards, or between standards and other information contained in program criteria, obtain written clarification from the Owner's representative prior to submitting proposal. Where discrepancies or differing interpretations occur, the most stringent interpretation shall be enforced.

- Utah Boiler and Pressure Vessel Rules and Regulations
- DFCM Standards
- International Mechanical Code (IMC)
- International Building Code (IBC)
- International Plumbing Code (IPC)
- International Fuel Gas Code (IFGC)
- International Fire Code (IFC)
- National Electrical Code (NEC)
- NFPA #13, Installation of Sprinkler Systems
- NFPA #14, Installation of Standpipe and Hose Systems
- Other applicable NFPA and UL regulations.
- ASHRAE Handbooks

2.8.2 Heating, Cooling and Ventilation Systems

The heating and cooling system(s) should be responsive to the local climate and conditions of the area in which the court facility is being built. They should be designed for optimal efficiency and distribution.

The ventilation system should be appropriately sized for the building, system expectations and building zones. It is important that the building ventilation and heating and cooling systems are zoned appropriately for the building size, orientation and configuration. The level of individual control and specific system performance parameters will be outlined in the individual space standard section.

Specialty cooling systems for communications rooms or other equipment intensive areas should be defined early in the design process to ensure appropriate equipment is provided for these areas.

The operational requirements during power outages should also be discussed early in the design process to assess any special heating, cooling and ventilation needs such as designing a split system for courtrooms and other ongoing operational areas of the building.

A variety of heating, cooling and ventilation systems exist and each new facility should conduct a life-cycle cost assessment study to analyze a variety of systems and work toward providing the most effective, durable, functional and efficient system for each building.

To control noise during all modes of operation, the mechanical heating, cooling and ventilation systems must include one or more of the following: sound traps and acoustical lining in duct work; a low-velocity and low-static-pressure fan systems; special low-noise diffusers.

2.8.3 Thermal Controls

Thermal controls should be included for as many of the individual workstations as feasible for the facility. Thermal controls include, but are not limited to:

- Thermostat
- Operable window
- Window shade
- Air supply diffuser control
- Thermal radiant system

The automatic temperature control system shall be a State-of-the-Art, Microprocessor based, distributed processing control system using proven products and technology.

2.8.4 Specialty Ventilation

Carbon dioxide sensors should be located in all multi-occupant spaces to ensure adequate ventilation when the space is fully occupied.

Chemical storage areas such as print, copy rooms, janitors closets and any other chemical areas shall be enclosed and directly exhausted.

2.8.5 Plumbing

Building plumbing systems should be designed to meet the needs of the user. There are three very distinct types of plumbing fixtures that should be used in a judicial facility, these area:

- High quality fixtures for Judge’s restrooms.
- Durable, efficient fixtures for public restrooms, including jury restrooms.
- Correctional fixtures for prisoner holding areas. These should be anti-suicide and fully accessible fixtures.

There are specialty plumbing considerations in holding areas, including floor drain requirements that should be coordinated and discussed early in the design process.

2.8.6 Fire Protection Systems

The fire protection system should meet all current codes and standards. In addition, a standard water based fire protection system should be used, except where specialty electronics exist, such as a server room.

Concealed sprinkler heads should be used in public areas and courtrooms and specialty correctional sprinkler heads should be used in prisoner holding and interstitial areas.

Computer rooms may require specialty fire detection and suppression systems. This should be discussed during the project design.

2.9 ELECTRICAL SYSTEMS

The building electrical systems should be designed as efficiently and effectively as possible. It is important that the building power provide adequate service to the building without designing for so much capacity that inefficiencies occur.

2.9.1 Meet the current electrical codes and standards

New projects shall comply with each of the latest adopted publications of the following codes and standards. In case of conflicts between these standards, or between standards and other information contained in program criteria, obtain written clarification from the Owner's representative prior to submitting proposal. Where discrepancies or differing interpretations occur, the most stringent (usually recognized as being the most costly) interpretation shall be enforced.

- National Electric Code (NEC)
- ANSI (applicable sections)
- ASHRAE 90.1
- DFCM, Division of Facilities and Management, Design Criteria
- EIA/TIA, Electronics Industries Association/Telecommunications Industry Association.
- IESNA Lighting Handbook and Recommended Practices as applicable.
- International Building Code (Current Edition)
- NEMA
- NFPA 70, The National Electrical Code; NFPA 72, National Fire Alarm Code, and other applicable NFPA sections.
- State of Utah Fire Marshal Requirements.
- UL (applicable sections)

2.9.2 Lighting Systems

Building lighting should be designed to meet the needs of the users while being durable and efficient. A variety of lighting environments occur within a judicial facility. These include, but are not limited to:

- Prominent public locations
- Semi-public locations
- Courtrooms
- Conference and jury rooms
- Circulation areas
- Judge's chambers
- Office environments
- Interstitial and secure environments

Lighting should be designed to provide optimal occupant comfort. This includes designing for reduced glare, adequately diffusing the light to reduce shadows and providing an adequate level of lighting to promote health and productivity.

The lighting should also be designed to minimize exterior light pollution at night.

2.9.3 Lighting Controls

A variety of lighting control systems and schemes need to be considered for judicial facilities. Each of the lighting environments listed above will have an individual lighting control requirement. For example, courtrooms need a variety of lighting scenes depending on the proceedings whereas secure environments need continuous and ample lighting for security and visibility.

Occupancy and photocell sensors should be used to the extent feasible for energy savings in the building.

An example list of lighting controls is below.

- Offices: Occupancy Sensor with multi-zone switching and dimming. Integrate photocell sensors where applicable.
- Conference, Group and Meeting Rooms: Occupancy sensors, multiple switches with programmable control. Integrate photocell sensors where applicable.
- Courtrooms: Multiple switches with programmable control. Integrate photocell sensors where applicable.
- Lobby / Corridors: Programmable control, un-switched emergency.
- Toilet Rooms: Occupancy sensors, un-switched emergency
- Stock / Storage Rooms: Occupancy sensors.
- Mechanical / Electrical Rooms: Switched normal and emergency
- Holding Cells: Programmable control and emergency.
- Parking: Photocell and Programmable control.
- Walkways: Photocell and Programmable control.
- Courtyard: Photocell and Programmable control.

The lighting should also be connected to the building automation system (BAS) to ensure the lights are turned off after hours.

2.9.4 Lighting Level (Fc)

Minimum maintained average foot-candle levels for typical spaces are listed below. Deviation from these criteria may be required to accommodate individual space needs or reduce energy consumption. Also see space standards for additional requirements.

- Offices: 30 plus task light
- Conference, Group and Meeting Rooms: 0 - 50 variable
- Courtrooms: 0 – 70 variable
- Spectator Seating: 25
- Lobby/Corridors: 10-20
- Toilet Rooms: 30
- Stock Rooms / Storage Rooms: 30
- Mechanical / Electrical Rooms: 20
- Holding Cells: 20
- Parking: 1 fc 4 to 1 min/max
- Walkways: 1-2
- Courtyard: 1 to 2fc at a 4 to 1 min/max

2.9.5 Power Distribution

Power distribution includes the systems required to deliver power to the building and distribute it within the building.

Power redundancy is preferred with a tie into two separate portions of a community's electric grid, if feasible.

Capacity for future growth needs to be designed into the system without compromising the efficiency of power to the facility prior to growth.

Raceways, conduit, cable tray and conductors shall all meet DFCM Design Standards. Additional raceways should be provided to accommodate growth and offer future flexibility.

Outlets should be located to allow for an amount of flexibility while not providing an unnecessary amount of outlets in general office environments. In addition, floor box outlets should be provided in multi-occupant spaces and should be coordinated with furniture locations during the design phase.

Electrical outlet locations should also be closely coordinated with the communications, audio/visual and security systems within the building.

2.9.6 Power Quality

As courthouse facilities have a large amount of very sensitive electrical, security and communications devices, it is important that a high quality power be distributed throughout the facility. The project team should understand the power quality available to the project and review means of improving quality if necessary.

2.9.7 Electrical Efficiency

Electrical efficiency is vital to the ongoing operational costs of the facility. A variety of methods of improving electrical efficiency should be considered, including but not limited to:

- Transformer sizing
- Redundancy requirements
- Circuit loading

2.9.8 Systems Coordination

A fault and coordination study should occur to indicate available fault current within the distribution system. the breaker and fuse selection should respond to the needs and issues identified in this study. Breakers should also be set at levels for optimum system coordination.

Coordinate locations that require transient voltage surge suppression (TVSS) and “noise” protection within the facility.

2.9.9 Uninterrupted Power Supply

UPS should be provided to support Data Processing, Building Controls, Security equipment and communications equipment. Coordinate systems requiring UPS with courts representatives and the DFCM.

2.9.10 Emergency Power

An emergency generator is required for life safety functions, and as back-up for commercial power to critical equipment items. Life safety functions include means of egress lighting, lighting to certain critical spaces, and power for the fire alarm system, security electronics and all smoke management equipment where required. The integration of additional systems, such as all or portions of the HVAC systems, building telephone system, data and file server equipment should be discussed during the project design.

The generator size, fuel supply and location should be determined early in the design processes and integrated into the site and building design.

2.9.11 Lightning Protection

Lightning protection should be provided for all judicial facilities.

2.9.12 Fire Alarm Systems

A fully addressable fire alarm system will be installed in accordance with code requirements and requirements of the Utah State Fire Marshal's Office. The system must comply with A.D.A. requirements and report compatible alarm signals to the Local State central monitoring system. System shall integrate with the building smoke management system to provide contract signal per smoke zone to the smoke management system.

2.10 BUILDING SYSTEMS MANAGEMENT

2.10.1 Building Automation System

A building automation system shall be integrated into the building design and be programmed to perform the following tasks:

- Maintain building temperature within a specified range
- Provide lighting based on a set occupancy schedule
- Monitor building mechanical and electrical system performance
- Send notification of failure or deviation from normal performance to building operation staff
- Monitor building energy use

The building automation system shall be designed to meet or exceed all applicable DFCM standards.

2.10.2 Fire System Management

The fire system includes an audible and visual alarm system as well as the fire suppression system. All fire systems shall be designed to meet applicable fire and building codes. The fire alarm system shall be tied into the municipal fire service with alarm and notification as prescribed by the local fire authority.

A knock box with a building entrance key should be located outside the main building entrance with a visible annunciator panel in the main lobby of the building. If this system is not in the main lobby, it should be located to minimize conflicts with building security and shall not be located in the control or holding areas of the building.

The fire suppression system should be a wet-pipe sprinkler system at all interior locations and shall be connected to the alarm system.

2.10.3 Elevator Controls

The elevator controls shall be tied to the building fire system and return to the main level in case of alarm. After this point, the elevators can only be controlled with the appropriate key override.

All elevator systems shall meet applicable building and fire codes.

2.11 ACOUSTIC DESIGN

There are three main acoustical considerations, or conversely, problems, that must be addressed in a judicial facility; acoustical privacy, control of background noise, and proper acoustical design of the space. There are well-established standards for all three, and are especially critical in design of courtroom facilities, where clear speech intelligibility is critical. If these principles are adequately addressed, they will assure acceptable acoustical conditions. The criteria are:

2.11.1 Acoustical Privacy

Proper design of structure to assure proper, air tight, isolated sealing of all possible sound leakage paths to minimize both speech and other noises between occupied spaces.

2.11.2 Control of Background Noise

Adequate control of potential sound interference from sources outside occupied spaces. These include: noises inside or outside the facilities, and from or into critical occupied spaces (i.e. Court rooms, Judge's chambers, Jury rooms, private counsel rooms, HVAC systems, street traffic, etc.).

2.11.3 Acoustical Design

Proper acoustical design of court room space must be adhered to in order to assure good intelligibility between the various participants. Typically, modern court rooms of any size will incorporate some form of speech reinforcement, in addition to the usual recording equipment for the Court Clerks; this can be combined into a single, coordinated electronic system. This, combined with an adequately quiet background noise level in the courtrooms, (< NC-30), should assure effective voice communication as well as quality recordings of courtroom proceedings.

All of these requirements can be specified and provided for during design. Coordination between the designers and a qualified acoustical engineer followed by effective, timely inspections during the construction will ensure these criteria are met.

2.12 COMMUNICATIONS AND INFORMATION TECHNOLOGY

2.12.1 Communications requirements and guidelines for courtrooms shall be as provided in the standards published by the Department of Administrative Services, Division of Information Technology Services, Facilities and Wire Management Group and the Administrative Office of the Courts. These requirements shall support the Computer Integrated Courtroom (CIC) operation and all related functions such as real time court reporting, on-line legal research, video court reporting, video conferencing, evidence presentation and records management.

2.12.2 Courthouse infrastructure should be designed to serve multiple computer platforms in the building's core (including a wide range of LANS, WANS and other systems) and provisions for wireless applications.

2.12.3 Courthouse infrastructure should permit the interface of the following systems through the use of communications protocols over connected wiring and cabling systems or wireless systems:

- Office automation
- Management information systems

Sufficient vertical chases to serve multiple communicating systems particularly support for multiple systems in the building backbone.

Vertical alignment and appropriate locations and distribution of floor telecommunications and electrical distribution closets for appropriate building zoning and services distribution.

Water pipes should not be installed over computer rooms or telecommunications closet or other water sensitive areas. If substantial cause prevents implementation of this guideline, a close-looped water pipe system or equivalent must be used. As an overriding guideline water suppression systems are not to be installed over computer rooms, instead a gas extinguishing system or alternative system which meets building and state codes is to be installed.

2.13 AUDIO VISUAL (AV) SYSTEMS

The design of audio visual systems and infrastructure should support widespread distribution of multimedia applications including video technology for remote proceedings and conferences as well as staff training and public education.

These systems should support the increased use of remote access to court computer systems for case/document filing, fine payments and public information. Off site connections to other court facilities, law offices and libraries or public assistance centers should be possible. In addition, the AV systems should support the deployment of assistive listening systems, TDD (Telecommunication Device for the Deaf) and non English language interpreter services in courtrooms, offices and public use areas such as jury assembly and hearing rooms.

Complete audio and video (AV) systems will be provided in judicial facilities. AV systems will be specified for all courtrooms, jury rooms and select conference rooms. Locations for AV systems should be coordinated early in the design process. AV systems will include audio systems, video evidence presentation systems, video conferencing systems, courtroom monitors and multi-media presentation equipment and control systems. All AV systems should be coordinated with the court representatives to ensure full compliance with the needs of the courts.

2.13.1 Courtroom Audio Systems

Microphones with very sensitive elements and super cardioid pickup patterns should be specified for effective capture of audio. All bench area, witness, podium, and counsel table microphones need to be specified and installed to ensure adequate audio quality.

All microphones should be designed for optimal output and for minimizing background noise. The microphone and mixer system will be designed with multiple outputs, for microphone mix down to the court's recorder. In addition, the courtroom automatic microphone mixers will be specified with echo cancellors and a telephone system interface for seamless integration of the courtroom sound and telephone systems.

A digital processor will be provided for equalization of the sound systems, and power amplifiers will be specified for faithful amplification of all input signals. The power amplifiers will provide 70 volt distribution of the audio signal to all ceiling speaker systems. Speaker systems will be installed throughout the courtroom jury box, spectator area, and well area. In addition, perimeter area speaker systems will be installed in the Judge's secretary office, Clerk's offices, and holding cell areas for unruly defendants.

Unless directed to change to RF technology during the design process, a two-channel infrared wireless transmission system will be specified for each courtroom. Each listener wearing a headset will be able to select between the assisted listening system, or a possible translation microphone input. If directed to do so during the design process, a translation system will be specified to facilitate an interpreter speaking in a second language. Interpreter microphone inputs will be located at the defense counsel table and the witness box.

Where directed to do so during the design process, a boundary type microphone will be specified for bench conferencing in courtrooms. If included in the project, this microphone will directly feed to equipment necessary to facilitate making a record of bench conference proceedings. In addition, masking noise will be added to the speakers over the jury boxes during bench conferences in order to help minimize the possibility of jurors overhearing bench conferences.

A four channel record output panel will be specified for each courtroom. The audio from each output will be segregated, as directed by the court, into groupings of microphones. For example, the court may wish to record opposing attorneys on different audio channels. Digital audio recording systems will be furnished and installed by the Court.

2.13.2 Courtroom Video Systems

Video evidence presentation systems will be specified for courtrooms. The video evidence presentation equipment will include a video evidence presentation lectern, and multiple small LCD flat panel monitors for video evidence display.

The video evidence presentation lectern will be equipped with a composite video/audio input, S-video/audio input, and computer video/audio input. These inputs will be used to accept AV signals from portable source devices such as lap top computers and DVD players. No source devices will be permanently installed on/in the video evidence presentation lectern. In addition, no source devices or AV inputs will be provided at any other courtroom location.

AV signals input at the video evidence presentation lectern will be switch, processed, and distributed to approximately monitors at the following locations: Judge, Clerk of the Court, witness, lectern, each counsel table, and one monitor for every two jurors. All monitors located on horizontal work surfaces will be installed on low-profile desk stands. Monitor located in the jury box will be installed on articulating arms affixed to the inside of the vertical millwork jury rails. A few large screen flat panel monitors will also be provided on roll-about stands. These monitors will be shared between courtrooms for display to the gallery, or other miscellaneous needs. The ability to annotate (write electronically on displayed video evidence) will not be provided.

Where directed to do so during the design process, video conference capability will be specified in courtrooms. Cameras will be located in recessed wall pockets at various courtroom locations. Signals from these cameras will be distributed to video conference equipment for audio and video communication with distant locations.

2.13.3 Chambers A/V Systems

Each Judge's chambers will be equipped with a ceiling mounted speaker, wall mounted volume control, and microphone input. This will make it possible for a Judge to go "on record" (be recorded), and to teleconference from his/her chambers. It is noted, however, that the control system is not extended into Judge's chambers; and therefore, this chamber functionality must be operated by a staff person on the touch panel at the Clerk's position in the associated courtroom.

2.13.4 Sequestered Witness A/V Systems

The sequestered witness room will be provided with audio and video systems for two-way communication with courtrooms. Audio and video system equipment will include one camera, two monitors, one speaker, and one microphone.

2.13.5 Conference Room A/V System

One conference room AV system will be specified. The system will include an audio system for amplification of presentation media and for tele/video conferencing. The video system will include large-screen display device(s), multiple locations for connection of AV source devices, and a resident DVD/VCR. All audio and video system equipment will be controlled via a touch panel control system

2.13.6 Paging System

The building telephone system will be used as a paging system.

2.13.7 Courtroom Controls Systems

Fully integrated control systems will be specified for each courtroom. The control systems will be used to provide remote control capability for all audio, video evidence, and video conferencing equipment. In addition, the touch panels will be programmed to control the lighting systems and electric roll-up projection screens (if specified).

Human interface with the control systems will be accomplished using touch panels. One touch panel will be located at the Clerk's position. If funding permits, a second touch panel will be located at the Judge's bench. The touch panels will be used to issue control commands to the audio and video systems.

Video cameras will be controlled via the courtroom control systems. Camera switching and position commands will originate by users via the specified touch panel(s).

2.14 COMMISSIONING

The state of Utah will hire a Commissioning Agent (CxA) as a part of the project team. The CxA will be engaged in the project from design development through construction and final training and be available to the owner through the one year warranty period, after substantial completion. The initial role of the CxA is to verify that the project design meets the Owners Project Requirements (OPR), as outlined in this document and subsequent owner documents, as well as the building systems Basis of Design (BOD). This will be completed through reviews of the construction documents at the design development and construction document phases of the project design. The CxA does not have the power to make or approve changes to the design, but they will suggest modifications and clarifications to be made to the project design, which will be coordinated and implemented by the project team.

The Commissioning Agent will also observe and track the installation of building systems to provide the owner verification that the building systems are installed and functioning efficiently and properly prior to building occupancy. According to the State of Utah Preamble for Commissioning, “The CxA is not to replace the design architect and engineers in verifying that the work is constructed per the plans and specifications. They are to supplement the efforts of the design team. Close communication and coordination between the design team, the CxA and DFCM is required. It is the intent for the design team to continue to do both interim and final inspections noting items that do not comply with code or with the contract documents.”

2.14.1 Commissioned Systems

Per the State of Utah Requirements, the following systems will be commissioned:

- Electrical Systems
- Mechanical and Plumbing Systems
- Operable Building Control Systems
- Audio and Visual Systems
- Telephone and Data Systems
- Building Security Systems
- Elevators and Conveyance Systems
- Scheduled or Occupancy Sensor Lighting Controls
- Daylight Dimming Controls
- Refrigeration Systems
- Emergency Power Generators and Automatic Transfer Switching
- Uninterrupted Power Supply Systems
- Life Safety Systems (fire alarm, egress pressurization, fire protection, smoke evacuation)
- Domestic and Process Water Pumping and Mixing Systems
- Equipment Sound Control Systems and Testing
- Paging Systems
- Renewable Energy Generating Systems
- Building Envelope Systems

In addition to the above systems, the court security systems, emergency systems and hardware systems will all be commissioned to guarantee the systems perform as designed.

3.0 Judicial Facility Security

Courthouse security is essential to the integrity of the judicial process and to the safety of courthouse occupants and users.

This section identifies items for coordination with the project architect, engineers, and design team. From a comprehensive security perspective, a court facility is unique. Three levels of security, requiring different types of access control, monitoring, and enforcement involvement are combined together in a single building. There will be a "public" level of security, a "judicial" level that restricts access to staff and Judges by the public, and a "custody" level that is to be completely separate from the other two levels. Each level has increasing security demands and requirements.

3.1 SECURITY PLAN

All Court facilities in the State will have a written security plan on file with the Administrative Office of the Courts as required by the Judicial Council. These plans shall comply with Rule 3-414 of the Rules of Judicial Administration.

3.1.1 The required plan will address issues of security policy and responsibility, general procedures and staffing as well as anticipated design and technology requirements. It should provide for the uniform training of security personnel.

3.2 BUILDING SYSTEM IMPLEMENTATION

The security systems that handle all three of the security "levels" will be installed as a single enterprise command and control system that will integrate the various elements of access control, alarm and duress monitoring, video surveillance, and voice communications. This integration will be IP-based and will follow the same requirements needed for the building's voice and data structured cabling system. The security system equipment will therefore be sharing space with the IT and AV equipment in the same distributed termination rooms (communications, telecom, IT, etc) that are vertically stacked on each floor. In addition to these "satellite" equipment locations, a main security equipment location will need to be provided, preferably close to or in the primary control room where security operations and control will be performed by the court's enforcement officers. The square footage requirement for the main equipment location is 30 – 35 square feet and the "satellite" locations will need 10 – 12 square feet per room.

3.3 ARCHITECTURAL ELEMENTS COORDINATION

There are several architectural elements that have particular security involvement that deal primarily with entrances, exits, vehicle gates and parking, and after hours usage of the building. They are listed as follows:

3.3.1 Public Entrances

The main entrance to the courthouse shall provide enough room for the screening process. Consideration for the size and restrictive proximity distances between X-ray machines and magnetometers is required. Sufficient accessible space for queuing, space for those with and without items to be x-rayed, and room for officers to monitor and to “wand” is needed. A clear view of the entrance by the screening officers is essential.

3.3.2. Public Exits

Public exits placed in the same vestibule as the main entrance must have a physical separation, such as a floor to ceiling glass partition. There should be no physical contact between those entering and those exiting the building, and still within view of the screening officers.

3.3.3 Public Emergency Exits

These are exits not associated with the main entrance or are not in view of the enforcement officers, and are intended for use only in emergencies. There should be no more of these than required for life safety. These doors shall be locked from the outside with no external hardware. Delayed exit hardware on the door inside will allow free egress following a prescribed time delay. During this delay, alarms are being registered both locally at the door (audible alarm) and at the main security console. Video cameras will be positioned both inside and outside of each of these emergency exits.

3.3.4 Courtroom Delayed Exits

Doors that enter the judicial secure corridor from the courtroom are access controlled with card readers to restrict the public’s entrance to this part of the building. It may be required, due to room occupancy and life safety requirements, that at least one of these doors becomes an emergency exit. As with the public emergency exit, a delayed exit hardware device will be used. The card reader will override the delayed exit and attendant alarm for authorized judicial staff.

3.3.5 Staff Entrances

Staff entrances need to be considered as being accessed 24/7. The location of these doors in a new facility should consider several factors, like the proximity to lighted parking and building use by multiple agencies. These doors will always require an external card reader for access and then a separate code entry at a security keypad on the inside wall to disarm the intrusion detection system.

3.3.6 Multiple Agency Staff Entrances

When multiple agencies (such as Guardian Ad Litem offices) are included in the planning for a new courthouse, staff doors that cause staff of these non-court agencies to access their offices through court employee designated areas can create risk management and accessibility issues including courthouse after hours security zone alarm problems. Every attempt should be taken to locate non court staff entrances for direct access after hours to their designated areas.

3.3.7 Judge's Secure Parking

Secure parking for Judges should be coordinated with their judicial entrances, and located close to the building. This parking should be a separate, privacy fenced-in space and accessed with a fully secure roll up or side roll gate. Gates are controlled by card reader and main control room operation with installed cameras and intercoms.

3.3.8 Staff Parking

The parking areas for Court employees shall be access controlled and entered through single arm gates with card readers. Intercoms at these gates are discouraged to limit the amount of "security" traffic at the main security console by folks who have forgotten their cards or don't have them.

3.3.9 Deliveries

Security for delivery access is determined by the proximity of the trucks to the building. When deliveries are made inside the staff parking area, an intercom and remote gate opening would be needed to allow access to non authorized drivers. This would automatically alert the court security forces of an impending delivery. A second intercom is located at the dock location. This second intercom will be connected directly to the person responsible for deliveries. If deliveries are made directly to the building dock, bypassing the staff parking security gate, only the dock intercom is needed. The intercom should have a sign indicating this is for "Deliveries Only" to eliminate most other nuisance calls. Deliveries should be discouraged in staff parking areas.

3.3.10 After Hours Access by Non Staff Persons

Sometimes after hour appointments are made with non-staff visitors. Locating an intercom, as described for Deliveries, outside a particular staff entrance would provide communication to the appropriate people inside the facility. These non staff visitors would then be let in and escorted by the appropriate staff on site.

3.3.11 Vehicle Sallyport for Prisoner Transportation

The vehicle sallyport is a fully enclosed building area constructed such that traffic is drive through, one way only, with no back up required. Overhead doors shall be used for both entrance and exit, sized in width and height for the expected mode of transportation. Accommodations for bus sized transports shall be provided in courthouses with 4 or more courtrooms, including expected growth potential. The sallyport exit shall have vehicle sensors in the pavement outside for exiting vehicles to initiate closure of exit doors. The entrance shall be accessed by one of two ways. Card

readers shall verify authorization for those officers normally assigned to the courthouse with cards. An intercom and camera shall be installed for those without cards that will allow identification by the main security console operator who then operates the doors manually. The entrance and exit overhead doors, as well as any other perimeter man doors entering the sallyport or holding areas, are all interlocked, thus restricting usage to one door being open at a time.

3.3.12 Secure Parking for Prisoner Transportation Vehicles

Upon exiting the vehicle sallyport, the transportation vehicle can either leave the courthouse property or park in a secure parking area that is physically separated by structure and/or fence from all public parking and building grounds. Similar to the sallyport, this area will again have a singular entrance and exit, controlled by card and/or intercom. Once inside the secure parking area, the transportation officers will then be able to enter the vehicle sallyport through a man door using the same manner of authorization, either card or intercom.

3.3.13 Security Control and Equipment Rooms

A main security control room shall be provided in the immediate area of the vehicle sallyport and the interior holding cells, with line of sight vision to all areas. This control room shall serve as the master of operations for all security technologies and any subsequent remote control stations located elsewhere in the courthouse. It is expected that officers will be a constant presence in this control room. A second control station, networked to the master station, shall be located at the main courthouse entrance screening area.

3.4 ALARM SYSTEM, INTRUSION AND DURESS

This the first of several sections that define the individual elements of the overall security system – security alarms, access control, video surveillance, intercom, and electronic integration. Each of these elements will be dealt with separately, but keep in mind that all these systems will be integrated into a singular system operation, allowing the security officer to operate through a single control screen.

This security element is intended to provide alarms for unauthorized entry to the building after hours and functions in the same manner as a home burglar alarm system. When armed, door contact switches, motion detectors, and glassbreak sensors are used to detect and send alarm information to responsible parties, usually via telephone lines.

3.4.1 Door Contact Sensors

Sensors are installed on all perimeter doors, including outside doors on mechanical and electrical rooms. Door sensors are either 24/7 or “disarmed” depending on the door usage. Doors used on a regular basis during business hours, will be disarmed. Generally unused doors, like the mechanical and electrical rooms, are always armed and notify the enforcement officers of service entrance situations. All door switches are to be installed in the door frames, concealed, or integral to the door hardware.

3.4.2 Motion Detectors

The intent of a motion detector is to provide a second layer of intrusion detection in addition to the door and window alarms. And if the threat exists, they can be especially useful for anyone hiding inside the building waiting for everyone to go home. However, motion detectors can present challenges for after hours presence by authorized staff and Judges. Several strategies ought to be considered when deploying motion detectors, such as which areas should be disarmed and which areas should remain actively armed, automatic arming of the system based on time, and whether the constant entering of codes to arm or disarm is necessary.

3.4.3 Glassbreak Sensors

These sensors are ceiling mounted, single gang faceplate type devices located in all first level spaces with ground accessible windows. These sensors are always armed (24/7), and alarms will always be sent to the security control screens. When the building intrusion system is armed, any and all alarms from any detector will be sent via the telephone dialer to responsible parties off site.

3.4.4 Duress Switches

These manually operated switches are located in various places for the protection of staff and judicial personnel. In general, these location are anywhere court staff and the public interact, including but not limited to all public counters and reception desks in individual department suites. For Courtrooms, switches are installed at the Judge's bench and the Clerk's bench. Judicial chambers and associated staff locations also have duress switches. All these switches are hard wired and permanently mounted to the underside of countertops and desktops. Activation of these duress switches causes a signal to be sent immediately to all the security control screens. The alarms alert the enforcement officers to the location of the duress situation with specific tones, flashing icons on the control screen floor plan, and camera video being called up automatically and displayed on the adjacent monitor screen. For courtroom duress, the audio signal from the sound system in the courtroom is also sent to the security control screen workstation area and heard through the master intercom station. This allows the officers to both see and hear what's going on before entering. The wired switches are a "hold-up" type that latches and requires an extra action at the switch to reset it.

3.4.5 Wireless Duress - Staff Locations

Where staff personnel are working without a permanent station or in transitional offices, wireless switches with hard wired receivers mounted above the accessible ceiling are provided. These areas would include any Court designated office, such as Probation and Pre-Trial.

3.4.6 Basic Alarm System Hardware

The main panel shall be a standard type of central station-monitored alarm panel. The panel is required to interface and transmit alarms and control information using open architecture serial based data communication with the overall system integration hardware and software. The panel shall have a minimum of 8 partitions and support both hard wired zones and addressable device zone wiring.

3.5 ACCESS CONTROL

Access Control is used to keep separate the three security levels – Custody, Judicial/Staff, and Public – and allow free access to those persons with authorization. Perimeters are to be established for each of these areas, with all door or access entrances controlled. The control of doors in the courthouse includes both card reader technology and manual door control from a security console, depending on the security level.

3.5.1. Public Level Access

Public entrance into the courthouse is provided through the screening process at the main entrance. There is an established physical boundary between the general public outside the courthouse and those who have been screened, with all public exits from the building being free egress. All exits are monitored by the security system. The public doors for entrance and exit have electrified hardware, ADA required automatic openers, and the locking function is controlled by the main access control system using both manual command and/or time and calendar programming.

3.5.2. Judicial/Staff Level Access

This perimeter is only for authorized persons, or those escorted by authorized persons. Access into this level from the Public area is granted by card readers for staff or by passing through a controlled reception area. Card reader technology is used primarily in the Public and Judicial/Staff areas and is intended to function independently and provide “automatic” operation of doors to authorized people.

3.5.3. Custody Level Access

Access into the Custody level is allowed at very few locations, as it is the most secure. The only point where Public and Judicial/Staff security levels interact with the Custody level is in the courtroom, when those persons in custody are escorted from the adjacent holding cells into the courtroom. Primarily, remote manual door control is the method of access in the Custody level. This requires a control officer to first determine the validity of a person’s entrance or exit and to then perform a manual action before any access is granted.

3.6. CARD READER CONTROLLED DOORS AND GATES (ALL LEVELS)

3.6.1. Cards Readers

Provide proximity type readers, both wall and mullion mounted for interior applications, with a maximum read distance of five inches. Readers for vehicles shall have a maximum read distance of 10 inches. Card readers shall be hardwired to the nearest termination room on the same floor for connection to a networked door controller.

3.6.2 Door Status Monitoring

The system monitors the status of the door – open or closed – using an installed contact switch in the door frame. This switch shall be a concealed type with an opposing magnet in the door. The status of the door is required by the access control system to monitor two alarm conditions. A

"forced door" alarm will be sent if the door opens without an authorized signal sent (card or remote switch) and a "door ajar" alarm will be sent if the door is propped open and/or remains unsecure.

3.6.3 Request To Exit Function.

Hardware must be provided to override a "forced door" alarm when someone exits through an access controlled door. This is a simple switch closure provided by a mechanical switch integrated as part of the exit hardware or crash bar.

3.6.4 Access Control System Panels.

The access control system shall be a full-featured, credential based control application delivered as a network appliance. The system's architecture shall be fully distributed and shall exist either as a stand alone system component capable of interfacing digitally and being completely compatible with the integrated enterprise command and control system or being an actual part of the integrated system itself. The access control system shall have the following features:

- Built-in OBDC compliant database for personnel profile information
- Photo ID capability with video verification
- Interface with elevator for status and control
- Integration with common alarm panels for disarm on access
- Interlock and global "lockdown" functions
- Custom report generator
- Card format decoder to discover unknown card formats

3.6.5 Manual Door Control

A single master brass key should be created for each judicial facility. This key shall be a restricted patented key system, which requires an authorized signature for replication. This key will be a manual override for electronically controlled hardware and devices throughout the facility as well as an additional level of control for the custody level.

In the Custody level of control, both card reader technology and manual door control is used.

- Holding Cells. Holding cells are located at both the immediate entrance into the building connecting to the vehicle sallyport and adjacent to each courtroom. These doors will be key locked, requiring an officer to be at the door when it is used.

- Movement doors (corridor, vestibule, sallyport type). Depending on their proximity to the outside, these doors may or may not be controlled electronically. Multiple security perimeters are set up in the Custody level, with the perimeter doors closest to the outside being the most secure and requiring an officer at the main security console to open the door remotely. All sallyports, man traps, or sequential doors offering a free path through more than one door will require interlocks. Doors requiring manual control by a control officer are supported with intercom communication and video surveillance, so the control officer can verify situations before opening the door.

- Card Reader Use in Custody Level. Cards readers can be used in the Custody level as long as they are supported by an additional perimeter of doors under electronic manual control
- Courtroom Holding Area Vestibules. The holding cells are key locked, but the holding area vestibule doors can use card readers. The card reader on the last door into the courtroom shall also employ a keypad, requiring the officer to not only use his card but enter a code. The courtroom holding cells and area are supported with intercoms and video surveillance cameras.
- Electronic Door Control System Hardware. The system panels controlling the Custody level doors shall be comprised of either relay panels or PLC input/output boards capable of communicating with the enterprise command and control system server and software. Discrete wiring is required to the locking hardware requiring relay type connections and control.

3.7 I INTERCOM

Two way communication between wall mounted field stations and the master stations is used in the Custody security level for support of door control and activity awareness.

3.7.1 Features

Call In. Pushing the call button registers a call, requesting a response from the main security officer. This officer can choose to cancel the call or respond to it by selecting the remote station from the control screen. Once selected, the officer can respond using a push-to–talk button.

Monitoring. The officer can monitor the audio at any remote intercom station at any time by selecting the remote station. Exception: Audio from the courtrooms is monitored duress situations only.

Location. Field intercom stations shall be located at all places where assistance from the main security officer may be required. Ceiling mounted speaker stations are installed in holding cells to allow the monitoring function.

3.7.2 System Hardware

Field Stations. Provide heavy duty brushed aluminum or stainless steel faceplates, 11 AWG. Intercom stations shall be weatherproof, vandal resistant, and mounts on a two gang deep electrical box with adapter ring.

System Equipment. Intercommunications system shall be an IP based communication network using a standard 10/100BaseTX Ethernet network connection. System shall be capable of field station selection via the enterprise command and control system software and control screens.

Telephone/Intercom Station. This is a specialized intercom station for use where pushing the Call In button initiates the dialing of a preprogrammed telephone number of specific staff such as for deliveries. The station shall be heavy duty brushed aluminum or stainless steel faceplate, 11 AWG. Cabling for this intercom station is not IP based and shall be connected directly to the telephone board and facility telephone switch network.

3.8 VIDEO SURVEILLANCE

This security system element shall be an IP based video system for direct interface to the IP based enterprise command and control system to allow video management of all live and captured video via the control screen and the coexistent viewing of selectable video views on additional video monitors at the control workstations.

3.8.1 Cameras

All cameras shall be low light color, using megapixel and h.264 compression technology. They are to be housed in tinted dome type assemblies suitable for both ceiling and wall mounting. Generally, most of the cameras installed inside the building will be fixed view. At select locations, for better officer observation, pan, tilt and zoom cameras will be installed. Cameras installed outside on the perimeter and in the parking will have environmentally controlled dome assemblies.

3.8.2 Camera Locations - Public and Staff Areas

Cameras will be installed inside the building to view all entrances and exits, security screening and checkpoints, public counters, reception desks, any locations with a duress button, and inside all elevators. At all “emergency exit only” or “delayed exit” doors, there will also be an exterior camera viewing the exit. Courtrooms will have two security cameras, one viewing the bench from the main gallery and the second viewing back into the gallery from the front of the courtroom. There will be general camera viewing of the secure corridors in the judicial and staff areas as well as the secure parking for both staff and Judges.

3.8.3 Camera Locations - Custody Areas

The Custody security areas will have extensive video surveillance coverage. Not because line of sight will be obstructed, but more for the capturing and recording of all events taking place. Starting with the secure parking and transportation gates, fixed exterior cameras will view the entire course approaching the vehicle sallyport, all card reader/intercom stations and both entering and exiting the overhead doorways and perimeter man doors. Interior fixed cameras will view the inside of the sallyport, the movement entrances and corridors, secure vestibules, transport stairwells, and all intercom locations. The intent is to have a camera view of at least 90 % of the Custody level areas. Heavy duty, vandal resistant cameras will be installed in the holding cells and custody transport elevators.

3.8.4 Video Associations

Video cameras will be installed in association with all intercom and duress locations. When any remote intercom station is selected by the officer in charge, the camera associated with that intercom will be automatically selected and displayed. The camera is not “called up” when the call in button is pushed, only when the officer selects the intercom station. This keeps the officer in complete control of the intercom and camera activations. When a duress button is activated, the video camera(s) associated with the button location are also automatically selected and displayed. In the case of the courtroom duress locations, audio from the courtroom is also automatically selected and heard on the intercom system.

3.8.5 Control Room Functions

The main control room will have a maximum of four LCD flat screen video monitor screens per control officer, 24 to 28 inches diagonal, for viewing selected camera views. The video management features of the enterprise system shall allow the option of configuring various combinations of camera views and placing these multi-screen combinations on the various monitors, manually selecting any camera for full screen viewing, and reviewing previously recorded images. Manual selections can be made by “clicking” on the actual camera location on the floor plan display or by selecting an associated intercom station, which will open the audio channel for monitoring and display the camera view of the intercom location automatically. No keyboard entry or camera number memorization shall be required.

3.8.6 Digital Recording

IP based camera systems have significant advantages for the capture, storage, and downloading of all recorded camera views. All cameras will remain active 24/7. The actual capture and storage of recorded material will be programmable. The use of megapixel camera technology will enhance the “forensic” analytics available for the reviewing of recorded material and zooming in for very acceptable detail.

3.8.7 Network Video Hardware

Provide a video management system (VMS) comprised of both hardware and software. Hardware shall be a network appliance/server providing the following features:

- Up to 16TB storage capacity per server
- Up to 128 channels per server (camera inputs)
- Flexible scalability
- DVD/RW drive on all systems
- Simple and flexible IP camera licensing
- RAID-5 capable
- iSCSI storage integration

Software shall have the following features:

- Be fully functional with Windows, Linux, and Mac clients
- PTZ camera control
- Supports megapixel and h.264 cameras
- Multi-camera playback and export
- Pre/post alarm recording
- Event search and event monitoring
- Enterprise multi-level mapping and user setup
- Web server management for both live and recorded video

3.9 ENTERPRISE COMMAND AND CONTROL INTEGRATION

The integration of the security elements previously discussed into a single point of operation, monitoring and control for the law enforcement officer is approaching a more streamlined and coherent solution using IP based technology. Heretofore this integration was disparate and lacked interoperability using various types of communications and interfaces. Using a network architecture brings the converging world together onto a singular, open platform.

3.9.1 Integrated System Architecture

The integrated system shall be a distributed IP network appliance architecture with a central controller/server and multiple remote network nodes. These distributed network nodes place the termination of field cabling closer to the field sensors and devices. The system architecture shall be truly open and scalable. A truly open platform means no single reseller or manufacturer. Scalable for the sake of standardization of the same equipment from small to large system applications. The IP network of Ethernet switches and security network appliances will use a separate backbone cabling system than that of the primary building LAN system.

3.9.2 Integrated System Hardware

The central controller shall act as the server to the security network with an embedded software suite including web server, ODBC compliant database management system, and embedded application software. The distributed network appliances or nodes shall provide for the actual termination of wiring and devices.

3.9.3 Operation

The integrated security system shall be operated via a standard web browser and custom screen layouts for the management of all the different security elements. The graphical configurations shall incorporate all element devices into a single GUI for a single view of all systems for a particular segment of the building.

3.9.4 Control Function

3.9.4.1 Door Alarms

All doors assumed by the law enforcement officers to be locked and secure, shall have a contact indicator switch installed and be identified with an icon as a “monitored door” on the floor plan control screen. When a door becomes unsecure, an alarm shall sound along with a visual indication of the icon. The alarm’s audio signal can then be silenced, but the visual alert will remain flashing until the door becomes secure again and the “reset” function is used.

3.9.4.2 Intercoms

All intercom station and/or speaker locations (main holding cells) shall be identified with a specific icon. Selecting this icon (mouse click) shall provide immediate operation of the monitoring (listen) function. The “Push to Talk” function on the desk mounted master station shall allow two way communication. No handsets will be permitted. Court audio shall be heard only when the duress buttons in the court are activated.

3.9.4.3 Duress

All wired duress button locations and wireless duress receiver locations shall be identified with specific icons located geographically on the control screen floor plan. Activated duress alarms shall provide an immediate, overriding alarm with both tone (distinctive from all other tones) and flashing visual indication of the screen icon. The tone can be silenced, but the alarm cannot be reset and cleared until the duress switch is locally reset.

3.9.4.4 Intrusion Detection

Alarms from glassbreak sensors shall annunciate as a separate icon representing a particular detection zone of the first floor. Door switches and/or motion detector alarms generated in the building shall send alarm information to the main enterprise system only when the particular area is “armed”. Only a general text message on the main control screen is necessary as off site notification is already in process through the intrusion control system’s dialer.

3.9.4.5 Custody Detention Grade Doors

All doors in the Custody security level area shall be identified with icons showing the door and lock status. This includes both the doors that are operated by the officer from the main control screen and any door that is operated using a card reader. For those doors controlled from the main security control screen, selecting the door’s icon will release the lock which will immediately change the door status indicators and provide access.

3.9.4.6 Card Access System Alarms

All card access door locations shall be identified with icons on the floor plan. Alarms generated by the access control system shall be indicated by a flashing change to the specific door icon and shall identify type of alarm being generated - “Door forced” or “Door ajar”.

3.9.4.7 Fire Alarm Notification

If available from the fire alarm panel, any alarm information pertaining to zone or location of device shall be indicated with text messages on the control screen.

3.9.4.8 Video Cameras

All camera locations shall be indicated on the floor plan control screen. Selecting any camera icon will immediately “call up” video from that specific camera and display it on a designated call up monitor.

3.9.4.9 Special Function Buttons

In addition to the device and door icons located geographically on the floor plan, there are to be other special function buttons that control system wide or “global” operations. These buttons are described as follows:

Silence and Reset. The “silence” button will turn off the audible tone for all alarms allowing the officer to respond and take care of the situation without the sound continuing. The visual flashing changes in the alarm icon will continue however, until the “reset” button is used. If the reason for the alarm has not been reset or remedied at the local point of initiation, such as closing the door or resetting the duress button, the alarm will again sound and flash. Once the alarm has been taken care of locally, using the “reset” button will return the screen back to normal.

Swing Function. The priority level of control between the master control screen and any distributed remote screens in the building is such that the master has all functions, controls, and annunciations enabled, whereas the remote screens, being more publicly located, will have limited functionality. The swing function allows the shifting of all functions and control between the master and the remote station for temporary purposes, either for convenience or in the case of emergency where the master control has been compromised. This is a function of the master control station only and the button will only be found on the screen at that station.

Interlock Override. In the Custody security level, doors that may be open at the same time, and thus offer a free path to freedom, are ‘interlocked”, meaning that only one door can be open at a time. But there may be circumstances where both doors need to be open, such as bringing in a ladder for instance. The interlock override button will allow both doors to be opened, but with a tone and button indication on the control screen that cannot be silenced or ignored. Having both doors open is strictly a temporary thing and should not be left unattended or forgotten.

Lockdown. The “lockdown” button, when used, will override the function of the card readers on the access control system and cause pre-selected card readers to go “blind”. These doors will no longer respond to any card. The control of these doors now resides with the master control officer and this is the only time that the officer has any control over any card reader controlled door in the building.

Custody Elevator Control. The elevators in the Custody level will be card access controlled through an interface with the actual elevator control system. Elevator status and control is made available to the main security system via the access control system element and gives the complete and singular control of the elevator’s movement to any floor and the opening of the doors to the officer at the master control station.

4.0 Court Facility Types and Roles

4.1 SUPREME COURT AND COURT OF APPEALS

4.1.1 Utah Supreme Court Role

The Supreme Court is the "court of last resort" in Utah. The court consists of five justices who serve ten-year renewable terms. The justices elect a chief justice by majority vote to serve for four years, and an associate chief justice to serve for two years.

The Supreme Court has original jurisdiction to answer questions of state law certified from Federal Courts and to issue extraordinary writs. The Court has appellate jurisdiction to hear first degree and capital felony convictions from the District Court and civil judgments other than domestic cases. It also reviews formal administrative proceedings of the Public Service Commission, Tax Commission, School and Institutional Trust Lands Board of Trustees, Board of Oil, Gas, and Mining, and the State Engineer. The Supreme Court also has jurisdiction over judgments of the Court of Appeals by writ of certiorari, proceedings of the Judicial Conduct Commission, and both constitutional and election questions.

The Supreme Court conducts sessions regularly at the Matheson Courthouse in Salt Lake City, but the Court may sit in other locations occasionally.

The justices are assisted by law clerks, staff attorneys, a Clerk of the Court, and a staff of legal secretaries and front office clerks. Law clerks are recent law school graduates who do legal research on issues before the court. The staff attorneys screen the cases to be heard by the court and the Clerk of Court is responsible for processing legal matters filed with the court.

The Supreme Court also adopts rules of civil and criminal procedure and rules of evidence for use in the state courts and manages the appellate process. The Court also governs the practice of law, including admission to practice law and the conduct and discipline of lawyers. http://www.utcourts.gov/courts/sup/

4.1.2 Court of Appeals Role

The jurisdiction of the Court of Appeals is complementary to that of the Supreme Court. The Court of Appeals hears all appeals from the Juvenile and District Courts, except those from the small claims department of a District Court. It also determines appeals from District Court involving domestic relations cases, including divorce, annulment, property division, child custody, support, visitation, adoption and paternity, and criminal matters of less than a first degree or capital felony. The Court also reviews appeals of administrative proceedings by state agencies including the Utah Industrial Commission and the Department of Employment Security Career Service Review Board. It also has jurisdiction to hear cases transferred to it by the Supreme Court.

Court of Appeals sessions usually are conducted in Salt Lake City, but the Court travels several times per year, holding court in different geographical regions of the state. The Court sits and renders judgment in rotating panels of three Judges. It is prohibited by statute from sitting en banc (all seven members at once).

The Judges are assisted by the Clerk of the Court, central staff attorneys, law clerks, legal secretaries, and deputy clerks. http://www.utcourts.gov/courts/appell/

4.1.3 Supreme Court and Court of Appeals Facilities

Both the Supreme Court and the Court of Appeals require unique courtroom and support spaces. In addition, there is only one dedicated Supreme and Appellate Court facility in the State of Utah, which is in Matheson Courthouse. As Matheson was constructed in 1998 and will remain in service for these court processes for the next half century and beyond, there is not a foreseeable need to construct a new facility for either of these court functions. As such, the space requirements for these courts will not be addressed in detail in this document.

4.2 DISTRICT COURT

4.2.1 District Court Role

The District Court is the state trial court of general jurisdiction. The District Court has original jurisdiction to try civil cases, criminal felonies, and certain misdemeanors. In addition, the Court serves as an appellate court to review informal adjudicative proceedings from administrative agencies. http://www.utcourts.gov/courts/dist/

4.2.2 District Court Facilities

District Courthouse facilities house a number of court related programs in addition to the courtrooms and courtroom support spaces. The following list is an example of the programs and spaces required in a typical district court facility.

- Building Entry and Lobby
- Security Station
- Courtroom Waiting
- Courtroom(s)
- Judicial office and Support
- Clerk's office and Support
- Court Programs, Offices and Support
- Secure Holding and Circulation
- Building Security and Operations Support

The list above is not inclusive of all programs that may be located in a district court facility. An architectural and building program will include all building programs and support spaces required by an individual district court. This program should be created with input from the appropriate local court representatives to ensure all necessary programs are included and adequately addressed.

4.3 JUVENILE COURTS

4.3.1 Juvenile Court Role

The Juvenile Court is a court of special jurisdiction. The Juvenile Court is of equal status with the District Court.

The Juvenile Court has exclusive original jurisdiction over youths, under 18 years of age, who violate any federal, state or municipal law, and any child who is abused, neglected or dependent. The court has the power to determine child custody, support and visitation in some circumstances; to permanently terminate parental rights, and to authorize or require treatment for mentally ill or retarded children. The court may also place children under the supervision of the court's probation department; place children in the custody or care of foster homes, group homes, special treatment centers, or secure institutions. The Court works closely with the Office of Guardian ad Litem on cases involving abuse, neglect or dependency.

The Juvenile Court, unlike other state courts of record, administers a probation department. Probation officers prepare dispositional reports, supervise youth who have been placed on probation by the Court, conduct evaluations, and submit reports on the progress of each juvenile. A clerical division prepares the legal documents and maintains the official court record.

All appeals from the Juvenile Court are heard in the Court of Appeals. http://www.utcourts.gov/courts/juv/

4.3.2 Juvenile Court Facilities

Juvenile Court facilities are very similar to district court facilities, with the addition of probation. The following list is an example of the programs and spaces required in a typical juvenile court facility.

- Building Entry and Lobby
- Security Station
- Courtroom Waiting
- Courtroom(s)
- Judicial office and Support
- Clerk's office and Support
- Probation Offices and Support
- Court Programs, Offices and Support
- Secure Holding and Circulation, per Rule R547-7 and R547-3 for Juvenile Holding
- Building Security and Operations Support

The list above is not inclusive of all programs that may be located in a juvenile court facility. An architectural and building program will include all building programs and support spaces required by an individual district court. This program should be created with input from the appropriate local court representatives to ensure all necessary programs are included and adequately addressed.

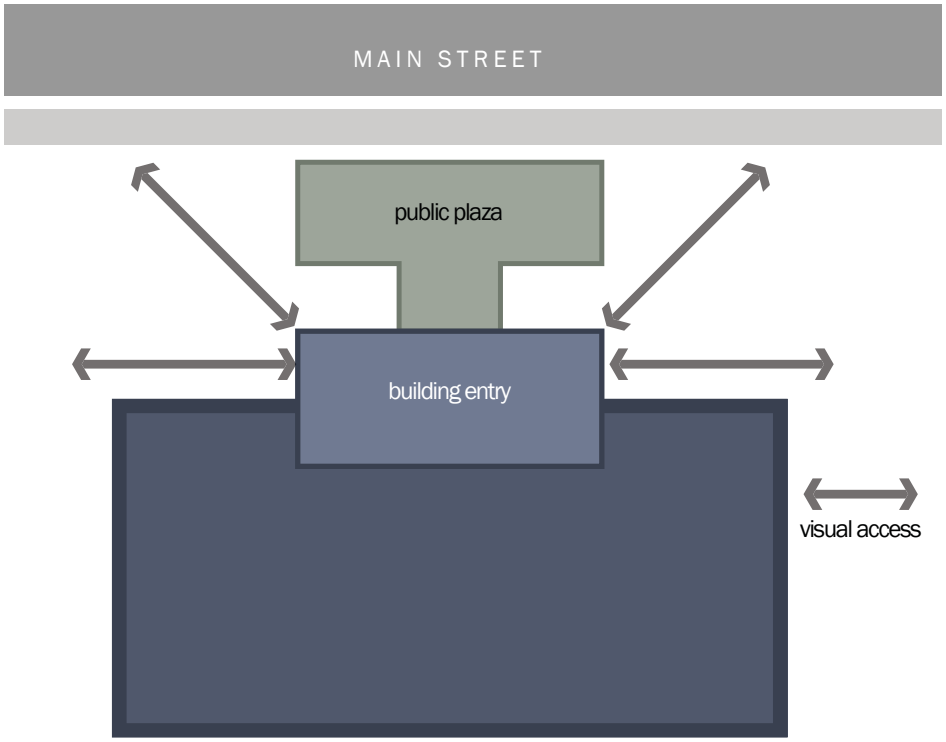
There are a number of existing court facilities that house both juvenile and district court programs in a single facility. Where this occurs, the architectural program shall outline the space and program needs associated with both juvenile and district courts as well as define any shared support spaces.

4.4 DEPARTMENT ADJACENCY REQUIREMENTS

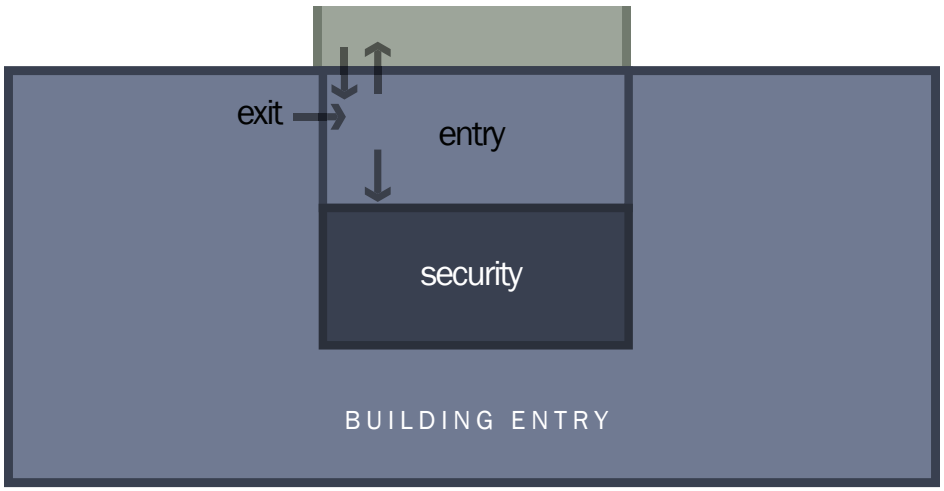
4.4.1 Basic Adjacency Requirements

Because both district and juvenile court facilities have similar programs, and both facility types function in a similar manner, similar adjacency requirements exist for these judicial facilities.

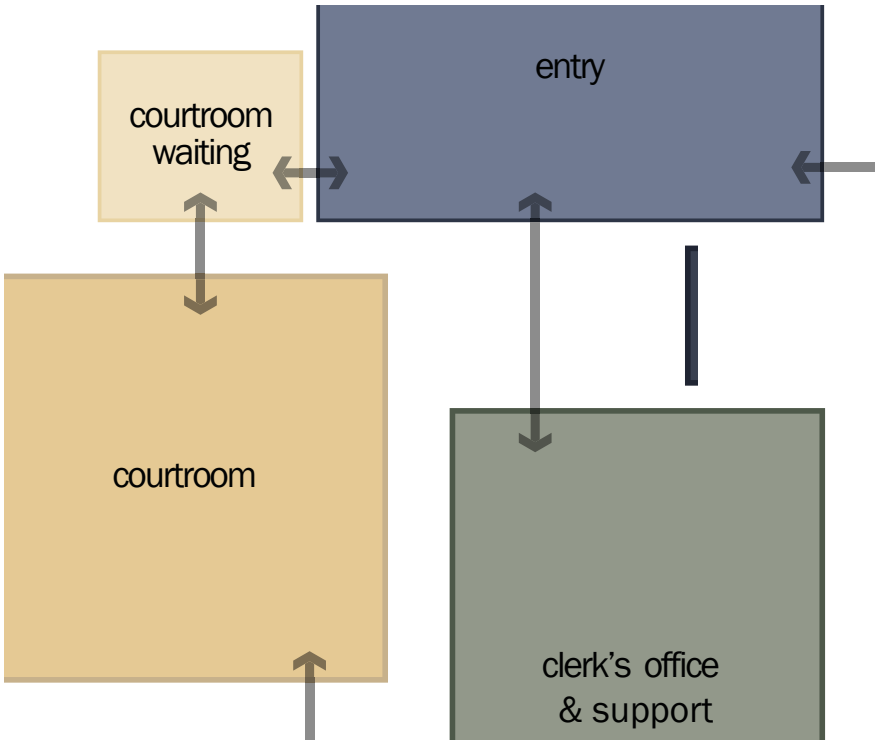
The first requirement is that the building entry and lobby be prominently located so that the general public has both visual and physical access to the entry from the main streets and parking areas. [public]



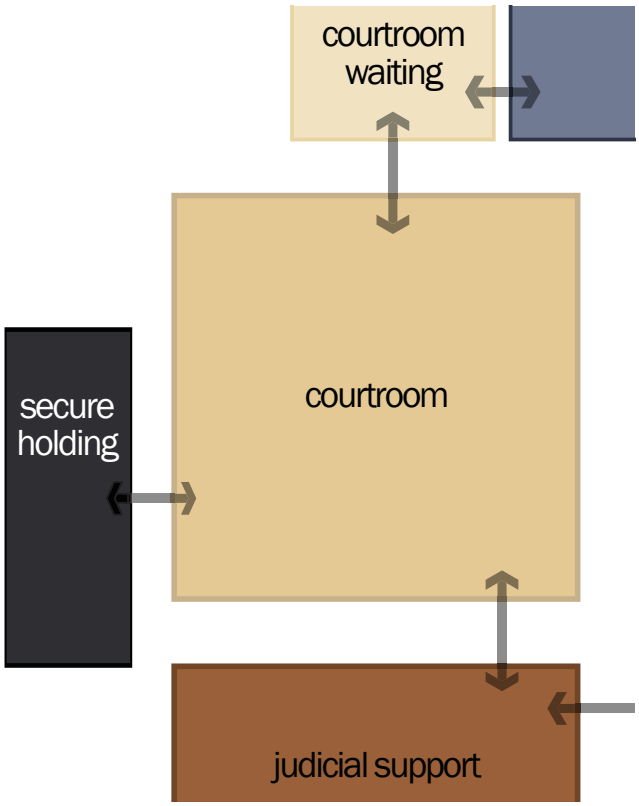
Building security shall be located immediately within the building entry to ensure all who enter the facility are adequately screened. [public]



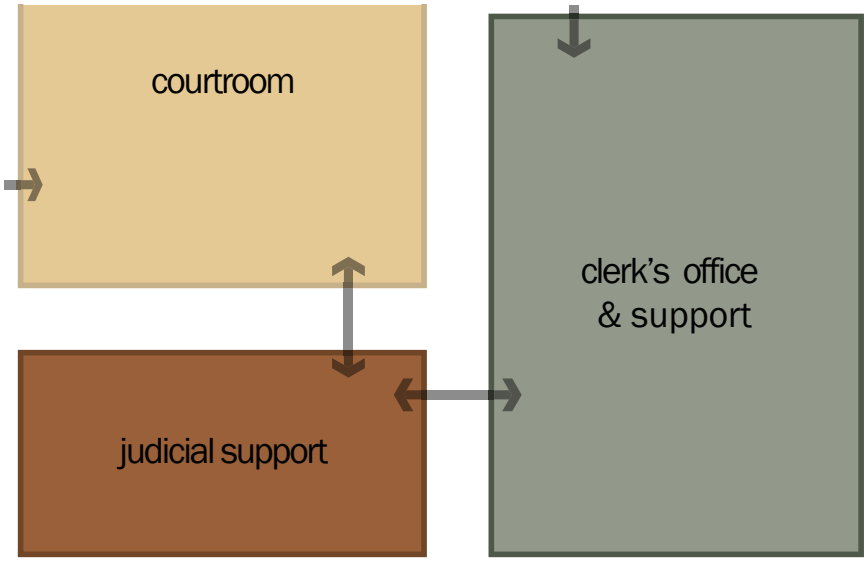
Courtroom waiting should be both visibly and physically accessible directly off the building entry. [public]



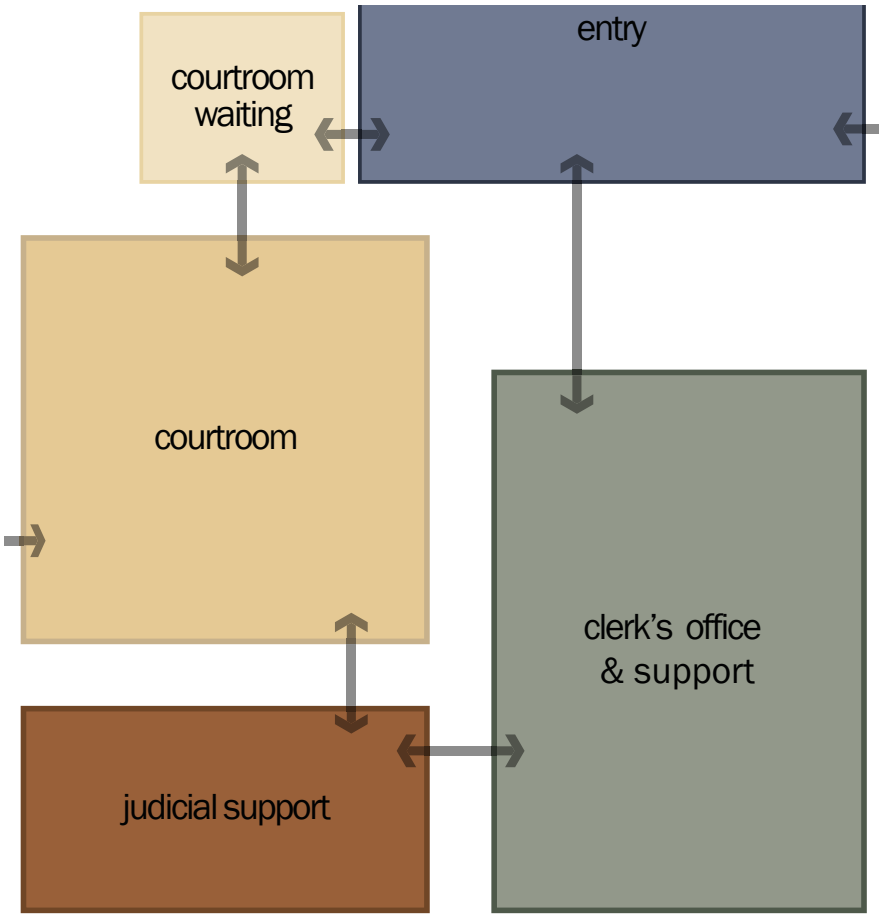
Courtrooms should be near courtroom waiting as well as adjacent to secure prisoner holding and near judicial support areas. Courtrooms are a key interface between the public and secure areas of a court facility. [interface]



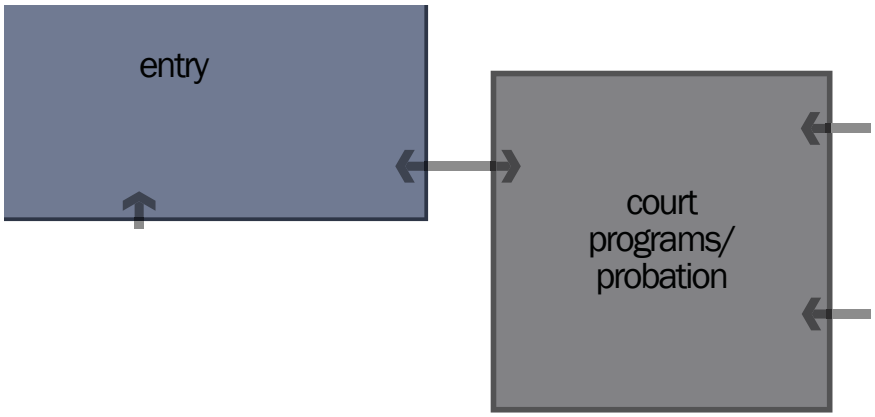
Judicial office and support shall have convenient access to the courtrooms as well as have access to the clerk's area as well as court programs, offices and support spaces. [secure]



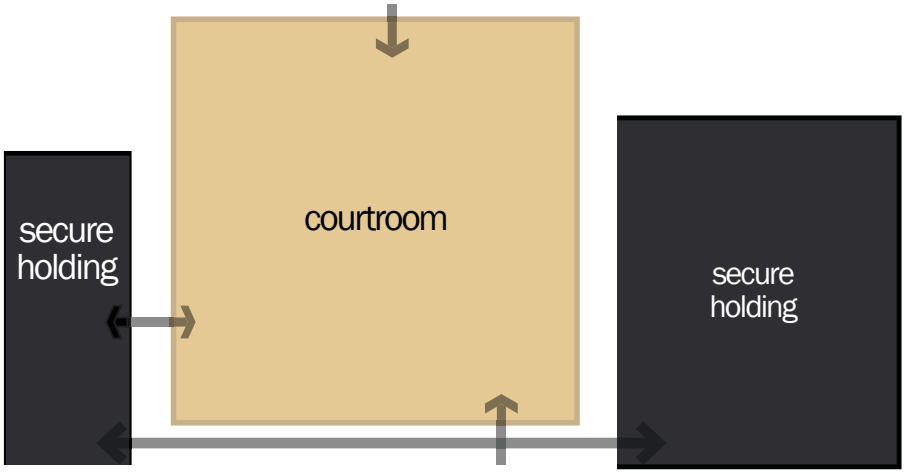
Clerk's office and support as well as court programs, offices and support spaces should be located to provide access from the public areas as well as access from the secure areas of the facility. [interface] [secure]



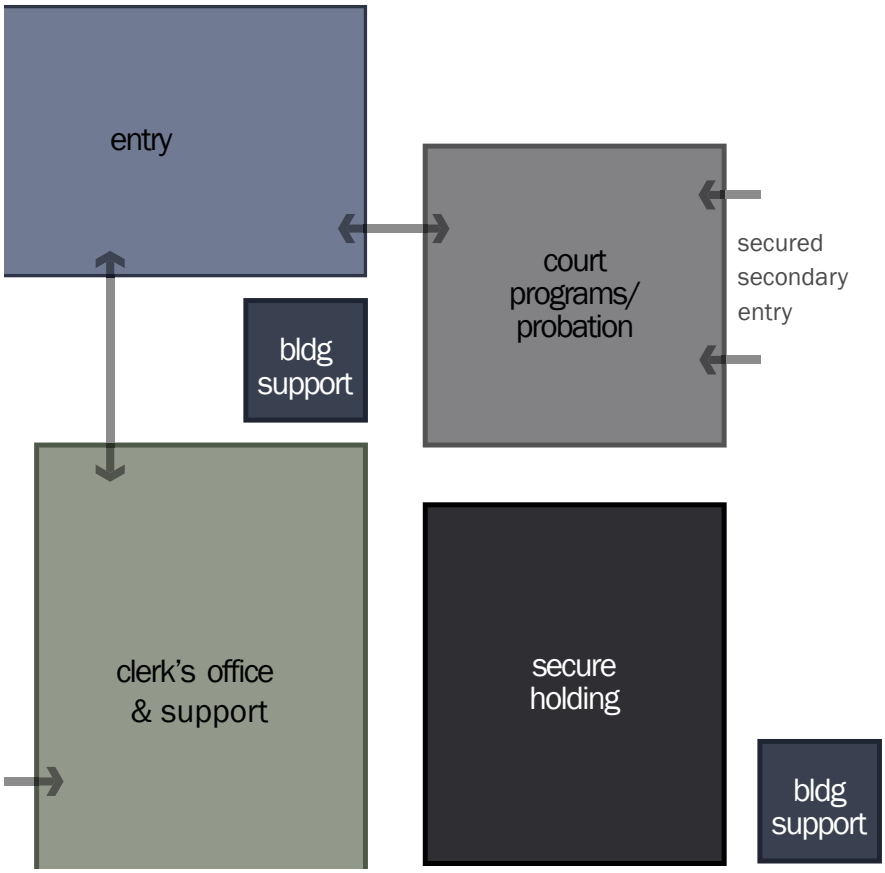
Probation and other Court Programs should be accessible from the main building entrance. Probation does not need any interface with the courtrooms, judicial support or secure holding and circulation areas. [secure]



Secure holding and circulation shall be separated from all other building areas. The only direct access from the secure area shall be into the courtrooms. [secure]



Building Security shall be located within the entry lobby as well as in the secure holding area. Building operations support should be accessible from the public entry, but should be located away from court programs and office areas and near service access areas. [secure]



5.0 Judicial Facility Space Standards

This section provides an extensive (though by no means all-inclusive) list of Court related spaces and defines key design criteria for each. The information is divided into the major categories of:

- Space and occupant type
- Space usage characteristics
- Key architectural design features
- Functional System requirements, including lighting, mechanical, controls, etc...
- Audio / Visual Systems
- Security systems and requirements

The criteria outlined in this section should be observed in all Courthouse design projects in the State unless specific exemption is provided by the AOC in writing. These criteria should be understood as minimum requirements.

The following courtroom and support space standards for the State of Utah reflect optimal standards for court set configuration. Various elements of the court set may be modified in accordance with local courtroom practices as there is no single courtroom design that is best suited for every jurisdiction. In general, however, the courtroom design must contribute to the effective administration of justice, convey an appropriate sense of decorum and be sufficiently flexible to accommodate future changes in practice and procedure.

It is understood that this document presents current courtroom design standards and acknowledges that these will change based on courts needs, technology advances and other unforeseen events. This document will be updated as needed to reflect the most current standards feasible.

5.1 BUILDING ENTRY AND LOBBY

5.1.1 Space Type and Usage

The Building Entry and Lobby is open to the general public. Once the public has entered the building they must proceed through security prior to having access to the public areas of the court facility.

This space is also a transitional space from the building entry to the public areas in the Clerk's office or the courtroom waiting areas.

5.1.2 Architectural Design Features

Key design features include:

- A generous sized building lobby that portrays the quality and character of a courthouse building
- An entry vestibule leading directly into the security station
- A separate exit vestibule
- Ample daylight
- High quality and durable finishes, including but not limited to stone, wood, glass and metal

The building entry shall be designed to allow visual access from the security station to the building entry point(s) and exit point(s). Blind spots from the security station to the entry and lobby areas should be avoided.

The building lobby shall be designed to allow both visual and physical access to the courtroom waiting areas as well as the adjacent public terminal portion of the Clerk's office.

Public restrooms are required directly adjacent to the entry lobby. Drinking fountains are also required adjacent to the lobby area.

5.1.3 System Requirements

The entry lobby is primarily a circulation space that does not need to be fully conditioned, however, consideration should be given to the security officers comfort. The temperatures can shift within a ten degree temperature range with the seasons to save energy. This energy savings should be balanced with the need to maintain a comfortable temperature at the sheriff's station in the security area.

Daylight is required in the front entry lobby. East, south and west facing window areas should be appropriately shaded to minimize glare and negative solar gains.

The security station should be shaded from direct sunlight to avoid impacting visibility.

Appropriate power should be provided to the security area to meet computer and security equipment needs and minimize inference with pedestrian flow.

5.1.4 Audio / Visual

Cameras should be located to monitor the front entry, allow the sheriff's visual access to all areas within the entry and lobby and monitor the adjacent corridors and Clerk's areas.

5.1.5 Security

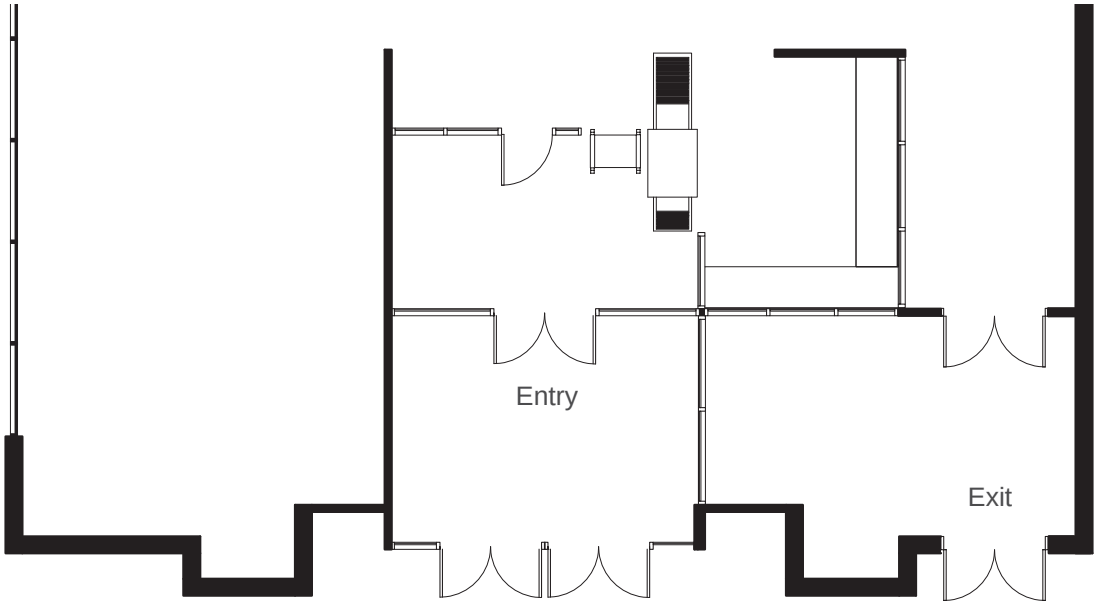
The security station requires an x-ray machine, magnetometer and area to search a person. These should be integrated into the building architecture.

Ample space for queuing after the entrance and before going through security is required as people tend to enter a court facility in groups.

A security station should be provided to accommodate a desk to house security camera monitors, alarm announcements and general office space for the sheriffs. This space can be part of or separate from the security checkpoint. The front of the security checkpoint should be constructed of bullet resistant materials that meet Underwriters laboratory test UL 752 Level 1 ballistic standards to ensure the baliiff's have a safe haven in the event of a shooting at the entry or lobby.

The entry lobby should be designed for uninterrupted visual access from security station to the building entry and exit doors and most lobby areas.

All exits other than the main public exit shall have delayed egress hardware and camera call ups upon alarm. These may have card key override as needed by staff.



5.2 COURTROOM WAITING

5.2.1 Space Type and Usage

It is important that the traffic patterns of the general public and persons having business before the court not be overlooked. When court is in session, persons will typically congregate in hallways by courtroom entrances while waiting for their cases to be called. These include defendants and their families (often with small children), the private bar, law enforcement officers, witnesses, the press and members of the general public.

It is recommended that a public waiting space (150 - 250 SF per courtroom) be provided for each courtroom. A single waiting area is sufficient for up to four courtrooms in a cluster and on a single level. If courtrooms are in clusters of fewer than four or are on different floors, one waiting area should be paired with each courtroom cluster. A single waiting area should be provided for smaller jurisdictions and be in sight of the courtroom it serves.

Courtroom waiting will generally be unoccupied during the majority of the day as it is in use prior to and after court proceedings.

5.2.2 Architectural Design Features

The courtroom waiting area should be located directly off the corridor serving a court room. It should be large enough to accommodate as many people as can fit in the courtroom spectator seating area.

Key design features include:

- Ample daylight
- High quality and durable finishes, including but not limited to stone, wood, glass and metal
- Bench type seating for visitors

Courtroom waiting should have convenient access to public restrooms and drinking fountains.

Courtroom waiting shall be easily access from, and ideally visible from, the entry lobby area.

5.2.3 System Requirements

As this is not a regularly occupied building space adjacent to a corridor it does not need to be fully conditioned. The temperatures can shift within a reasonable temperature range with the seasons to save energy.

Thermal controls are not required in this space.

5.2.4 Audio / Visual

Cameras shall be located to allow the sheriffs full visibility of the courtroom waiting area.

Sound absorptive materials should be used on ceilings or on walls to reduce the impact of general conversation noise outside the courtroom.

5.2.5 Security

Security cameras are the only security elements required in this space.

It is important that the waiting areas are designed to avoid hidden corners, ensuring public areas are fully visible to the camera.

5.3 COURTROOM

5.3.1 Space Type and Usage

The courtroom is the primary functional space within a court facility. It is also a key interface between the public space, secure holding areas and secure judicial support areas.

The physical dimensions of the courtroom should be sufficient to promote the appropriate formality of the proceedings. In order to accommodate state and local codes regarding proper fire exiting requirements, all courtrooms must have two public entry/exits accessible from a public circulation corridor, each located from the other at least half of the diagonal distance of the courtroom's length.

Ceiling heights should be proportional to room dimensions and allow for an elevated bench. In a standard courtroom a minimum ceiling height is 12 feet in the well and no less than 10 feet in the spectator area.

Key components of a courtroom include:

- Judge's Bench
- Clerk's Station
- Jury Box
- Witness Box
- Attorney's Table
- Baliff
- Exhibits
- Spectator Seating

5.3.2 Architectural Design Features

The design of a courtroom should express the serious nature and function of the court. The courtroom should be dignified and business-like, although attractive and in conformance with the building in which it is housed. In addition, all courtrooms should have access to natural daylight where possible.

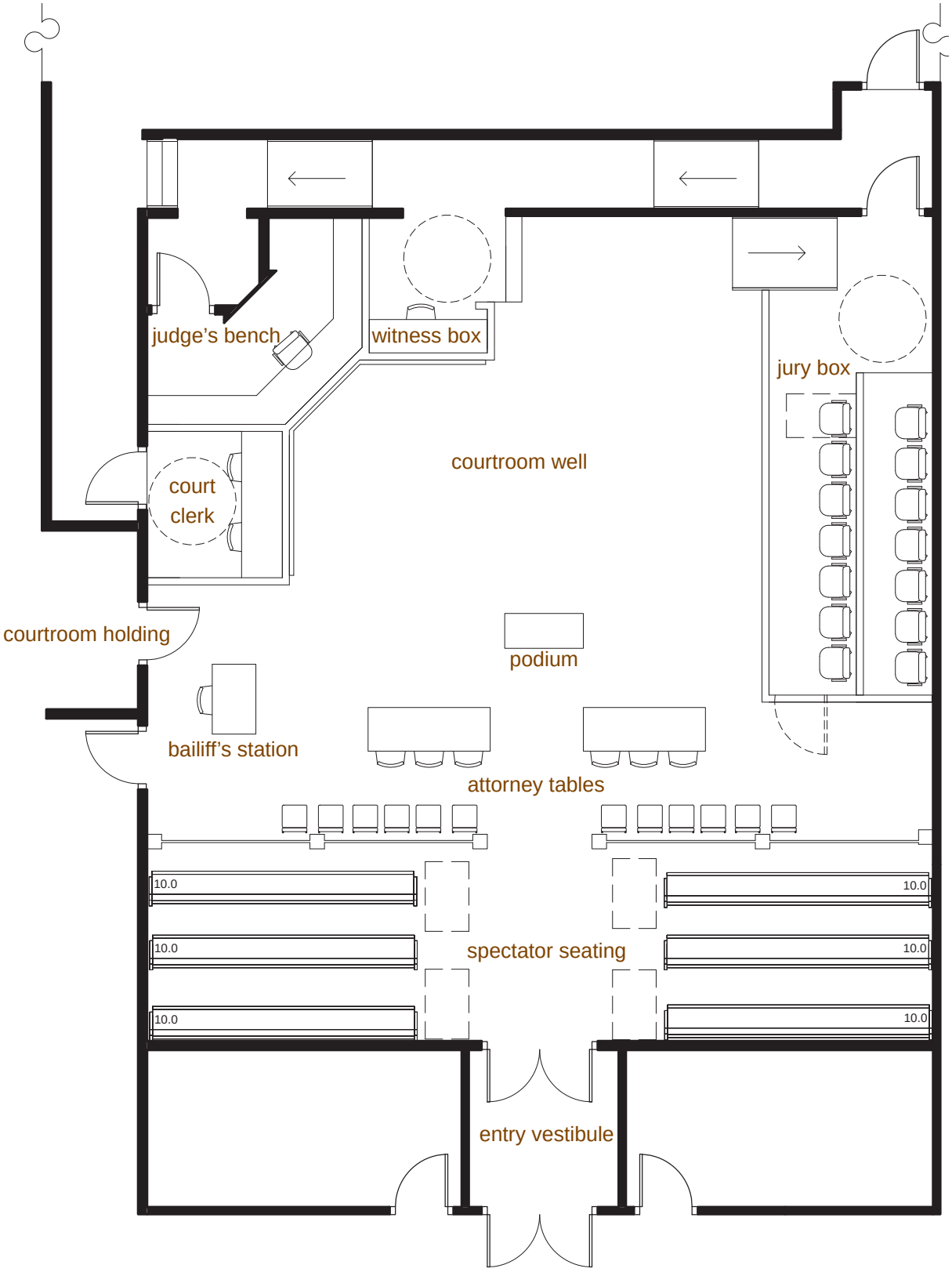
The finishes within the courtroom should be both high quality and durable. Generally carpet should be used on the floor, wood or wood accents and wall covering on the walls and a painted gypsum ceiling are typical in a courtroom.

All spaces within the courtroom shall be fully accessible, or be able to be adapted to be fully accessible in accordance with the U.S. Access Board Courthouse Access Advisory Committee's whitepaper on accessible design for courthouse facilities, referenced in Section 2.5 of this document.

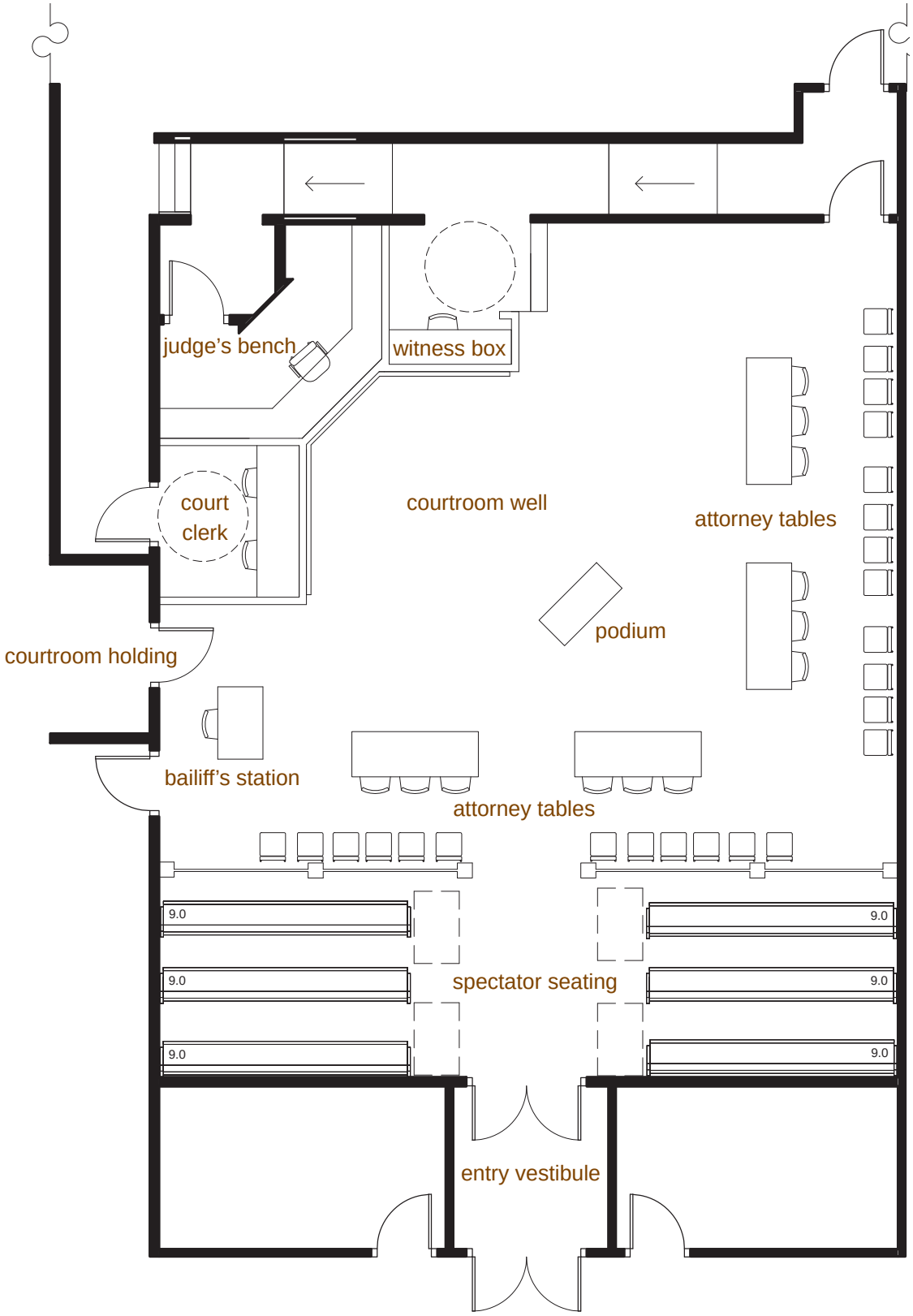
District and Juvenile Courtroom Space Standards include:

Large Courtroom Area:	2,400 - 2,600 SF (large jury and large spectator seating)
Standard Courtroom Area:	1,800 - 2,000 SF
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 20-30
	Sound Transmission Class - 55
	Public Address
	Audio Recording
Daylight:	Integrate daylight design through high clerestory windows. Direct visual access from the exterior into the courtroom should be avoided where it poses a security risk for occupants.
Daylight control:	Automatic shades and blackout blinds should be integral to window systems.
Lighting:	Various lighting scenes are required for general court proceedings, including general illumination, presentation mode and others as needed.
HVAC:	Courtrooms are individually zoned space, CO2 Sensor controlled, with an individual thermostat.
Technology:	Per Courtroom Technology Standards.
Security:	Per Security Standards outlined in section 3 of this document.

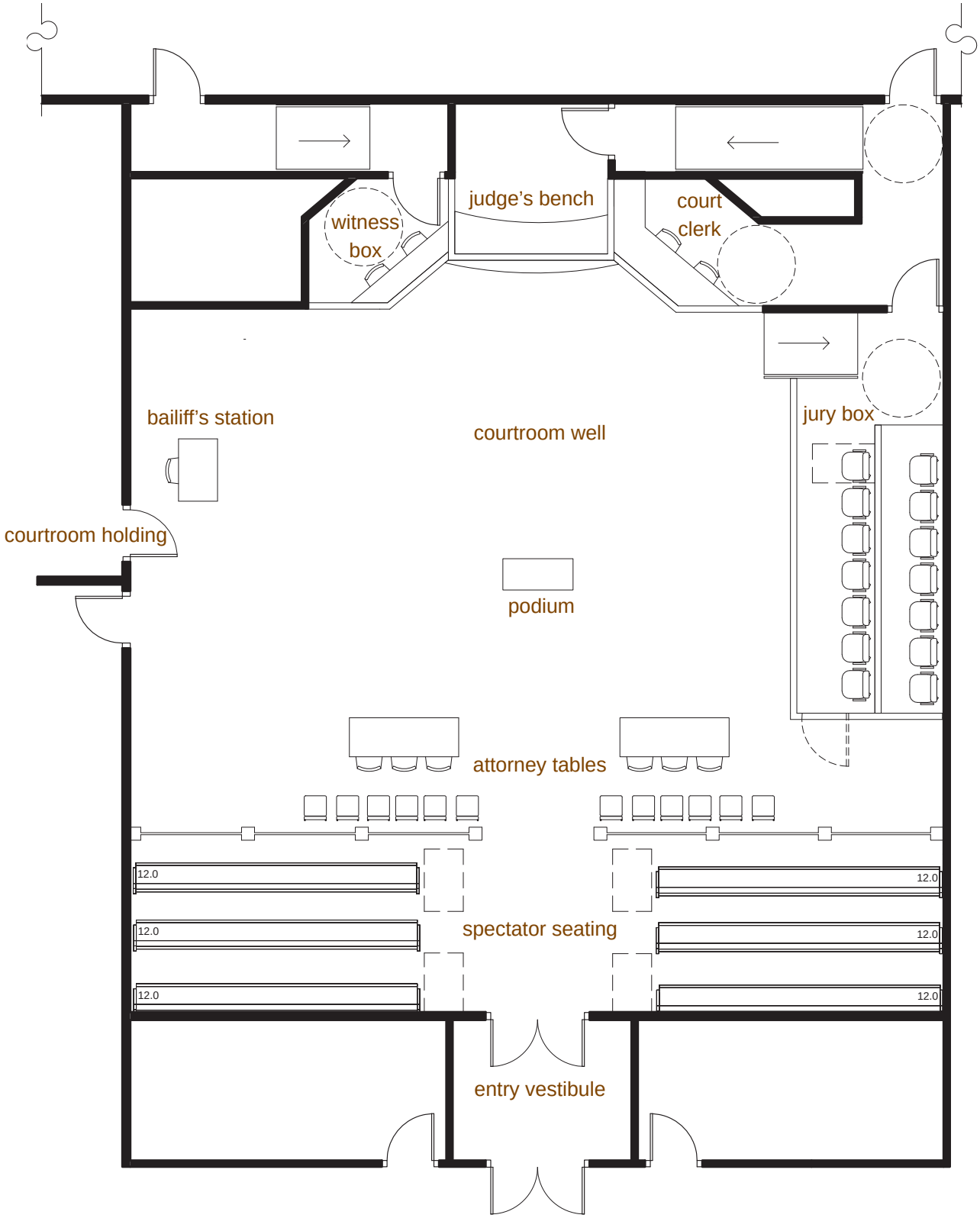
District Courtroom with Corner Bench and Jury Box



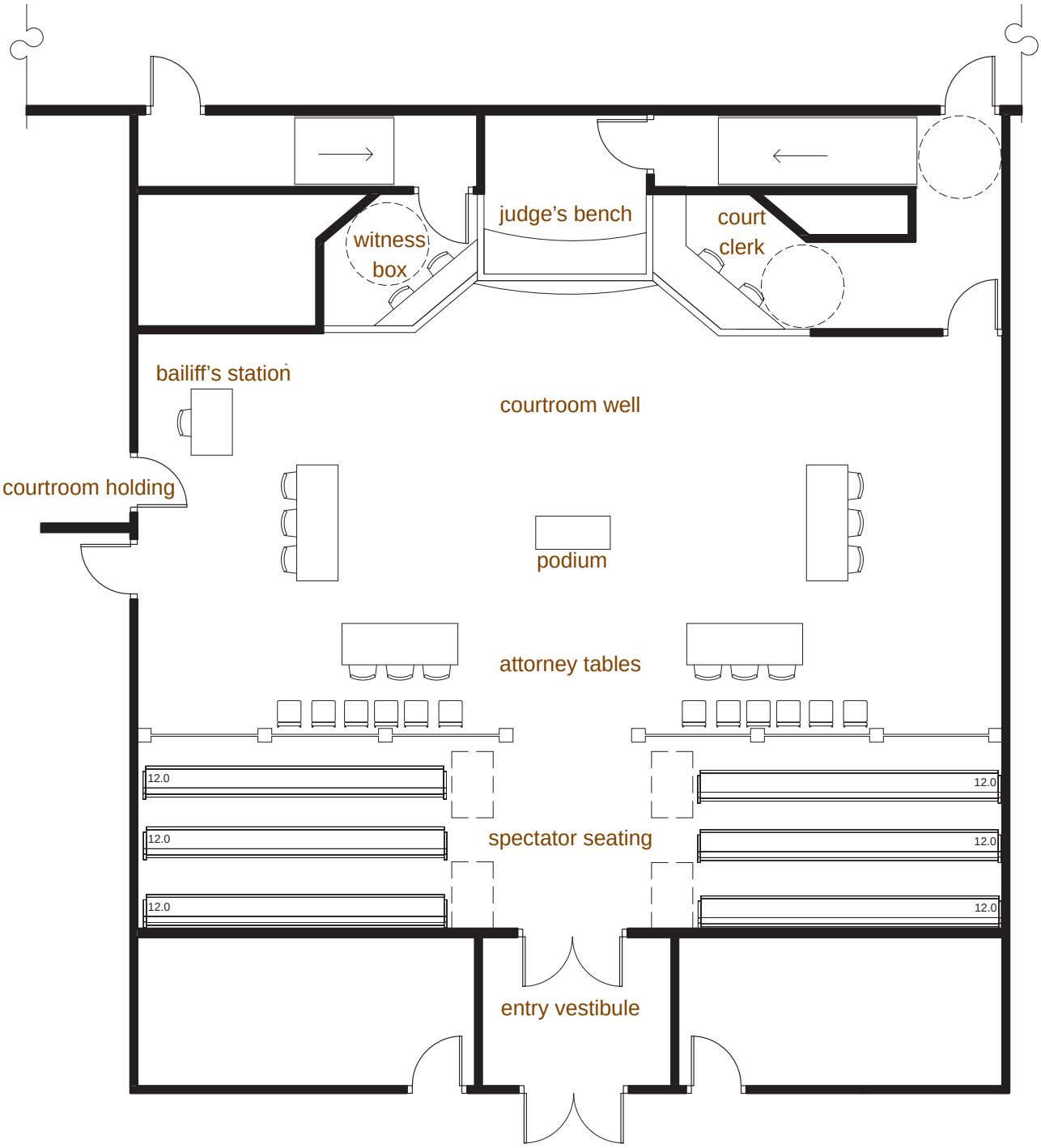
Juvenile Courtroom with Corner Bench



District Courtroom with Center Bench and Jury Box



Juvenile Courtroom with Center Bench



5.3.2.1 Judge's Bench

The Judge's bench should be the focal point of the courtroom. It should be designed and constructed to impart an appropriate sense of authority and dignity to the judicial office. The bench shall accommodate the following functions:

- Facilitate the Judge's control of court proceedings and the interaction of the Judge with courtroom participants.
- Allow unobstructed view of the witness, jury and Counsel, simultaneously.
- Inhibit direct public access to the Judge.

The bench should be situated either in a corner orientation or centered at one end of the courtroom.

The height of the bench should be three risers, (18" inches is standard) or at a level so the Judge's line of sight is not obstructed.

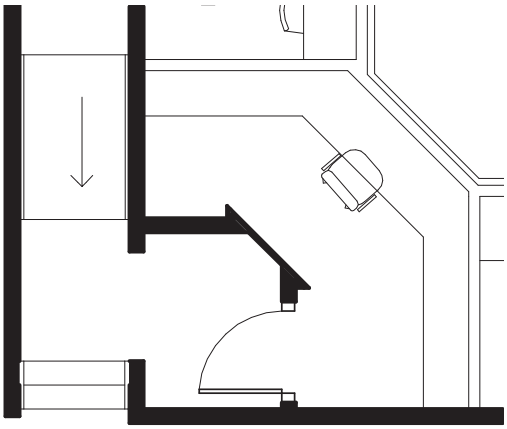
The following shall be included in the design of the bench:

- Judges must have sufficient leg room under the bench.
- The sides of the Judge's bench may be lowered to facilitate the transfer of documents and verbal communication with the Clerk.
- It should be configured to permit bench conferences out of the hearing of the jury.
- The front of the bench should be designed to allow attorneys to refer to files and documents during a bench conference and prevent attorneys from resting their arms and elbows on the top of the bench.
- The Judge's desktop should be spacious. A minimum of 6' x 2' is recommended.
- Several drawers should be provided for forms, supplies, and personal items, as well as adequate shelving for volumes of the code of laws.
- A microphone for sound reinforcement should be provided and should have an on-off switch on the unit.
- A flush mounted or flat screen computer monitor shall be integrated into the bench and a computer terminal shall be integrated into the bench design.
- The front of the desk should be constructed of bullet resistant materials that meets Underwriters laboratory test UL 752 Level 1 ballistic standards.
- A concealed duress alarm should be located at the bench to notify the Sheriffs in case of an emergency.
- Computer equipment such as monitors, keyboards, and CPUs should be hidden from public view.

It is recommended that the space between the Judge's desk and the opposing wall be at least five feet. This will allow the Judge to easily move his or her chair for bench conferences and to reach for reference books.

Space Requirements

Area:	48 SF, min.
Furnishings:	1 Executive Chair
Acoustics:	ability to hear all courtroom proceedings from bench, audio amplification as needed
Equipment:	storage drawer, file cabinet as needed
Lighting:	Standard overhead and task lighting at the bench, access to courtroom lighting controls
Technology:	Computer, video, controls, flat screen monitor, audio speakers, microphone, electrical and data port, video connection
Security:	Duress alarm, bullet resistant front, controlled access from secure corridor card reader access in and out of courtroom



5.3.2.3 Clerk's Station

The Clerk requires immediate physical and communicative proximity to the Judge. The Clerk handles a substantial volume of documents and files and frequently must pass them to or receive them from the Judge.

The following shall be included in the design of the Clerk's Station:

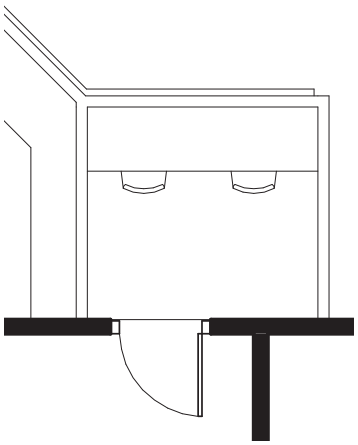
- Space to comfortably seat two Clerks
- Access to courtroom controls including temperature, lighting levels, window shades, audio and visual controls as required
- A concealed duress alarm should be located at the bench to notify the Sheriffs in case of an emergency
- The Clerk's station should be elevated 6" above the floor of the well
- The privacy screen should be constructed of bullet resistant materials

Space Requirements

Area:	60 SF, min.
Furnishings:	2 office chairs
Acoustics:	Courtroom acoustic amplification controls
Equipment:	2 storage drawers and 2 lockable file cabinets, printer cabinet
Lighting:	Standard overhead and task lighting, access to courtroom lighting controls
Technology:	2 Computers, courtroom controls, 2 flat screen monitors, Audio speakers, microphone, electrical and data port, printer, scanner as needed
Security:	Duress alarm, bullet resistant front, controlled access from secure corridor card reader access from both sides

There should be two entries to the courtroom from the back corridor. The Clerks should not have access from their work area to the well. It is important that the courtroom entries are placed such that the Judge is not interrupted by Clerk's entering and exiting courtroom while proceeding in process

Note all court facilities to have voice over internet protocol (VoIP). There should be a minimum of four voice and data jacks that will accommodate a minimum of 8 IP addresses to allow ample computer and communications equipment as well as scanners for electronic records



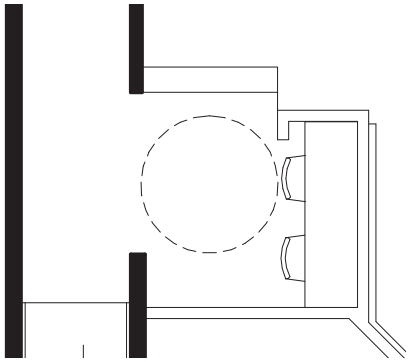
5.3.2.4 Witness Box

The witness box should be placed between the jury and the Judge and allow clear visibility to the witness by both the jury and Judge. The witness box shall include the following design elements:

- The box shall be elevated 12” and be in clear view of the Judge, jury, attorneys’ tables and spectators
- The box shall be large enough to accommodate 2 people
- The box should be enclosed on two or three sides depending upon the entry location
- The width of the box should be large enough to accommodate an ADA turning circle and the height should shield the witness only from the waist down so that all non-verbal gestures can be easily viewed
- A moveable microphone should be mounted unobtrusively in the box, and be able to clearly receive the testimony of children and soft-spoken witnesses

Space Requirements

Area:	50 SF
Furnishings:	2 chairs
Acoustics:	Courtroom acoustic amplification system
Lighting:	Standard overhead and task lighting
Technology:	Flat screen monitor, microphone
Security:	Bullet resistant front



5.3.2.5 Jury Box (District Courtroom Only)

Jurors are temporary “officers of the court” and should be accorded the comfort and courtesies appropriate to their important role in the trial process. Although jury service is a civic duty required of all eligible citizens, many jurors serve at great personal sacrifice of wages and time. Further, many are completely unfamiliar with the judicial process and find it intimidating, confusing, and mentally taxing. The prominent position of a well-appointed jury box in a courtroom should serve to facilitate their understanding of court proceedings. The following shall be incorporated into the design of the Jury Box:

Large Courtroom to seat 14 jurors

Standard Courtroom to seat 10 jurors

Juvenile Courtroom will not have a jury

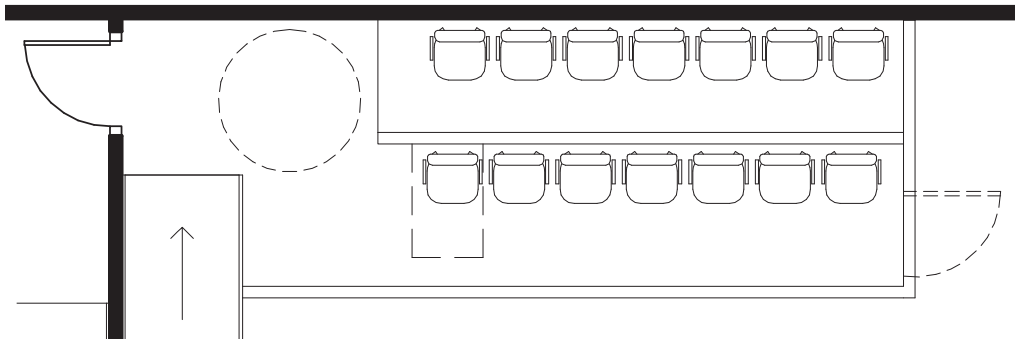
The standard jury box should accommodate 10 jurors. One courtroom in each facility needs to accommodate a 14 person jury box. Space should also be provided for a disabled juror. The disabled Juror space can occupy one of the required seats.

- ADA access should be provided to the level of the first tier
- The jury box should be situated so that the attorneys’ tables, witness box, Judge are in full view.
- The jurors themselves should be in view of the court as well as the spectators to ensure the perception of an open and public trial. However, the jury box should be sufficiently distanced from the spectator area to inhibit any physical or verbal contact. Seven feet from the center of the first juror’s chair to the bar is adequate. This leaves an additional 2-3 feet from the edge of the bar to the center of the nearest spectator’s seat.
- Seating placement can vary, but a two-tiered configuration with the front row on one riser and the back on two risers is preferred.
- The jury box should not extend past either the witness box or the attorney’s tables to ensure at least a 90-degree view of all participants.
- The main entrance to the jury box should be opposite to the spectator seating.
- Jury chairs should be medium to medium-high backed and provide good back and seat support. Theater fixed-seating type should swivel left to right but not tip front to back and should be designed so they do not create distracting noise when swiveled.
- Depth of jury box from inside courtroom wall to inside of rail to be no less than 48 inches for the top tier and 60 inches at the bottom tier to accommodate monitors and ADA access

In multi-use courthouses where juvenile court is collocated, it is not necessary for all courtrooms to have a jury box. The Facility Program may determine the appropriate number of courtrooms that accommodate a jury.

Space Requirements

Area:	200-250 SF
Furnishings:	10 to 14 juror chairs
Acoustics:	Ability to hear all proceedings in courtroom, acoustic amplification as necessary
Lighting:	Standard overhead lighting
Technology:	Flat screen monitors, audio speakers
Security:	Enclosed jury box from the waste down



5.3.2.6 Attorney's Tables

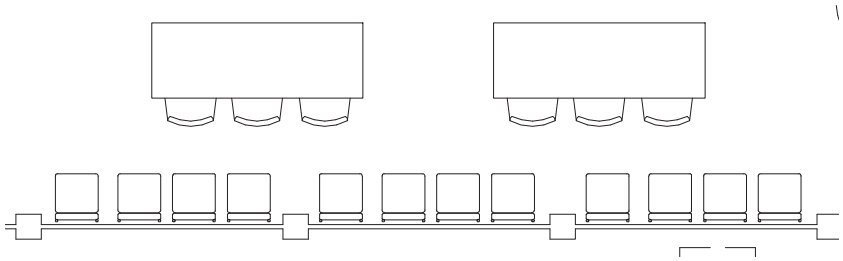
Attorney tables and their placement should facilitate attorneys' in-courtroom work and movement throughout the well. The tables' positioning should insure that litigants are in full view of the Judge, court reporter and jury. The tables' distance from each other, the spectators, and the jury should be such that private conversations cannot be overheard. This usually requires at least five feet between tables and eight feet from the nearest juror or spectator.

The following should be considered in laying out the attorney's tables or well area:

- The tables should be at least seven feet in length if multiple litigants or attorneys are common.
- The tables shall have a privacy panel at the front and two sides.
- District Courts should accommodate at least two tables, while the well should accommodate four table in all juvenile courtrooms.
- For security reasons, the tables should not have drawers or a recess underneath the tabletop.
- Each table should have access to electrical outlets and data port as necessary for court proceedings. All wiring shall be integrated into the table, hidden from public view.
- Microphone floor jacks should be located under tables. A portable microphone should be provided for each courtroom.
- The distance between the back of the table's chairs and the bar should be sufficient to comfortably accommodate a row of chairs along the bar for staff, paralegals, etc.
- The space at each end of the tables should permit easy movement to and from the tables.

Space Requirements

Area:	varies
Furnishings:	3 to 4 chairs per table, tables as needed.
Acoustics:	Courtroom acoustic amplification as needed
Lighting:	Standard overhead and task lighting
Technology:	One flat screen monitor per table, audio speakers, microphone,
Security:	General courtroom security



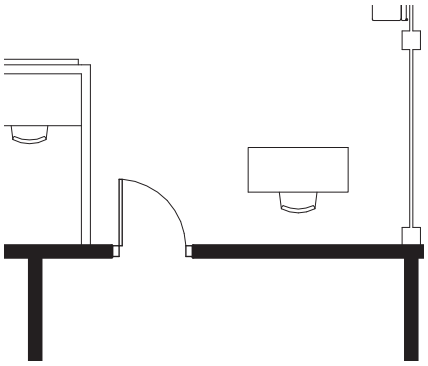
5.3.2.7 Bailiff

The bailiff is principally responsible for security and to maintain order in the courtroom. The bailiff typically escorts witnesses to and from the witness box, escorts jurors to and from the jury box, handles heavy or hazardous evidence, and announces the entry of the Judge. As such, the bailiff has multiple stations in the courtroom depending upon the type of proceedings at any given moment. The jury box entrance should provide space when defendants in custody are testifying. Otherwise, a chair can be provided near the defendant's table in criminal trials, or by the jury box nearest to the spectator seating.

In non-jury trials where defendant security is a concern, the bailiff should be stationed between the Clerk and the spectator area. However, this may depend on the design of the well and the discretion of the Judge.

Space Requirements

Furnishings: Fixed table and moveable chair



5.3.2.8 Charts and Exhibits

After exhibits are introduced into evidence and marked by the Clerk, they should be displayed on a shelf in full view of the court. Hazardous exhibits such as firearms, drugs, toxic substances and objects that could be used as weapons should be placed away from the witness and jury boxes, and the defendant's table. Usually, the Clerk station or an adjacent bailiff's station is the most suitable location and adequate shelving should be provided for their display.

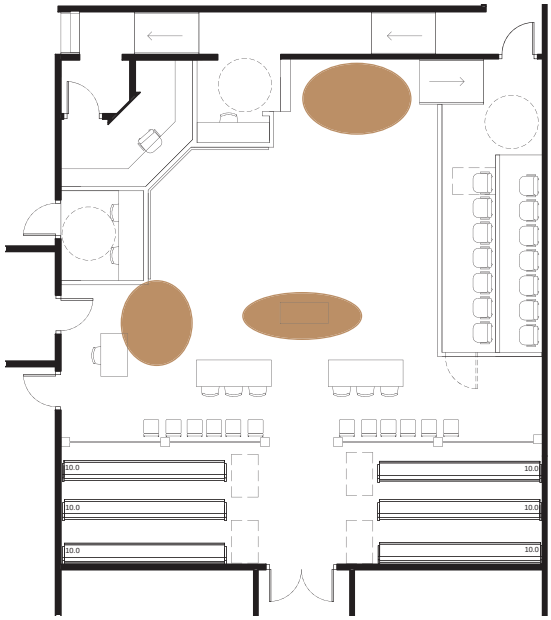
It is recommended that each courtroom have a secured evidence storage area where the Clerk may secure items. The location of the secured storage should be out of any traffic patterns, away from the spectator's area and inconspicuous. The lockable storage should be able to accommodate a variety of documents upon shelving and have several small compartments to safeguard weapons or drugs. The storage must be sturdy, lockable and immovable.

Charts and displays are best presented digitally on flat screen monitors, or if physical displays are necessary, either between the witness box and the jury box, so those addressing the court may point to them or across from the jury box if their detail is large enough to be seen at a distance.

Flat screen monitors should be located at the bench, Clerk's station, attorney's tables and multiple locations in the jury box.

5.3.2.9 Presentation Podium

A presentation podium should be located directly in front of the bench, within full and clear view of the bench, jury, witness box and Clerk's station. The podium should be designed to accommodate persons with varying abilities, including persons in a wheelchair.



5.3.2.10 Spectator Seating

As a general rule, trials must be open and public. Persons who wish to view trials and hearings, whether they are press or ordinary citizens, have a right to both see and hear the proceedings. Seating for spectators, in particular notorious criminal trials, usually overwhelms even the largest courtrooms. Generally, the size of the juror impanelment should determine the minimum number of spectator seats in a standard courtroom. All prospective jurors should be able to be seated in the spectator area, without overflow into the jury box or other area.

Multi-courtroom facilities should consider the feasibility of one large or “ceremonial” courtroom to accommodate unusual spectator demand. This courtroom can also be designed for high security trials and be equipped with audio-visual and news media features not normally required for most trials. The large courtroom is likely to be used as the arraignment courtroom (depending on local policy and preference) and should be equipped with a video arraignment capability. This courtroom could also have a Judge’s bench designed for three-Judge appellate panels.

The following should be considered when laying out the spectator seating area:

- Fixed benches shall be used as they can accommodate “more people per foot”. They are also comparatively easy to maintain and show wear less quickly.
- The bar separating the spectator seating is primarily a decorative element, but should be included as a physical barrier between the spectator and the proceedings. If a gate is provided it should be a single double swing leaf that provides 32 inches clear for ADA access.
- The seating must conform to all building code regulations and allow for disabled movement to the well. The front row of seats should be distanced somewhat from the bar for sound and physical separation. Adequate exiting distance around ADA accessible seating should be provided.
- Electrical outlet access under seating at the first row of seating in a large courtroom should be provided for media access.

Public entry to the courtroom should be through a vestibule for noise control and security. The inner set of doors should have sufficient glass panels to permit visual identification of courtroom activities and participants without physical intrusion into the courtroom.

5.3.3 System Requirements

All courtrooms should be adequately lighted, particularly in the well.

The lighting design shall incorporate the following:

- Occupancy sensors to ensure minimum lighting levels upon entrance into the courtroom.
- Multi-level switching or programmed scenes to allow appropriate lighting to accommodate all court proceeding visual needs.
- High efficient lamps and ballast for reduced energy consumption
- Appropriate task lighting at Attorney's tables, Clerk's Station, the Bench and presentation podium.
- Quiet ballasts

Daylight should be available in all courtrooms. Appropriate shading to minimize disruptive glare and negative solar heat gain should be integral to the window system. Solar control and black out blinds shall be installed at all windows for optimal daylight control.

The air conditioning and ventilation system should incorporate the following:

- Air handling equipment must be silent in the courtrooms.
- All courtrooms should have individual climate controls.
- The mechanical system design should be able to handle future needs as well as present demands.
- CO2 sensors should be located in all courtrooms to ensure adequate ventilation
- No mechanical systems (air handlers or other machinery) will be installed immediately above courtrooms.

5.3.4 Audio / Visual

All courtrooms should be designed to accommodate installation of equipment for audio and/or audio/video systems as presented in Section 2 of this document.

5.3.5 Security

The courtrooms should ideally be situated so that public and private circulation areas are separated and secure routes for defendants in custody can be established. Courtrooms in multi-story buildings should be located on upper floors, which can provide quieter and more secure space.

Courtroom security systems shall meet the standards set forth in section 3 of this document.

5.4 JUDICIAL OFFICE AND SUPPORT

5.4.1 Space Type and Usage

Judicial Office and Support Spaces include the following:

- Judge's Chambers
- Jury Deliberation Rooms
- Victim/Witness Area

5.4.2 Architectural Design Features

The design of the Judicial Office and Support spaces should resemble a high quality office environment. The Judge's chambers in particular should reflect the high standing of a Judge through the quality and character of the architecture.

5.4.2.1 Judge's Chambers

Judge's chambers must be conducive to efficient work practices. This includes the reception of visitors, legal research, in-chamber hearings and conferences and private telephone conversations.

Judge's Chambers should be adjacent to or very near the courtroom. If on a corridor, the area should not be directly accessible by the public, but be convenient to the Clerk of the Court, secretaries, law clerks and court attaches'.

Key components of a Judge's Chamber include:

- Ample work space
- Small meeting or conference space
- A coat and robe closet
- Adjacent, private toilet room

High quality and durable finishes should be used. These may include wood, fabric wall covering, high quality carpet and tile flooring.

Walls should continue to the floor or roof deck above and be insulated for acoustic isolation. If the chambers enter directly from the courtroom, the door and adjoining wall should be sound insulated.

Judge's chambers shall have access to natural light, but visual and physical security should be considered when locating windows in the chambers.

Space Requirements

Area:	280 SF to 320 SF, depending on conferencing requirements
Furnishings:	1 Executive Chair, credenza, executive desk, small conference table and 4 side chairs, book shelves
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 20-30
	Sound Transmission Class 55 at the chambers and 45 at adjacent toilet room
	Audio Recording
HVAC:	Standard office HVAC with an individual thermostat and noise attenuation
Lighting:	Standard overhead and task lighting at the desk
Technology:	Computer, flat screen monitor, printer, microphone and audio and video recording as needed, electrical and data ports,
Security:	Duress alarm, controlled card reader access from secure corridor

5.4.2.2 Jury Deliberation Rooms

Jury deliberation rooms should be near the courtroom in a private or semi-private area. The rooms should be soundproofed to prevent people in adjacent areas from hearing the deliberations. Long and sometimes emotional deliberations can increase feeling of claustrophobia and general unease, interfering with the decision-making process. If windows are provided they should not allow jurors to view public events outdoors or allow public view into the space.

The Jury Deliberation Room shall include the following:

- A conference table and chairs to comfortably accommodate the maximum jury size for the court facility. Because exhibits may be placed on the table, its finish should be scratch resistant and durable.
- Private ADA accessible toilet facilities that do not open directly into the jury room
- A drinking fountain or sink with cups should also be provided in the jury deliberation room area.

The room should be designed to function as a conference room when not in use by a jury. To accomplish this, the following shall be included in the space:

- Electrical and telecommunication access for conference A/V equipment
- A white board or other electronic tablet device

Space Requirements

Area:	500 SF, including restroom and vestibule
Furnishings:	14-20 conference chairs, conference table to seat a full jury comfortably
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 20-30
	Sound Transmission Class 50
	Public address system
Equipment:	White board and markers
HVAC:	Standard with individual thermostat and CO2 sensor
Lighting:	Preset lighting scenes for general illumination, presentation and task lighting over the table. Occupancy and daylight sensors as needed
Technology:	Computer, video, flat screen monitor, audio speakers, electrical and data port, video connection
Security:	Duress alarm, controlled access from secure corridor card reader access in and out of the deliberation room

5.4.2.3 Victim/Witness Area

With the advent of victim's rights movements nationwide, there is now general consensus in the criminal justice system that victims of violent crime and witnesses in criminal trials deserve sensitive and compassionate treatment. One of the most traumatic aspects of court process for victims and witnesses are the numerous and prolonged appearances necessary in many cases. These proceedings normally require that all parties appear at the courthouse at the same time and congregate in the same public areas. This often results in victims having to physically associate with their alleged assailants and the defendant's family. The intermingling of defendants and witnesses for the prosecution always has the potential for intimidation and conflict. The opportunity for a mistrial due to improper communication is also increased.

In view of the recognized rights of victims and witnesses to be shielded from further intimidation and trauma, it is recommended that victim/witness areas be provided for their use while awaiting trial. These can be multi-functional rooms that can accommodate both victim/witness waiting and attorney-client conferences. These areas should provide sight and sound separation from public waiting areas and should be able to accommodate attorney/client conference functions. These areas should be adjacent to the courtrooms or in a non-public zone such as on a judicial staff corridor.

It is recommended that individual victim/witness areas be a minimum of 120 net square feet and larger for group and long-term waiting. The areas should be comfortably and attractively furnished with access to nearby restroom facilities and drinking water.

Space Requirements

Area:	120 SF, min.
Furnishings:	Small conference table and 4 side chairs, small couch and side table
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 20-30
	Sound Transmission Class 50
	Public address system
Equipment:	White board or other digital display board and markers
HVAC:	Standard with individual thermostat and CO2 sensor
Lighting:	Preset lighting scenes for general illumination, presentation and task lighting over the table. Occupancy and daylight sensors as needed
Technology:	Computer, electrical and data port
Security:	Controlled access from secure corridor card reader access in and out

5.4.3 System Requirements

All office, conference and work spaces, including Judge's chambers should have access to daylight, be adequately lit with electric lighting and meet the thermal comfort needs of the users.

The lighting design shall incorporate the following:

- Occupancy sensors to ensure lights are not on when spaces are unoccupied.
- Multi-level switching or programmed lighting scenes to allow appropriate lighting to accommodate visual needs.
- High efficient lamps and ballast for reduced energy consumption and reduced ballast noise
- Appropriate task lighting at work stations, desks, and presentation locations.

Daylight should be available in all regularly occupied spaces. Appropriate shading to minimize disruptive glare and negative solar heat gain should be integral to the window system. Solar control and black out blinds shall be installed at all windows for optimal daylight control.

The air conditioning and ventilation system should incorporate the following:

- Air handling equipment must be silent in the Judge's chambers.
- All judicial support spaces should have individual climate controls.
- The mechanical system design should be able to handle future needs as well as present demands.
- CO2 sensors should be located in the courtrooms, jury room and other densely occupied spaces.
- No mechanical systems (air handlers or other machinery) will be installed immediately above jury rooms, Judge's chambers, or where deliberations occur.

5.4.4 Audio / Visual

All judicial support areas should be designed to accommodate installation of equipment for audio/ video systems as presented in Section 2 of this document.

5.4.5 Security

Judicial support is located in the secure areas of the building. The security systems required for these spaces are defined in section 4 of this document.

5.5 CLERKS' OFFICES AND SUPPORT

5.5.1 Space Type and Usage

The Clerk serves the public, the courts and the bar. As such, the Clerk's Office should be located near a high traffic area in the courthouse to provide rapid public access. Design of the courthouse entrance (including security function), Clerk's office entrance and counter work area is important to having traffic flow efficiently and orderly. The office should also have adjacency to private zones for access to Judges, staff and routine functions. This provides separation between the public and the Clerk's work area, yet does not inhibit the transaction of business. Because this is a high traffic area, public seating should be provided near the Clerk's reception area, this area should also have writing surfaces available.

The Clerk's Office should have access to judicial corridors and other private courthouse zones. This access will enable the staff to transport files, evidence and funds without intersecting public areas.

5.5.2 Architectural Design Features

Typical Clerk workstations in large offices are usually best suited for open office configurations. This allows for frequent communication, ease of movement to files and public counters and effective supervision of employees. Administrative staff should have private or semi-private offices as appropriate. The individual workstations shall include the following:

- Be in an open work environment with approximately 75 net square feet each, in addition to internal circulation space between stations.
- Be clustered by division
- Use flexible systems furniture for ease of re-configuration
- Have access to a collaboration space or conference room
- To the extent feasible, each work station should have visual access to daylight and a view to the exterior.

Counter workstations should provide between five and seven running feet of counter per workstation depending on function. Seven feet is recommended for all but cashier functions.

Space Requirements

Area:	Varies
	55-75 SF open office work stations
	120 SF small office
	150-180 SF administrative offices
Furnishings:	Systems Furniture, including desk, file storage, office supply storage, personal storage, task lighting
	Desk chair
	Guest chair as needed
Acoustics:	At enclosed offices - Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
HVAC:	Standard with shared thermostat and CO2 sensor in open office areas
Lighting:	General illumination and task lighting. Occupancy and daylight sensors as needed
Technology:	Computer, printer and scanner as needed electrical and data port. Telephone.
Security:	Controlled access from secure corridor card reader access in and out from all access points

5.5.3 System Requirements

All office environment work spaces should have access to daylight, be designed for optimal visual and thermal comfort and have access to lighting controls.

The Lighting system shall incorporate the following:

- Occupancy sensors for work areas
- Reduced overhead lighting with task specific lighting systems
- Daylight integrated lighting systems
- High efficient lamps and ballasts
- Consistent color rendering
- Quiet ballasts

The air conditioning and ventilation system should incorporate the following:

- Air handling equipment should be quiet enough to not interrupt general work
- All executive offices should have individual climate controls. Individual climate controls should be incorporated as feasible in open office environments.
- The mechanical system design should be able to handle future needs as well as present demands.
- CO2 sensors should be located in open office areas and other densely occupied spaces.

5.5.4 Audio / Visual

All Clerk's office and support areas should be designed to accommodate installation of equipment for audio/video systems as presented in Section 2 of this document.

5.5.5 Security

Because the Clerk's Office has the responsibility to safeguard the records of the court, as well as evidence, fees and fines, security concerns should receive careful attention. The single most important security feature of the Clerk's Office is its ability to separate the public from vulnerable zones and to maintain a secure envelope for the transportation of documents, money, or evidence. This can be accomplished through counter separation and private corridors.

Semi-public circulation within the Clerk's Office should also be designed to inhibit unauthorized contact with confidential files or funds. This can be accomplished through the use of a dedicated area for public document inspection (e.g. title searches). Court evidence should be secured in a separate, locked area with limited key access. Evidence room walls should extend through interstitial space to the structure above. Lockable compartments should be used for the storage of dangerous evidence such as weapons, drugs or toxic substances.

The security systems required for these spaces are defined in section 4 of this document.

5.5.6 Filing Technology

Everything will be electronically filed in the near future. There are currently however paper storage needs that need to be accommodated. Unique to each facility and unique to each district and will need to be addressed with each individual facility.

Filing and retrieval is a primary activity of the office, and filing systems typically consume a great deal of space. Each office should be evaluated to determine filing demands so that sufficient space will be allocated to this function. The use of lateral filings, flat files, microfiche and document retention schedules can significantly impact the square footage necessary to store active documents. As a general rule, pigeonhole filing is the least space efficient system, followed by file cabinets. Open shelf, sliding shelf and rotary shelf systems are almost always more space efficient, and are now used almost exclusively in new court facilities. These space efficient systems (particularly sliding shelf and rotary type systems) when filled with files generally place considerable weight load on the floor structure in the areas of the building where these systems are in operation. Especially, where the Clerk's office area is above grade or where there is basement or sally port area below the Clerk's office, it should be determined whether additional structural support to the floor of the Clerk's office is required to accommodate these space efficient filing systems.

Because it is uncertain what role technological advancements will have on information management in the courts, prudent design of new facilities and renovations should allow for maximum flexibility. The increased use of computers and electronic data storage are broad based trends that will continue in the future. Many courts employ microfiche systems, imaging, computerized indexing of files, and advanced word processing systems. New facilities should be made cable-ready to interface with rapid technological development. Because such development can outdistance planners ability to anticipate during the life of a project, it is crucial that flexibility in function be designed into the Clerk work areas.

5.6 COURT PROGRAMS, OFFICES AND SUPPORT

Court programs are distinct court related offices that benefit from being in close proximity to the Courtroom, Judge's and Clerk functions. These include, but are not limited to, Alternative Dispute Resolution, Pro Se Assistance, Domestic Violence Assistance Center, Guardian Ad Litem and Probation offices and support.

5.6.1 Space Type and Usage

These spaces are typically office type spaces with offices, conference rooms, waiting areas and staff support areas. The size of each of these offices and suites vary depending on the judicial facility type (district or juvenile court) as well as the location and the distinct judicial district needs.

5.6.2 Architectural Design Features

Court programs, office and support spaces shall be designed to reflect the quality and character of the court facility, while maintaining a comfortable and healthy work environment for court programs staff and visitors.

Durability of systems and finishes is key in these heavily used areas.

5.6.2.1 Alternative Dispute Resolution Suite

All new Court facilities should include space designated for Alternative Dispute Resolution. Typically this will be a small cluster of conference rooms with an attendant waiting area. In a small facility, two conference rooms of 240 SF each may be sufficient with waiting sized at another 300 SF. In larger facilities more conference rooms and a larger waiting area may be required, particularly if child custody mediation is anticipated.

Space Requirements

Area:	240 SF, small conference room
	400 SF, large conference room
Furnishings:	10 conference chairs per small conference room, 16 conference chairs per large conference room, conference table sized as needed
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 20-30
	Sound Transmission Class 50
	Public address system
Equipment:	White board and markers
HVAC:	Standard with individual thermostat and CO2 sensor
Lighting:	Preset lighting scenes for general illumination, presentation and task lighting over the table. Occupancy and daylight sensors as needed
Technology:	Computer, video, flat screen monitor, audio speakers, electrical and data port, video connection
Security:	Duress alarm, controlled access from secure corridor card reader access in and out of the conference room.

5.6.2.2 Pro Se Assistance

People who represent themselves in court without the assistance of an attorney are called “Pro Se” or “Self-Represented” litigants. Pro Se litigants are responsible for learning about and following the procedures that govern the court process.

All new facilities should include space designated for Pro Se Assistance. This is intended to provide an area where members of the public who are seeking to represent themselves can find information and assistance. The space may include the following:

- Form racks
- Public computer access terminals
- Staff workstations. It may also provide a small conference room where staff can hold private interviews if necessary.
- A minimal area of 240 SF for the open area is recommended in the absence of a fully defined program statement.
- This space may be a shared Pro Se Assistance and Public Abstract space

Space Requirements

Area:	240 SF, Min.
Furnishings:	Desk, chair(s) bookshelves, task light
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 35-40
	Sound Transmission Class 45
	Public address system
HVAC:	Standard with shared thermostat and CO2 sensor
Lighting:	General illumination and task lighting at bookshelves and work station(s)
Technology:	Computer terminal, printer, electrical and data port(s)
Security:	Public access as well as controlled card reader access from Clerk’s area, if necessary

5.6.2.3 Assistance Center

All new facilities should provide space for an Assistance Center. This will be a centralized area that will provide work space for Protective Order Teams composed of representatives of cooperating agencies and where victims of domestic violence can report to receive services. This space will be defined on a project by project basis, and often resembles a small conference room.

Space Requirements

Area:	150 SF
Furnishings:	Table and 4-6 chairs
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
Equipment:	White board and markers
HVAC:	Standard with individual thermostat and CO2 sensor
Lighting:	General lighting, Occupancy and daylight sensors as needed
Technology:	Electrical and data ports
Security:	Accessible from public areas only. No controlled access.

5.6.2.4 Guardian Ad Litem

A guardian ad litem is a lawyer appointed by the court to look after the interests of an infant, child or incompetent during court proceedings. All new facilities will provide space for the Guardian Ad Litem Program.

Typically this will be a small cluster of offices with a conference room and an attendant waiting area. In a small facility, two offices at 120 SF each and a small conference rooms of 240 SF may be sufficient with waiting sized at another 300 SF. In larger facilities more offices and a larger conference room and waiting area may be required. A child waiting area, staff toilets and a staff work and storage area should be considered for inclusion in this suite.

The Guardian Ad Litem area should be directly accessible from the public area and it shall not have access to the secured court areas.

Space Requirements

Area:	Varies
	150 SF small office
	180 SF administrative offices
	240 SF - 400 SF conference room
Furnishings:	Systems Furniture, including desk, file storage, office supply storage, personal storage, task lighting
	Desk chair
	Guest chair as needed
	Conference table and chairs as needed
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
Equipment:	Projection screen, white board and markers at conference room
HVAC:	Standard with shared thermostat and CO2 sensor in conference rooms
Lighting:	General illumination and task lighting. Occupancy and daylight sensors as needed
Technology:	Computer, printer and scanner as needed electrical and data port. Telephone.

5.6.2.5 Probation Offices and Support

Probation is one of the many dispositional alternatives that a Judge has available to use when juveniles appear before them for disposition. Probation is a legal status that allows a juvenile who has been adjudicated delinquent to remain in their home under certain conditions set forth by the Court and the probation division.

Juvenile Court facilities typically have a probation office suite within the judicial facility. This suite includes probation offices, conference and training facilities, urinalysis toilet room, drug testing lab, work space, storage and toilet rooms for staff.

A secondary access from the exterior directly to probation with a waiting area should also be considered in Juvenile Court facilities. Probation should have limited access to secure building areas.

Space Requirements

Area:	Varies
	150 SF small office
	180 SF administrative offices
	120 SF urinalysis toilet room and testing lab
Furnishings:	Systems Furniture, including desk, file storage, office supply storage, personal storage, task lighting
	Desk chair
	2 guest chairs, min.
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
HVAC:	Standard with shared thermostat
Plumbing:	Toilet, sink and lab support for the urinalysis and drug testing area
Lighting:	General illumination and task lighting. Occupancy and daylight sensors as needed
Technology:	Computer, printer and scanner as needed electrical and data port Telephone
Security:	Controlled access from public area, secure corridor card reader access in and out from all access points

5.6.3 System Requirements

All office environment work spaces should have access to daylight, be designed for optimal visual and thermal comfort and have access to lighting controls.

The Lighting system shall incorporate the following:

- Occupancy sensors for work areas
- Reduced overhead lighting with task specific lighting systems
- Daylight integrated lighting systems
- High efficient lamps and ballasts
- Consistent color rendering
- Quiet ballasts

The air conditioning and ventilation system should incorporate the following:

- Air handling equipment should be quiet enough to not interrupt general work
- All executive offices should have individual climate controls. Individual climate controls should be incorporated as feasible in open office environments.
- The mechanical system design should be able to handle future needs as well as present demands.
- CO2 sensors should be located in open office areas and other densely occupied spaces.

5.6.4 Audio / Visual

All Court Programs, offices and support areas should be designed to accommodate installation of equipment for audio/video systems as presented in Section 2 of this document.

5.5.5 Security

Because the court program spaces need to be accessible from public spaces, it is vital that they be well monitored and secured at access points. This will allow for the appropriate flow of staff and visitors in these spaces.

The security systems required for these spaces are defined in section 4 of this document.

5.6.6 General office Areas

Clerical spaces shall be planned as much as possible on an open concept utilizing open office workstations to maximize flexibility.

Workstation sizes will be assigned on a functional basis as opposed to a pay grade basis, however, planners will make every effort to see that similar positions are assigned similar standards.

5.7 SECURE HOLDING AND CIRCULATION

Secure holding and circulation spaces are highly secured areas dedicated to prisoner holding and building and prisoner security and control functions. These areas shall be separated from all other court functions. There should be direct access from the general building holding to smaller courtroom holding areas. This circulation should not intersect with any other building circulation or judicial facility program.

The central holding and control areas should be directly adjacent to the vehicular sally port to avoid transporting prisoners in public view.

The central holding area should include a secure vestibule, control room, group holding cells, as well as staff toilets as required.

The central holding area shall be connected to a smaller courtroom holding area through a secured prisoner circulation route. This route shall not be open to any other regularly occupied building uses or areas.

5.7.1 Space Type and Usage

These spaces will only be used by Sheriff's and prisoners and will only be occupied by prisoners as needed for court. The Sheriff's will use the control and circulation areas for building security as well as prisoner security.

5.7.2 Architectural Design Features

Secure holding areas shall comply with the Utah State Department of Corrections and current Federal correctional standards for lighting, ventilation, heating and cooling and circulation spaces.

The finishes shall be industrial grade, vandal proof, highly durable and void of any finishes or systems that could be used by a prisoner as a weapon.

All spaces within the holding areas shall be visible from the Sheriff's control station or desk.

5.7.2.1 Courtroom Holding

Courtroom related clusters would typically contain 3 cells. Each holding cell should have a combined toilet-wash basin and a shelf secured table and chair for writing and study. All fixtures shall be tamper-proof. All cells shall contain floor drains.

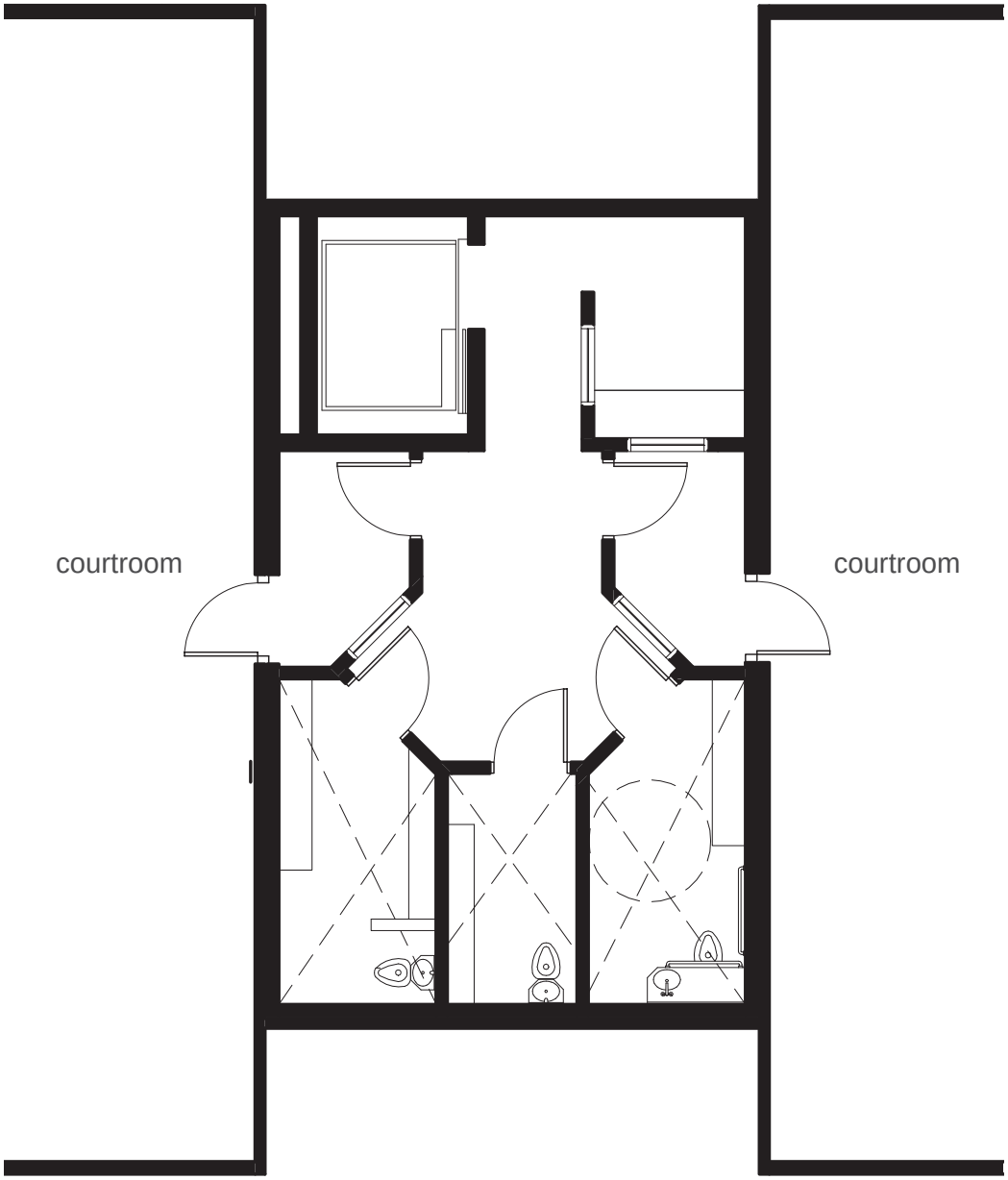
The ceilings and walls should have smooth surfaces that can be cleaned and disinfected easily.

All cell doors should have a glass panel installed so that prisoners may be viewed by security personnel. Ideally, multiple holding cells should have adequate sound separation to prevent inter-cell communication between prisoners.

The cells should be as close as possible to the courtroom, and the entire area must be soundproofed so that sound from the holding cell is not transmitted to the courtroom.

Space Requirements

Area:	Varies
	60 SF, min.
Furnishings:	Bench, concrete
Plumbing:	toilet-wash basin, floor drain
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 50
	Sound Transmission Class 50
HVAC:	Standard, tamper resistant
Lighting:	General illumination, tamper resistant
Security:	Highly controlled access, security camera in all cells and at all points of holding areas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5.7.2.2 General Holding

Temporary holding cells for prisoners awaiting court appearances should conform to Utah State Department of Corrections and current Federal correctional standards for lighting, ventilation, heating and cooling. Single cells should be a minimum of 60 net square feet and 15 net square feet should be allocated per person in group holding cells.

Each holding cell should have a combined toilet-wash basin. All fixtures shall be tamper-proof. All cells shall contain floor drains.

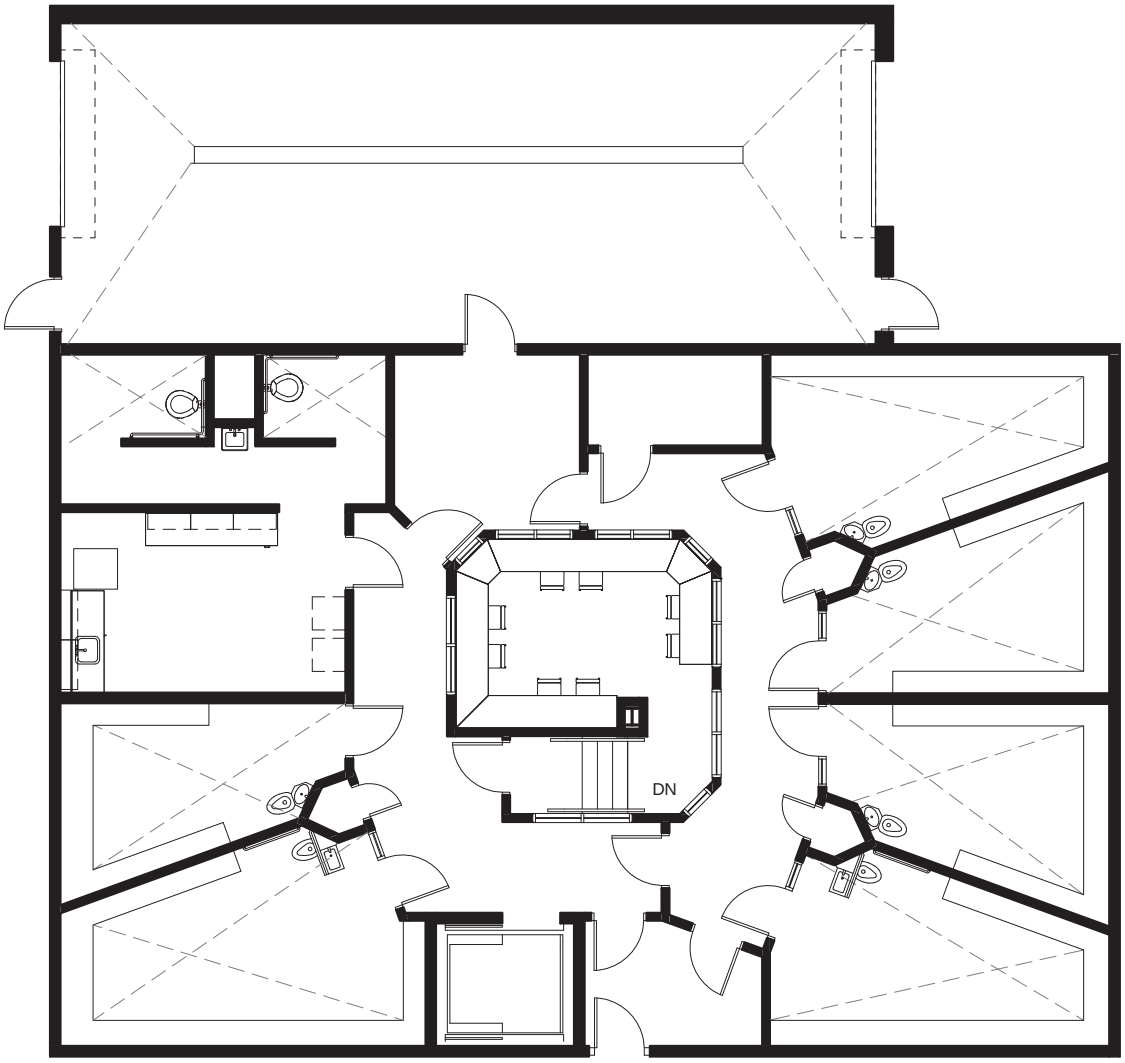
The ceilings and walls should have smooth surfaces that can be cleaned and disinfected easily.

All cell doors should have a glass panel installed so that prisoners may be viewed by security personnel. Ideally, multiple holding cells should have adequate sound separation to prevent inter-cell communication between prisoners.

Juvenile holding must be sight and sound separate from adult holding.

Space Requirements

Area:	Varies
	60 SF, min. and 15 SF / person, min.
Furnishings:	Bench, concrete
Plumbing:	toilet-wash basin, floor drain
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
HVAC:	Standard, tamper resistant
Lighting:	General illumination, tamper resistant
Security:	Highly controlled access, security camera in all cells and at all points of holding areas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5.7.2.3 Prisoner Circulation

Prisoner circulation should be separated from all other building circulation. The Sheriff's should be able to take the prisoners from the main holding area to the courtroom holding without exposing public or staff to the prisoners and vice versa.

The prisoner circulation routes should be durable, easily cleaned and disinfected and contain tamper resistant mechanical and lighting systems.

Any elevators should also have tamper resistant finishes.

Space Requirements

Area:	Varies
Plumbing:	floor drains as needed for cleaning
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
HVAC:	Standard, tamper resistant
Lighting:	General illumination, tamper resistant
Security:	Highly controlled access, security cameras to view all circulation areas

5.7.2.4 Control Room

The security control room is a central visual and communications center from which the Sheriff's can monitor and control the building security and holding areas. This space can also function as a check-in counter for prisoners.

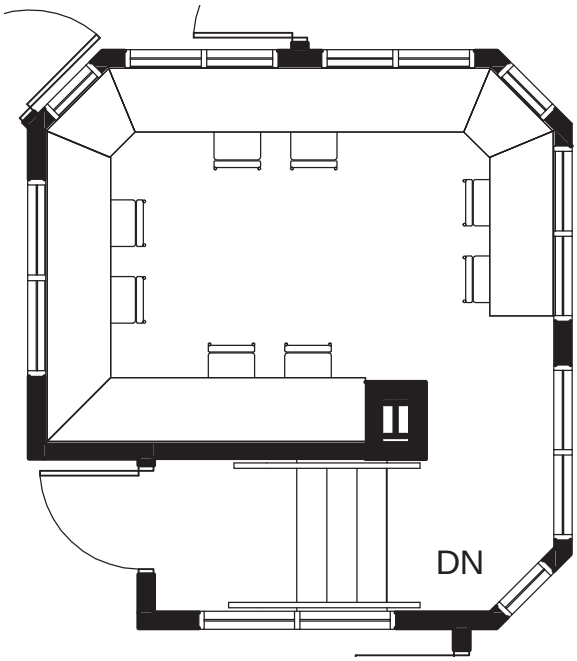
The control room shall be centrally located in the general prisoner holding area, adjacent to the vehicular sally port. It should also be adjacent to the prisoner circulation area(s).

The Control room should have 360 degree visual access to holding area. The glass shall be bullet proof, one-way glazing for optimal security.

The control room should also be raised a minimum of 12 inches above the adjacent floor for optimal visibility to surrounding holding and circulation areas.

Space Requirements

Area:	Varies
	75 SF per workstation
Furnishings:	Counter, office chairs as needed, security glazing, personal storage cabinets, equipment storage cabinets as needed
Plumbing:	toilet-wash basin, floor drain
Acoustics:	Noise Reduction Coefficient .65-.75
	Noise Criteria 30-35
	Sound Transmission Class 45
HVAC:	Standard, individual thermal control
Lighting:	General illumination with dimming capability, task lighting at work stations
Technology:	Annunciator, Duress, Security panels, multiple monitors for security camera control
Security:	Highly controlled access



5.7.2.5 Vehicular Sally port

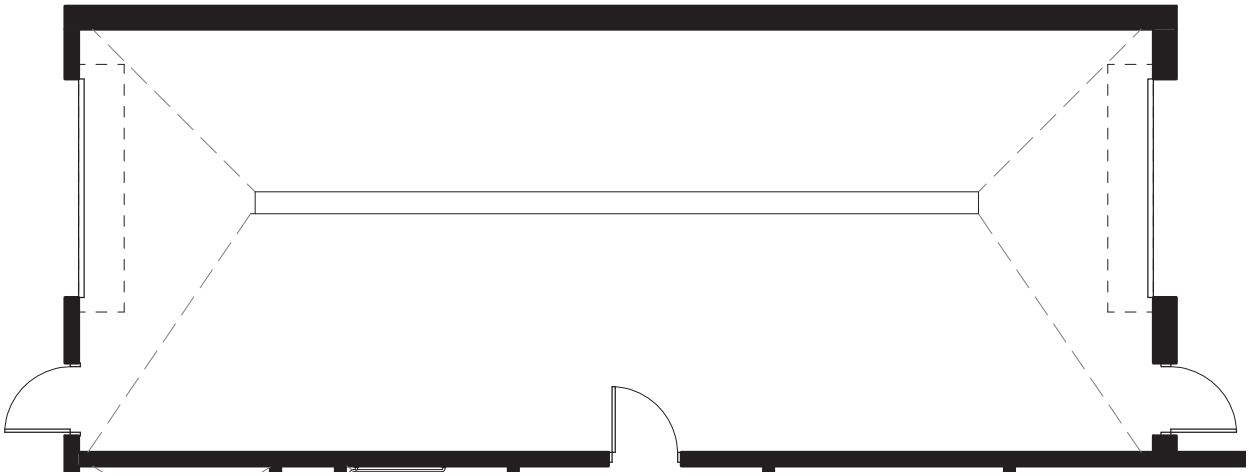
Each facility should provide a secure vehicular sally port for prisoner delivery with immediate and secure access to a centralized detention holding/staging area to accommodate prisoners in transit to and from courtrooms. This area will connect by a secure route to clusters of holding cells located between pairs of courtrooms from which there will be direct entrance into the courtrooms.

The sally port shall be located to have direct access to the central holding and control area. Prisoners should not be required to pass any other regularly occupied building areas between the sally port and holding cells.

The sally port shall have an overhead entry door and a second overhead exit door for optimal security and building access control. A prisoner transport vehicle should not have to back out of the sally port.

Space Requirements

Area:	800 SF, large enough to accommodate bus transport
Equipment:	12 gun capacity metal gun locker
Plumbing:	floor drains with grease trap
HVAC:	Semi-conditioned space. Heating as needed to avoid freezing fire protection
Lighting:	General illumination, tamper resistant
Security:	Highly controlled access at entry overhead door and exit overhead door. Cameras for security control, duress button



5.7.3 System Requirements

All holding areas should be designed for security and durability.

The Lighting system shall incorporate the following:

- Occupancy sensors at Sheriff work areas
- Adequate lighting for optimal visibility for both cameras and Sheriffs
- High efficient lamps and ballasts
- Consistent color rendering

The air conditioning and ventilation system should incorporate the following:

- Air handling equipment should be tamper resistant where accessible to prisoners.
- Sheriff's stations to have climate control. No areas accessible by prisoners should have access to climate control.
- The mechanical system design should be able to handle future needs as well as present demands.

5.7.4 Audio / Visual

All court holding and support areas should be designed to accommodate installation of equipment for audio/video systems as presented in Section 2 of this document.

5.7.5 Security

These are the areas that require the highest level of security in the building. The security systems required for these spaces are defined in section 4 of this document.

5.8 COURTHOUSE SUPPORT AND MAINTENANCE

It is essential that all court facilities in the state be properly maintained. Experience has shown that incomplete and/or ineffective upkeep can lead to uncomfortable working conditions, unacceptable disrepair and unnecessary loss of dignity for both the facility and the judicial system.

Representatives of the Department of Facilities Construction and Management, Facility Management and Maintenance Division will be contacted and included in planning and design of all court projects to insure that adequate life cycle provisions are made.

5.8.1 Space Type and Usage

All new court facility programs will include specific space provisions for maintenance and housekeeping functions. At a minimum, these will include general building receiving, storage, housekeeping supply storage (including approved chemical storage), recycling collection, maintenance shops and supplies and properly sized housekeeping closets throughout the facility.

5.7.2 Architectural Design Features

The building support and maintenance spaces shall be designed to meet the State of Utah Division of Facilities Construction and Management (DFCM) standards.

Attention will also be given to the provision of appropriate storage for grounds-keeping equipment.

5.8.2.1 Deliveries and Receiving

Each facility should provide a delivery area to receive office supplies, custodial goods and other building materials as needed. This area shall be separate from the main building entrance as well as separate from the sally port access. This area should be both durable and secure.

A mail room and receiving office should be adjacent to the receiving area.

Space Requirements

Area:	Varies, dependant on building needs
Equipment:	Storage cabinets for mail and building supplies
Plumbing:	floor drains
HVAC:	Semi-conditioned space. Heating as needed to avoid freezing fire protection
Lighting:	General illumination, occupancy sensors
Security:	Controlled access

5.8.2.2 Utility Closets

Utility closets shall be provided as needed in the building. These shall meet DFCM standards.

5.8.2.3 Custodial Support and Storage

Custodial closets, storage space and office areas shall be provided as needed in the building. These shall meet DFCM standards.

5.8.2.3 General Building Storage

General building storage shall be provided as needed in the building. The specific size and location of the storage areas shall be coordinated with the building users and maintenance staff. These areas shall meet DFCM standards.

5.9 SHARED SPACES

It is the intent of the Judicial System to plan and design facilities that are efficient and cost sensitive. For this reason, every project should seek opportunities to develop as much shared or common use space as possible in order to minimize unnecessary redundancies.

The following types of areas should be considered for common use: training rooms, conference rooms, staff toilets, vending, food services, break rooms, media rooms and computer server rooms. Any smoking accommodations should be remotely located from the building in accordance with state law.

Facility programs should reflect this interest and specifically identify where such common use has been planned.

In each courthouse such spaces as may be needed should be set aside for public access, offices, conference rooms and public accommodation.

A Space Standard Matrix

Space	Area (NSF)	Seating	Description	Technology: Equipment: Computer (processor, monitor, keyboard)	Technology: Equipment: Video (camera, monitor, recorder)	Technology: Equipment: Controls (touch screen, panel)	Technology: Equipment: Other (printer, scanner, Bar Code Reader)	Technology: Equipment: CIC Large Screen, Monitor	Technology: Equipment: Audio (Mikes, Speaker, Recorder)	Technology: Application	Technology: Infrastructure: CIC (Large Screen Monitor)	Technology: Infrastructure: Data Port	Technology: Infrastructure: Video Connection	Technology: Infrastructure: Remote Data Links	Technology: Infrastructure: Remote Video Links	Acoustics: Standard	Acoustics: Special: Noise Reduction Coefficient	Acoustics: Special: Noise Criteria	Acoustics: Special: Sound Transmission Class	Acoustics: ion: Public Address	Acoustics: ion: Recording	HVAC: Standard	HVAC: Special	HVAC: Remarks	Lighting: General: Standard	Lighting: General: Task	Lighting: Emergency: Lighting	Lighting: Emergency: Power	Communications: Telephone	Communications: Video	Communications: Electronic	Communications: Radio	Communications: Intercom	Furniture / Fixtures	Finishes: Walls	Finishes: Floors	Finishes: Ceilings
District Court																																						
Large Set																																						
Courtroom																																						
Large Courtroom, ADA	2,400	120+	Multi-litigant trials, high volume proceedings, ceremonial functions, appellate panels	x	x	x	x	x	x	1, 2, 4, 5, 6, 7, 8, 9	x	x	x	x	x		0.65 -0.75	20-30	55	x	x		x	Zoned or separate heating, ventilating & air conditioning for possible night and/or weekend courts	x		x	x	x	x	x	x	x	Judge Bench, Witness Box, Jury Box, Jury seating, Clerk Workstation, rail, public seating, Counsel tables, counsel chairs, Judge chair, witness chair, court recorder chair, bailiff table and chair	2	2, 3	3
Courtroom Workstations/Positions																																						
Judge Bench	144	2	Sized for 3 Judge Appellate panel	x	x	x		x	x		x	x	x	x	x					x	x				x	x			x								2	
Clerk Workstation	48	2	in-court clerking functions - area required/position - additional positions require additional area - includes seating	x	x	x	x	x	x		x	x	x	x	x					x	x				x	x			x								2	
Witness/Interpreter Box	48	2	raised platform for witness & interpreter in courtroom - ADA accessible					x			x									x	x				x												2	
Jury Box (large)	104	14	12 + 2 alternates					x			x	x								x	x				x													
Counsel Tables	39ea	3 ea.	includes seating area - minimum 2 tables - potentially up to 4								x	x													x				x									
Bailiff workstation	15	1																							x													
Well Area (including workstations & circulation)	1,400																								x										1	3	1
Courtroom Support Spaces																																						
Courtroom Sound Vestibule	80		Sound lock courtroom entry													x						x			x											1	3	1
Courtroom Storage	15											x	x	x	x	x						x			x											1	3	1
Courtroom Technology Closet	15		to house video equipment					x				x	x									x			x											1	3	1

Space	Area (NSF)	Seating	Description	Technology												Acoustics						HVAC			Lighting				Communications					Furniture / Fixtures	Finishes		
				Equipment						Application	Infrastructure						Special			ion					General		Emergency										
				Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		CIC (Large Screen Monitor)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Large Jury Deliberation Suite (incl. Toilets & vestibule)	530	14									x						0.65 -0.75	20-30	50			x			x				x						1	3	1
Attorney/Client Conference	120	6	1/courtroom														0.65 - 0.75	20-30	50			x			x											1	3	1
Victim/Witness Waiting Room	120	6	1/courtroom although several may be grouped on a floor as a single space														0.65 - 0.75	20-30	50	x		x			x											1	3	1
Courtroom Waiting	200	20																		x		x			x											1	3	1
Standard Set																																					
Courtroom																																					
Standard Courtroom (ADA/Non-ADA)	1,800-1,600	50-60	Routine civil & criminal proceedings, jury trials	x	x	x	x	x	x	1, 2, 4, 5, 6, 7, 8, 9		x	x	x	x		0.65 -0.75	20-30	55	x	x		x	Zoned or separate heating, ventilating & air conditioning for possible night and/or weekend courts	x		x	x	x	x	x	x	x	Judge Bench, Witness Box, Jury Box, Jury seating, Clerk Workstation, rail, public seating, Counsel tables, counsel chairs, Judge chair, witness chair, court recorder chair, bailiff table and chair	2	2, 3	3
Courtroom Workstations																																					
Judge Bench	48	1	When seated judge's eye level should be higher than that of litigants or spectators, standing or seated. Generally 21" above floor finish is sufficient.	x	x	x		x	x		x	x	x	x	x					x	x					x			x							2	
Clerk Workstation	48ea	1		x	x	x	x	x	x		x	x	x	x	x					x	x					x			x							2	
Witness Box/Interpreter	48	2	raised platform for witness & interpreter in courtroom - ADA accessible	x	x			x	x		x									x	x				x											2	
Jury Box (large)	104	14	12 + 2 alternates					x			x									x	x				x											2	
Counsel Tables	39ea	3ea.	includes seating area - minimum 2 tables					x			x	x								x	x				x												

Space	Area (NSF)	Seating	Description	Technology												Acoustics						HVAC			Lighting				Communications					Furniture / Fixtures	Finishes		
				Equipment						Application	Infrastructure						Special			ion					General		Emergency										
				Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		CIC (Large Screen Monitor)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Bailiff workstation	15	1	moveable									x														x			x								
Well Area (including workstations & circulation)	1,200-1,000																																				
																																			1	3	1
Courtroom Support Spaces																x			45			x			x										1	3	1
Courtroom Sound Vestibule	80		soundlock courtroom entry													x						x			x										1	3	1
Courtroom Storage	15															x						x			x										1	3	1
Courtroom Technology Closet	15											x	x	x	x		0.65 -0.75	20-30	55			x			x				x						1	3	1
Large Jury Deliberation Suite	530	14						x				x	x				0.65 - 0.75	20-30	50			x			x										1	3	1
Attorney/Client Conference	120		1/courtroom														0.65 - 0.75	20-30	50	x		x			x										1	3	1
Victim/Witness Waiting Room	120		1/courtroom although several may be grouped on a floor as a single space													x				x		x			x										1	3	1
Courtroom Waiting	200																																				
Small Set																																					
Courtroom																																					
Small Courtroom (ADA/Non-ADA)	1500-1300	35-40	Small civil or criminal trials	x	x	x	x	x	x	1, 2, 4, 5, 6, 7, 8, 9		x	x	x	x		0.65 -0.75	20-30	55	x	x		x	Zoned or separate heating, ventilating & air conditioning for possible night and/or weekend courts	x		x	x	x	x	x	x	x	Judge Bench, Witness Box, Jury Box, Jury seating, Clerk Workstation, rail, public seating, Counsel tables, counsel chairs, Judge chair, witness chair, court recorder chair, bailiff table and chair	2	2, 3	3
Courtroom Workstations																																					
Judge Bench	48	1		x	x	x		x	x		x	x	x	x	x					x	x								x							2	
Clerk Workstation	48ea	1		x	x	x	x	x	x		x	x	x	x	x					x	x					x			x							2	
Witness Box	48			x	x			x	x		x									x	x					x										2	

Space	Area (NSF)	Seating	Description	Technology												Acoustics						HVAC			Lighting				Communications					Furniture / Fixtures	Finishes		
				Equipment						Application	Infrastructure						Special			ion					General		Emergency										
				Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		CIC (Large Screen Monitor)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Jury Box (small)	58	8	6 + 2 alternates					x			x									x	x				x												2	
Counsel Tables	39ea	1						x			x	x								x	x				x													
Bailiff workstation	15											x													x													
Well Area (including workstations & circulation)	1,000-900																									x												
																																			1	3	1
Courtroom Support Spaces																x						x			x											1	3	1
Courtroom Sound Vestibule	80		soundlock courtroom entry													x						x			x											1	3	1
Courtroom Storage	15															x						x			x											1	3	1
Courtroom Technology Closet	15											x	x	x	x		0.65 -0.75	20-30	55			x			x				x							1	3	1
Small Jury Deliberation Suite	480	8						x			x	x	x				0.65 - 0.75	20-30	50			x			x											1	3	1
Attorney/Client Conference	120		1/courtroom														0.65 - 0.75	20-30	50	x		x			x											1	3	1
Victim/Witness Waiting Room	120		1/courtroom although several may be grouped on a floor as a single space													x				x		x			x											1	3	1
Courtroom Waiting	200																																					
Juvenile Court																																						
Standard Set																																						
Courtroom																																						
Standard Courtroom (ADA/Non-ADA)	1800-1500	50-60		x	x	x	x	x	x	1, 2, 4, 5, 6, 7, 8, 9		x	x	x	x		0.65 -0.75	20-30	55	x	x		x	Zoned or separate heating, ventilating & air conditioning for possible night and/or weekend courts	x		x	x	x	x	x	x	x	Judge Bench, Clerk Workstation, rail, public seating, Counsel tables, counsel chairs, Judge chair, witness chair, court recorder chair, bailiff table and chair	2	2,3	2
Courtroom Workstations/Positions																																						
Judge Bench	48	1									X																											
Clerk Workstation	48ea	1		x	x	x		x	x		X	x	x	x	x					x	x					x			x								2	
Counsel/staff Tables	39ea	3ea	witnesses also sit at tables - up to	x	x	x	x	x	x		X	x	x	x	x					x	x					x			x								2	
Bailiff workstation	15	1	moveable					x				x								x	x				x													

Space	Area (NSF)	Seating	Description	Technology												Acoustics						HVAC			Lighting				Communications					Furniture / Fixtures	Finishes		
				Equipment						Application	Infrastructure						Special			ion					General		Emergency										
				Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		CIC (Large Screen Monitor)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Well Area (including workstations & circulation)												x														x			x								
Courtroom Sound Vestibule	80		soundlock entry													x			45			x			x										1	3	1
Courtroom Storage	15															x						x			x										1	3	1
Courtroom Technology Closet	15															x						x			x										1	3	1
Attorney/Client Conference	120		1/courtroom									x	x	x	x		0.65 - 0.75	20-30	50			x			x										1	3	1
Victim/Witness Waiting Room	120		1/courtroom although several may be grouped on a floor as a single space					x				x	x				0.65 - 0.75	20-30	50	x		x			x										1	3	1
Courtroom Waiting	200															x				x		x			x										1	3	1
Small Set																																					
Courtroom																																					
Small Courtroom (ADA/Non-ADA)	1500-1300	35-40		x	x	x	x	x	x	1, 2, 4, 5, 6, 7, 8, 9		x	x	x	x		0.65 -0.75	NC20-NC30	55	x	x		x	Zoned or separate heating, ventilating & air conditioning for possible night and/or weekend courts	x		x	x	x	x	x	x	x	Judge Bench, Clerk Workstation, rail, public seating, Counsel tables, counsel chairs, Judge chair, witness chair, court recorder chair, bailiff table and chair	2	2,3	3
Judge Bench	48	1		x	x	x		x	x		X	x	x	x	x					x	x					x			x							2	
Clerk Workstation	48ea			x	x	x	x	x	x		X	x	x	x	x					x	x					x			x							2	
Counsel Tables	39ea							x			X	x								x	x				x												
Bailiff workstation	15	1										x														x			x								
Well Area (including workstations & circulation)	1200-1000																																				
Courtroom Support Spaces																																					
Courtroom Sound Vestibule	80		soundlock entry													x			45			x			x										1	3	1
Courtroom Storage	15															x						x			x										1	3	1
Courtroom Technology Closet	15															x						x			x										1	3	1

Space	Area (NSF)	Seating	Description	Technology												Acoustics						HVAC			Lighting				Communications					Furniture / Fixtures	Finishes		
				Equipment						Application	Infrastructure						Special			ion					General		Emergency										
				Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		CIC (Large Screen Monitor)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Attorney/Client Conference	120											x	x	x	x		0.65 - 0.75	20-30	50			x			x										1	3	1
Victim/Witness Waiting Room	120		1/courtroom					x				x	x				0.65 - 0.75	20-30	50	x		x			x										1	3	1
Courtroom Waiting	200		1/courtroom although several may be grouped on a floor as a singe space													x				x		x			x										1	3	1

Space	Area (NSF)	Description	Technology: Equipment: Computer (processor, monitor, keyboard)	Equipment: Video (camera, monitor, recorder)	Equipment: Controls (touch screen, panel)	Equipment: Other (printer, scanner ,Bar Code Reader)	Equipment: CIC Large Screen, Monitor	Equipment: Audio (Mikes, Speaker, Recorder)	Applications	Infrastructure: Data Port	Infrastructure: Video Connection	Infrastructure: Remote Data Links	Infrastructure: Remote Video Links	Security: Zone Assignment	Security: Controlled Access	Security: Special Locks	Security: Duress Alarm	Security: Camera Surveillance	Security: Audio Monitoring	Security: Bullet Resistant Materials	Security: Special Alarms	Acoustics: Standard	Acoustics: Special: Noise Reduction Coefficient	Acoustics: Special: Noise Criteria	Acoustics: Sound Transmission Class	Acoustics: tion: Public Address	Acoustics: tion: Recording	HVAC: Standard	HVAC: Special	HVAC: Remarks	Lighting: General: Standard	Lighting: General: Task	Lighting: Emergenc: Lighting	Lighting: Emergenc: Power	Communications: Telephone	Communications: Video	Communications: Electronic	Communications: Radio	Communications: Intercom	Furniture	Finishes: Walls	Finishes: Floors	Finishes: Ceilings
Trial Court Judicial Offices																																												
Judge's Chamber with Conferencing	320	Use when Judges expect to conduct proceedings in office	x	x		x			1,2,3,4,6,8	x		x	x	3	x		x						0.65-0.75	20-30	55		x	x				x		x									
Judge's Chamber without Conferencing	280	Use when Judges agree to conduct all proceedings in Courtrooms	x	x		x			1,2,3,4,6,8	x		x	x	3	x		x						0.65-0.75	20-30	50		x	x				x		x									
Judges Chamber Toilet/Robing Area	65													3	x										45			x			x			x									
Commissioner's Office	350		x			x			1,2,3,4,6,8	x		x	x	3	x		x								50			x				x		x									
Judicial Assistant/Secretary	80	Personal workstation only - to be combined with other support functions to create larger space	x	x		x			1,2,3,4,9	x		x		3	x		x								45			x				x										
Trial Court Judicial Support																																												
Reception/Waiting	60													3	x										45			x			x												
File/Storage	120		x			x				x		x		3	x										45			x				x											
Copy/Work		Supplement to Judicial Assistant space as either open area or separate room	x			x				x		x		3	x										35			x			x												
Library	35	Open shelves within judicial office suite	x			x				x		x		3	x								0.65-0.75	30-35	45			x			x												
In Court Clerk	64		x			x			1,2,3,4	x		x		3	x		x								35			x				x										
Law Clerk	120		x			x			1,2,3,4,6,	x		x		3	x																	x										
Appeals Courts Judicial Offices																																												
Justice/Judge's Chambers	350	SLC has Supreme at 300 & Appeals at 300 - other areas different, too	x	x		x			1,2,3,4,6,8	x	x	x	x	3	x		x						0.65-0.75	20-30	55			x															
Law Clerk	120		x			x			1,2,3,4,6	x		x		3	x								0.65-0.75	30-35	42-45			x				x		x									
Intern	120		x			x			1,2,3,4,6	x		x		3	x								0.65-0.75	30-35	42-45			x				x											
Secretary	100		x			x			1,2,3,4,	x		x		3	x								0.65-0.75	30-35	42-45			x				x											
Staff Attorney	150	Lead Staff Attorney 200 - Central Staff Attorney 180	x			x			1,2,3,4	x		x		3	x										35			x				x											
Clerk of Court	200		x			x			1,2,3,4,9	x		x		3	x		x											x				x											
Administrative Clerks	64		x			x			1,2,3,4	x		x		3	x													x				x		x									
																																x											
Appeals Courts Judicial Support																																												
Reception/Waiting	60													2	x								0.65-0.75	30-35	42-45			x			x												
File/Work/Storage	120		x			x				x		x		3	x								0.65-0.75	30-35	42-45			x				x											
Copy / Work			x			x				x		x		3	x								0.65-0.75	30-35	42-45			x			x												
Justice Toilet	65	Toilet & closet												3	x								0.65- 0.75	30- 35	45			x				x											
Staff Toilet	80													3	x										45			x			x												
Appellate Court Administrator	180		x			x			1,2,3,4,6,	x		x		3	x		x								45			x			x												

Space	Area (NSF)	Description	Technology										Security								Acoustics						HVAC			Lighting				Communications					Furniture	Finishes		
			Equipment						Applications	Infrastructure												Special			tion					General		Emergency										
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner ,Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Appellate Court Mediator	150		x	x		x			1,2,3,4,	x		x		3	x		x						0.65-0.75	30-35	45			x				x		x									
Clerical Position	55		x			x			1,2,3,4	x		x		3	x													x				x											

Space	Area (NSF)	Description/Use/Assignment	Technology										Security								Acoustics						HVAC			Lighting				Communications					Furniture	Finishes		
			Equipment						Infrastructure													Special			on					General		Emergen										
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Private Offices																																										
Clerk of Court/Division Ad	180		x			x			x		x			3	x		x					0.65- 0.75	30-35	45							x		x	x				x				
Chief Deputy Court Clerk	140		x			x			x		x			3	x							0.65- 0.75	30-35	45							x			x				x				
Assistant Clerk of Court	155		x			x			x		x			3	x							0.65- 0.75	30-35	45							x			x								
Lead Deputy Court Clerk			x			x			x		x			3	x							0.65- 0.75	30-35	45							x			x								
Supervisor/Officer	120	Office or Open Office	x			x			x		x			3	x							0.65- 0.75	30-35	45							x			x								
Workstations																																										
Supervisor workstation	70		x			x			x		x			3	x							0.65- 0.75	35-40	25							x			x								
General clerical	55		x			x			x		x			3	x							0.65- 0.75	35-40	N/A							x			x								
Counter workstation			x			x			x		x			2								0.65- 0.75	35-40	N/A							x		x	x								
Cashier workstation			x			x			x		x			2								0.65- 0.75	35-40	N/A							x		x	x								
Deputy Court Clerk	55		x			x			x		x			3	x																x			x								
Jury Coordinator	70		x			x			x		x			3	x																x			x								
Support Spaces																																										
Copy Room			x						x					3	x							0.65- 0.75	35-40	35						x												
File Storage														3	x							0.65- 0.75	35-40	N/A						x												
Public Counter			x						x					2								0.65- 0.75	35-40	N/A							x		x	x								
Public Research Terminals			x						x					1								0.65- 0.75	35-40	N/A							x		x									
Counter Queuing - Large														1																x			x								
Counter Queuing - Standard														1								0.65- 0.75	35-40	N/A						x			x								
Counter Queuing - Small														1								0.65- 0.75	35-40	N/A						x			x								
File Viewing			x						x					2								0.65- 0.75	35-40	N/A							x		x									
Evidence Storage			x						x					3	x							0.65- 0.75	35-40	N/A						x			x	x				x				
Mail Room			x						x					3	x																x			x								
Staff Toilets														3	x							0.65- 0.75	40	35						x												
Rest Area														3	x															x				x								
Equipment																																										
Bookcase														3																	x											
Cash Register			x						x					3																	x											
Copier									x					3								0.65- 0.75	35-40	35						x												
Copier/Collator									x					3								0.65- 0.75	35-40	35						x												
Docket Bookshelf														3								0.65- 0.75	35-40	N/A						x												
File/Film Cabinet														3								0.65- 0.75	35-40	N/A						x												
File, Lateral														3								0.65- 0.75	35-40	N/A						x												
Film Storage Cabinet														3								0.65- 0.75	35-40	N/A						x												

Space	Area (NSF)	Description/Use/Assignment	Technology										Security								Acoustics						HVAC			Lighting				Communications					Furniture	Finishes		
			Equipment						Infrastructure													Special			on					General		Emergen										
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner ,Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)	Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Microfilm Reader/Printer														3																	x											
Microfilm Recorder														3																	x											
Printer									x					3																x												
Safe														3																x			x									
Storage Cabinet														3								0.65- 0.75	35-40	N/A						x												
Terminal			x						x					3																	x											
Scanner			x						x					3																												
Fax Machine									x					3																	x											
Receipt Printer									x					3																x												

Space	Area (NSF)	Description	Equipment						Applica-tions	Infrastructure				Security								Acoustics					HVAC				Lighting									Finishes		
																						Stan	Special				Amplification				General			Emergenc		Communications					Furniture / Fixtures		
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms			Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task		Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Private Offices																																													
Law Clerk	120	Professional office	x			x			1,2,3,4,6,7	x		x		3	x							x							x				x				x		x				1	3	1
Court Executive	180	Management/High level professional office	x			x			1,2,3,4,6,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Probation/Intake Office	155	Professional office	x			x			1,2,3,4,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
State Court Administrator	275	Executive office	x	x		x			1,2,3,4,6,8,	x	x	x	x	3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x	x	x				2	3	3
Deputy State Court Administrator	225	Executive office	x			x			1,2,3,4,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Assistant State Court Administrator	180	Management office	x			x			1,2,3,4,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Director Administrative Services	200	Management office	x			x			1,2,3,4,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Physical Resources Coordinator	155	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Appellate Court Administrator	180	Management office	x			x			1,2,3,4,6	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Appellate Mediator	155	Professional office	x			x			1,2,3,4,6,8,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
ADR Director	155	Professional office	x	x		x			1,2,3,4,6,8	x	x	x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x	x	x				1	3	1
GAL Director	155	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC							x				x		x				1	3	1
Human Resources Director	160	Management office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC							x				x		x				1	3	1
Legal Counsel - General	200	Executive office	x			x			1,2,3,4,6	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				2	3	1
Legal Counsel - Senior	180	Management/High level professional office	x			x			1,2,3,4,6	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Legal Counsel - Associate	150	Professional office	x			x			1,2,3,4,6	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Personnel Officer	150	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Public Information Officer	150	Management office	x	x		x			1,2,3,4,8,9	x	x	x	x	3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x	x	x				1	3	1
Information Services Director	160	Management office	x	x		x			1,2,3,4,8,9	x	x	x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x	x	x				1	3	1
Information Technology Director	180	Management office	x	x	x	x			1,2,3,4,8,9	x	x	x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x			x	x	x	x				1	3	1
Judicial Education Director	160	Management office	x			x			1,2,3,4,8	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
District Court Administrator	200	Management office	x			x			1,2,3,4,6,	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Juvenile Court Administrator	200	Management office	x			x			1,2,3,4,6	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1

Space	Area (NSF)	Description												Security								Acoustics						HVAC			Lighting										Finishes		
			Equipment						Applica-tions	Infrastructure												Stan	Special			Amplification					General			Emergenc		Communications					Furniture / Fixtures			
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms			Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task		Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Program Director	180	Management office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Finance Director	160	Management office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Audit Director	160	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Judicial Support - Coordinator	140	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Administrative Assistant	120	Includes files, supplies, printer & reception, possible open office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Accountant - Accounting Officer	140	Professional office	x			x			1,2,3,4	x		x		3	x									0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Chief Probation Officer	170	Management office	x			x			1,2,3,4	x		x		3	x		x							0.65- 0.75	NC30-NC35	45 STC			x				x				x		x				1	3	1
Probation Intake Supervisor	155	Management office	x			x			1,2,3,4,	x		x		3	x		x							0.65- 0.75	NC30-NC35	50 STC			x				x				x		x				1	3	1
Deputy Probation Officer	155	Professional office	x			x			1,2,3,4	x		x		3	x		x							0.65- 0.75	NC30-NC35	50 STC			x				x				x		x				1	3	1
Special Services Officer	140	Professional office	x			x			1,2,3,4,	x		x		3	x		x							0.65- 0.75	NC30-NC35	50 STC			x				x				x		x				1	3	1
CASA Coordinator	140	Professional office	x			x			1,2,3,4	x		x		3	x							x							x				x				x		x				1	3	1
Open Workstations																																												
Secretary Workstation	80	legal secretary, executive secretary	x			x			1,2,3,4	x		x		3										0.65- 0.75	NC35-NC40	25 STC			x				x				x		x				1	1	1
General Clerical	64	general clerical or secretarial	x			x			1,2,3,4	x		x		3										0.65- 0.75	NC35-NC40	N/A			x				x				x		x				1	1	1
Counter	42		x			x			1,2,3,4	x		x		2			x							0.65- 0.75	NC35-NC40	N/A			x				x		x		x		x				1	1	1
File Clerk	35		x			x			1,2,3	x		x		3										0.65- 0.75	NC35-NC40	N/A			x				x				x		x				1	1	1
Office Support Spaces																																												
File/Work/Storage	64	general allocation in open office configuration	x			x				x		x		3										0.65- 0.75	NC35-NC40	N/A			x				x										1	1	1
Copy Area	variable	to be sized by anticipated equipment				x				x				3										0.65- 0.75	NC35-NC40	35 STC			x			x											1	1	1
Reception/Waiting	10sf/per													1										0.65- 0.75	NC30-NC35	45 STC			x			x			x								1	3	1
Child Waiting	variable	special scale, furniture and finish treatment												1								x							x			x			x							low scale furniture	1	3	3
Conference/Interview Rooms																																												

Space	Area (NSF)	Description												Security								Acoustics						HVAC			Lighting										Finishes		
			Equipment						Applica-tions	Infrastructure												Stan	Special				Amplification					General			Emergenc		Communications					Furniture / Fixtures			
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner, Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)		Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms			Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task		Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
General standard/person for conferencing	20																																												
Large Conference Room	240		x			x				x				3										0.65- 0.75	NC30-NC35	50 STC			x			x			x		x		x				1	3	
Medium Conference Room	160		x			x				x				3										0.65- 0.75	NC30-NC35	50 STC			x			x			x		x		x				1	3	
Small Conference Room	120		x			x				x				3										0.65- 0.75	NC30-NC35	50 STC			x			x			x		x		x				1	3	
Mediation Room	160	mediator plus up to 7 persons	x			x				x				2			x					x				50 STC			x			x			x		x		x				1	3	
Interview Room	120		x			x				x							x					x				50 STC			x			x			x		x		x				1	3	
Special Rooms																																													
Urinalysis Toilets	60	specimen collection												3								x				45 STC			x			x												1		
Lab (supplies and specimen storage)	120	contains storage cabinets for supplies and cold storage for specimens awaiting transport to remote laboratories	x							x				3								x				45 STC			x			x					x					Built-in counter with sink	1		
Judicial Counsel Board Room			x	x	x	x		x	1,2,3,4,5,6, 8	x	x	x	x	3										0.65- 0.75	NC30-NC35	50 STC	x	x		x	individual control and quiet airflow to permit recording	x			x	x	x	x	x			Large conference table and matching chairs Built-in counter & cabinets w/sink for coffee service	2		

Space	Area (NSF)	Description	Technology											Security								Acoustics						HVAC			Lighting				Communications					Furniture	Finishes		
			Equipment							Infrastructure													Special			on					General		y										
			Computer (processor, monitor, keyboard)	Video (camera, monitor, recorder)	Controls (touch screen, panel)	Other (printer, scanner ,Bar Code Reader)	CIC Large Screen, Monitor	Audio (Mikes, Speaker, Recorder)	Applications	Data Port	Video Connection	Remote Data Links	Remote Video Links	Zone Assignment	Controlled Access	Special Locks	Duress Alarm	Camera Surveillance	Audio Monitoring	Bullet Resistant Materials	Special Alarms	Standard	Noise Reduction Coefficient	Noise Criteria	Sound Transmission Class	Public Address	Recording	Standard	Special	Remarks	Standard	Task	Lighting	Power	Telephone	Video	Electronic	Radio	Intercom		Walls	Floors	Ceilings
Lobby/Information	60	Typical staffed Information station in lobby area	x	x		x		x	1,2,3,4	x	x	x		1			x					x				x		x				x	x		x	x	x		x		1	1	3
Loading Dock	300ea	Typical dock platform/slot - does not include vehicle area	x			x			3	x	x			1	x			x	x		x	x				x		x			x				x	x		x	x		1	4	3
Receiving Area	120+	Variable by facility and expected deliveries - sized to hold screening equipment. Multi-level courthouses require a freight elevator.	x			x			3	x	x			2	x	x	x	x	x		x	x				x		x			x				x	x	x		x		1	4	1
Recycling Collection Area	100+	Bin park (individual bins @ 20NSF ea. x number anticipated)												3								x						x			x										1	4	1
Recycling Stations (distributed)	20ea	Distributed throughout the facility												3								x						x			x										1	1	1
Mail Room	120+	Small facility minimum - larger facilities and special conditions larger	x			x				x				3	x	x							0.65-0.75	NC35-NC40	35 STC			x			x										1	1	1
Communications Room	100+	Minimum entry point for telephone and computer lines -generally larger - very large if new telephone switching is required.	x	x		x			1,2,3,4,5,6,7,8,9	x	x	x		3	x						x	x							x	temperature sensitive	x		x	x	x	x	x				1	1	1
Communications Closets	100	minimum one /floor - greater allocation based on distance calculations	x	x		x			1,2,3,4,5,6,7,8,9	x	x	x		3	x						x	x							x	temperature sensitive	x		x	x	x	x	x				1	1	1
Housekeeping Storage	100+	includes chemical storage closet and dry goods storage .004 x Bldg. sq. ft.												3	x							x						x			x										1	1	1
Housekeeping Closets	80	1/floor minimum - 50 sq. ft. per 5K sq. ft.												3	x							x						x			x										1	1	1
General Storage	Variable	Depends on facility size and components												3	x							x						x			x										1	1	1
Building Maintenance Areas:		*Variable assignment by facility based on State's Maintenance Plan for the Building .0093 x Bldg. Sq. ft.*																																									
Shop/Materials	240	Minimum allocation based on expectation that most maintenance staff will be based elsewhere and will serve this facility as needed.	x			x			3,4	x		x		3	x						x	x						x			x				x		x		x		1	4	3
Maintenance Staff	150	Staff room or vendor area	x			x			3,4	x		x		3	x							x						x			x				x		x		x		1	1	1
Building Manager	150		x			x			3,4,	x		x		3	x							x						x			x				x		x		x		1	1	1
Public Toilets	Varies													1								x						x			x										1	1	1
Staff Toilets	Varies													3	x							x						x			x										1	1	1
Staff Lounge	Varies													3	x							x						x			x										1	1	1
Food Service	Varies		x			x				x				1								x						x	x	special venting for cooking odors	x										1	1	1
Vending Area	20ea													1								x									x										1	1	1
Equipment Rooms & Risers	100+		x	x		x			1,2,3,4,5,6,7,8,9	x	x	x		3		x					x	x							x	temperature sensitive	x		x	x	x	x	x				1	1	1
Computer Equipment Room	200+		x	x		x			1,2,3,4,5,6,7,8,9	x	x	x		3		x					x	x							x	temperature sensitive	x		x	x	x	x	x				1	1	1
Lobby Information			x	x																																							
Building Entry															x	x	x				x																						
Foyer																																								Magnetometers, X-Ray Machine			

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C Rule 3-414 Court Security

INTENT:

To promote the safety and well being of judicial personnel, members of the bar and citizens utilizing the courts.

To establish uniform policies for court security.

To delineate responsibility for security measures by the Council, the administrative office, local judges, court executives, and law enforcement agencies.

APPLICABILITY:

This rule shall apply to all courts.

Statement of the Rule:

(1) Definitions.

(1)(A) Court security. Court security includes the procedures, technology, and architectural features needed to ensure the safety and protection of individuals within the courthouse and the integrity of the judicial process. Court security is the joint effort of law enforcement and the judiciary to prevent or control such problems as, disorderly conduct, physical violence, theft, bomb threats, prisoner escapes, assassinations, and hostage situations.

(1)(B) Presiding judge. As used in this rule, presiding judge includes the judge of a single-judge courthouse. The presiding judge may delegate the responsibilities of this rule to another judge.

(2) Responsibilities of the Council.

(2)(A) The Council shall ensure that all design plans for renovation or new construction of court facilities are reviewed for compliance with The Utah Judicial Facility Design Standards.

(2)(B) The Council shall promulgate general security guidelines to assist local jurisdictions in the development of court security plans. These guidelines and local security plans may supplement but shall not conflict with the following minimum requirements. If a facility fails to conform to the following requirements, the security plan for the courthouse shall note the deficiency, and the presiding judge and court executive shall use reasonable efforts to obtain funding for necessary modifications.

(2)(C) As a condition for the certification of a new justice court or the continued certification of an existing justice court, the justice court shall file an acceptable local security plan with the Court Security Director and shall file amendments to the plan with the Court Security Director as amendments are made. The local security plan shall provide for the presence of a law enforcement officer or constable in court during court sessions or a reasonable response time by the local law enforcement agency upon call of the court.

(3) Responsibilities of the Administrative Office.

(3)(A) The state court administrator shall appoint a Court Security Director who shall:

(3)(A)(i) review, approve and keep on file copies of all local security plans; and

(3)(A)(ii) periodically visit the various court jurisdictions to offer assistance in the development or implementation of local security plans.

(3)(B) The state court administrator shall appoint a court executive in each judicial district to serve as a local security coordinator.

(4) Responsibilities of the court executive.

(4)(A) The court executive designated as the local security coordinator shall:

(4)(A)(i) in consultation with the law enforcement administrator responsible for security and with the judges responsible for the security plan, develop and implement a local security plan for each court of record facility within the district;

(4)(A)(ii) annually review the local security plan with the presiding judge and the law enforcement administrator to identify deficiencies in the plan and problems with implementation;

(4)(A)(iii) file an acceptable local security plan with the Court Security Director; and

(4)(A)(iv) file amendments to the plan with the Court Security Director as amendments are made.

(4)(B) The local security plan for a courthouse and any amendments to it shall be approved by a majority of the judges of the district of any court level regularly occupying the courthouse. Voting shall be without regard to court level. As used in this subsection the term “judges of the district of any court level occupying the courthouse” shall include all judges of the district court of the district and all judges of the juvenile court of the district regardless of whether a particular judge occupies the courthouse so long as at least one judge of that court level occupies the courthouse. The term also includes the justices of the Supreme Court, the judges of the Court of Appeals and all justice court judges who actually occupy the courthouse.

(4)(D) The court executive shall provide a copy of the current local security plan and annual training on the plan to all employees, volunteers and security personnel.

(4)(E) The local plan shall clearly delineate the responsibilities between court personnel and law enforcement personnel for all areas and activities in and about the courthouse.

(4)(F) The court clerk or probation officer, under the supervision of the court executive, shall provide timely notice to transportation officers of required court appearances and cancellation of appearances for individuals in custody. The court shall consolidate scheduled appearances whenever practicable and otherwise cooperate with transportation officers to avoid unnecessary court appearances.

(4)(G) To the extent possible, the clerk of the court shall establish certain days of the week and times of day for court appearances of persons in custody in order to permit transportation officers reasonable preparation and planning time. The court shall give priority to cases in which a person in custody appears in order to prevent increased security risks resulting from lengthy waiting periods.

(5) Responsibilities of law enforcement agencies.

(5)(A) The law enforcement agency with responsibility for security of the courthouse, through a law enforcement administrator, shall:

(5)(A)(i) coordinate all law enforcement activities within the courthouse necessary for implementation of the security plan and for response to emergencies;

(5)(A)(ii) cooperate with the court executive in the development and implementation of a local security plan;

(5)(A)(iii) provide local law enforcement personnel with training as provided in this rule;

(5)(A)(iv) provide court bailiffs; and

(5)(A)(v) provide building and perimeter security.

(5)(B) The law enforcement agency responsible for court security shall be as follows:

(5)(B)(i) The Department of Public Safety for the Supreme Court and the Court of Appeals when they are in session in Salt Lake County. When convening outside of Salt Lake County, security shall be provided by the county sheriff. The Department of Public Safety may call upon the Salt Lake County Sheriff for additional assistance as necessary when the appellate courts are convening in Salt Lake County.

(5)(B)(ii) The county sheriff for district courts and juvenile courts within the county.

(5)(B)(iii) The county sheriff for a county justice court and the municipal police for a municipal justice court. The county or municipality may provide a constable to provide security services to the justice court. If a municipality has no police department or constable, then the law enforcement agency with which the municipality contracts shall provide security services to the justice court.

(6) Court bailiffs.

(6)(A) Qualifications. Bailiffs shall be “law enforcement officers” as defined in Section 53-13-103. At the discretion of the law enforcement administrator and with the consent of the presiding judge, bailiffs may be “special function officers” as defined by Section 53-13-105.

(6)(B) Training. Prior to exercising the authority of their office, bailiffs shall satisfactorily complete the basic course at a certified peace officer training academy or pass a waiver examination and be certified. Bailiffs shall complete 40 hours of annual training as established by the Division of Peace Officer Standards and Training. Bailiffs shall receive annual training on the elements of the court security plan, emergency medical assistance and the use of firearms.

(6)(C) Physical and mental condition. Court bailiffs shall be of suitable physical and mental condition to ensure that they are capable of providing a high level of security for the court and to ensure the safety and welfare of individuals participating in court proceedings. Bailiffs shall be capable of responding appropriately to any potential or actual breach of security.

(6)(D) Appointment. The appointment of a bailiff is subject to the concurrence of the presiding judge.

(6)(E) Supervision. The court bailiff shall be supervised by the appointing authority and perform duties in compliance with directives of the appointing authority.

(6)(F) Responsibilities. Court bailiff responsibilities shall include but are not limited to the following.

(6)(F)(i) The bailiff shall prevent persons in custody from having physical contact with anyone other than the members of the defense counsel’s team. Visitation shall be in accordance with jail and prison policies and be restricted to those facilities.

(6)(F)(ii) The bailiff shall observe all persons entering the courtroom, their movement and their activities. The bailiff shall control access to the bench and other restricted areas.

(6)(F)(iii) The bailiff shall search the interior of the courtroom and restricted areas prior to the arrival of any other court participants. Similar searches shall be conducted following recesses to ensure the room is clear of weapons, explosives, or contraband.

(6)(F)(iv) Bailiffs shall wear the official uniform of the law enforcement agency by whom they are employed.

(6)(F)(v) Bailiffs shall comply with the directives of the judge or commissioner with respect to security related activities and shall perform other duties incidental to the efficient functioning of the court which do not detract from security functions. Activities wholly unrelated to security or function of the court, including personal errands, shall not be requested nor performed.

(6)(F)(vi) Bailiffs shall perform responsibilities provided for in the local court security plan.

(2)(B)(x) The bailiff shall maintain a clear line of sight of all courtroom participants and shall be between individuals who are in custody and courtroom exits.

(7) Weapons.

(7)(A) Weapons generally.

(7)(A)(i) A courthouse is presumed to be free of all weapons and firearms unless a local security plan provides otherwise in accordance with this rule. No person may possess an explosive device in a courthouse. Except as permitted by this rule, no person may possess a firearm, ammunition, or dangerous weapon in a courthouse.

(7)(A)(ii) All firearms permitted under this rule and a local security plan:

(7)(A)(ii)(a) and carried upon the person shall be concealed unless worn as part of a public law enforcement agency uniform;

(7)(A)(ii)(b) shall remain in the physical possession of the person authorized to possess it and shall not be placed in a drawer, cabinet, briefcase or purse unless the person has physical possession of the briefcase or purse or immediate control of the drawer or cabinet or the drawer or cabinet is locked; and

(7)(A)(ii)(c) shall be secured in a holster with a restraining device.

(7)(B) Persons authorized to possess a firearm or other weapon.

(7)(B)(i) The following officers may possess a firearm and ammunition in a courthouse if the firearm is issued by or approved by the officer's appointing authority, if possession is required or permitted by the officer's appointing authority and the local security plan, and if the officer presents valid picture identification:

(7)(B)(i)(a) "law enforcement officer" as defined in Section 53-13-103;

(7)(B)(i)(b) "correctional officer" as defined in Section 53-13-104;

(7)(B)(i)(c) "special function officer" as defined in Section 53-13-105;

(7)(B)(i)(d) "federal officer" as defined in Section 53-13-106; and

(7)(B)(i)(e) a private security officer, licensed under Utah Code Title 58, Chapter 63, Security Personnel Licensing Act, hired by the court or the court's banker to transport money.

(7)(B)(ii) A judge or law enforcement official as defined in Section 53-5-711 may possess in a courthouse a firearm and ammunition for which the judge or law enforcement official has a valid certificate of qualification issued under Section 53-5-711 if possession is permitted by the local security plan.

(7)(B)(iii) A court commissioner may possess in a courthouse a firearm and ammunition for which the court commissioner has a concealed weapons permit, but only if the court commissioner has obtained the training and annual retraining necessary to qualify for a certificate issued under Section 53-5-711 and if possession is permitted by the local security plan.

(7)(B)(iv) A person permitted under subsections (i), (ii) or (iii) to possess a firearm nevertheless shall not possess a firearm in a courthouse if the person is appearing at the courthouse as a party to litigation. A person possessing a firearm in a courtroom shall notify the bailiff or the judge.

(7)(B)(v) If permitted by the local security plan, a court employee or volunteer may possess in a courthouse an otherwise legal personal protection device other than a firearm. An employee or volunteer shall not possess a personal protection device while appearing as a party to litigation. An employee or volunteer shall not possess a firearm while on duty.

(7)(C) Firearm training requirements.

(7)(C)(i) To requalify for a certificate issued under Section 53-5-711 a judge shall annually complete with a passing score a range qualification course for judges and law enforcement officials established by the Department of Public Safety or a course established by any law enforcement agency of the state of Utah or its political subdivision for the requalification of its officers.

(7)(C)(ii) The cost of firearms, ammunition, initial qualification, requalification and any other equipment, supplies or fees associated with a certificate of qualification issued under Section 53-5-711 shall be the responsibility of the judge or court commissioner and shall not be paid from state funds.

(8) Security devices and procedures.

(8)(A) Metal detectors. The use of metal detectors or other screening devices, Where present, shall be used by the law enforcement agency responsible for security/bailiff services. (8)(B) Physical search. Searches of persons in or about the courthouse or courtroom shall be conducted at the discretion of the law enforcement agency responsible for security when the local law enforcement agency has reason to believe that the person to be searched is carrying a weapon or contraband into or out of the courthouse or when the court so orders. No other person is authorized to conduct such searches. Written notice of this policy shall be posted in a conspicuous place at the entrance to all court facilities.

(8)(A)(i) All persons in custody shall be kept in a holding cell, restrained by restraining devices, or supervised at all times while in court unless otherwise specifically ordered by the judge in whose courtroom the individual appears.

(8)(B) Extra security. In anticipated high risk situations or a highly publicized case, the law enforcement agency responsible for security should, on its own initiative or in response to an order of the court, provide extra security including additional personnel, controlled access, etc. A written operational plan outlining and assigning security duties should be developed in conjunction with the presiding judge, the court executive and the Court Security Director.

(9) Transportation of persons in custody.

(9)(A) The federal, state, county or municipal agency with physical custody of a person whose appearance in court is required is responsible for transportation of that person to and from the courtroom.

(9)(B) The transportation officer shall:

(9)(B)(i) remain present at all times during court appearances;

(9)(B)(ii) be responsible for the custody of such persons;

(9)(B)(iii) support the court bailiff in the preservation of peace in the courthouse and courtroom;

(9)(B)(iv) provide advance notice of the transportation and of any extraordinary security requirements to the law enforcement agency responsible for court security, to the judge, and to the bailiff;

(9)(B)(v) comply with any regulations of the county sheriff regarding the transportation of persons in custody to court; and

(9)(B)(vi) return the person in custody to the proper place of confinement.

(9)(C) The law enforcement agency responsible for court security shall provide assistance to the transportation officer as circumstances dictate.

UTAH BUILDING CODE APPEALS BOARD

In the Matter of Consideration of Appeal of Utah Administrative Office of the Courts regarding the Building Code and Delayed Egress Doors, State Courthouses, hearing on April 25, 2006	: : :	**RESOLUTION NO: 2006-1**

It appearing that Utah Building Code Appeals Board (hereinafter "Board") that the above-entitled matter came before this Board for hearing on April 25, 2006 at 3:00 p.m., Room 4112, State Office Building, Salt Lake City, Utah 84114;

It appearing that the following Board members were appointed by the Director of the Division of Facilities Construction and Management of the Utah Department of Administrative Services (hereinafter "DFCM") and were present throughout the hearing and deliberation of the above-entitled matter; Judge Sandra Peuler, Third District Court, as Chair of the Board; Ron Ivie, Building Official/Fire Marshall, Park City, Utah; Roger Evans, Plans Examiner, Park City, Utah; Jack Robertson, Architect, Salt Lake City; and Brad W. Slater, Weber County Sheriff;

It appearing that a presentation was made at the hearing by officials from DFCM as well as the Utah Administrative Office of the Courts (hereinafter "AOC") regarding the above-entitled matter; and

After considering all presentations at said hearing, documents presented and expertise provided from Board members; the following is hereby:

RESOLVED, by the Board, that it finds and declares that:

Occupancy in courtrooms in Courthouses under the jurisdiction of the State of Utah AOC shall have occupancy limits posted at 49 people. When so posted for all Courtrooms in a particular Courthouse, then the occupancy rating under the Building Code is a Class B occupancy which allows for the subject control devices of delayed egress on doors. However, if at any time a Courtroom in such a courthouse exceeds 49 people, then the AOC is responsible to take special precautions to manage safe evacuation procedures; and

State of Utah Courthouses may have delayed egress doors including, but not limited to, doors related to stairwells and exiting. However, when a courtroom exceeds the 49 person occupancy limit, the AOC is responsible to take special precautions to manage safe evacuation procedures.

DATED THIS 21 day of July, 2006.

UTAH BUILDING CODE APPEALS BOARD

By: Sandra Peuler
Judge Sandra Peuler
Board Chair

STATE OF UTAH
THIRD DISTRICT COURT
SALT LAKE CITY

F. Keith Stepan
F. Keith Stepan, Director of DFCM
Administrator for the Board

APPROVED AS TO FORM:

Alan S. Bachman
ALAN S. BACHMAN
Assistant Attorney General

E Excerpt from Justice for All: Designing Accessible Courthouses

Recommendations from the Courthouse Access Advisory Committee

November 15, 2006

This report contains recommendations of the Courthouse Access Advisory Committee for the U.S. Access Board's use in developing and disseminating guidance on accessible courthouse design under the Americans with Disabilities Act and the Architectural Barriers Act. This is not a regulation.

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- Acknowledgements
- Members of the Courthouse Access Advisory Committee
- I. Introduction
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- IV. Access to Raised Elements in Courtrooms and Courthouses
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- VI. Background
- Appendices

ACKNOWLEDGEMENTS

The Courthouse Access Advisory Committee is grateful to the many organizations and individuals who participated in its meetings and provided comment and insight on different aspects of courthouse accessibility. The real-world experiences shared by those involved in courthouse management and design, accessibility, and disability rights were valuable to the Committee's information gathering efforts.

The Committee toured courthouses in different cities as part of its quarterly meetings. These tours were extremely beneficial to the Committee's work by illustrating how accessibility has been addressed in a various types of courthouses. The Committee appreciates the cooperation and hospitality of those who arranged and conducted these tours, including justices, court managers, facility operators, and architects associated with the:

- City of Phoenix Municipal Courthouse
- Sandra Day O'Connor U.S. Courthouse in Phoenix
- Superior Court of the District of Columbia
- District of Columbia Court of Appeals
- Cook County Domestic Violence Courthouse in Chicago
- California Supreme Court in San Francisco
- Superior Court of California, County of San Francisco
- Federal Courthouse in Miami

- Miami-Dade Family Court
- Edward W. Brooke Courthouse in Boston
- John Adams Courthouse in Boston

The Committee also thanks the following entities for hosting its meetings in San Francisco, Washington, D.C., and Boston: the California Administrative Office of the Courts, the California Judicial Council, the District of Columbia Courts' Education and Training Division, the Massachusetts Division of Capital Asset Management, the Massachusetts Administrative Office of the Trial Court, and the Boston Society of Architects.

In addition, the Committee appreciates the expertise, information, and guidance provided by various individuals in scheduled presentations and briefings to the Committee, including: Chief Judge Annice M. Wagner of the DC Court of Appeals, Chief Judge Rufus G. King, III, of the Superior Court of D.C., Michael Kazan of Gruzen Samton, Architects, Planners, and Interior Designers LLP; Francis Burton, Coordinator of the Office of Court Interpreting Service for the D.C Superior Court; Beverly Prior, Randy Dahr, Edward Spooner, Charles Drulis, and Frank Greene of the American Institute of Architects' Academy of Architecture for Justice; Mary Lamielle of the National Center for Environmental Health Strategies, Inc.; Susan Molloy of the National Coalition for the Chemically Injured; Professor Rebecca Morgan, Dr. Karen Griffin, Dan Payne, and Professor Roberta Flowers of Stetson University; Danielle Strickman of the Disability Independence Group; Daniel Holder of the Miami-Dade County Office of ADA Coordination; Chief Justice Robert A. Mulligan of the Massachusetts Administrative Office of the Trial Court; and David Perini, Liz Minnis, and Polly Welch of the Massachusetts Division of Capital Asset Management.

Members of the Courthouse Access Advisory Committee

- Accessibility Equipment Manufacturers Association, Gregory L. Harmon
- Administrative Office of the U.S. Courts, Gate Lew, AIA
- American Institute of Architects, James L. Beight, AIA and Andrew Goldberg, Assoc. AIA
- American Bar Association, Honorable Norma L. Shapiro
- Arizona State Bar Association, James B. Reed
- California Administrative Office of the Courts, Honorable Frederick P. Horn, Gordon "Sam" Overton, and Linda McCulloh
- Conference of State Court Administrators, Steven C. Hollon and James T. Glessner
- Cook County (IL) Government, Warrick Graham, AIA
- David Calvert, PA
- Disability Rights Legal Center, Eve L. Hill and Paula Pearlman
- District of Columbia Courts, H. Clifton Grandy
- Disabilities Law Project, Rocco J. Iacullo
- Hearing Loss Association of America, Marcia Finisdore and Diana Bender
- HDR Architecture, Inc., Luis F. Pitarque, RA
- Hellmuth, Obata and Kassabaum, Inc., Robert W. Schwartz, AIA
- International Code Council, Kimberly Paarlberg, RA and Phil Hahn

- Lift-U Division, Hogan Manufacturing, Don W. Birdsall
- Michael Graves & Associates, Thomas P. Rowe, AIA and Michael A. Crackel, AIA
- Michigan Commission for the Blind, Patrick D. Cannon
- Montana Advocacy Program, Philip A. Hohenlohe
- National Association for Court Management, Roy S. Wynn, Jr.
- National Center for State Courts, Chang-Ming Yeh
- National Fire Protection Association, Nancy McNabb, AIA and John C. Biechman
- New Hampshire Governor's Commission on Disability, Cheryl L. Killam
- Ninth Circuit for the U.S. Courts, Honorable Michael R. Hogan
- Paralyzed Veterans of America, Maureen McCloskey and Mark Lichter, AIA
- PSA-Dewberry, Inc., Marlene Shade, AIA
- Steven Winter Associates, Inc., Stephanie Vierra
- Superior Court of the District of Columbia, Honorable Patricia A. Broderick
- T.L. Shield & Associates, Tom Shield
- Tenth Judicial Circuit Court of Florida, Honorable Susan W. Roberts and Nick Sudzina
- U.S. Department of Justice, Janet L. Blizard and Tracy Justesen
- U.S. General Services Administration, Robert L. Andrukonis, AIA and Thomas Williams, AIA
- U.S. Judicial Conference, Securities and Facilities Committee, Honorable Joseph F. Bataillon
- United Spinal Association, Kleo J. King

Also active in the work of the Committee were:

- Bob Gammon, American Disabilities Consultants
- Nina Gladstone, Spillis Candela DMJM
- Katherine McGuinness, Kessler McGuinness & Associates, LLC

Access Board Representatives and Staff

- Denis Pratt, AIA, Board Member
- Elizabeth Stewart, DFO/ Board Member
- Dave Yanchulis, Staff Member/ DFO
- Earlene Sesker, Staff Member
- Meriel Brooks, Staff Member
- Rose Bunales, Staff Member
- Tanya Johnston, Staff Member

I. INTRODUCTION

The design of courthouses poses challenges to access due to unique features, such as courtroom areas that are elevated within confined spaces. Determining the best way to provide access to these spaces can be difficult. While the U.S. Access Board has established guidelines for courthouses which cover access to courtrooms, many have sought guidance on how access can best be achieved. Additional information is needed that explores new or innovative design solutions. In October, 2004, the U.S. Access Board organized an advisory committee to develop such guidance and to promote access to courthouses as part of an overall plan for targeted outreach on different aspects or spheres of accessibility.

The Courthouse Access Advisory Committee's (CAAC) 35 members included designers and architects, disability groups, attorneys, members of the judiciary, court administrators, representatives of the codes community and standard-setting entities, government agencies, and other volunteers with an interest in the issues to be explored. The members were selected among applications the Board received in response to a published notice. The Committee was charged with developing design solutions and best practice recommendations for accessible courthouses. In addition, the Committee's charter called for recommendations on outreach and educational strategies for disseminating this information most effectively to various audiences.

Over the course of its two-year charter, the Committee met quarterly in different cities and toured various types of courthouses in each location. Committee meetings were held in Phoenix, Chicago, San Francisco, Miami, Boston, and Washington, D.C. In developing its recommendations, the Committee followed a consensus-based model according to protocols governing Federal advisory committees. Three Subcommittees organized by the Committee covering court suites, courthouse spaces other than courtrooms, and education and outreach met extensively in between committee meetings.

As a result of this process, the CAAC was able to more closely examine and understand regional differences and approaches to courthouse access issues, as well as differences between local, state, and federal court systems. This led to more effective communication among a larger group of individuals who serve and contribute to the courts systems. The most significant lesson the CAAC learned from its investigation is that the most accessible designs arose in court systems that considered access at the outset of the project and involved people with disabilities at that point. Additionally, whenever flexibility was built into the courthouse, courtrooms, and services, it was easier to accommodate and/or provide the required or requested services for people with disabilities. Architectural elements of the courthouse and courtrooms only go so far in supporting the larger picture of courthouse access. So it was determined that addressing program services and promoting better communication and education among the judicial associations were critical components to effectively solving access issues. The final CAAC documents have been developed with a cross-disciplinary focus and are intended to support and communicate an integrated process as the way to address and resolve courthouse access issues for the most successful outcome.

This document is comprised of the reports from each Subcommittee as adopted by the Committee.

Courthouse Design

The report's recommendations cover access to areas and elements of courthouses other than courtrooms, including building entrances, interior and exterior routes, egress, signage and wayfinding, jury assembly areas, clerks' offices, and conference rooms. This information clarifies how existing guidelines can be met and includes best practice recommendations for optimum accessibility. It also identifies common access problems and details effective design solutions.

Court Suite Design

Best practice recommendations and their related spaces, including judges chambers, jury deliberation suites and in-custody defendant holding. Design solutions addressed in the report cover access to courtrooms. Elements particular to courtrooms included entrances, witness stands, jury boxes, judges' benches, clerk's stations and other work stations, and assistive listening systems, among others. Guidance is provided on how to achieve access most effectively while preserving traditional and necessary features of courtroom design. Recommendations also address associated spaces, including jury deliberation rooms, holding cells, and judges' chambers.

Education and Outreach

The report provides recommendations for outreach, marketing, and partnership strategies to promote accessibility to courthouses and to disseminate the Committee's design guidance among target audiences, including design professionals, judicial officers, court managers, court staff, and disability groups. The Committee recommends that a website be the main avenue for disseminating this information, and its report provides recommendations for the structure, content, and marketing of such a website. The report contains suggestions for tailoring website material to various audiences and provides narrative content for web pages. Recommendations also address training courses for architects and designers and for judges and court administrators.

The remaining document can be found at *http://www.access-board.gov/caac/report.htm*