



## STAFF REPORT

**Report To:** Board of Supervisors

**Meeting Date:** March 17, 2022

**Staff Contact:** Ali Banister, Chief

**Agenda Title:** For Discussion Only: Discussion and presentation on the Carson City Juvenile Detention Center Needs Assessment. (Ali Banister, ABanister@carson.org)

Staff Summary: H+K Architects has concluded an overall review of the Carson City Juvenile Detention Center. The review included performing a facility needs assessment and developing a comprehensive plan for expanding the existing facility, as well as constructing a new facility in a phased approach to satisfy industry standards and meet the current and future operational needs of the Carson City Department of Juvenile Services. The presentation will provide a summary of the study's findings.

**Agenda Action:** Other / Presentation

**Time Requested:** 25 minutes

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### **Proposed Motion**

N/A

### **Board's Strategic Goal**

Sustainable Infrastructure

### **Previous Action**

February 4, 2021 - the Board of Supervisors approved a contract with H+K Architects, a qualified architectural design consultant, to conduct a facility needs assessment of the Carson City Juvenile Detention Center.

### **Background/Issues & Analysis**

The Carson City Department of Juvenile Services initiated a facility needs assessment to conduct an overall review of the City's youth detention facilities. The reason for this assessment is the age of the infrastructure, State and Federal requirements and continued growth of Carson City and the need for juvenile services in Carson City. The assessment, conducted by H+K Architects in consultation with the Juvenile Services staff and other City stakeholders, commenced in February 2021 and included a comprehensive analysis of the existing site and facility, review of existing needs and State and Federal requirements and development of a plan or "blueprint" of the proposed operations and capital investment required to address the current and future needs of juvenile services in Carson City. The purpose of this document is to provide a strategic vision and to outline how the Department of Juvenile Services can best utilize its resources to serve the youth and families involved in the juvenile justice system. The strategic goals of the plan were to: develop a future plan to more efficiently and effectively utilize existing resources; renovate or phase out portions of the current facility that are outdated, unsafe and non-compliant; enhance support operations to include restructuring the Murphy-Bernadini Regional Detention Center, juvenile probation and the Carson City Juvenile Court; address compliance issues with the current detention facility, the Americans with Disabilities Act ("ADA") and the Prison Rape Elimination Act ("PREA") standards; and to develop a plan to adapt to future changes in the juvenile justice system.

The presentation will provide a summary of the study's findings, including an overview of the existing site and facility deficiencies, current and future needs, and development of construction schedule and costs associated with two potential phased options to support the needs of the Department of Juvenile Services and enable it to provide adequate and effective juvenile services in Carson City.

The Department of Juvenile Services will review any discussion of this presentation, and move forward with identified recommendations and make requests for funding of identified capital improvements, as appropriate.

**Applicable Statute, Code, Policy, Rule or Regulation**

42 USC § 12101 et seq., the Americans with Disabilities Act; and 42 USC § 15601 et seq, the Prison Rape Elimination Act

**Financial Information**

**Is there a fiscal impact?** No

**If yes, account name/number:**

**Is it currently budgeted?** No

**Explanation of Fiscal Impact:**

**Alternatives**

N/A

**Attachments:**

[Carson City Juvenile Facility Needs Assessment Board Presentation 3-17-22.pptx](#)

[Carson City Juvenile Detention Facility Needs Assessment Final 2-22.pdf](#)

[Detention Stats.pdf](#)

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_  
2) \_\_\_\_\_

Aye/Nay

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)



Carson City Juvenile Detention Center Needs Assessment  
Presentation to Carson City Board of Supervisors  
March 17, 2022



## The Needs Assessment Overview

- Provides an overall review of the City's youth detention facility and brief history.
- Allows evaluation of the existing facility due to the age of the infrastructure, State mandates, and continued growth of Juvenile Services and Carson City.
- Provide a strategic vision and outline how the Carson City Department of Juvenile Services can best utilize its resources to serve the youth and families involved in the juvenile justice system.
- Considers the renovation or phase-out of the current facility that is outdated, unsafe and non-compliant.
- Scope includes Juvenile Detention, Juvenile Probation and First Judicial District Court.





# History

- The Murphy Bernardini Detention Center opened in 1979
- In 1979 the population was 32,000
- Temporary detention facility for juvenile offenders
- During this time, youth could be doubled up in the rooms stretching the maximum capacity
- The facility was designed with two wings (boys wing with 12 rooms and girls wing with 6 rooms)
- At this time, the facility met the needs of the department and needs of the community it was serving

# Federal/State Mandates

- In 2003 the Prison Rape Elimination Act (PREA) was passed
- PREA reduced the bed capacity from double occupancy to single room/bed occupancy (18 beds)
- Due to the design of the building and PREA mandates regarding required video monitoring, the building quickly become non-compliant with PREA standards
- Americans with Disabilities Act- ADA compliance issues
- The COVID-19 Pandemic quickly overwhelmed the detention center due to forced isolation and limited space to do so
- Increase in youth with mental health issues and limited space to house these youth.

# Future

- As of 2019, the estimated population of Carson City was 57,115. The Economic Planning Indicators Committee (EPIC) estimates 8.6% growth in our region by 2023. If EPIC is correct, Carson City's population will have more than doubled since 1979
- It is anticipated that the mental health numbers will continue to increase in detention, with little to no capacity to house these youth
- It is anticipated the State will require youth who have been certified as adults to be housed in the facility with no way of separating the youth in the current building
- Reconstructing this building would provide enhanced services to include but not limited to, increased detention bed capacity, increased and more functional operations related to mental health and pandemic challenges, and compliance with federal and state standards.



## The Existing Facility Site Plan



## The Existing Facility Site and Building Deficiencies

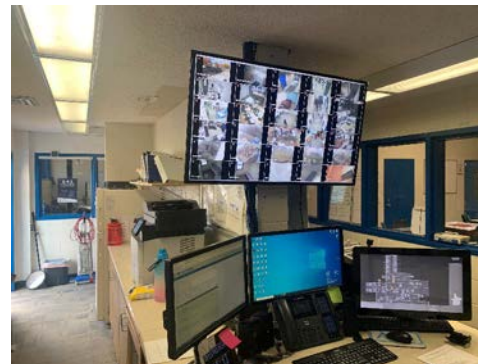
- The 11,500 square foot detention and courts building was constructed in 1978. The population of Carson City has doubled since the Justice Center was first occupied. The capacity of the building has actually been reduced in that time.
- Expansion is anticipated within the Water Treatment Building. Expansion would require relocation of Detention Equipment Storage and CASA.
- The HVAC system is past its service life. The building has no fire sprinkler system. The electrical system is not sufficient to power the needs of contemporary security, access control, communication and monitoring systems.
- The building has limited Internet and network infrastructure.
- There is not a compliant emergency access road around the Juvenile Probation building.
- Public parking reaches capacity during busy times.





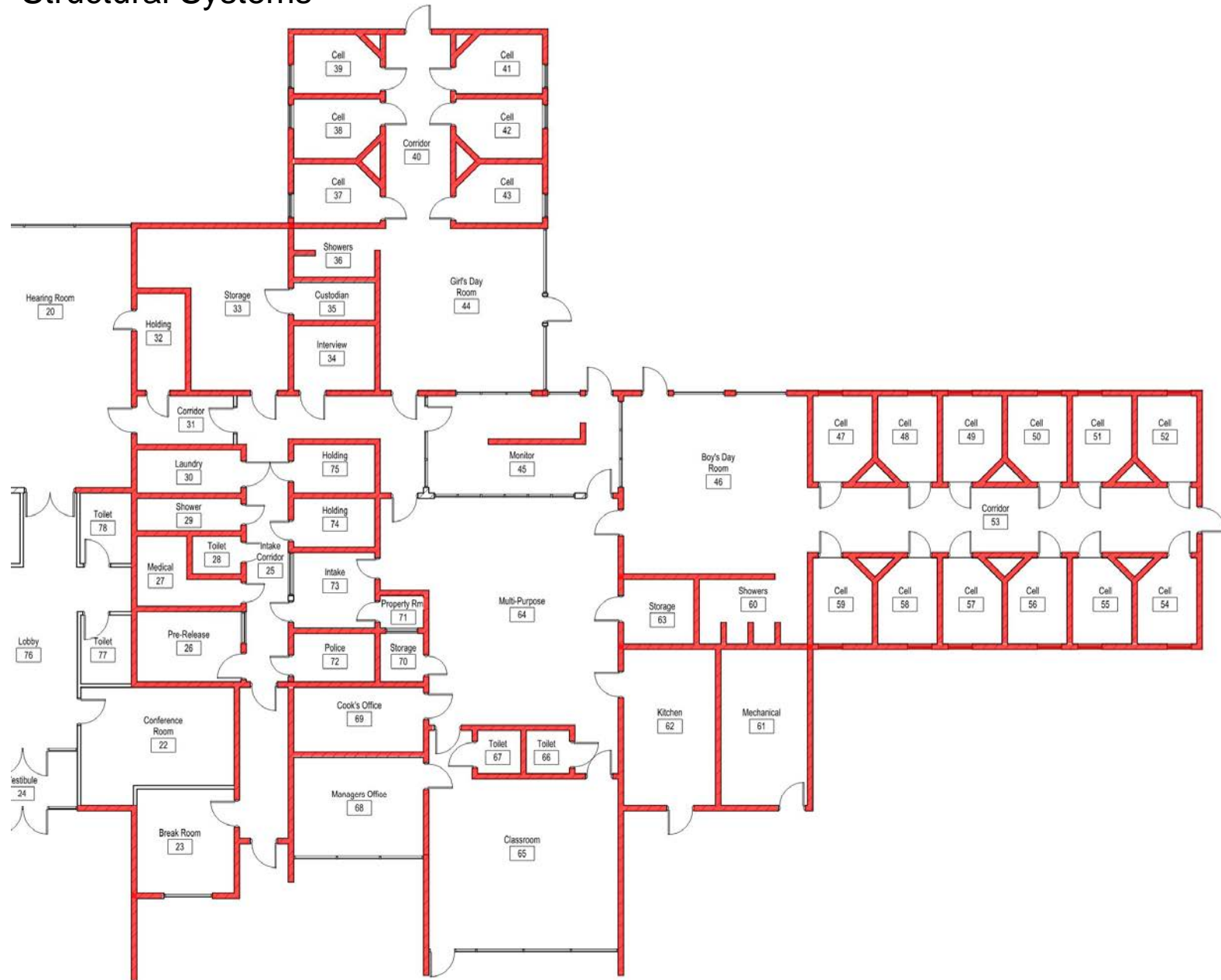
# The Existing Facility Detention Center, Courts and Juvenile Probation Operational Deficiencies

- The size, design, and age of the 40-year-old facility make it difficult to operate the Detention Center in a safe, therapeutic, and cost-effective manner.
- Male and female detainees are required to be separated into distinct housing areas. With only two relatively small housing areas, the detention staff regularly has to make challenging housing decisions.
- Changes in population demographics and custody protocol, the implementation of the Americans with Disabilities Act (ADA), and the creation of the Prison Rape Elimination Act (PREA) all impact the use of the Detention Center.
- Major spaces such as Detention Cells, Courtroom, Control Center, Intake, Dayrooms and Administrative areas all need to be larger and better organized.
- The Courts portion of the building has seen growth that the building does not support.
- The current facility does not support the Juvenile Courts process. Many of the rooms are not properly sized and organization is not efficient. The courtroom is not large enough for many of the hearings. There are also issues with providing the necessary level of security for staff. Confidentiality is compromised with room locations and wall/ceiling acoustical construction.
- Relationships of the public, court professionals (judiciary and staff), and in-custody persons does not provide the required level of safety and security.
- Juvenile Probation is at capacity.
- Juvenile Probation needs to recapture common area that was converted to offices and needs staff restrooms.

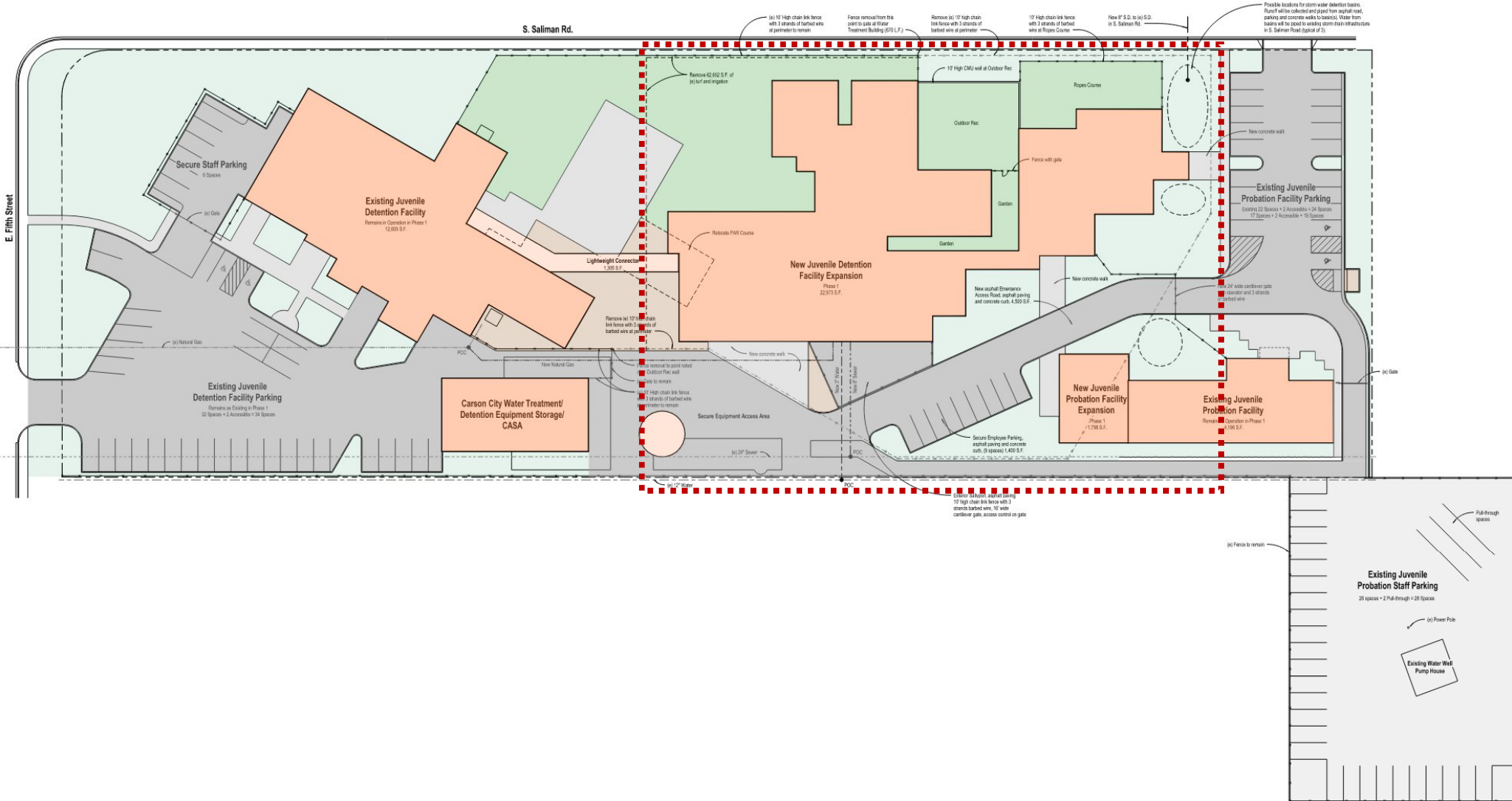




## The Existing Facility Structural Systems



# The New Juvenile Services Facility Phase 1 Site Plan



# The New Juvenile Services Facility Phase 1 Detention Center Floor Plan

**26,900 SF Detention Center**

## Public

Public Classroom and Training Room  
Dedicated Pre-Release Area  
Separated Non-Contact Visiting

## Exterior

Outdoor Recreation Yard  
Garden  
Ropes Course

## Detention

Detention Staff Administration Area  
Intake area with 5 Holding Rooms and Support Spaces  
22 Housing beds in 3 wings with Time Out and Day Room  
Central Control Room  
Detention Counseling and Meeting Rooms  
Detention Classroom and Multi-Purpose Room  
Commercial Kitchen and Food Storage  
Medical Unit with Exam, Office and Med Storage





# The New Juvenile Services Facility Juvenile Probation Building

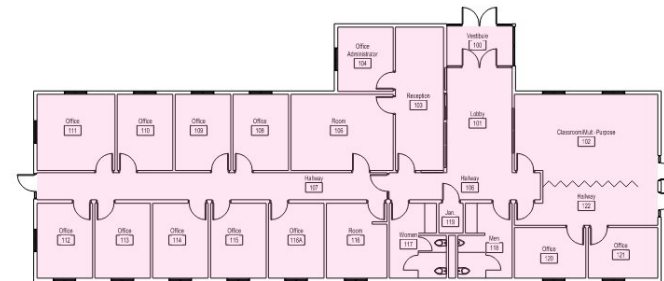
## PHASE 1 1,800 SF Addition/Remodeling

### Probation

- Offices
- Staff Conference Room
- Staff Restrooms

### Public

- Recapture Classroom/Multi-Purpose Space



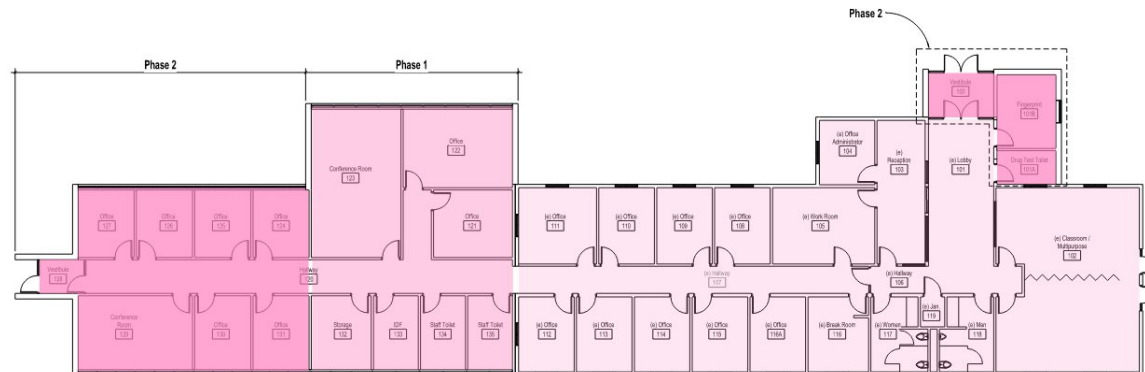
## PHASE 2 1,860 SF Addition

### Probation

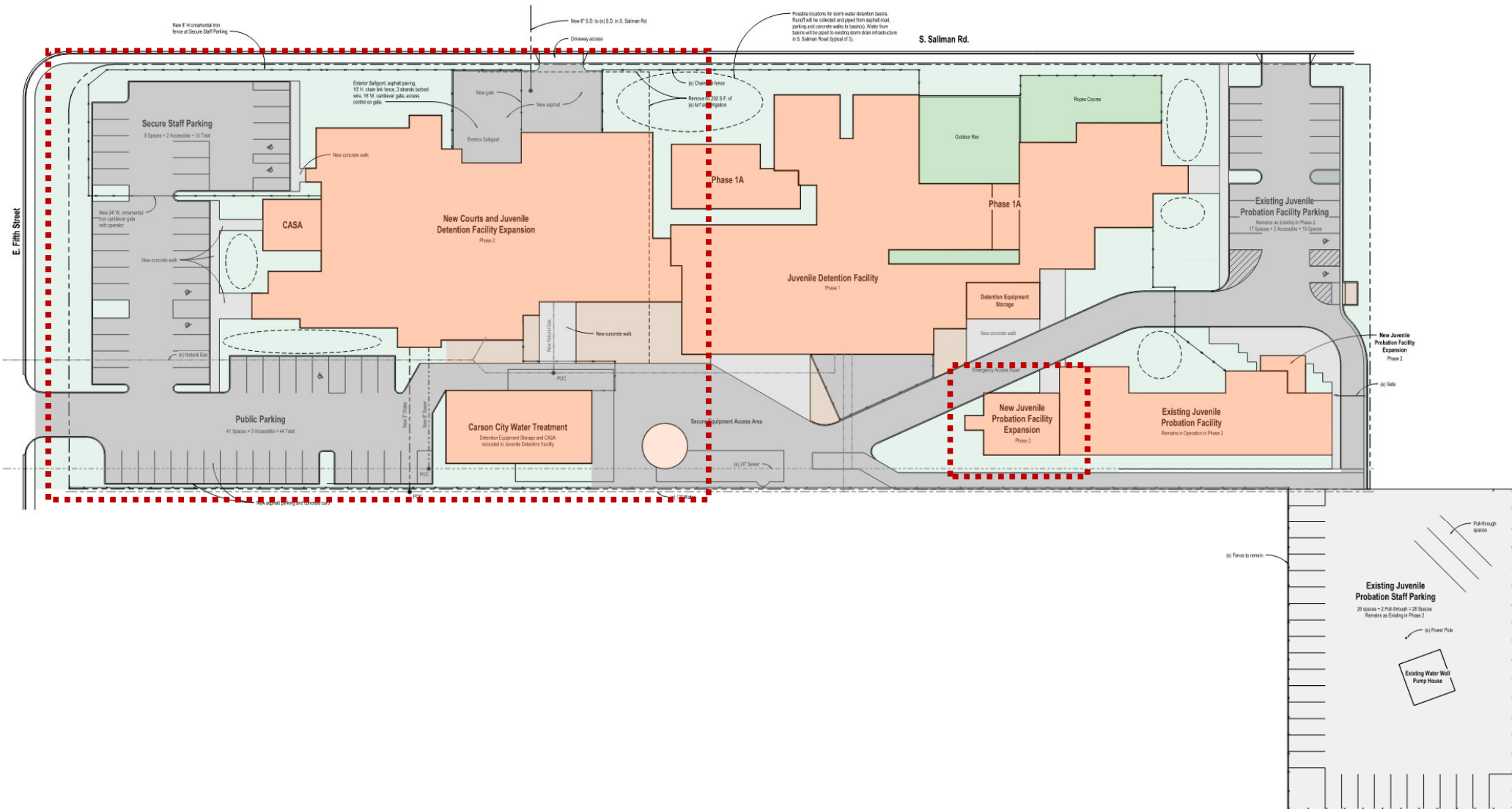
- Offices
- Staff Conference Room

### Public

- Entry Vestibule
- Fingerprinting Room
- Drug Testing Restroom



# The New Juvenile Services Facility Phase 2 Site Plan



# The New Juvenile Services Facility Phase 2 Ground Floor Plan

## 20,270 SF Detention Center Expansion and Juvenile Courts

### Public

Secure Entry & Screening  
Security Office  
Public Courts Lobby  
Conference Rooms  
Family Room  
Lactation Room

### Exterior

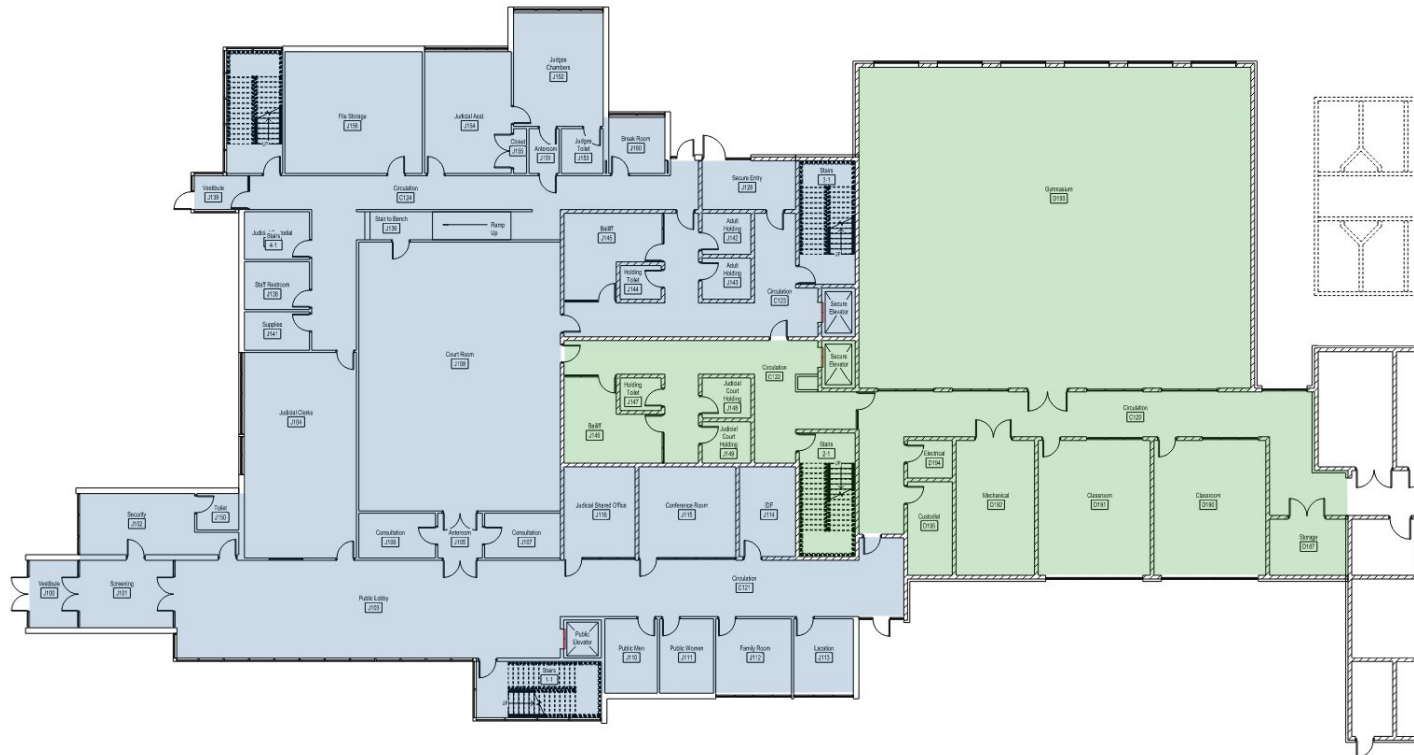
Public Parking  
Secure Staff Parking

### Detention

Gymnasium  
Bailiff and Juvenile Holding  
Classrooms

### Courts

Courtroom  
Courtroom Consultation Rooms  
Judicial Shared Offices  
Bailiff and Adult Holding  
Judicial Clerks  
Judge's Chambers and Support



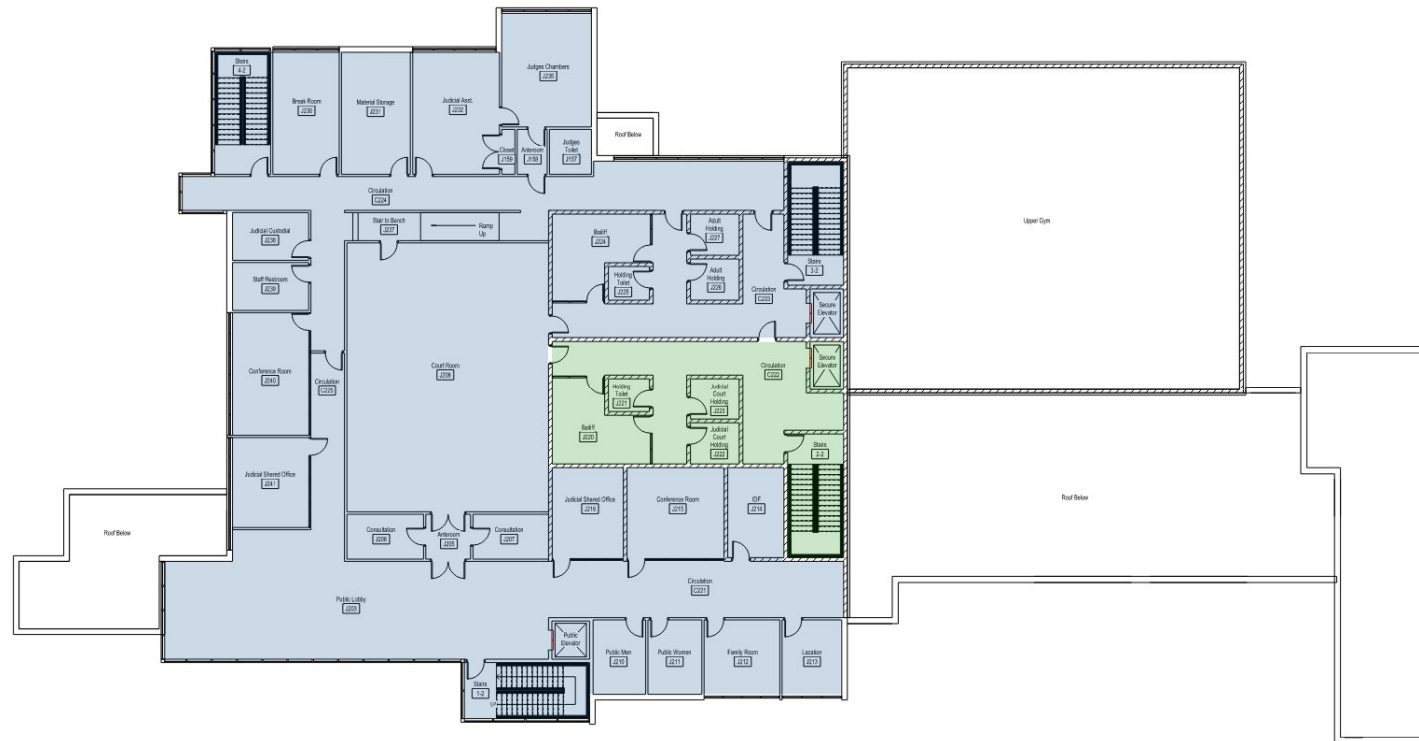
# The New Juvenile Services Facility Phase 2 Second Floor Plan

**12,300 SF Courts Facility and  
Juvenile Courts Holding**

**Public**  
Public Courts Lobby  
Conference Rooms  
Family Room  
Lactation Room

**Detention**  
Bailiff and Juvenile Holding

**Courts**  
Courtroom  
Courtroom Consultation Rooms  
Judicial Shared Offices  
Bailiff and Adult Holding  
Judge's Chambers and Support





# The New Juvenile Services Facility Construction Costs

## Option 1

Design Start August 2023  
Occupancy October 2026

Phase 1 \$15,421,000  
Phase 1A \$1,754,000  
Phase 2 \$26,222,000

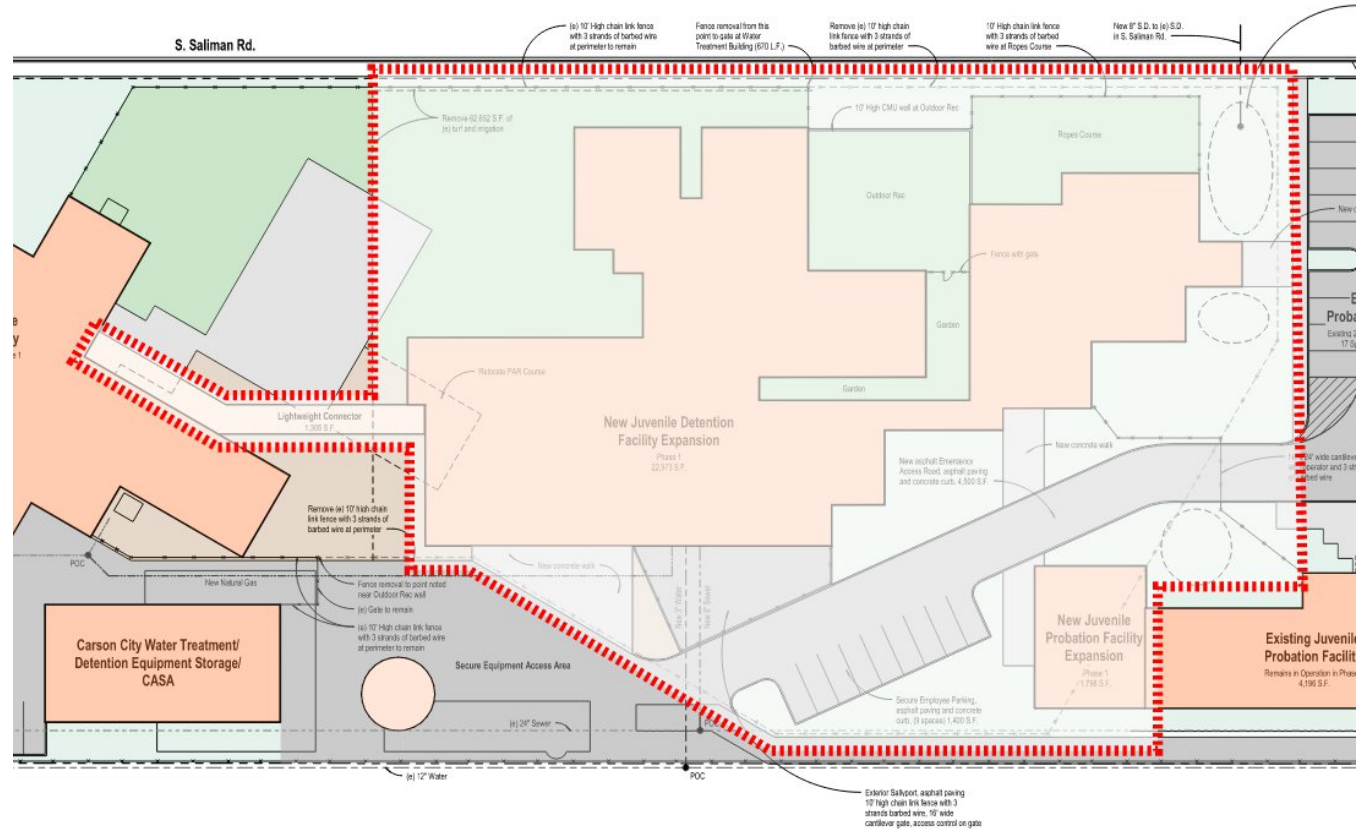
Option 1 Total \$43,397,000

## Option 2

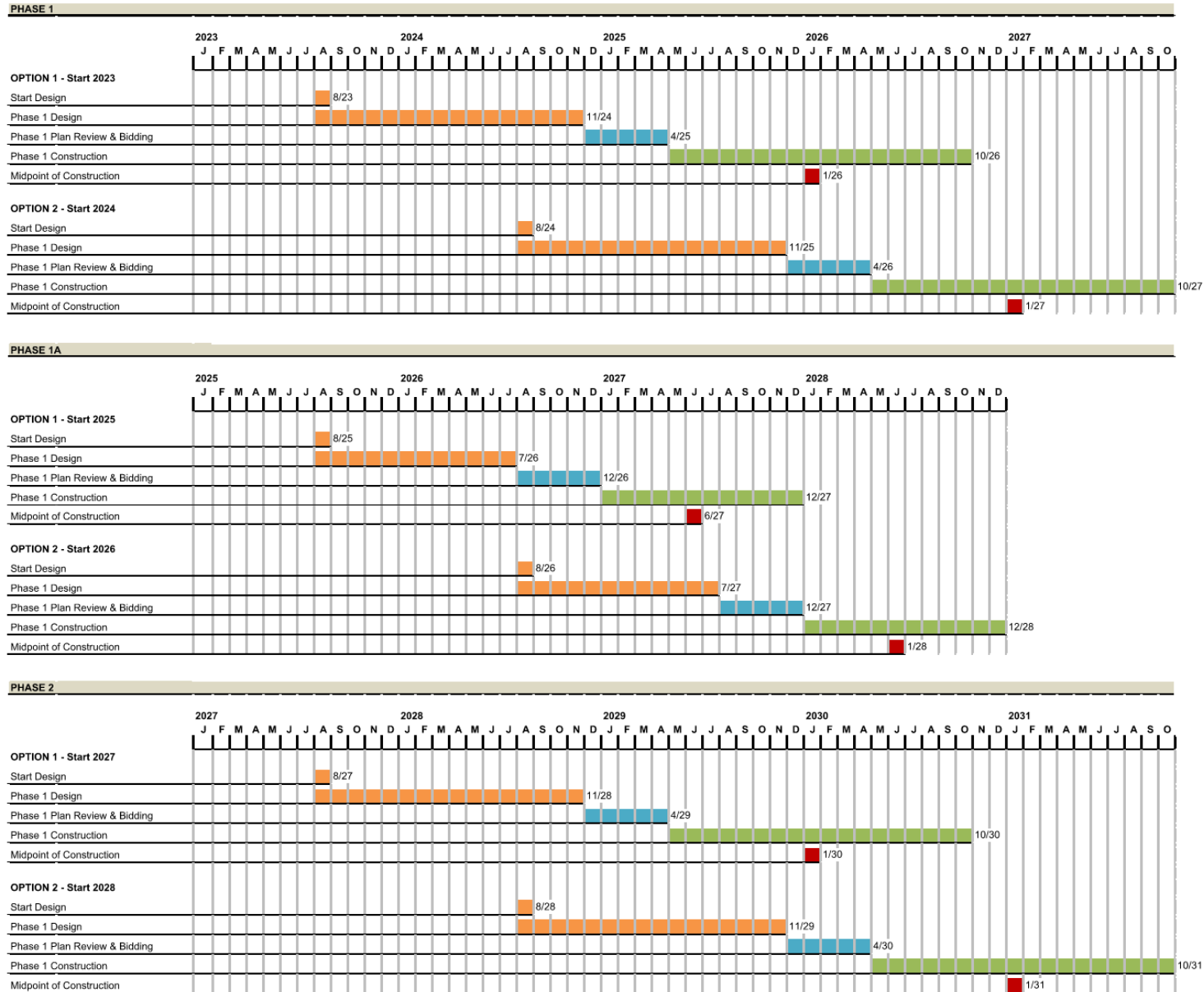
Design Start August 2024  
Occupancy October 2027

Phase 1 \$15,902,000  
Phase 1A \$1,806,000  
Phase 2 \$26,951,000

Option 2 Total \$44,659,000



# The New Juvenile Services Facility Overall Project Schedule



# The New Juvenile Services Facility Phase 1 Schedule

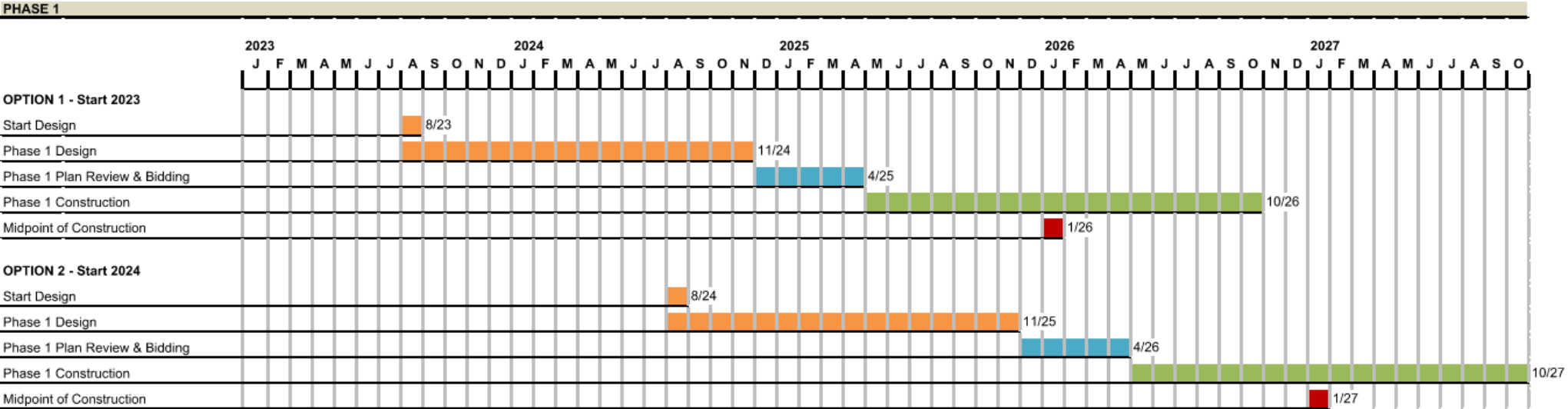








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APPENDIX A

Cost Statement
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APPENDIX B

Full-size Drawing Set
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EXECUTIVE SUMMARY

Scope and Facility Overview

This Executive Summary provides excerpts from the complete Needs Assessment document. It is included as an introductory section to present a summary of the various components of the document.

Project Scope

The Carson City Juvenile Services Facility Needs Assessment provides an overall review of the City’s youth detention facility. The reason for this assessment is due to the age of the infrastructure, State mandates, and continued growth of Juvenile Services and Carson City. While this report is referred to as a “facilities needs assessment”, it is intended as a comprehensive plan, a “blueprint” of the proposed operations and needs of Carson City Juvenile Services. The purpose of this document is to provide a strategic vision and outline how the Carson City Department of Juvenile Services can best utilize its resources to serve the youth and families involved in the juvenile justice system.

The strategic goal is the development of a future plan to more efficiently and effectively utilize existing resources. The Needs Assessment considers the renovation or phase-out of the current facility that is outdated, unsafe and non-compliant. An operational goal is to enhance support operations to include restructuring the Murphy-Bernardini Regional Detention Center, Probation and Carson City Juvenile Court.

The Facility

The Murphy-Bernardini Regional Juvenile Justice Center is located at 1545 East Fifth Street, Carson City, Nevada. The Juvenile Justice Center includes the Juvenile Detention Center, the First Judicial District Juvenile Court, and the Juvenile Probation Division.

The Murphy-Bernardini Juvenile Detention Center is a secure holding facility for the temporary detention of juvenile offenders.

The First Judicial District Juvenile Court houses the courtroom, offices and support spaces. The Court is located within the same building as the Detention Center.

The Juvenile Probation Division is located in a separate building within the site at 740 South Saliman Road. The Probation building has offices and support spaces.

The Murphy-Bernardini Regional Juvenile Justice Center serves Carson City, Storey County, several other counties, and agencies that have contracts with Carson City.

Existing Conditions

Existing Site

The Murphy-Bernardini Regional Juvenile Justice Center is a 3.65-acre parcel. The parcel is at the southwest corner of East Fifth Street and South Saliman Road. The adjacent property to the west is a mini-warehouse storage facility. The property to the south is an apartment complex. Across East Fifth Street to the north are apartment buildings. A retail center is across South Saliman to the east.

The site is also used by the Carson City Public Works Department for an arsenic water treatment plant. The plant is in the middle of the parcel along the west property line.

Existing Facility

The existing Murphy-Bernardini Regional Juvenile Justice Center houses juvenile detention and juvenile courts. The 11,500 square foot detention and courts building was constructed in 1978. A new entry was added in 2002. The structure is constructed primarily of concrete masonry unit (CMU) walls, with some wood-framed partitions in the courts side of the building. The detention portion of the building has a concrete roof deck, while the courts portion has a wood-framed roof.

The population of Carson City has doubled since the Justice Center was first occupied. The capacity of the building has actually been reduced in that time. The size, design, and age of the 40-year-old facility make it difficult to operate the Detention facility in a safe, therapeutic, and cost-effective manner. Changes in population demographics and custody protocol, the implementation of the Americans with Disabilities Act (ADA), and the creation of the Prison Rape Elimination Act (PREA) combine to necessitate changes to the Detention portion of the building’s functional and organizational structure.

The Courts portion of the building is facing similar growth issues. An increase in detainees also means an increased caseload for the Courts. The facility needs a second courtroom. Changes in how juveniles are managed in the Carson City court system, coupled with the need to allow for occasional adult, both public and in custody, to appear in Juvenile Court, requires a clear and direct, efficient, effective, and safe circulation system. Separation of the public, courts professionals (judiciary and staff), and in-custody accused persons is critical. The current facility cannot provide the required level of safety and security.

Facility Deficiencies

There are many deficiencies that make remodeling and alteration of the existing building cost prohibitive. Some of the deficiencies are summarized here. More detailed descriptions are provided within the Introduction section.

- Male and female detainees are required to be separated into distinct housing areas. With only two relatively small housing areas, the Detention staff regularly has to make challenging housing decisions.
- The current facility does not support the Juvenile Courts process. Many of the rooms are not properly sized and organization is not efficient. The courtroom is not large enough for many of the hearings. There are also issues with providing the necessary level of security for staff. Confidentiality is also compromised with room locations and construction.
- Major spaces such as Detention Cells, Courtroom, Control Center, Intake, Dayrooms and Administrative areas all need to be larger and better organized.
- The HVAC system is past its service life.
- The building has no fire sprinkler system.
- The electrical system is not sufficient to power the needs of contemporary security, access control, communication and monitoring systems.
- The building has limited Internet and network infrastructure.
- The Detention Center does not comply with PREA.
- The facility is not compliant with ADA.

EXECUTIVE SUMMARY

The New Facility

Overview

The proposed Carson City Juvenile Services complex contains three components: Juvenile Courts, Juvenile Detention and Juvenile Probation. The facility will be constructed in two phases. The existing building must remain operational during Phase 1 of the project. The existing building will be demolished to make room for construction of Phase 2.

The new Juvenile Detention Services component will provide a modern, state-of-the-art juvenile detention facility. With an ultimate capacity of 36 individual beds, the facility will meet the anticipated growth needs of Carson City for the 20-year planning timeframe. The building will provide adequate space for the needs of both the staff and the detainees. Improved intake, secure visitation, counseling, medical services, indoor recreation, classrooms, kitchen, and central control program spaces will be a part of the new detention facility.

In the final development, the Detention area is connected to the Juvenile Courts component. The new 2-story Courts portion of the building includes two courtrooms, one on each floor. The building will house expanded space for court support (clerks, judicial assistants, and bailiffs), as well as provide spaces for legal counsel and family support.

To support the growing needs of Juvenile Detention and Juvenile Courts, the Juvenile Probation Services building must also be expanded.

Project Phases

Phase 1 will consist of constructing the new detention facility in the existing recreation yard and will have two components: The Public Entrance/Administration Area and the Detention/Housing Area. This phase will contain all support spaces necessary for Detention Services to be operational and move out of the existing detention facility. Phase 1 will also expand the Juvenile Probation building.

Phase 1A is a placeholder for 14 additional beds. Specific timeframes for these additions have not been identified.

Phase 2 will demolish the existing Juvenile Services building. It will construct a new Juvenile Courts facility and an expansion to the Detention facility. Phase 2 will also continue to expand the Juvenile Probation building.

Building Systems

Detailed narrative on the proposed building and site systems are included in the Building Systems section. Systems include site development, architecture, structural, mechanical, plumbing, electrical and telecommunications.

Staffing and Parking

Staff growth is expected to follow operational growth and is one of the drivers of the need for a new facility. Staff and public parking will also increase. Detailed information on current and future staffing & parking is included in the Staffing and Parking sections.

Space Program

A detailed summary documenting existing and future spaces in the facility is provided in the Space Program section.

The building areas are as follows:

Existing	
Detention/Courts Building	12,605 gross square feet
Juvenile Probation Building	4,196 gross square feet
Detention Equipment Storage	738 net square feet
CASA	738 net square feet
At Phase 1 Completion	
Juvenile Detention Facility	22,973 gross square feet
Juvenile Probation	5,994 gross square feet
At Phase 1A Completion	
4-Bed Addition	539 gross square feet
10-Bed Addition	2,192 gross square feet
At Phase 2 Completion	
Juvenile Detention and Courts	56,254 gross square feet
Juvenile Probation	7,858 gross square feet
Detention Equipment Storage	805 gross square feet
CASA	890 gross square feet

Schedules

The Needs Assessment has developed two potential project schedules. Since future funding is not known at the time of publication, schedules for two options are included. The schedules assume design start dates of August 2023 (Option 1) and August 2024 (Option 2). Detailed schedules are in the Schedules section.

Construction Costs

The Needs Assessment includes a construction cost statement. The cost estimate includes construction costs for each component of each phase. Construction costs are directly related to schedules and project durations. The cost estimate has been developed based on October 2021 costs. Those costs have then been increased to account for escalation through the life of the project.

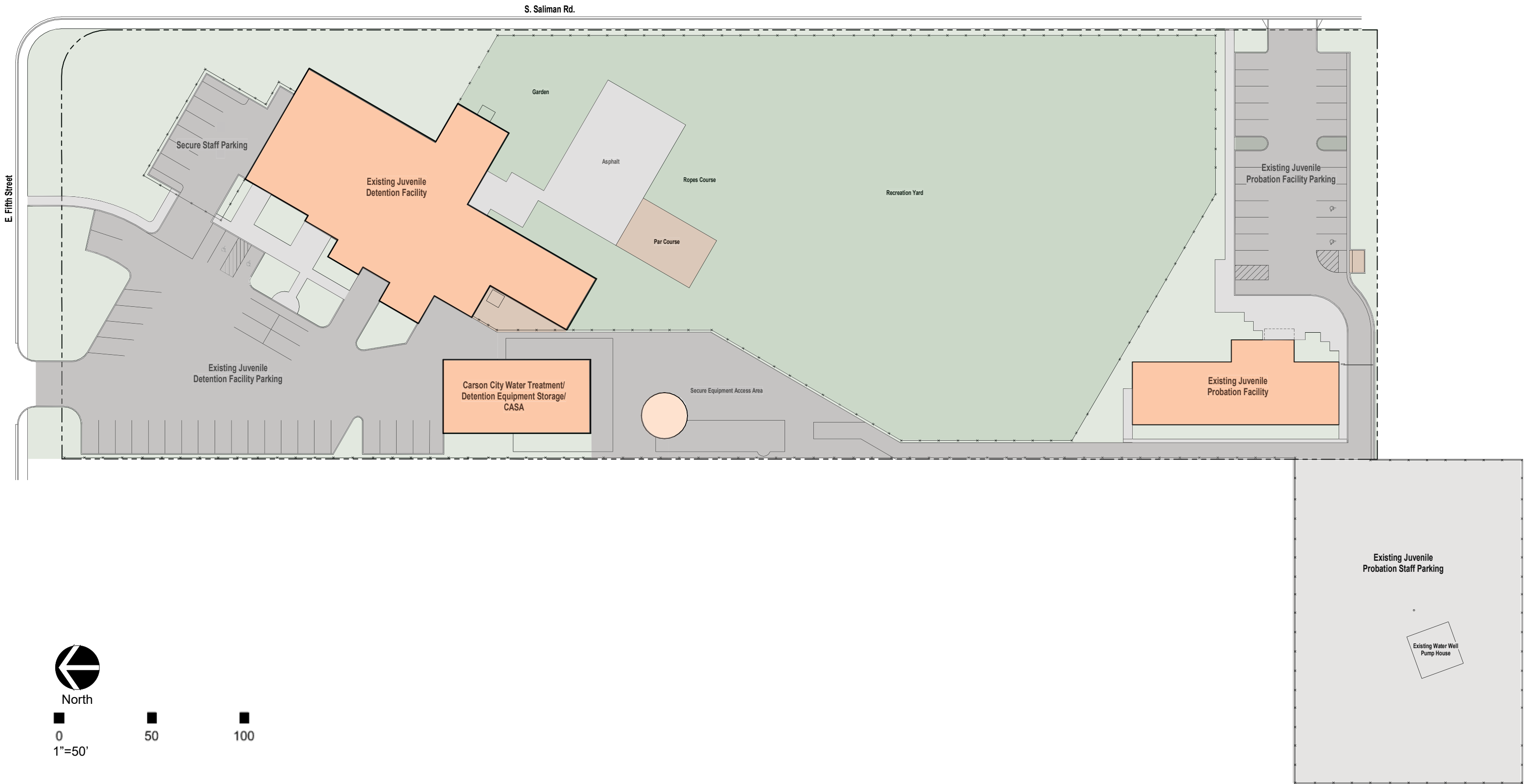
Cost estimate summary sheets are in the Cost Estimates section. The complete cost estimate is in Appendix A.

Overall costs are as follows:

Option 1	
Phase 1	\$15,421,000
Phase 1A	\$1,754,000
Phase 2	\$26,222,000
Option 1 Total	\$43,397,000
Option 2	
Phase 1	\$15,902,000
Phase 1A	\$1,806,000
Phase 2	\$26,951,000
Option 2 Total	\$44,659,000

EXECUTIVE SUMMARY

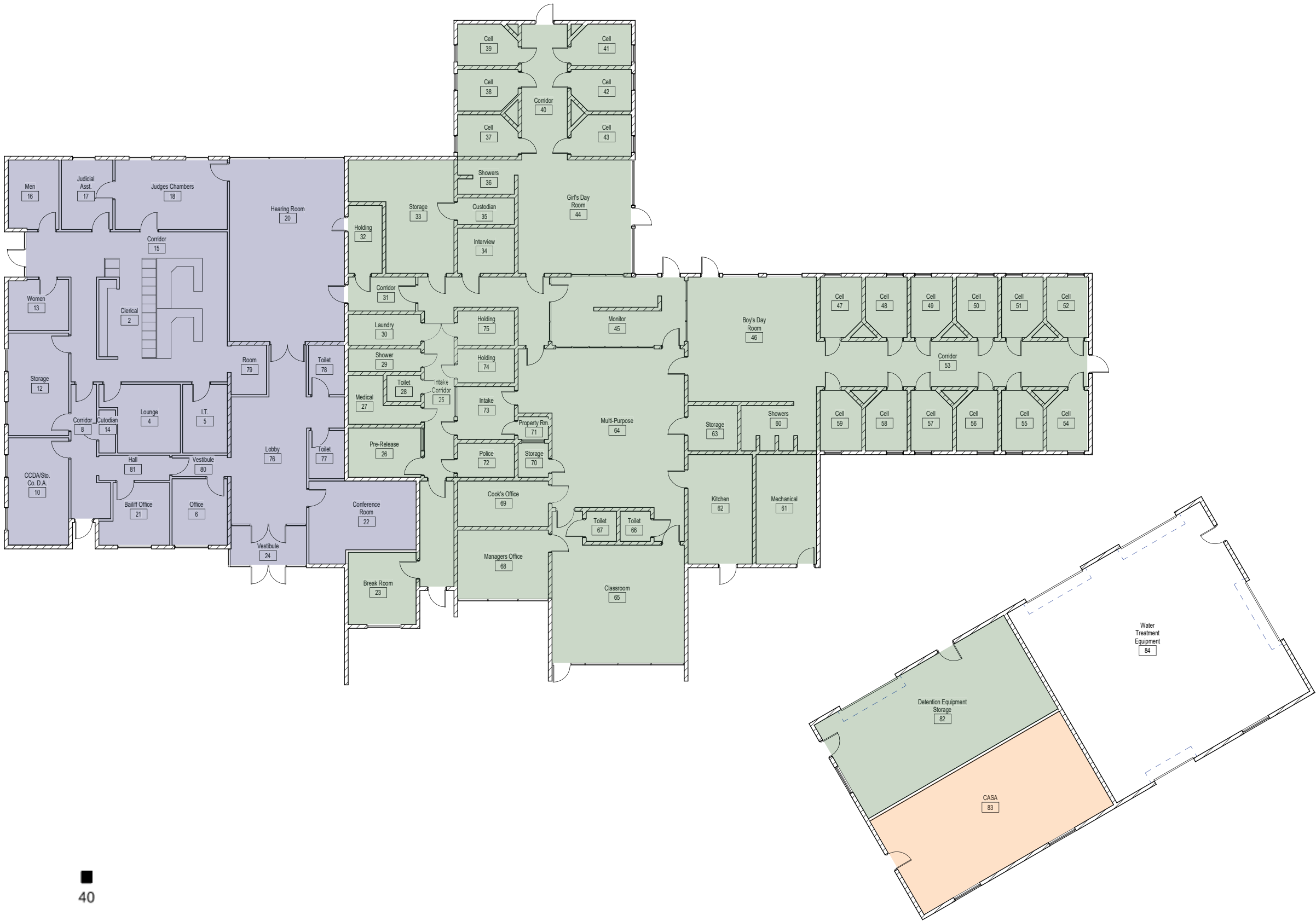
Existing Site Plan





EXECUTIVE SUMMARY

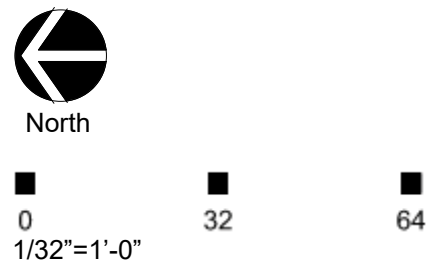
Existing Floor Plans



North

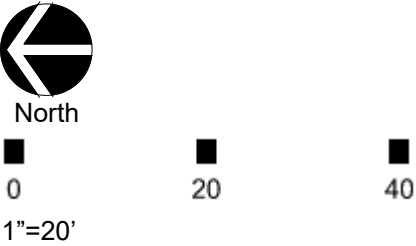
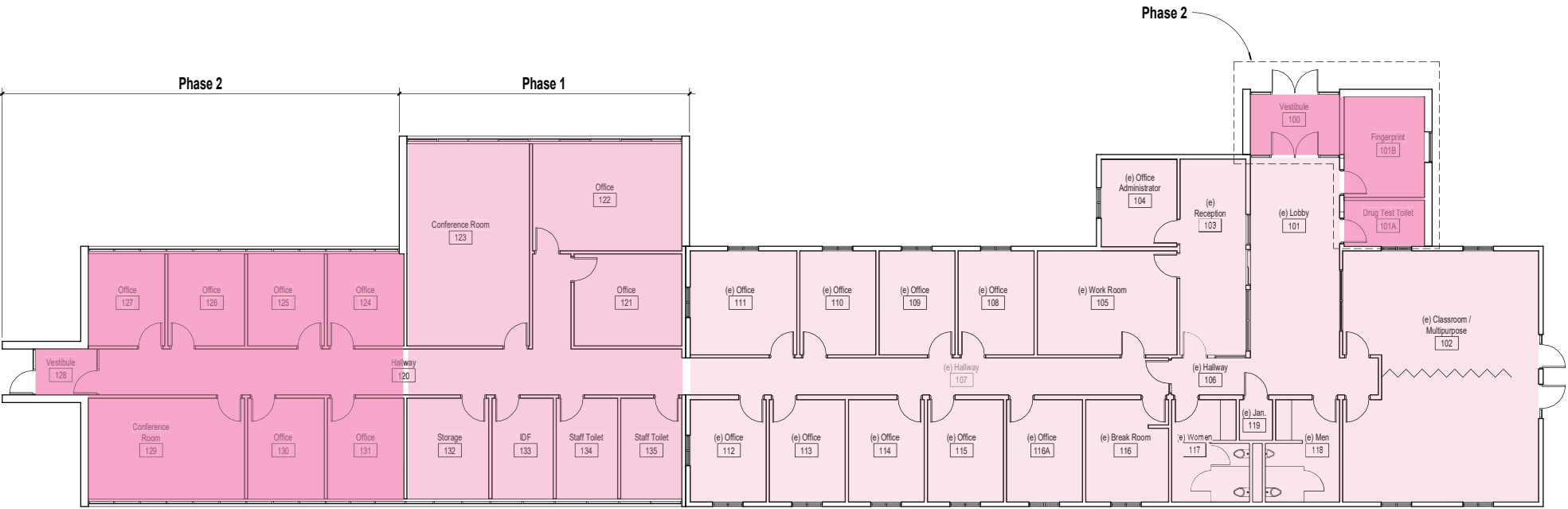
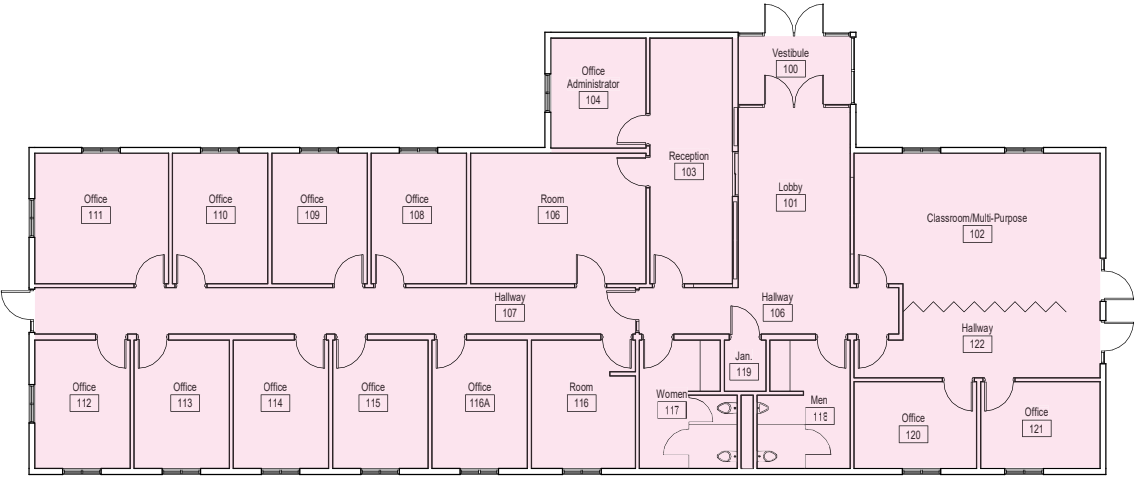


## Phase 1 and Phase 2 Overall Floor Plan



EXECUTIVE SUMMARY

Juvenile Probation Existing Floor Plan and Phase 1 & 2 Expansion Plan

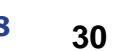


## Phase 1 Site Plan





## Phase 2 Site Plan





INTRODUCTION

Existing Site





INTRODUCTION

Scope and Organizational Overview

Project Scope

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The strategic goal is the development of a future plan to more efficiently and effectively utilize existing resources if possible, the renovation or phase-out of the current facility that is outdated, unsafe and non-compliant. An operational goal is to enhance support operations to include restructuring the Murphy-Bernardini Regional Detention Center, Probation and Carson City Juvenile Court.

Murphy-Bernardini Regional Juvenile Justice Center

The Murphy-Bernardini Regional Juvenile Justice Center is located at 1545 East Fifth Street, Carson City, Nevada. The Juvenile Justice Center includes the Juvenile Detention Center, the First Judicial District Juvenile Court, and the Juvenile Probation Division.

The Murphy-Bernardini Juvenile Detention Center is a secure holding facility for the temporary detention of juvenile offenders. N.R.S. 62B.210 mandates that the facility be “constructed and conducted as nearly as a home as possible.” Within this framework, our mission is twofold:

- Protecting the community by securely housing juveniles that may be or have been involved in activities injurious to the public; and
- Providing for the safe and secure detention of juveniles detained within the facility

The First Judicial District Juvenile Court houses the courtroom, offices and support spaces. The Court is located within the same building as the Detention Center.

The Juvenile Probation Division is located in a separate building within the site at 740 South Saliman Road. The Probation building has offices and support spaces.

The Murphy-Bernardini Regional Juvenile Justice Center serves Carson City, Storey County, several other counties, and agencies that have contracts with Carson City.

The Carson City Department of Juvenile Services is a public agency committed to serving youth and families through probation services for the First Judicial District Court. The department has two divisions: Probation and Detention, which work as one team to provide a continuum of care to ensure community safety and restorative justice for Carson City and Storey County.

Goals

The goals of the Detention Center are:

- To provide for the youth’s basic needs like shelter, food, clothing, and medical care
- To protect the rights of juveniles during residence.
- To provide for the educational, physical, emotional, and social needs of detained juveniles.
- To administer programs, rules, discipline, and controls in a firm, fair, and consistent manner
- To nurture and encourage acceptable behavior

Mission Statement

The mission of the Carson City Department of Juvenile Services is to encourage positive change in the lives of juvenile offenders through, respect, fairness, and integrity. The department is committed to serving the welfare of juveniles and their families by holding juvenile offenders accountable for their actions by providing meaningful consequences and a continuum of services and sanctions in order to create a safer community. In partnership with integrated programming, the department promotes the process of reintegration and directs delinquent juveniles toward reforming their behavior

Vision

The vision of the Carson City Department of Juvenile Services is to provide and promote leadership and public safety while improving and enriching the lives of youth, victims, families, and the community.



Murphy-Bernardini Regional Juvenile Justice Center



Juvenile Probation Entrance from South Saliman Road

INTRODUCTION

Site and Existing Buildings

Site

The Murphy-Bernardini Regional Juvenile Justice Center is a 3.65-acre parcel. The parcel is at the southwest corner of East Fifth Street and South Saliman Road. The adjacent property to the west is a mini-warehouse storage facility. The property to the south is an apartment complex. Across East Fifth Street to the north are apartment buildings. A retail center is across South Saliman to the east.

Adjacent to the southwest corner of the site is a 1/2-acre unpaved parcel owned by Carson City Public Works. The parcel houses a municipal well contained within a masonry structure and is secured by 6’ chain-link fence. Access to this parcel is through a controlled gate at the south end of the Probation building. Carson City allows Juvenile Services to park staff and probation vehicles in this lot as a secure parking area.

The site contains a large outdoor recreation yard with a basketball court, a garden, small par course and a ropes course. There is a large turf area, which at one time had a softball field. The recreation yard is bounded by a 14-foot-tall chain link fence with vinyl slats, topped with barbed wire. Juvenile Services would like to enclose the recreation yard with a solid wall to eliminate the possibility of visual contact with detainees from outside the complex.

The site is also used by the Carson City Public Works Department for an arsenic water treatment plant. The plant is in the middle of the parcel along the west property line. It is comprised of a 67,600-gallon exterior tank, a series of underground pump vaults, and a 3,200 square foot building. The south half of this building is used by Public Works for water filtration. The north half is used as a staging space for CASA (Court Appointed Special Advocates) and a storage space for Detention’s Outdoor Recreation program. There are operational issues with the water treatment plant that will require adding additional water treatment processes to resolve. The additional treatment equipment will require more floor area, requiring the expansion of the water treatment area into the north part of the building.

Detention Center and Courts

The existing Murphy-Bernardini Regional Juvenile Justice Center houses juvenile detention and juvenile courts. The 11,500 square foot detention and courts building was constructed in 1978. A new entry was added in 2002. The structure is constructed primarily of concrete masonry unit (CMU) walls, with some wood-framed partitions in the courts side of the building. The detention portion of the building has a concrete roof deck, while the courts portion has a wood-framed roof.

The population of Carson City has doubled since the Justice Center was first occupied. The capacity of the building has actually been reduced in that time. When initially occupied, the Detention Center had 18 housing rooms which could accommodate 2 persons in each room, for a total of 36 beds. Changes in regulations over the years has necessitated changing rooms from dual occupancy to single occupancy. This has reduced the capacity from 36 beds to 18 beds. In addition, female and male detainees need to be in distinctly separate areas. This has resulted in a 12-bed male wing and a 6-bed female wing. These changes have impacted operations and required more creativity than desired in managing the population. In addition to the housing issues, space constraints allow the booking and processing of only 1 youth at a time. If multiple youths arrive at one time, staff must manage booking and processing in undesirable processes.

The size, design, and age of the facility, which is nearing 45 years old, make it difficult to operate the Detention facility in a safe, therapeutic, and cost-effective manner. Changes in population demographics and custody protocol, the implementation of the Americans with Disabilities Act (ADA), and the creation of the Prison Rape Elimination Act (PREA) combine to necessitate changes to the Detention portion of the building’s functional and organizational structure.

The Courts portion of the building is facing similar growth issues. An increase in detainees also means an increased caseload for the Courts. The facility needs a second courtroom. Changes in how juveniles are managed in the Carson City court system, coupled with the need to allow for occasional adults, both public and in custody, to appear in Juvenile Court requires a clear and direct, efficient, effective, and safe circulation system. Separation of the public, courts professionals (judiciary and staff), and in-custody accused persons is critical. The current facility cannot provide the required level of safety and security. Provision of a second court will make the circulation needs further complicated. Proper protocol prohibits detainees from cross circulation with both judicial staff and the public. The resulting design solutions make it apparent an addition to the courts portion of the building is also cost prohibitive.

The Needs Assessment evaluated the existing building and the ability to remodel and/or expand the meet the current needs. Our opinion is the extensive remodel and building additions that would be required to bring the facility into compliance is cost prohibitive. The Needs Assessment has identified numerous building components and systems that are in need of updating or replacement. The following list is not meant to be all-inclusive. It is a summary of issues noted during on-site review by the planning team and input from Carson City stakeholders.

Facility Deficiencies

There are many structural bearing walls that limit re-configuration. This is especially true in the Detention Center’s housing rooms and support spaces.

Male and female detainees are required to be separated into distinct housing areas. This has required Juvenile Detention to define two separate housing areas - one 12-bed wing for males and one 6-bed wing for females. With only two relatively small housing areas, the Detention staff regularly has to make challenging housing decisions.

The current facility does not support the Juvenile Courts process. Many of the rooms are not properly sized and organization is not efficient. The courtroom is not large enough for many of the hearings. There are issues with providing an adequate level of security for staff. Confidentiality is compromised by room locations and construction.

The building has many rooms and spaces that are no longer of adequate size for their function. Major spaces such as Detention Cells, Courtroom, Control Center, Intake, Dayrooms and Administrative areas all need to be larger and better organized.

The HVAC system is past its service life. Replacement parts are more and more difficult to procure. System maintenance is a rising cost that takes up an increasing portion of the department budget.

The building has no fire sprinkler system. The was not a code requirement at the time of construction and, as such, a fire sprinkler system is not technically required. Current codes do require fire protection in a building of this size and occupancy.

The electrical system is not sufficient to power the needs of contemporary security, access control, communication and monitoring systems. The administrative spaces do not have enough floor outlets.

The building has limited Internet and network infrastructure. Many existing conduits are at capacity and lack space for additional cabling. The telecom room is undersized and does not have adequate cooling.

The Detention Center does not comply with PREA. The shower and toilet areas do not provide the required separations and screening. Remodeling to comply will reduce the number of plumbing fixtures.

The facility is not compliant with ADA, as it was constructed many years before enactment. Compliance issues include doors, hardware, plumbing fixtures, compartments, signage, & accessible routes.



INTRODUCTION

Existing Buildings

Juvenile Probation

The Juvenile Probation Services building was constructed in 2002 to alleviate staff crowding issues in the Murphy-Bernardini Juvenile Justice Center. The building and its parking area were constructed in a portion of the original recreation yard. The building houses the meeting rooms, offices for the juvenile probation officers and support staff. It is a single-story, wood-frame, 4,200 square foot structure. As with Detention and Courts, Juvenile Probation has outgrown the existing building. Alterations remodeled a classroom/meeting room to create two additional offices. There is no office space to accommodate a recent mental health staff addition. In the site's current configuration, the probation staff must travel over 400 feet to reach the Detention Building. A shorter and more direct route to the Detention Building is desired.

The Probation staff currently shares the restroom facilities with the general public. This creates a potential for a breakdown in protocol and privacy. The public restroom also must be used for specimen collection. It is not a proper environment for this important procedure. Probation needs expansion space for additional staff, conference rooms, a drug testing specimen collection room, and staff toilet facilities. The expansion will also allow for the classroom/meeting room to be put back into service, providing a flexible large meeting space.

Water Treatment, Outdoor Recreation Storage and CASA

The separate building to the west of the Detention Center is used by 3 entities - Carson City Water Division, Juvenile Probation (for outdoor equipment storage) and CASA. The Water Division occupies the southern half of the building with water treatment equipment. Probation and CASA each use one-quarter of the building in the north portion of the building.

The probable expansion of the water treatment equipment room into the remaining half of the building will necessitate relocation of both Outdoor Equipment Storage and CASA. Phase 2 includes this relocation in the Detention and Courts areas.

Existing Site Photographs



Courts and Detention Public Parking



Courts Secure Staff Parking



Courts Building West Elevation



Courts Secure Staff Parking



INTRODUCTION

Existing Exterior Photographs



Detention Center Entrance



CASA and Detention Equipment Storage Entrances at Water Treatment Building



Water Treatment Building and Secure Equipment Access Area



Juvenile Court Entrance



Vehicle Circulation Between Public Parking and Secure Equipment Access Area



Water Treatment Tank in Secure Equipment Access Area



INTRODUCTION

Existing Exterior Photographs



Detention Par Course



Detention Recreation Yard Asphalt Court



Juvenile Probation Entrance



Detention Recreation Yard Ropes Course



Detention Recreation Yard



Juvenile Probation Parking



INTRODUCTION

Existing Exterior Photographs



Secure Access Gate at South Side of Juvenile Probation



Juvenile Probation Parking in Water Well Parcel

Detention Equipment Storage



Detention Equipment Storage



Detention Recreation Yard Secure Perimeter Fence from South Saliman Road



Water Well Building



Detention Equipment Storage Mezzanine



INTRODUCTION

Existing Interior Photographs



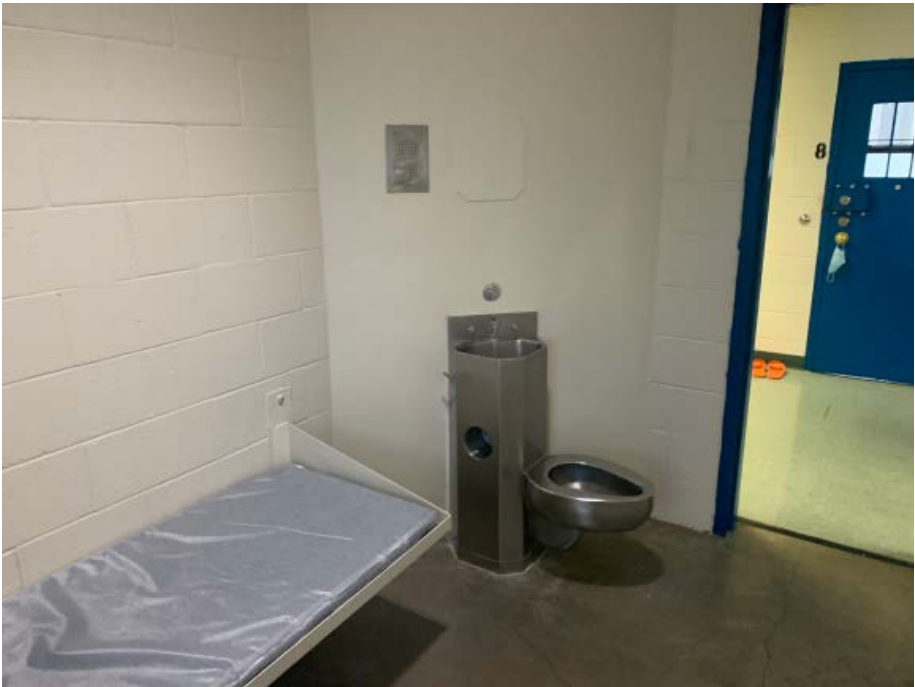
Boys Detention Dayroom



Boys Detention Showers



Girls Detention Dayroom



Boys Detention Housing



Boys Detention Housing



Boys Detention Housing Corridor



INTRODUCTION

Existing Interior Photographs



Detention Holding Room



Detention Intake Room



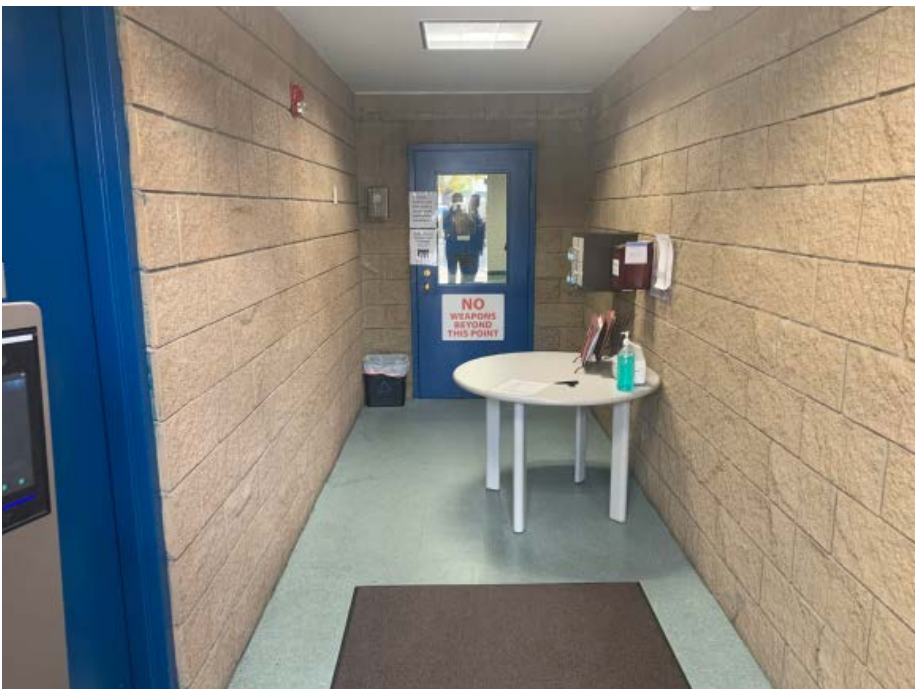
Detention Storage Room



Detention Pre Release Room



Detention Intake at Corridor



Detention Sallyport



INTRODUCTION

Existing Interior Photographs



Detention Multi-Purpose Room



Detention Kitchen



Detention Laundry



Detention Classroom



Detention Medical Room



Detention Police Room

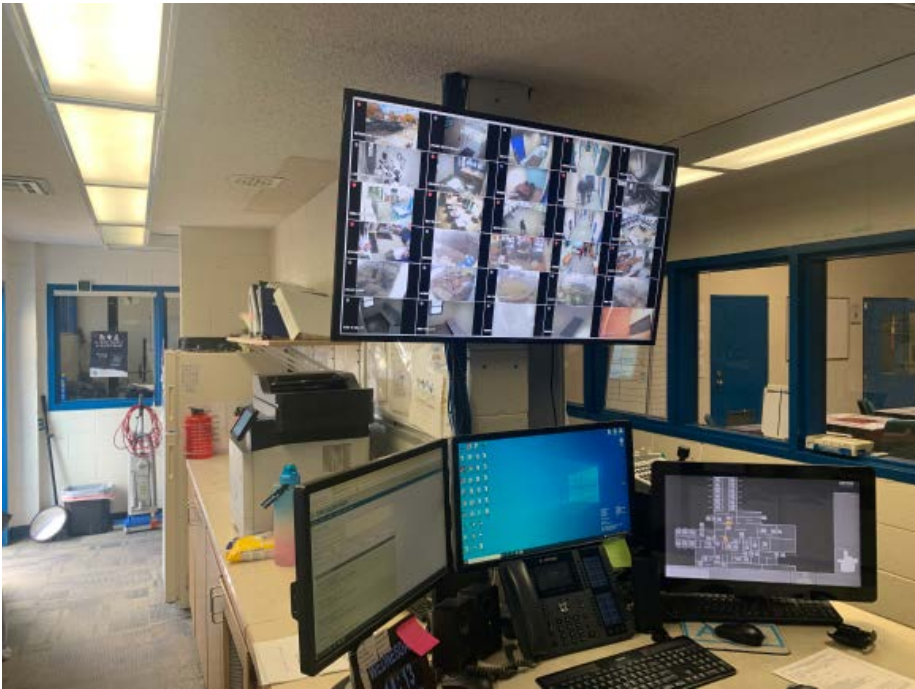


INTRODUCTION

Existing Interior Photographs



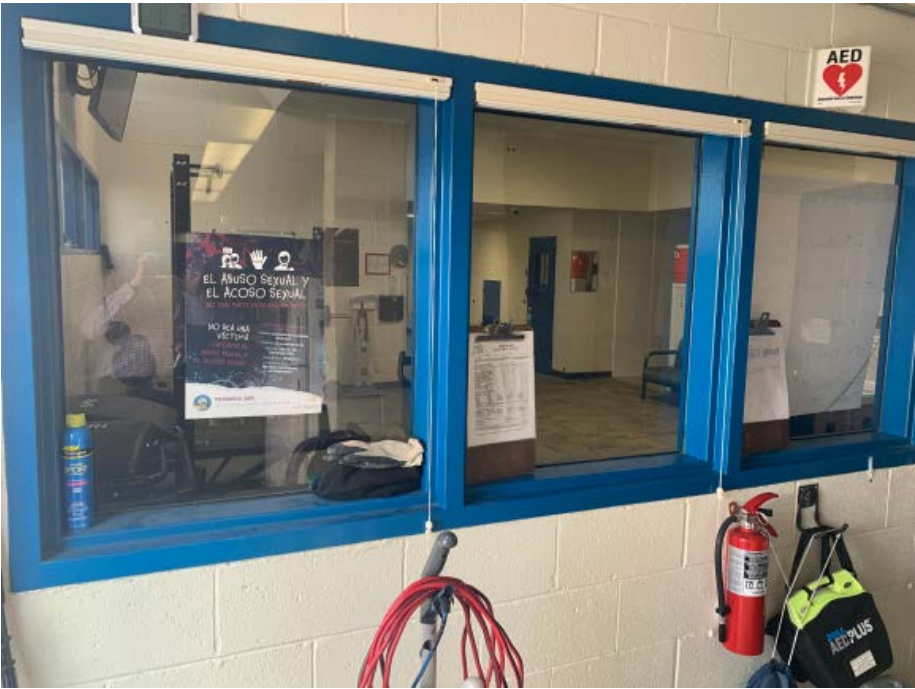
Detention Monitor Room



Detention Monitor Room



Juvenile Court Clerk Workstation



Detention Monitor Room into Multi-Purpose



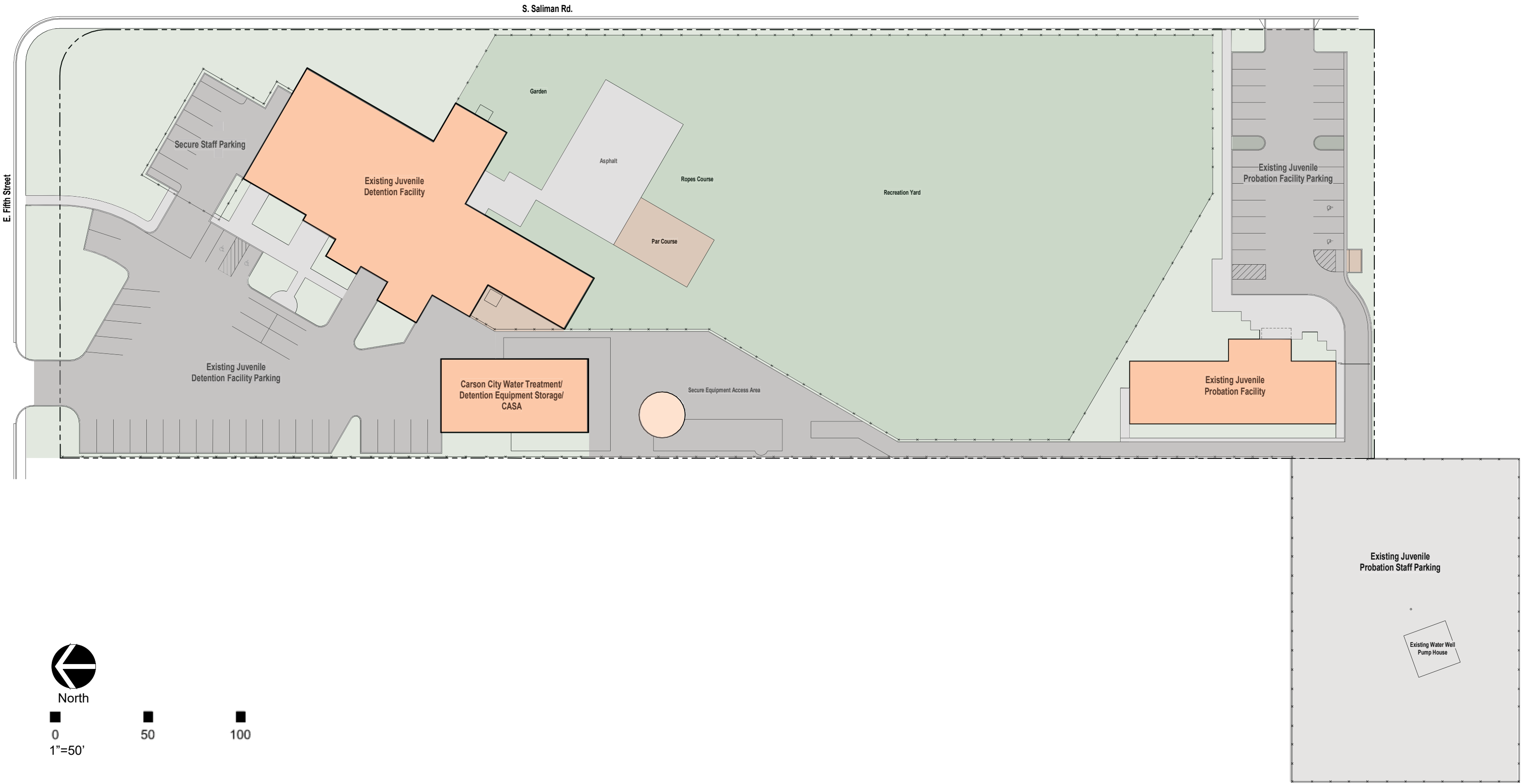
Juvenile Court Lobby Reception



Juvenile Court Lobby

EXISTING CONDITIONS

Existing Site Plan





EXISTING CONDITIONS

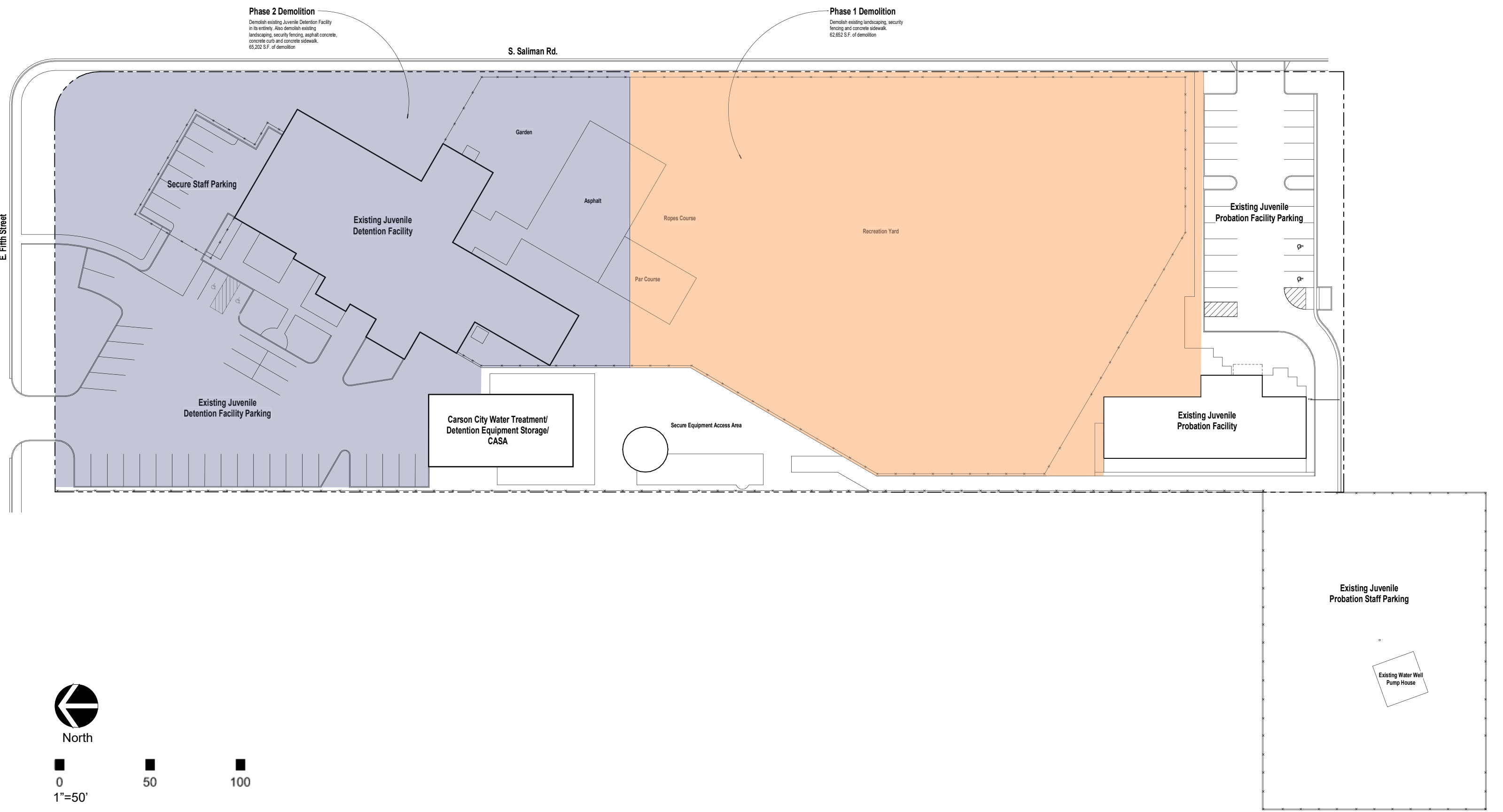
Existing Floor Plans





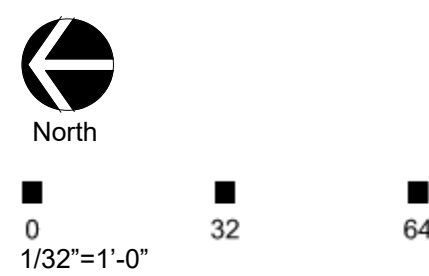
EXISTING CONDITIONS

Site Demolition Areas



JUVENILE DETENTION AND COURTS BUILDING

Phase 1 and Phase 2 Overall Floor Plan



SITE AND BUILDING SYSTEMS

Site Development and Civil Engineering

Geotechnical Investigation

A geotechnical investigation and report will be required to provide site specific grading, soil, foundation, and pavement recommendations. All project improvements will be required to comply with Carson City Municipal Code (CCMC), Title 18 Development Standards, and Geotechnical Recommendations.

Parking and Vehicular Circulation

The Needs Assessment provides parking quantities based on site area that remains after satisfying building area requirements. The parking shown for staff and public vehicles is not based on formula. Neither CCMC nor the approved Special Use Permit for the site specify parking requirements for the proposed use. A parking analysis should be done in future design phases. The analysis will include employees counts, expected visitors, overflow parking availability and peak hour factors to determine the required parking.

The existing drive to the west of Juvenile Probation Services does not provide a code compliant emergency access road (narrow width, impact of power poles and very tight turning radius at the southwest corner of the Juvenile Probation building). A new paved drive aisle is proposed to connect the secure equipment access area with the Juvenile Probation Services parking lot. This drive will provide code compliant emergency vehicle circulation for the entire site. The access road will be constructed in Phase 1.

Storm Water Management

The project will be required to comply with the recently approved Carson City Drainage Manual which requires low-impact-development (LID) design to be utilized for detaining the 10-year, 24-hour design event.

Storm-water runoff generated from the increase in impervious area will likely be collected in an underground pipe system and routed to a detention basin or underground infiltration system. Run-off will then be routed from the basin to the existing City-owned storm water system at pre-development flows. Minimal offsite drainage improvements are anticipated due to City-owned storm drain infrastructure in Saliman Road and the north side of Fifth Street.

Finished floor elevations, building foundations, and parking lot grading will need to be designed in a manner to direct flow away from all buildings and into the storm-water collection system.



Emergency Access Road to the West of Outdoor Recreation Yard



Emergency Access Road to the West of Juvenile Probation

Sanitary Sewer

Sewer service for the site is provided by Carson City Public Works. There is a 24” concrete sewer main running along the western property line of the site that intersects a 24” concrete main within Fifth Street. On-site sewer will connect to the 24” main along the western property line. An 8” sanitary sewer lateral to the proposed building is expected. The existing sewer main is relatively deep due to the proximity to the water reclamation facility and therefore there are no anticipated issues with requiring a lift station or pumping of sewer.

A “pre-treatment” system will likely be required along the service lateral prior to connection to the 24” main. The purpose of this system will be to filter out any foreign objects that may be flushed into the system (metal, plastic, etc.).

A grease interceptor will be required to service the kitchen/trash enclosure.

A detailed analysis of the sewer system capacity will need to be performed during future design phases.

Water Supply

Domestic water service for the site is provided by Carson City Public Works. There is a 12” steel water main running along the western property line of the site and a 16” ACP main within Fifth Street. There is one fire hydrant located within the existing parking lot. Preliminary analysis shows that a 3” domestic service lateral will be required for the new building. This service will require a backflow prevention assembly and will tie into the existing 12” steel main.

Carson City Fire will need to be coordinated with regarding whether additional fire hydrants will be required around the new facility.

A fire sprinkler service line will be required within 100’ of a fire hydrant. The required fire flow of the project is 1,500 gpm for 2 hours. A detailed water main analysis will be done in future design phases to prove that sufficient flow is provided for the project.



BUILDING SYSTEMS

Architecture

Overview

The proposed Carson City Juvenile Services complex contains three components: Juvenile Courts, Juvenile Detention and Juvenile Probation. The facility will be constructed in two phases. The existing building must remain operational during Phase 1 of the project. The existing building will be demolished to make room for construction of Phase 2.

When initially occupied, the Detention Center had 18 housing rooms which could accommodate 2 persons in each room, for a total of 36 beds. Changes in regulations over the years has necessitated changing rooms from dual occupancy to single occupancy. This has reduced the capacity from 36 beds to 18 beds. In addition, female and male detainees need to be in distinctly separate areas. This has resulted in a 12-bed male wing and a 6-bed female wing. These changes have impacted operations and required more creativity than desired in managing the population. In addition to the housing issues, space constraints allow the booking and processing of only 1 youth at a time. If multiple youths arrive at one time, staff must manage booking and processing in undesirable processes.

The new Juvenile Detention Services component will provide a modern, state-of-the-art juvenile detention facility. With an ultimate capacity of 36 individual beds, the facility will meet the anticipated growth needs of Carson City for the 20-year planning timeframe. The building will provide adequate space for the needs of both the staff and the detainees. Improved intake, secure visitation, counseling, medical services, indoor recreation, classrooms, kitchen, and central control program spaces will be a part of the new detention facility.

In the final development, the Detention area is connected to the Juvenile Courts component. The new 2-story Courts portion of the building includes two courtrooms, one on each floor. The building will house expanded space for court support (clerks, judicial assistants, and bailiffs), as well as provide spaces for legal counsel and family support.

To support the growing needs of Juvenile Detention and Juvenile Courts, the Juvenile Probation Services building must also be expanded. As the needs of the community increase, additional Probation officers will be needed. The expanded Probation Services building will contain 17 offices, 2 training/community rooms, two conference rooms, separate public and staff toilets, a fingerprinting and drug testing area, and storage/support spaces.

Phase 1

Phase 1 will construct the new detention facility in the existing recreation yard and will have two components: The Public Entrance/Administration Area and the Detention/Housing Area. This phase will contain all support spaces necessary for Detention Services to relocate from the existing detention facility.

The Public Entrance/Administration Area will include a secure vestibule & screening area, community classroom & staff training room, public toilets, visiting, facility administration, and pre-release. The Public Entrance/Administration Area will have a structural steel frame skinned by a wall assembly consisting of light gauge metal stud framing, covered with insulated metal panels over rigid insulation. Interior walls will be metal stud gypsum board, excepting spaces within the secure perimeter which will be grouted CMU.

The Detention/Housing Area will include 22 housing units, detainee intake, medical services, kitchen, classrooms, and recreation areas as well as support spaces. The Detention/Housing Area will have exterior CMU walls with insulated metal panels over rigid insulation. Interior walls will be grouted CMU.

Phase 1 will also include an addition to the Probation Services building. The addition will contain additional offices, a conference room, staff toilets and a larger IT/Storage area. The Probation Services addition will have a structural steel frame of light gauge metal stud framing and Exterior Insulation Finish System (EIFS) to match the existing building. Interior walls will be metal studs with gypsum board.

Building Areas at Phase 1 Completion

Juvenile Detention Facility	22,973 gross square feet
Juvenile Probation	5,994 gross square feet

Phase 1 Demolition will remove existing turf, irrigation, landscaping and the ropes course. A temporary detention-grade fence will be installed around the remaining portion of the recreation yard, until the new yard is completed.

A new Outdoor Recreation Yard and new Ropes Course will also be constructed as part of Phase 1. The Outdoor Recreation Yard will be fully enclosed by a minimum 14-foot-tall perimeter wall. The ropes course is also used by non-custody groups and will be adjacent to parking and the front entrance of the building.

A Connector structure will be constructed between the new Detention building and the existing Juvenile Courts building. This Connector will serve to move detainees from detention to the courts for hearings. The Connector will be of lightweight construction – steel framed roof with open walls with chain-link fencing. The Connector will provide a secure walkway that provides cover from precipitation, but will not be heated or cooled. It will have lighting that is adequate for the circulation use. The Connector will be demolished in Phase 2 at the same time as the existing Juvenile Courts building.

Phase 1A

The Needs Assessment identified two locations for future housing additions. These housing unit expansion components have been identified as Phase 1A. They represent 14 additional beds. One area is planned for 4 beds and the other for 10 beds. Phase 1A is a placeholder for possible growth and specific timeframes have not been identified. For the purposes of the cost estimates, the housing components are planned to be constructed between Phase 1 and Phase 2. The actual timeframe for these housing units will be determined based on future needs.

Phase 1A will be constructed similar to the Detention/Housing component.

Phase 1A Building Areas

4-Bed Addition	539 gross square feet
10-Bed Addition	2,192 gross square feet

Phase 2

Phase 2 will demolish the existing Juvenile Services building. It will construct the new Juvenile Courts facility and an expansion to the Detention facility.

The Detention portion of Phase 2 will add additional classrooms and a gymnasium to the Phase 1 Detention building. Phase 2 will continue to expand the Probation Services building.

The Probation Services building will be further expanded to contain additional probation officer offices, storage and a new entry with a drug testing toilet and fingerprinting room.

BUILDING SYSTEMS

Architecture

Phase 2, continued

The building will also accommodate the future locations of CASA and the Detention Outdoor Equipment Storage. Both spaces are programmed as part of Phase 2. The Outdoor Equipment Storage will be an addition to the Detention facility and the CASA space will be constructed as part of the Juvenile Courts facility.

Building Areas at Phase 2 Completion

Juvenile Detention and Courts	56,254 gross square feet
Juvenile Probation	7,858 gross square feet
Detention Equipment Storage	805 gross square feet
CASA	890 gross square feet

The two-story Courts facility will provide two new courtrooms and the required support spaces: bailiffs, secure non-contact holding areas, a separate secure adult in-custody entrance, judicial chambers, and staff offices. It will also have a secure entrance to a public lobby. There will be a vertical circulation system (stairs and elevators) to separate detainees from the public and judicial employees. A separate secure sallyport and entrance is provided for in-custody adults required to appear in court.

The Juvenile Courts component will have a structural steel frame with a wall assembly of light gauge metal stud framing and insulated metal panels over rigid insulation. Interior walls will be metal stud and gypsum board, excepting spaces within the secure perimeter which will be grouted, reinforced CMU.

The Phase 2 Detention/Housing addition will utilize the same construction as used in Phase 1. The gymnasium will be constructed of grouted CMU walls with a concrete-reinforced metal deck roof.

The Phase 2 Probation Services addition will allow the classroom to be remodeled to its original configuration for both staff and community use. The offices currently in the classroom area will be relocated to the addition.

Construction of the Probation Services expansion will be similar to the Phase 1 addition.

The public parking area on the North end of the site will be expanded to maximize the number of spaces available to the public. A new, secure fenced parking area will be also provided for the Juvenile Courts staff.

Structural Systems

Public Space/Administration, Juvenile Courts, CASA and Juvenile Probation

Foundation: Reinforced concrete spread footings under columns and continuous reinforced turned-down slab edge footings at the perimeter of the building. Perimeter footings will bear at least 24” below finish grade for frost depth. Over excavation and engineered fill requirements to be per the geotechnical report.

Floor System: 5” thick, rebar-reinforced concrete slab-on-grade over 6” type 2 aggregate base on a 15-mil vapor barrier.

Second Level Floor System (Juvenile Courts): Reinforced concrete-filled 1 ½” x 18-gauge metal deck on steel open web joists and/or wide flange beam framing.

Roof System: 1 ½” x 18-gauge metal deck on steel open web joists and/or wide flange beam framing. Roof framing will span between steel columns.

Lateral System: Wind and seismic loads would be resisted by steel moment frames or steel braced frames.

Exterior Walls: Exterior walls would be framed using metal studs.

Detention and Detention Equipment Storage

Foundation: Reinforced concrete spread footings under columns and continuous reinforced concrete footings under CMU bearing walls. Perimeter footings will bear at least 24” below finish grade for frost depth. Over excavation and engineered fill requirements to be determined by geotechnical investigation.

Floor System: 6” thick, rebar-reinforced concrete slab-on-grade over 6” type 2 aggregate base over a 15-mil vapor barrier.

Bearing Walls: Bearing walls, interior and exterior, would be solid grouted, reinforced CMU.

Roof System: Rebar-reinforced 3 ¼” concrete on 3” x 18-gauge metal deck (6 ¼” total thickness) spanning between CMU bearing walls, steel open web joists, and/or wide flange beam framing. Roof beams will bear on CMU walls and steel columns.

Lateral System: Wind and seismic loads would be resisted by solid grouted, reinforced CMU shear walls.

Mechanical Systems

General

Several mechanical system options were considered. Due to the building area and type of facility it was determined that high efficiency rooftop package equipment would be best suited for this facility. A key advantage to use of rooftop package equipment is that maintenance of the systems will not require technicians to enter the secured areas to perform required periodic maintenance of the equipment.

HVAC Design Criteria

The holding cells and intake area HVAC units will be dedicated outside air systems (DOAS). These units utilize 100% outside air with energy recovery ventilation with 100% exhaust. This allows for virtually no contaminants to be recirculated through the inmate cell areas. It is anticipated that there will be approximately 4 units or Zones using this type of unit.

All other areas in the facility, except for the kitchen area, will utilize high efficiency rooftop packaged units with gas heat and electric cooling. Each unit will be provided with a factory roof curb, 100% outside air economizer, and powered exhaust. It is anticipated that there will be approximately 10 units or Zones using this type of unit.

The kitchen/serving area will be served by two separate HVAC systems. One system will be a rooftop packaged unit that will operate when the kitchen and dishwashing hoods are not operating. A make-up air system will be provided to operate when the kitchen and dishwasher hoods are operating. This system will include exhaust fans and a direct-fired gas heat/evaporative cooling make-up air unit. The packaged HVAC rooftop unit and the make-up air unit/exhaust fans will be interlocked so that the two systems cannot both operate at the same time.

The telecom room will be served by a unitary split-system cooling unit.

All supply, return and exhaust ductwork will be sheet metal installed in accordance with SMACNA requirements. Final duct runouts to grills and registers can utilize flexible ductwork with a maximum length of five feet. Supply and return ductwork will be insulated with foil faced fiberglass insulation.



BUILDING SYSTEMS

Mechanical Systems

Exhaust

Kitchen hood exhaust ductwork will be prefabricated stainless steel with a one-hour fire rating from the hood to the roof. Dishwasher exhaust ductwork will be either aluminum or stainless steel.

Curb-mounted rooftop upblast exhaust fans will be provided for the following areas.

Toilet rooms (multiple toilet rooms may be served by a common fan), Custodial Rooms and Dishwasher (selected for wet environment)

Building Controls

Controls for all the rooftop HVAC units will be individual programmable thermostats capable of daily, weekly and holiday programming. The kitchen system controls will be provided with the exhaust fan/make up air unit and be capable of both manual control and automatic interlocking with the package HVAC unit also serving the kitchen/serving area. An option worth considering would be to install a building management system (BMS) to conform with Carson City Public Works standards.

General Equipment Basis of Design

Mechanical equipment basis of design will be as follows (unless directed otherwise by owner):

Rooftop Package Units:	Trane
DOAS Units:	Trane
Kitchen Hood Exhaust/makeup air unit:	Greenheck
Grilles/Registers/Diffusers	Titus
Toilet Room Exhaust Fans:	Greenheck
Split System cooling units	Mitsubishi

HVAC Security Considerations

Using multiple smaller tonnage rooftop units will keep ductwork sizes relatively small. Security bars within the ductwork will be installed where required. Security type supply registers, diffusers, and grilles will be used throughout the secured areas, and space sensors will be installed in return/exhaust air grilles.

Plumbing Systems

General

Plumbing utilities will be provided to all fixtures within the project area. Fixture unit load calculations and pipe sizing will be done during the design phase of the project.

Security type plumbing fixtures will be used in all secured areas, with no exposed pipe in secured areas. Vandal-proof access panels will be provided if required.

Domestic Hot and Cold Water

Pipe material will be type L hard copper.

Hot Water

Domestic hot water will be produced by two gas-fired direct vent water heaters. Each water heater will be sized at 60% of the total hot water load. This is to ensure the facility will never be without hot water in case of equipment failure. A concentric combination combustion air/exhaust gas flue will be run up through the roof. The water heaters will be located in the mechanical room at ground floor level. Hot water systems will be provided with circulating pumps controlled by a timeclock.

Hot water supply and return piping will be insulated with fiberglass pipe insulation.

Waste and Vent Systems

A complete sanitary waste and vent system will be provided in accordance with the Uniform Plumbing Code throughout the building. Sanitary sewer/vent piping shall be cast-iron. However, if the authority having jurisdiction allows plastic PVC piping below grade, this may be used at the contractor’s option. Water closets and urinals will be provided with electric-powered sensor-type flush valves in public non secured areas.

Plumbing Equipment Basis of Design

Plumbing equipment basis of design will be as follows (unless directed otherwise by the owner):

Secured Areas:

Combination Toilet/ Lavatory Showers	Willoughby Fixtures
Security Fixtures	Willoughby Fixtures

Public Non-secured Areas:

Water Closets and Urinals:	American Standard
Lavatories:	American Standard
Flush Valves:	Sloan “Royal” (Sensor type)
Stainless Steel Sinks:	American Standard
Faucets:	Sloan “Optima” (Sensor type)
Drinking Fountains:	Elkay
Hydration Station:	Elkay
Floor Drains and Floor Sinks	Zurn
Roof Drains	Zurn

Automatic Fire Suppression Sprinkler System

The entire building will be provided with an automatic fire suppression sprinkler system. The system will be comprised of a single fire riser with remote fire department connection and post indicator valve. Typical spaces will employ a wet fire sprinkler system, while areas subject to freezing will use a dry or glycol fire sprinkler system. Sprinkler heads will be the quick response type and security type quick response sprinkler heads will be provided in secured areas.

Site Primary Service

Electrical Service to the building will be provided by existing NV Energy infrastructure adjacent to the site. New service will be extended from existing poles running north/south on the west side of the site to a new pad-mounted utility transformer exterior to the main electrical room. Service to the building will be 480/277V, 3-phase, 4-wire. Preliminary load calculations for the project yields an NEC demand load of 472kVA (including 25% spare capacity). Based on this calculation, the Service Entrance Switchboard will be 800 amp, 480/277V, 3-phase, 4-wire.

BUILDING SYSTEMS

Electrical Systems

Site Exterior Lighting

Parking lot lighting is 12'-20' pole mount LED fixtures with sharp cutoff optics to reduce glare and light trespass to adjacent properties. Height will be chosen in accordance with Carson City Lighting Ordinance requirements. Building exterior/pathways and secure recreational areas are building mounted LED Flood Lights.

Building Power Distribution

The Main Electrical Room will contain an 800A Service Entrance, Automatic Transfer Switch (if desired), 225kVA step-down transformer, 208/120V distribution board, and branch circuit distribution panelboards. A second electrical room in Phase 2 will contain a 480V distribution board, step-down transformer, and branch circuit distribution panelboards. 208/120V branch circuit distribution panelboards may be located throughout the building as needed.

Mechanical loads will be primarily at 480V 3-phase and fed from the main service or smaller distribution boards located throughout the facility.

Standby power requirements

A standby generator is anticipated to be provided for this type of facility. Anticipated size is 400kW, 480V, 3-phase with an Open Transition Automatic Transfer Switch to provide complete building backup power. The generator enclosure would be located outside the main electrical room with an ATS inside the main electrical room. Alternate methods could be utilized to reduce the size of the generator to provide backup power to specific loads in lieu of entire building backup to allow the facility to remain operational during an outage. This could include HVAC, lighting, security/communication systems, and food storage.

Lighting

All fixtures will be LED. All fixtures in secure areas will be correctional center grade with tamper resistant hardware. Centralized lighting inverters will be utilized for emergency egress lighting requirements. This alleviates maintenance needs for testing and maintenance of individual batteries or unit equipment (Dedicated emergency light fixtures).

Electrical and Telecommunications Systems

Additional Electrical Requirements (Secure Areas)

No exposed conduit or surface boxes. All raceways will be fully concealed where accessible. All wiring devices will be tamper-resistant throughout with stainless steel faceplates.

Lightning Protection System

Based upon an NFPA 780 (Standard for the Installation of Lightning Protection Systems) Risk Assessment, a Lightning Protection System is recommended for this facility. Factors include surrounding building heights, building construction type, size, height, and specifically the impact of relocation of occupants or a detrimental effect to normal building operation upon the adverse effect of a lightning strike.

Communications Service Provider Connections

Raceway infrastructure consisting of conduit and pull boxes will be installed to connect the main telecom room demarcation location to the local telephone and Internet service providers (AT&T and Charter Communications).

Communication Equipment Rooms

Rooms will be sized to accommodate communications/security cabling, terminations, and equipment. This includes space for outside plant conduit, backbone cable termination equipment, lightning protection equipment, equipment racks and security panels/cabinets.

Audio Visual Systems

Conference room and court room Audio Visual systems will be provided in accordance with the user’s requirements. The systems will consist of flat panel displays, speakers, web cameras, microphones, and video conferencing equipment (where required).

Radio Signal Booster System

A radio booster signal system consisting of donor antennas, building distribution amplifiers, in-building antennas and associated cabling will be provided as needed to provide 2-way radio coverage throughout the facility.

Telecommunications Systems

PLC Based Electronic Detention System

The PLC based electronic detention system will be controlled via GUI (graphical user interface) workstations located in the control room. The system will consist of redundant PLC controllers, PLC I/O modules, power supplies and relays.

Electronic Door Locking System

An electronic door locking system will be installed on all detention doors. Doors will be capable of being locked/unlocked from the operator workstations. The operator workstations will also display the location and status of all doors (locked, unlocked, closed, open, etc.).

Control Room Operator Workstations

GUI based operator control workstations will be located in the control room. Custom operator control room furniture will be provided to mount and support computers, monitors, keyboards, microphones, and other security equipment. Each operator workstation will have multiple monitors. Workstations will graphically display the facility plan and will allow the operator to respond to intercom calls, unlock/lock doors, view cameras and make paging announcements.

Intercom System

Vandal resistant stainless steel 2-way intercoms with call buttons will be provided at select doors. A gooseneck push-to-talk gooseneck microphone and speaker will be provided at the control room operator workstation location to enable 2-way audio.

Door Access Control System

A door access control system consisting of card readers, electronic door locking hardware and controllers will be provided as needed on detention and non-detention system doors. Access control will also be provided as needed for vehicle gates.



BUILDING SYSTEMS

Telecommunications Systems

Video Surveillance System

An IP video surveillance system will be provided throughout the facility. Cameras will consist of indoor and outdoor vandal resistant cameras. Multi-sensor cameras will be selected where cameras view multiple directions from a single mounting location. Vandal resistant ceiling corner mount anti-ligature cameras will be provided in the detention cells. A video wall will be provided in the control room to view all cameras.

Paging Speaker System

A zoned paging audio system will be provided throughout the facility. Vandal resistant ceiling and wall speakers will be provided. Speaker zones will be selected via the operator workstation. The system will be capable of single, multi-zone or all-zone paging announcements.

Duress System

A wired push-button duress system will be provided. Push button locations will be identified during the design phase. Duress alarms and locations will be graphically displayed on the control room operator workstations. A wireless duress alarm system will be provided in the facility if required. This system will allow security personnel to wear wireless belt loop transmitters.

Perimeter Security System

A perimeter security system will be provided. Device types and locations will be identified during the design phase. The system may consist of fence climb detection, motion detectors, beam detectors, door position contacts, glass break sensors, etc. Perimeter security alarms will be graphically annunciated on the control room operator workstations.

Fire Alarm System

Smoke detection is required in housing/detainment areas. Horn/strobes are required throughout all spaces other than housing areas. Devices will have protective guards to prevent tampering in secure areas. A horn/strobe notification system is required as a minimum. A Voice Evacuation system is recommended. A voice system will allow selection of paging areas and the ability to give detailed instructions in a fire event. This system could be utilized as an employee notification system for additional event notification if desired.

STAFFING

Current and Future Staffing

The table below presents current staffing levels and projections for future staffing for Detention, Probation and Courts. The projections are based on input from Juvenile Services staff. While the future staffing numbers are not precise, they are believed to be representative of staffing needs relative to anticipated growth. The staffing of the Detention department responds to the number of beds and support spaces. The Courts staffing is based on the addition of the second future courtroom as discussed with staff. Probation staffing is a projection of community growth and the increase in size of the Detention facility.

	Current	Phase 1	Phase 2
Juvenile Detention and Probation			
Chief of Juvenile Services	1	1	1
Deputy Chief of Juvenile Services	1	1	1
Detention Shift Supervisors	4	6	6
Detention Youth Advisors	2	4	4
Juvenile Cook	1	1	1
Juvenile Probation Officers	6	9	12
Office Manager	1	1	1
Probation Youth Advisors	9	11	13
Sr. Juvenile Probation Officer	1	1	1
Support Specialist	2	2	4
Therapist	-	1	1
Grant Writer	1	1	1
Mental Health Professional	1	1	1
Total	32	40	47
First Judicial District Court			
Special Master	1	1	1
Judge	-	-	1
Judicial Assistant	1	1	2
Judicial Clerk	2	2	4
Bailiff	2	2	4
Administrative Assistant	1	1	1
Total	7	7	13
CASA Staff	2	2	4

PARKING

Current and Future Parking

Current and Future Parking

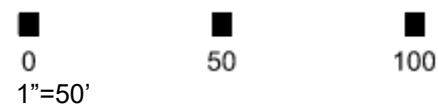
The existing parking at the facility is inadequate. On certain days when Court is in session, there is not enough parking onsite. Staff often finds places to park inside the secure fence, behind the Outdoor Recreation Yard, next to the Water Treatment building, and occasionally in the Fire Lane. Some staff utilize the Pump House parcel. The Pump House parcel is gravel with no pavement marking.

The Needs Assessment strives to maximize the available parking by balancing parking and facility building footprint. The Court's Phase 2 secure parking is nearly twice as large as the existing area, as required by the increase in staffing. Public parking for Courts and Detention is increased significantly.

The new emergency access will eliminate 5 public parking spaces from the Probation parking area. Probation staff vehicles are parked in the Water Well lot. There will be 9 additional Probation staff spaces in Phase 1 next to the emergency access road. These 9 spaces will be eliminated in Phase 2 with the Probation expansion. Probation staff feels public parking can be managed through scheduling, and they think parking in the Probation parking lot should be adequate through the completion of Phase 2. Retaining the staff parking in the Well parcel will be important to Probation operations.

	Current	Phase 1	Phase 2
Public Parking			
Courts and Detention	33	33	47
Probation	24	19	19
First Judicial District Court Secure Staff Parking			
Required	7	7	13
Provided	6	6	13
Juvenile Detention and Probation Parking (Parking in City Well area)			
Staff Spaces Required	13	18	20
Department Vehicles Required	10	11	13
Spaces Required	23	29	33
Spaces Provided	28	28	28
Surplus (Deficit)	5	(-1)	(-5)

## Site Plan



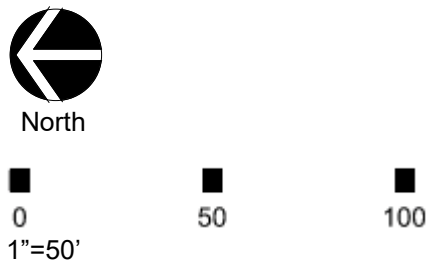
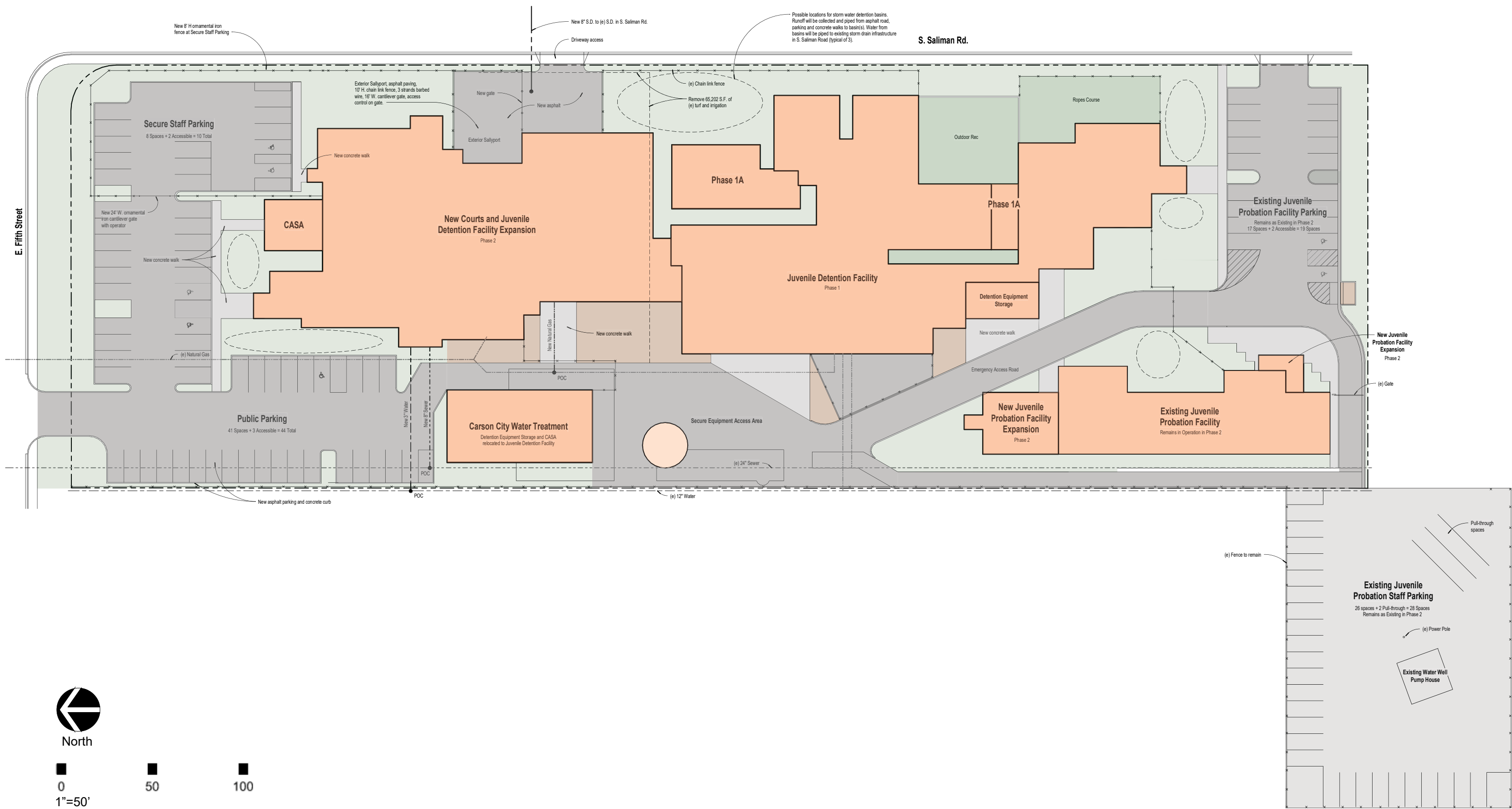


PHASE 1

Juvenile Detention Floor Plan



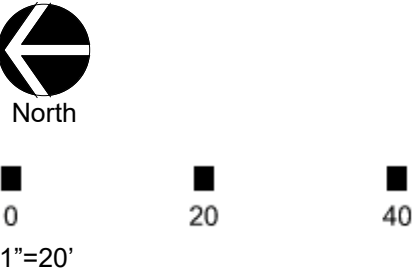
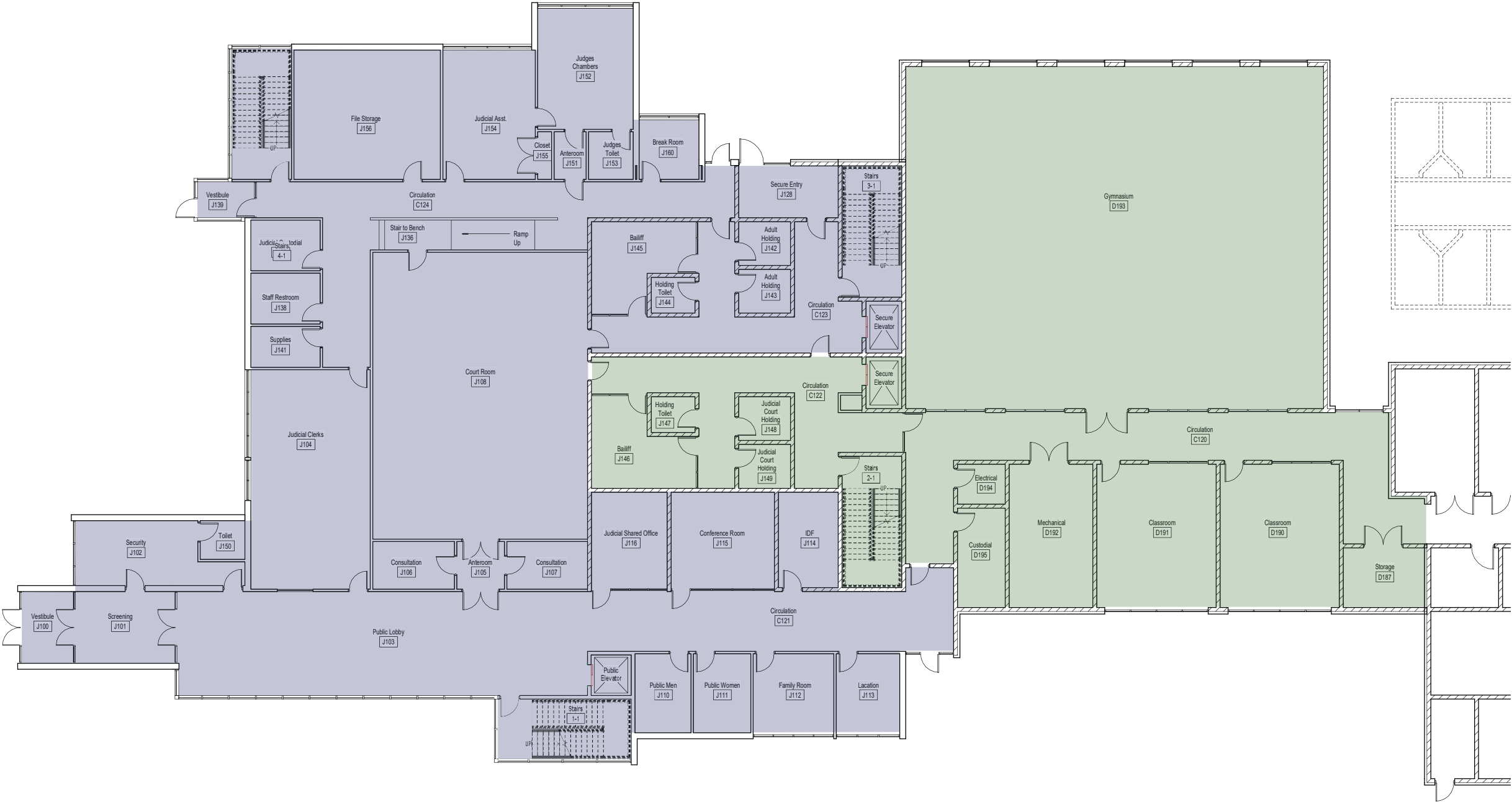
PHASE 2  
Site Plan





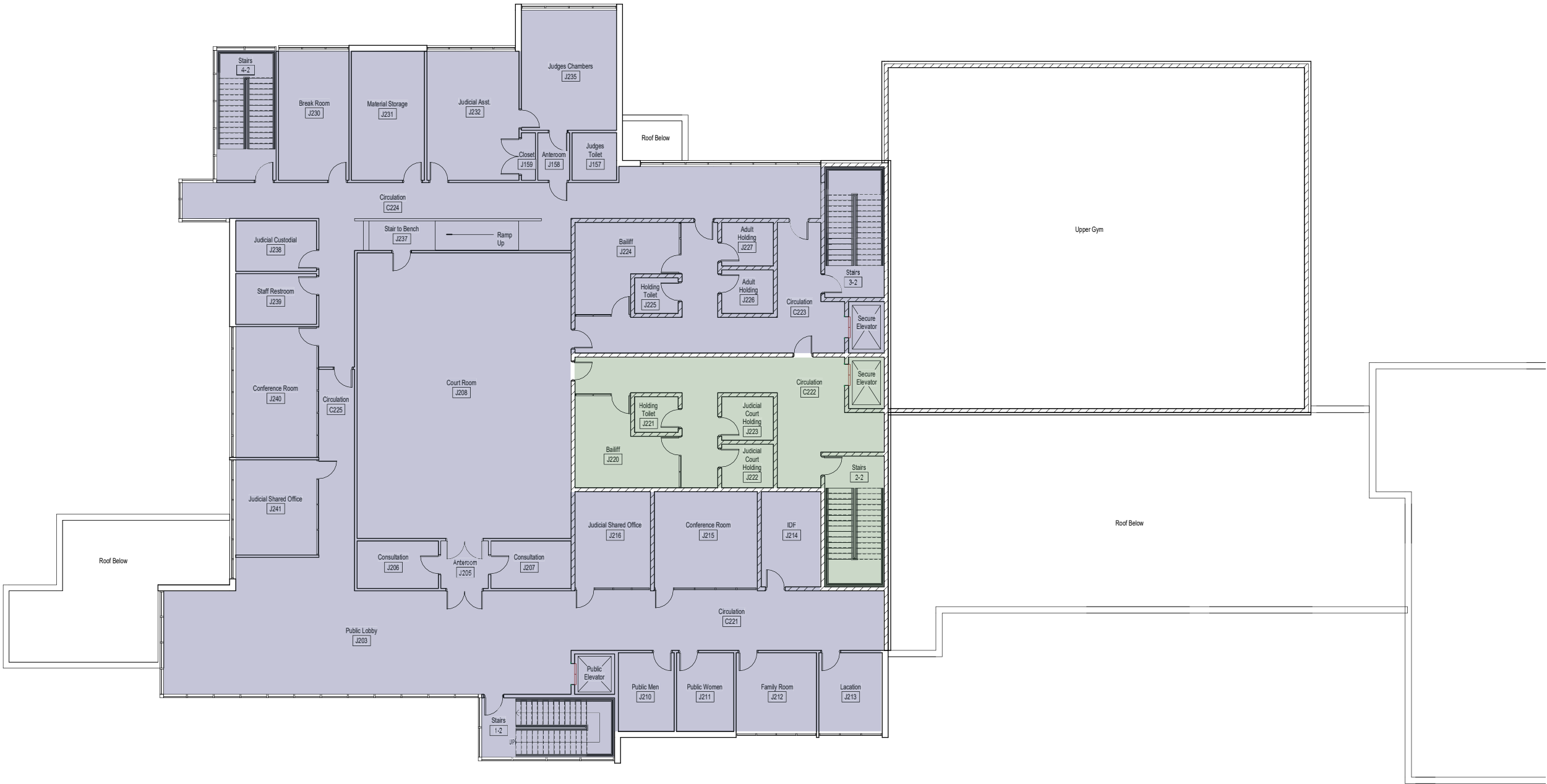
PHASE 2

Courts and Juvenile Detention First Floor Plan



PHASE 2

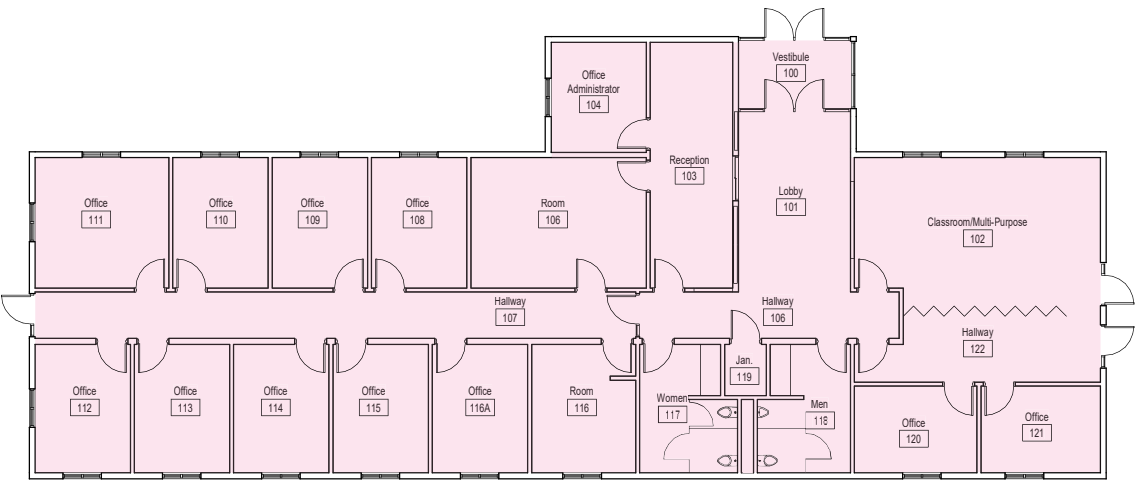
Courts and Juvenile Detention Second Floor Plan



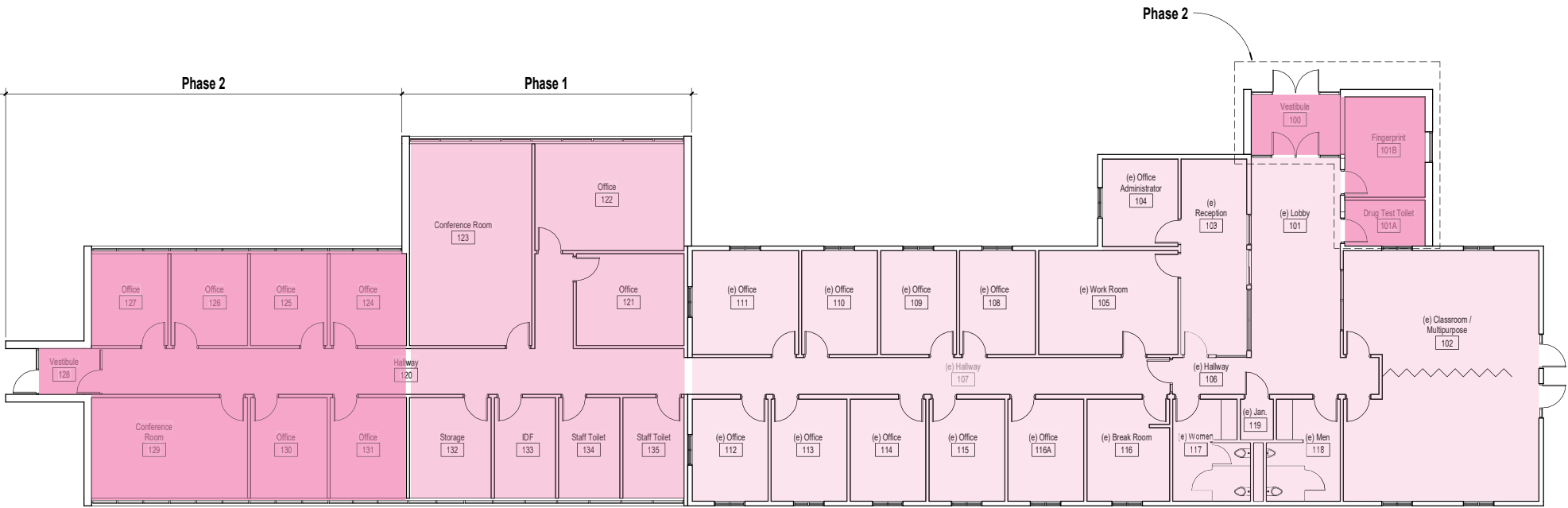


JUVENILE PROBATION DEPARTMENT

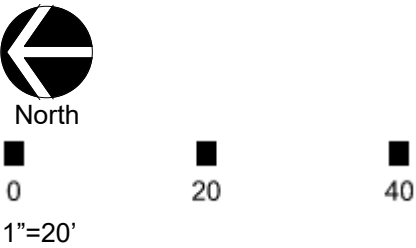
Existing Floor Plan and Phase 1 & 2 Expansion Plan



Existing Floor Plan



Phase 1 and Phase 2 Floor Plans



SPACE PROGRAM

Juvenile Detention - Existing

The space program contains the existing and proposed spaces for the project. The existing and future space programs refer to the drawings and contain the room number, room name and net square footage is presented. Totals net areas are presented at the end of each component.

23	Break Room	153
25	Intake Corridor	152
26	Pre-Release	111
27	Medical	76
28	Toilet	28
29	Intake Shower	51
30	Laundry	68
31	Corridor	237
32	Holding	72
33	Storage	289
34	Interview	80
35	Custodian	47
36	Housing Unit 1 (Girls) Showers	60
37	Housing Unit 1 (Girls) Cell	74
38	Housing Unit 1 (Girls) Cell	74
39	Housing Unit 1 (Girls) Cell	74
40	Housing Unit 1 (Girls) Corridor	192
41	Housing Unit 1 (Girls) Cell	74
42	Housing Unit 1 (Girls) Cell	74
43	Housing Unit 1 (Girls) Cell	74
44	Housing Unit 1 (Girls) Day Room	400
45	Monitor	271
46	Housing Unit 2 (Boys) Day Room	499
47	Housing Unit 2 (Boys) Cell	75
48	Housing Unit 2 (Boys) Cell	76
49	Housing Unit 2 (Boys) Cell	77
50	Housing Unit 2 (Boys) Cell	78
51	Housing Unit 2 (Boys) Cell	79
52	Housing Unit 2 (Boys) Cell	80
53	Housing Unit 2 (Boys) Corridor	384
54	Housing Unit 2 (Boys) Cell	81
55	Housing Unit 2 (Boys) Cell	82
56	Housing Unit 2 (Boys) Cell	83
57	Housing Unit 2 (Boys) Cell	84
58	Housing Unit 2 (Boys) Cell	85
59	Housing Unit 2 (Boys) Cell	86
60	Housing Unit 2 (Boys) Showers	104
61	Mechanical	206
62	Kitchen	219
63	Storage	69
64	Multi-Purpose	753
65	Classroom	514
66	Toilet	28
67	Toilet	28
68	Manager's Office	192
69	Cook's Office	128
70	Visit	32
71	Visit	21
72	Police	60
73	Intake	93
74	Intake Holding	60
75	Intake Holding	60
Sallyport		
Total		7,147

Juvenile Detention - Future

100	Vestibule	121
101	Screening	208
102	Community Classroom	507
103	Detention Staff Training	507
104	Family Restroom	80
105	IDF	161
106	Custodial	160
107	Women	191
108	Men	191
109	Non-Contact Visiting	191
110	Pre-Release Consult	107
111	Pre-Release	129
112	Pre-Release	133
113	Non-Contact Visiting	191
114	Admin Staff Toilet	86
115	Admin Office	112
116	Admin Office	110
117	Detention Manager	259
118	Admin Staff Toilet	84
119	Lobby	743
183	Medical Office	100
C100	Circulation	594
C101	Circulation	113
C102	Circulation	1,499
C103	Circulation	646
C104	Circulation	362
C105	Circulation	296
C106	Circulation	436
C107	Circulation	291
C108	Circulation	291
C109	Circulation	332
C110	Circulation	112
C111	Circulation	382
C120	Circulation	940
C121	Circulation	648
C122	Circulation	556
C123	Circulation	496
C124	Cirulcaiton	696
D100	Intake Toilet	80
D101	Intake Shower	59
D102	Intake Holding	59
D103	Intake Holding	59
D105	Intake Holding	59
D106	Intake Holding	59
D107	Intake Shower	59
D108	Intake	213
D109	Sallyport	128
D110	Personal Belongings	124
D111	Intake Interview	110
D112	Police	380
D120	Day Room	373
D121	Time Out	92
D122	Shower	84
D123	Cell	84
D124	Cell	84
D125	Cell	84
D126	Cell	84
D127	Cell	84

Juvenile Detention - Future, continued

D128	Cell	84
D129	Cell	84
D130	Cell	84
D131	Cell	84
D132	Cell	84
D140	Day Room	271
D141	Time Out	84
D142	Shower	84
D143	Cell	84
D144	Cell	84
D145	Cell	84
D146	Cell	84
D147	Cell	84
D148	Cell	84
D150	Day Room	271
D151	Time Out	84
D152	Shower	84
D153	Cell	84
D154	Cell	84
D155	Cell	84
D156	Cell	84
D157	Cell	84
D158	Cell	84
D160	Control	372
D161	Counseling	100
D162	Housing Interview	147
D163	Housing Interview	147
D164	Housing Staff	85
D170	Multi-Purpose Room	980
D171	Kitchen	302
D172	Kitchen Storage	192
D173	Cook's Office	144
D174	MDF Telecom	194
D175	Electrical	204
D176	Mechanical	213
D177	Fire Riser	98
D178	Building Maintenance	336
D179	Detention Custodial	120
D180	Linen	113
D181	Classroom	516
D182	Medication Issue/Stg.	120
D183	Exam Room	120
D184	Medical Office	100
D185	Laundry	220
D186	Storage	276
D187	Storage	136
D190	Classroom	480
D191	Classroom	480
D192	Mechanical	336
D193	Gymnasium	4,013
D194	Electrical	53
D195	Custodial	113
Total		28,435



SPACE PROGRAM

Juvenile Court - Existing

2	Judicial Clerks	417
4	Lounge	148
5	IT	95
6	Office	114
8	Corridor	208
10	CC DA / Storey Co. DA Office	202
12	Storage	193
13	Women	96
14	Custodian	22
15	Corridor	283
16	Men	109
17	Judicial Assistant	111
18	Special Master Chambers	242
20	Hearing Room	648
21	Bailiff Office	121
22	Conference Room	246
24	Vestibule	98
76	Lobby	398
77	Toilet	53
78	Toilet	53
79	Room	55
Total		3,912

Juvenile Court - Future

1-1	Stairs	234
1-2	Stairs	234
2-1	Stairs	220
2-2	Stairs	220
3-1	Stairs	220
3-2	Stairs	220
4-1	Stairs	229
4-2	Stairs	229
C221	Circulation	527
C222	Circulation	570
C223	Circulation	496
C224	Circulation	744
C225	Circulation	190
J100	Vestibule	100
J101	Screening	191
J102	Security	252
J103	Public Lobby	1,209
J104	Judicial Clerks	736
J105	Anteroom	64
J106	Consultation	110
J107	Consultation	108
J108	Court Room	1,730
J110	Public Men	125
J111	Public Women	127
J112	Family Room	179
J113	Lacation	141
J114	IDF	160
J115	Conference Room	277
J116	Judicial Shared Office	203
J128	Secure Entry	153
J136	Stair to Bench	184
J137	Judicial Custodial	99
J138	Staff Restroom	99
J139	Vestibule	65
J140	IDF	161
J141	Supplies	79
J142	Adult Holding	64
J143	Adult Holding	64
J144	Judges Chambers	324
J145	Bailiff	212
J146	Bailiff	212
J147	Holding Toilet	44
J148	Judicial Court Holding	59
J149	Judicial Court Holding	59
J150	Holding Toilet	44
J153	Judges Toilet	60
J154	Judicial Asst.	336
J155	Closet	19
J156	File Storage	532
J157	Judges Toilet	60
J159	Closet	19
J160	Break Room	100

Juvenile Court - Future, continued

J203	Public Lobby	1,326
J205	Anteroom	64
J206	Consultation	110
J207	Consultation	108
J208	Court Room	1,730
J210	Public Men	125
J211	Public Women	127
J212	Family Room	179
J213	Lacation	141
J214	IDF	160
J215	Conference Room	277
J216	Judicial Shared Office	203
J220	Bailiff	212
J221	Holding Toilet	44
J222	Judicial Court Holding	64
J223	Judicial Court Holding	64
J224	Bailiff	212
J225	Holding Toilet	44
J226	Adult Holding	59
J227	Adult Holding	59
J230	Break Room	257
J231	Material Storage	266
J232	Judicial Asst.	336
J235	Judges Chambers	324
J237	Stair to Bench	184
J238	Judicial Custodial	116
J239	Staff Restroom	116
J240	Conference Room	299
J241	Judicial Shared Office	218
Total		20,517

SPACE PROGRAM

Juvenile Probation - Existing

100	Vestibule	82
101	Lobby	220
102	Classroom/Multi-Purpose	407
103	Reception	219
104	Office Administrator	113
105	Work Room	248
106	Hallway	131
107	Hallway	302
108	Office	134
109	Office	134
110	Office	134
111	Office	188
112	Office	132
113	Office	133
114	Office	133
115	Office	133
116	Break Room	144
116A	Office	133
117	Women	124
118	Men	120
119	Custodian	23
120	Office	115
121	Office	115
122	Hallway	161
Total		3,778

Juvenile Probation - Future

100	Vestibule	87
101	Lobby	220
101A	Drug Test Toilet	63
101B	Fingerprint	137
102	Classroom/Multi-Purpose	407
103	Reception	219
104	Office Administrator	113
105	Work Room	248
106	Hallway	131
107	Hallway	302
108	Office	134
109	Office	134
110	Office	134
111	Office	188
112	Office	132
113	Office	133
114	Office	133
115	Office	133
116	Break Room	144
116A	Office	133
117	Women	124
118	Men	120
119	Custodian	23
120	Halway	522
121	Office	169
122	Office	273
123	Conference Room	423
124	Office	120
125	Office	120
126	Office	120
127	Office	120
128	Vestibule	47
129	Conference Room	269
130	Office	132
131	Office	132
132	Storage	141
133	IDF	105
134	Staff Toilet	105
135	Staff Toilet	105
Total		6,495

Detention Equipment Storage and CASA

EXISTING		
82	Detention Equipment Storage	738
83	CASA	738
PROPOSED		
	Detention Equipment Storage	805
	CASA	890

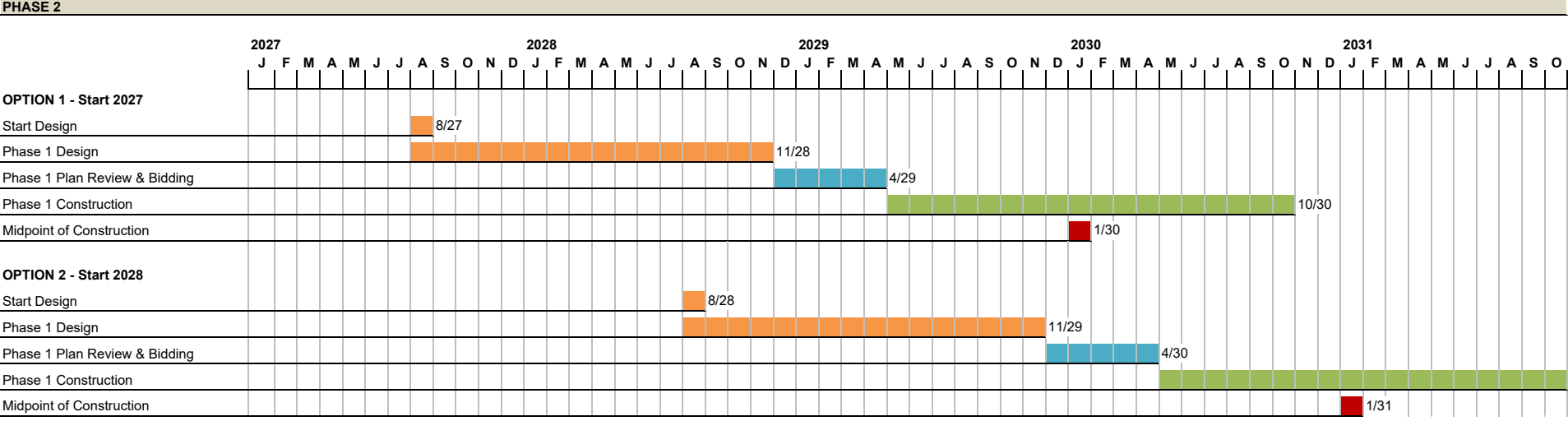
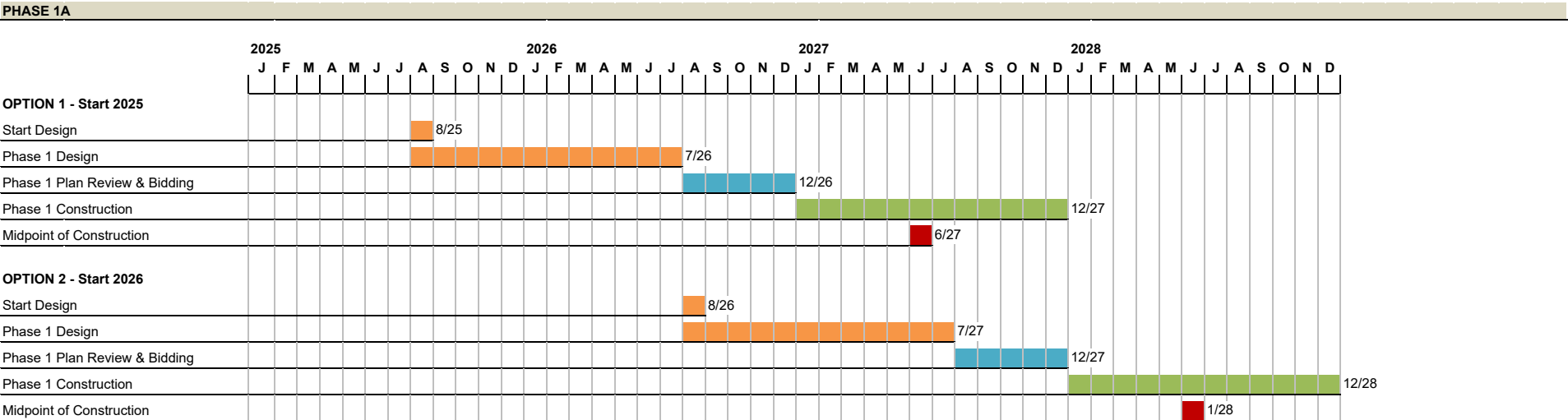
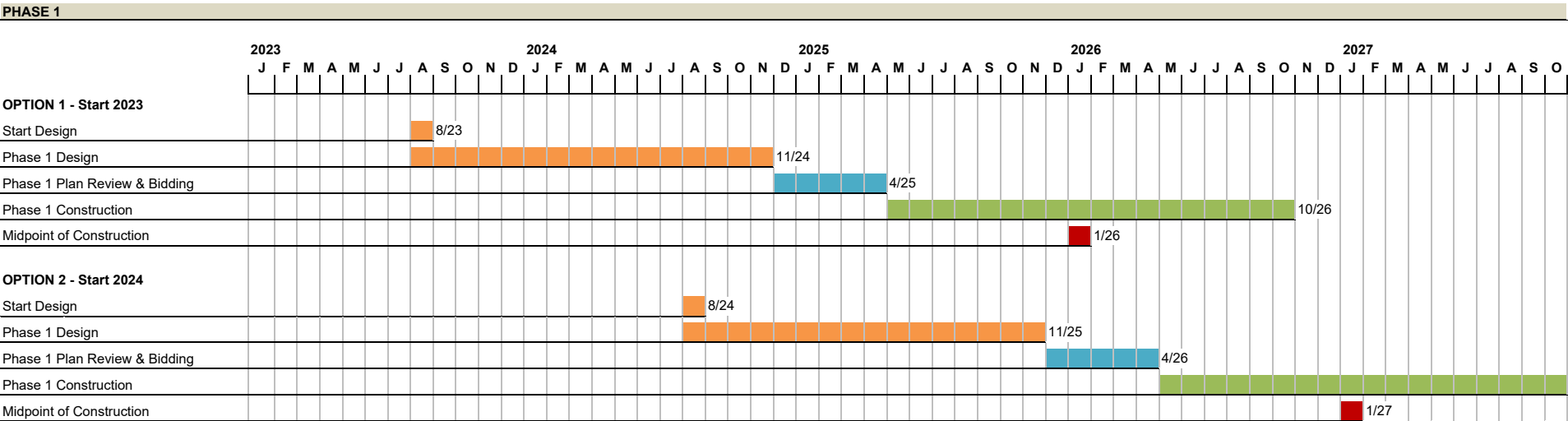
SCHEDULES

The Needs Assessment has developed two potential project schedules. Since future funding is not known at the time of publication, schedules for two options are included.

Option 1 assumes a design start of August 2023. Option 2 assumes a design start of August 2024. Each schedule is based on project funding at the early part of the City’s fiscal year. For instance, Option 1 would be discussed during FY 2022-2023 for inclusion in the FY 2023-2024 budget. It was assumed this was the earliest timeframe the project could start. Should the project be funded earlier, the schedule can be adjusted.

The schedule has also been developed to assist with cost estimating. In order to be as accurate as possible, the cost estimate needs a construction start date and a construction duration. This allows the escalation to be calculated accurately.

The schedules include design, plan review & bidding, and constructions. Project development may allow for design funding in one fiscal year and the funding for construction in the subsequent year. This allows the project funding to be spread between budget cycles.





COST ESTIMATE

The Needs Assessment includes a construction cost statement. The cost estimate includes construction costs for each component of each phase.

As presented in the Schedule section on the previous page, the Needs Assessment includes two timeframes for future phases of the project. Option 1 assumes a design start of August 2023. Option 2 assumes a design start of August 2024.

The Project Overview to the right contains the overall construction costs for each Option. The detailed cost estimates for each phase have been arrived at using the date of cost estimate publication and the construction durations in the schedule.

The detailed cost estimates for each phase have two sets of multipliers applied to account for future escalation. The multiplier in each Building Summary (2.25%) accounts for escalation from the publication date of the estimate through the midpoint of the component’s construction duration. This escalation would be applicable if construction had started in October 2021. Since the project construction did not start at the time of the cost estimate, a second multiplier has been applied to arrive at the cost of the component at the midpoint of anticipated construction. This second multiplier provides a component cost that is aligned with the planned construction schedule.

Although the cost statement is as detailed as possible, all costs are in line with the conceptual nature of the Needs Assessment. The complete cost estimate is included in Appendix A.

Overall costs are as follows:

Option 1	
Phase 1	\$15,421.000
Phase 1A	\$1,754,000
Phase 2	\$26,222,000
Option 1 Total	\$43,397,000
Option 2	
Phase 1	\$15,902,000
Phase 1A	\$1,806,000
Phase 2	\$26,951,000
Option 2 Total	\$44,659,000

PROJECT OVERVIEW		
	OPTION 1	OPTION 2
	CONSTRUCTION START APRIL 2025	CONSTRUCTION START APRIL 2026
PHASE 1	\$15,421,000	\$15,902,000
	CONSTRUCTION START DECEMBER 2026	CONSTRUCTION START DECEMBER 2027
PHASE 1A	\$1,754,000	\$1,806,000
	CONSTRUCTION START APRIL 2029	CONSTRUCTION START APRIL 2030
PHASE 2	\$26,222,000	\$26,951,000
TOTAL CONSTRUCTION COST		\$44,659,000

The following items are excluded from this estimate:

- Professional fees.
- Building permits and fees.
- Inspections and tests.
- Furniture, fixtures & equipment, except as noted.
- Installation of owner furnished equipment.
- Construction change order contingency.
- Overtime.
- Hazardous material abatement/removal.
- Items referenced as NOT INCLUDED or NIC in estimate.

This estimate is based on the following schedule:

- Option 1
  - Phase 1 - Construction start April 2025, 18 month
  - Phase 1A - Construction start December 2026, 12 month duration
  - Phase 2 - Construction start April 2029, 18 month duration
- Option 2
  - Phase 1 - Construction start April 2026, 18 month
  - Phase 1A - Construction start December 2027, 12 month duration
  - Phase 2 - Construction start April 2030, 18 month duration

- This estimate is based on a Design-Bid-Build delivery method.
- This estimate is based on prevailing wage labor rates.
- This estimate is based on 3 phases being completed consecutively.
- This estimate is based on a phased logistic plan.
- This estimate is based on a detailed measurement of quantities. We have made allowances for items that were not clearly defined in the drawings. The client should verify these allowances.
- This estimate is based on a minimum of four competitive bids and a stable bidding market.
- This estimate should be updated if more definitive information becomes available, or if there is any change in scope.
- We strongly advise the client to review this estimate in detail. If any interpretations in this estimate appear to differ from those intended by the design documents, they should be addressed immediately.

COST ESTIMATE

Option 1 and Option 2 Project Summaries

PROJECT SUMMARY - OPTION 1			
ELEMENT	TOTAL COST	GFA	\$/SF AREA
PHASE 1 - CONSTRUCTION START APRIL 2025:			
01. PH 1 NEW BUILD: DETENTION AREA, PUBLIC LOBBY AND ADMIN, AND LIGHTWEIGHT CONNECTOR	\$13,085,000	24,278	\$538.97
02. PH 1 RENOVATION: JUVENILE PROBATION DEPARTMENT	\$566,000	1,798	\$314.79
03. PH 1: ON-SITE IMPROVEMENTS	\$1,770,000	62,652 1.4 ACRES	\$28.25 \$1,231,000
SUBTOTAL	\$15,421,000		
PHASE 1A - CONSTRUCTION START DATE DECEMBER 2026:			
04. PH 1A EXPANSION: DETENTION BED ADDITION	\$1,754,000	2,192	\$800.18
SUBTOTAL	\$1,754,000		
PHASE 2 - CONSTRUCTION START DATE APRIL 2029:			
05. PH 2 NEW BUILD: DETENTION AREA AND COURTS	\$21,562,000	32,149	\$670.69
06. PH 2 EXPANSION: JUVENILE PROBATION DEPARTMENT	\$1,384,000	1,864	\$742.49
07. PH 2 NEW BUILD: DETENTION EQUIPMENT STORAGE AND CASA ADDITION	\$1,184,000	1,696	\$698.11
08. PH 2: ON-SITE IMPROVEMENTS	\$2,092,000	68,338 1.6 ACRES	\$30.61 \$1,333,000
SUBTOTAL	\$26,222,000		
TOTAL CONSTRUCTION COST		\$43,397,000	

Total construction costs are rounded to the nearest thousand.

PROJECT SUMMARY - OPTION 2			
ELEMENT	TOTAL COST	GFA	\$/SF AREA
PHASE 1 - CONSTRUCTION START APRIL 2026:			
01. PH 1 NEW BUILD: DETENTION AREA, PUBLIC LOBBY AND ADMIN, AND LIGHTWEIGHT CONNECTOR	\$13,494,000	24,278	\$555.81
02. PH 1 RENOVATION: JUVENILE PROBATION DEPARTMENT	\$583,000	1,798	\$324.25
03. PH 1: ON-SITE IMPROVEMENTS	\$1,825,000	62,652 1.4 ACRES	\$29.13 \$1,269,000
SUBTOTAL	\$15,902,000		
PHASE 1A - CONSTRUCTION START DECEMBER 2027:			
04. PH 1A EXPANSION: DETENTION BED ADDITION	\$1,806,000	2,192	\$823.91
SUBTOTAL	\$1,806,000		
PHASE 2 - CONSTRUCTION START APRIL 2030:			
05. PH 2 NEW BUILD: DETENTION AREA AND COURTS	\$22,161,000	32,149	\$689.32
06. PH 2 EXPANSION: JUVENILE PROBATION DEPARTMENT	\$1,423,000	1,864	\$763.41
07. PH 2 NEW BUILD: DETENTION EQUIPMENT STORAGE AND CASA ADDITION	\$1,217,000	1,696	\$717.57
08. PH 2: ON-SITE IMPROVEMENTS	\$2,150,000	68,338 1.6 ACRES	\$31.46 \$1,370,000
SUBTOTAL	\$26,951,000		
TOTAL CONSTRUCTION COST		\$44,659,000	

Total construction costs are rounded to the nearest thousand.

PARTICIPANTS

The Planning Team would like to thank all of those who participated in the project. Your insight, assistance and energy made the entire process better through your involvement.

CARSON CITY

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Linda Lawlor, Deputy Chief of Juvenile Services  
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**First Judicial District Court**  
Kimberly Okezie, First Judicial Court Special Master

**Justice and Municipal Courts**  
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Maxine Cortes, Courts Administrator  
Julio Lopez, Court Marshal

**Fire Department**  
Dave Ruben, Fire Marshal  
Jenny Williamson, Fire Department Inspector 2

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## Carson City Juvenile Detention

Year	Bookings	Youth on Suicide Watch	% of youth on Suicide Watch	Average Length of Stay	Average Daily Population
2017	430	54	12.56%	16.7 days	12.2
2018	280	93	33%	24.6 days	12.4
2019	283	100	35%	25 days	13.1
2020	145	81	55%	28.8 days	10
2021	185	110	60%	26 days	9.2
Future Population Predictions					
2022					12.2
2023					13.1
2024					14
2025					15
2026					16

\*Please note that detention populations decreased significantly due to the COVID 19 pandemic. Intakes were limited to serious offenses only. However, despite the population count going down, mental health issues with the facility increased significantly.