MANATEE COUNTY
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Basis of Design Narrative

Manatee County Jail Medical Wing

Agreement Number: 20-R074813CD

DAI Project Number: 50137667

The new Jail Medical Wing will potentially be a 165,000-180,000 square foot medical complex with a minimum of 300 beds. The new facility will also include behavior health services for drug and alcohol treatment that has an increasing demand on facility resources. The design and construction will be based on the County's Construction Standards Manual, State and Local Model Codes and the included Basis-of-Design.

Version #: Final *as of date:* 09-02-2021

Approved:

_____ _____

Owner's Representative *Date*

_____ _____

Owner's Representative *Date*

Basis of Design Narrative

Manatee County Jail Medical Wing

Overview and Instructions

The purpose of this document is to provide a basis-of-design performance documentation of the Owner's goals, expectations and requirements for the future Design-Build Project and shall be utilized throughout the project delivery to provide an informed baseline and focus for development of the design and for validating the Project's vision and mission, energy performance, environmental profile, and alignment with overall values and goals.

The intent of the Basis of Design document (BOD) is to provide an overview of the functional requirements for the project and the expectations of the building's use and operation as it relates to building and systems design. This facility will be designed based on the standards of LEED Silver (50-59 points); however, USGBC certification is not required to be obtained. This document is intended to be a high-level description of the project requirements and qualifications to guide the Design-Builder, yet not to hinder the creativity and exploration of design solutions.

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APPENDIX

1.0 | Owner and User Requirements

This section describes the overall requirements for the facility in a brief overview.

Primary Purpose, Program, and Use

The intent of this report is to assess the current conditions and future needs of the healthcare facility addition needed at the Manatee County Department of Corrections Facility known as Manatee County Central Jail (MCCJ) healthcare facility. This report is intended to guide the Design-Builder.

Owner and Project Team

This basis-of-design was created by Dewberry Architects Inc. with input from the Manatee County Property Management Department, Manatee County Sheriff's Office, and Medical Provider that runs the existing medical facility at the Manatee County Central Jail.

Members of the survey and fire protection team visited the site on July 20th, 2021 in order to verify the existing site conditions. As a result of Manatee County meetings and the site visit, the design team completed this basis-of-design to guide the Design-Builder.

Project requires ongoing communication with all parties involved throughout the design-build process.

General Size and Scope of Project

The new medical wing will potentially be a 165,000-180,000 square foot medical complex with a maximum of 300 beds. The new facility will also include mental health services for drug and alcohol treatment that has an increasing demand on facility resources. The design and construction will be based on Basis-of-Design Section 3.0 "Applicable Codes & Life Safety".

Project Name	Manatee County Jail New Medical Wing
Year Existing Building Constructed	Est. 1995
Project Address	14470 Harlee Road, Palmetto, Florida 34221
Estimated Total Floor Area	165,000 - 180,000
Primary Space Use	Medical Wing
Estimated Building Useful Life	20 years
Project Schedule	
Conceptual Plans	10 weeks
Design Start - End	52 weeks
County Review	30 days, permit approval process
Construction Start - End	Fast Track project where it is practical, early bid packages are acceptable
Occupancy	Early 2025
Warranty Phase Review	11 months after substantial completion

Pertinent Project History and Reference Documents

County to provide: Ugarte & Associates MCDF Healthcare Study, dated 07/20/2020 and existing drawings of the Jail Facility.

2.0 | Broad Goals

This section describes the primary purpose, overall goals, and values defining the BOD and proposed project. These Broad Goals regulate the thought process and detail of all supporting BOD sections.

Overall Values and Goals of Project

The Sheriff Office's existing overall mission is to provide a safe, secure, functional and humane environment for staff and inmates, while operating professionally, respectfully, and efficiently. The Sheriff's Office consists of a wide array of services and components that provide the basic care and custodial services for every person arrested. The Manatee County Central Jail houses pre-trial, pre-sentenced, county and state sentenced males and females, as well as juvenile offenders who have been adjudicated as adults.

The Sheriff's Office consists of five Divisions, all of which provide Correctional services in one form or another:

- Administrative Division
- Operations Division
- Services Division
- Support Division

The main focus of the project is to increase capacity for inmates who are currently housed in other facilities. Space will be provided for a maximum 300 patients in flexible medical classifications housing pods.

Broad Goals Relative to Cultural Awareness

Trauma-informed and normative design in environment: color, space, furnishings. Classification and Generational awareness for patient-based engagement within the environment, services, partnerships are paramount and include visibility, transparency, and accessibility. Medical Wing should be welcoming.

Broad Goals Relative to Room List Needs

In the macro view of room list needs, these keywords and phrases govern the final outcomes:

- Facility will provide secure medical and mental health housing for Adults and Juvenile inmates that identify as male, female, transgender, gender neutral, intersex, non-binary, none, or a combination of these. Juvenile inmates shall be visually and audibly separated at all times from Adult Inmates.
- Daylighting is critical in all spaces to extent possible. Control views to exterior.
- Individualize patient/treatment groups as much as possible for treatment engagement (e.g. varying acuities of Mental Illness):
    - Skilled Nursing
    - Mental Health (e.g. Geriatric, Dementia, Alzheimer's, short-term Stabilization Units)
    - Medically Assisted Detox
    - Ambulatory
- Reintegration: step-down approach to level of care and transition back to general population when appropriate.
- Multi-functional spaces & shared support spaces
- Integrate a step-down approach in terms of security and acuity
    - Defining the difference between night and day protocol
    - Smaller groups are better for treatment vs. large groups
- Facility zoned for safety and privacy
- Greenspace & connection to nature

Programmatic Elements to be Accommodated

Minimum to Maximum Security + Special Needs (Mental Health) classifications depend on an accurate assessment of adult and youth patients. Basic program needs range from a low to high acuities, assistance, recreation, and appropriate treatment space to recover and heal.

Building Room List and Adjacency Requirements driven by Program Needs

1. Lay out all areas to promote good sight lines for staff into all patient areas. The higher the acuity of the patient needs in each area, the higher the need for good visibility
2. Locate Mental Health areas together with access between units
    a. Allows staff to flex between areas to meet changing needs
    b. Allows staff to support each other and share common areas and equipment
    c. Creates internal flow for patient movement between areas as acuities and needs change
    d. Prevents non-related traffic from flowing through the Mental Health areas
3. Separate mental health spaces from other medical patient areas wherever possible
    a. Features in mental health areas include ligature resistance that is not necessarily needed in other medical populations. Some of these features that help prevent safety issues for mental health patients can present other problems, such as specialized doors, breakaway designs, safety glass types that may scratch easily, recessed lighting and mechanical elements that create maintenance issues. Other features may be needed in some areas but not others; suicide prevention features are different than those needed by Alzheimer's patients. Mental health details and features typically have a significantly higher cost associated with them.
4. Locate key departments and areas close to each other with good access to control flow of people, materials and processes
    a. Plan for easy transport of patients within like areas depending on the patient's acuity to allow a "step down" transition
    b. Pharmacy in proximity to areas needing frequent dispensing of meds. Create area for securing medications within departments to prevent tracking and dispensing issues while providing for timely dispensing to all patient areas. Design for future flexibility when equipment and procedures change in the future.
    c. Urgent Care adjacency to Clinic spaces. Ideally these spaces would allow flexible use so that none are underutilized or over staffed.
    d. Locate shared support spaces between units such as soiled, clean, equipment, environmental services, and staff areas
    e. Create access to the outdoors, views of nature and an abundance of daylight to patients wherever possible to promote healing, improve outcomes and address mental health needs

Adjacencies will vary depending on building footprint and program layout, connection to the existing building, single-story vs. multiple-stories, and the efficiency and means in which activities support one another between spaces.

Broad Goals Relative to Flexibility

1. Create plan that allows flexibility for multipurpose use to maximize utilization of spaces
    a. Exam rooms can be located for use by multiple areas to serve diverse patient needs. Specialized equipment can be located in the rooms or stored in a nearby room area and brought to generic exam rooms as needed. Specialized rooms can be used for general purpose exams when not needed for their specialized function.
    b. Design and locate program areas in a way that will maximize their utilization and be flexible as needs change. Multipurpose spaces can be used for counseling, meeting with law enforcement, used for forensic interviews, and many other purposes if located for shared use convenient to other program areas.

Broad Goals Relative to Building Aesthetics (Exterior/Interior)

Design appropriately in terms of scale and material to fit into the surrounding context (existing site, climate, and region).

Consider including art both on the interior and exterior. Include greenspace, bioswales, and stormwater retention where appropriate that is aesthetically pleasing promoting recovery and improved patient outcomes.

Broad Goals Relative to Quality of Materials

Materials must be durable, safe, and aesthetically pleasing.

Materials must be easily sanitizable for infection control.

Provide materials that allow for ease of maintenance, improved indoor air quality, and sound resistance.

Choose quality of materials that create environments focused on comfort and healing, reducing noise, glare, falls, avoiding medication errors, enhancing sleep quality, reducing stress, and improving staff/patient satisfaction.

Broad Goals Relative to Construction

The primary goal for the Design-Build Team is provide a facility that meets the standards and quality expectations of the County and the Sheriff's Office for the next 20 years.

Broad Goals Relative to Operations

It is critical that the design and construction of this new medical wing does not restrict or alter the daily operations of the existing Jail facility.

Broad Goals Relative to Life Cycle of the Equipment

5 years with no major capital investments; will have regular maintenance.

Standards for Space Allocation and Furniture

Plan for functions with appropriate types and sizes of equipment and furniture

1. The Sheriff's Office Staff and Medical Provider will determine types and sizes of beds for each area based on different needs. Hospital beds are much larger than other bed types and require room to maneuver them and access the patient. Hospital beds should be used where appropriate to patient needs and acuities but are not required or appropriate in all areas and will be used in limited locations. Medical patients may not require hospital beds or be able to access two-level bunks and may need single level bunks instead. One- or two-level bunks will be determined by the Sheriff's Office Staff and Medical Provider. Mental Health beds shall be single level bunk only. Post-surgical patients may need beds wider than standard bunks for medical staff to change dressings and perform exams.
    a. If beds are switched out to suit different patient needs, a space to store them is required.
    b. Rooms can get very congested with equipment such as ventilators or lifts being placed in the room and require area for staff to access them while preventing injury or mistakes.
    c. Door openings shall be wide enough to allow hospital beds to be relocated from one room to another when the need arises.

Special Considerations: Safety

Safety is paramount and should be considered in terms of building perimeters and varying security level perimeters. It should be unseen, normative with ligature-resistant furnishings, with high staff visibility to reduce assault/abuse and meet PREA (Prison Rape Elimination Act of 2003). Designing for safety should also promote required privacy of inmates in specific areas to maintain their dignity and meet HIPAA requirements.

1. Safety of patients, staff and visitors is the highest priority and should govern all planning decisions.
2. Create zones and spaces for staff safety with controlled access and special design features
    a. Provide for good sight lines and supplement with cameras linked to monitors for good observation
    b. Create safe areas and features which staff can quickly access in case of emergencies
    c. Provide for good circulation to allow staff interaction and support between adjacent units
    d. Include features that resist tampering / damage and control incidents, providing for swift identification and containment. Details and components should be designed to keep patients safe from harming themselves and others
    e. Provide staff access to necessary materials, sharps, equipment and tools while securing them from unauthorized access.

Additional Guiding Principles Behind the Design Effort

1. Provide a safe, healing, and restorative healthcare environment
2. Environment designed to encourage regular interaction between patients and staff
3. Satisfy critical operational needs and provide adequate core support services
4. Achieve staff efficiency and retain talent (staff retention)
5. Good stewardship of budget and return-on-investment.
6. Create a sustainable healthcare model regarding construction, operational, and maintenance costs

3.0 | Applicable Codes & Life Safety

1. All work will be done in accordance with all applicable local, state, and federal codes. https://shop.iccsafe.org/florida-building-code-building-seventh-edition-2020.html

2. Systems and equipment will be designed and installed in accordance with the current adopted editions of the following codes, laws, standards, and guidelines:

    a. 2020 Florida Building Code – Building 7th Edition
    b. 2020 Florida Building Code - Accessibility 7th Edition
    c. 2020 Florida Building Code – Mechanical 7th Edition
    d. 2020 Florida Building Code – Plumbing 7th Edition
    e. 2020 Florida Building Code – Energy Conservation 7th Edition
    f. 2020 Florida Building Code – Fuel Gas 7th Edition
    g. 2020 Florida Fire Prevention Code 7th Edition
    h. 2017 NFPA 70 – National Electric Code
    i. American Society of Heating, Refrigerating and Air-Conditioning Engineers Standards & Guidelines, specifically ASHRAE standards 15-2019, 90.1-2019, 62.1-2019, and 55-2017.
    j. Current NFPA 101 Life Safety Code.
    k. Current American Society for Testing and Materials.
    l. Illumination Engineering Society of North America - Lighting Design Handbook 10th Edition.
    m. ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures.
    n. ACI 318-17 Building Code Requirements for Structural Concrete
    o. ASCE 530/ASCE 5/TMS 402 Building Code Requirements for Masonry Structures
    p. AISC 360-16 Specification for Structural Steel Buildings
    q. National Electric Code - NFPA 70-2017 Edition
    r. National Fire Protection Association.
    s. American National Standards Institute.

t. National Electrical Manufacturers Association.
u. Institute of Electrical and Electronic Engineers.
v. Underwriters Laboratory.
w. Federal Communications Commission.
x. Electronics Industries Association.
y. Telecommunications Industry Association.
z. Building Industry Consulting Services International.
aa. National Systems Contractors Association.
bb. PREA (Prison Rape Elimination Act) (required by Federal Law)
cc. HIPAA (Health Insurance Portability and Accountability Act) (required by Federal Law)
dd. FMJS (Florida Model Jail Standards)
ee. Manatee County Design Standards & Guidelines
ff. NCCHC (National Commission on Correctional Health Care)
gg. ACA (American Correctional Association)
hh. CALEA (Commission on Accreditation for Law Enforcement Agencies)
ii. Southwest Florida Water Management District Environmental Resource Permit Applicant's Handbook Volume II
jj. Manatee County Land Development Code
kk. USGBC LEED requirement.
ll. State of Florida required FGI Guidelines as applicable for I-2 occupancy areas.

3. All materials, equipment, and installation of materials and equipment will conform to the following standards as applicable:

a. ANSI/AAMI Standard ST79.
b. Underwriters Laboratories.
c. National Fire Protection Association.
d. National Electrical Contractors Association NECA Installation Standards.
e. National Electrical Manufacturers Association NEMA.
f. ASHRAE.

4. Life Safety

a. Occupancy

The primary use of the building will be for the medical treatment and care of the inmates on a 24-hour basis. The facility will also include mental health services for drug and alcohol treatment. Medical treatment facilities providing care on a 24-hour basis are considered Institutional Group I-2, Condition 2. As part of the overall Manatee County Central Jail complex, the facility is also considered an Institutional Group I-3 occupancy. Group I-3 has 5 conditions to consider based on the use of the facility, conditions 1-5. It is anticipated all 5 conditions for the Group I-3 occupancy could be present based on the final program. Other occupancies within the building may include:

- S-1 Occupancy: Mechanical, electrical, IT, and storage areas
- B Occupancy: Offices, small conference rooms

Mixed/incidental uses

This building includes multiple occupancies and is therefore characterized as a mixed-use building in accordance with 508.1. The FBC offers the designer several options under Section 508 to address mixed occupancies. The largest area of any floor is not anticipated exceed the area limitation for I-2 and/or I-3 occupancies, which are the most restrictive. Therefore, the non-separated use provisions of FBC 508.3 could be applied throughout if chosen by the design-build contractor.

b. Construction Type and Allowable Area

The overall area of the building is anticipated to be approximately 165,000 – 180,000 square feet (SF). The construction must utilize non-combustible material (either Type I or Type II construction) and the construction type will be determined by the design-build team. The maximum height, maximum number of stories, and the maximum area per floor is based on the construction type selected as prescribed in the FBC Section 504 and Section 506, respectively. Allowances to increase the maximum allowable area per floor may be included where allowed by the FBC.

c. Building Construction

Fire-rated Building Elements
Table 1 below summarizes the fire-resistive building element requirements associated with non-combustible construction types. Construction type to be determined by design-build Firm.

Table 1

BUILDING COMPONENT	TYPE I-A	TYPE I-B	TYPE II-A	TYPE II-B
Structural Frame	3-hour	2-hour	1-hour	0-hour
Exterior Bearing Walls	3-hour	2-hour	1-hour	0-hour
Interior Bearing Walls	3-hour	2-hour	1-hour	0-hour
Exterior Non-Bearing Walls	*	*	*	*
Interior Non-Bearing Walls	0-hour	0-hour	0-hour	0-hour
Floor Construction	2-hour	2-hour	1-hour	0-hour
Roof Construction	1.5-hour	1-hour	1-hour	0-hour

*Per FBC Section 602 based on Construction Type and Separation

Fire-rated separations

Shafts
Vertical openings (e.g. elevators, stairs) through four floors or more which are concealed within the construction of a wall or floor/ceiling assembly are to be enclosed by 2-hour fire resistance rated shafts in accordance with FBC Sections 712 and 713. Vertical openings connecting less than four stories are required to be enclosed by 1-hour rated shafts but shall not have a rating less than the floor assembly penetrated, but need not exceed 2-hours.

Elevator Machine Rooms
Where the elevator machine room abuts the hoistway it serves, the machine room is to be enclosed with walls of the same fire rating as the hoistway (FBC 3005.4). Where the machine room does not abut the hoistway enclosure, the machine room enclosure is not required to be fire-rated (FBC 3005.4, Exception #2).

d. Building Components

Opening Protection
Opening protection through fire walls, fire barriers, fire partitions, shaft enclosures, exterior walls and smoke barriers shall be protected as prescribed by FBC Section 716.

Ducts and Air Transfer Openings
Ducts and air transfer openings that penetrate fire barriers, rated shafts, stairways, exit passageways or other rated assemblies shall be provided with rated fire dampers as prescribed in FBC Section 717. Where fire dampers are required, the fire resistance rating shall be per FBC Section 717.3.2.
A smoke control system and sequencing shall be designed and specified in accordance with Chapters 7 and 9 of the Florida Building Code – Building 7th Edition and Chapter 6 of the Florida Building Code – Mechanical 7th Edition.

Emergency/Standby Power
Systems requiring emergency power will be based on the final building configuration and construction type provided by the design-build team and the requirements prescribed in Section 2702 and other applicable sections of the FBC. Systems requiring emergency power may include but are not limited to:

- Exit signs (FFC Section 1013.6.3)
- Egress illumination (IFC Section 1008.3)
- Elevator car lighting (ASME A17.1)
- Fire alarm (NFPA 72)
- Essential electrical systems in I-2 Occupancies (per FBC Section 407.10)
- Power operated doors and locks in I-3 Occupancies (per FBC Section 408.4.2)
- Emergency responder radio coverage (FBC Section 2702.2.3)
- Smoke Control Systems (FBC Section 909.11)

Elevators

Elevators, if included as part of the building design, must meet all applicable requirements prescribed in Chapter 30 of the FBC.
Passenger elevators are required to be accessible per the FBC section 3001.3. If the building is more than 3 stories high or in which the vertical distance between the bottom terminal landing and the top terminal landing exceeds 25 feet, at least one passenger elevator must be operational for building occupants and fire department emergency access to all floor and must be sized to accommodate an ambulance stretcher per the requirements outlined in the FBC Section 3002.4.
Elevators located in areas of I-2 occupancy and other medical areas of the building where hospital beds are used must comply with sizes and clearances in accordance with FGI Guidelines.
Hoistway openings for I-2 and I-3 occupancy groups, where the elevator hoistway connects more than 3 stories, shall be protected in accordance with Section 3006.3 of the FBC.

e. Egress and Exiting

Occupant Load
Occupant Load Factors
Table 2 summarizes the occupant load factors which will be applied in calculating occupant loads of various spaces based on their use:

Table 2

USE	OCCUPANT LOAD FACTOR
Inpatient treatment areas	240 sf/occupant (gross)
Outpatient treatment areas	100 sf/occupant (gross)
Institutional sleeping areas	120 sf/occupant (gross)
Electrical, Mechanical, Storage	300 sf/occupant (gross)
Business	100 sf/occupant (gross)
Assembly – Unconcentrated (tables and chairs)	15 sf/occupant (net)

Egress Path Components and Arrangement

Exit/Egress Width
Exits and egress paths are to be sized for the occupant load served. Stairs, if used, are to be sized for the occupant load served based on 0.30 inches per occupant and are to provide a minimum clear width of 44 inches (FBC Section 1011.2). Door width calculations will be based on 0.20 inches per occupant and are to provide a minimum clear egress width of 41.5 inches (FBC 1010.1.1). Corridor width shall be sized per the occupant load served and must meet the minimum requirements provide in FBC Section 1020.2.
Travel Distance
Travel distance shall comply with FBC Sections 407 and 1017.
Dead-Ends
Dead end corridors shall comply with FBC Section 1020.4.
Common Path of Travel
Common path of travel shall comply with FBC Table 1006.2.1.
Door Swing
Doors are required to swing in the direction of egress travel where they serve an occupant load of 50 or greater (FBC Section 1010.1.2.1).

Exits

Required Number of Exits
Two exits are required from any I-2 or I-3 occupancy space with an occupant load of 11 or greater (FBC Table 1006.2.1.). Three exits are required to be provided from any space with an occupant load of 501 to 1000 and four exits are required to be provided from any space with an occupant load greater than 1000 (FBC Section 1006.2.1.1).
Location of Exits
Spaces that are required to be served by two or more exits shall have the exit access doors located such that they are separated by not less than 1/3 of the diagonal for the area served (FBC Section 1007.1.1, Exception #2).

4.0 | Environment and Sustainability Goals

This section describes specific environmental or sustainability goals, and overall project energy efficiency goals relative to local energy code or ASHRAE Standard. Project shall be designed to meet LEED Silver (50-59 points) but not required to be certified with USGBC. It also describes any goals or requirements for building siting, landscaping, facade, fenestration, envelope and roof features that will impact energy use.

HVAC and Water Heating Systems:

All HVAC and water heating systems shall at a minimum meet the energy efficiency requirements as set forth in

the Florida Building Code – Energy Conservation 7th Edition. Energy efficiency of HVAC and water heating systems shall be increased to obtain credits as needed to satisfy the pursuit of achieving the targeted LEED Silver certification credit goal.

Siting:

1. The site has space for building expansion to the East of the existing facility.
2. Utilities at the north side of the building in the expansion area include transformer, emergency generator, electric meter, electrical switch gear, fire department connection, grease trap, and fire hydrant.
3. Underground site utilities to the north side mechanical room include building water, fire water, and natural gas. Sanitary sewer is at south side of building.
4. Underground utilities are connected to the services located near John E Potts Lane.
5. Safety/Security: There is an existing perimeter fence and gate system.

There are multiple locations which could accommodate the new facility. However, MSO identified the preferred location adjacent to the existing housing pods at the east end of the main corridor axis. The new medical wing should be at the terminus of the main corridor. See exhibit provided below for the approximate location of the new facility. Furthermore, it was noted that the main entry and major parking lot shall not be modified. The new location should also provide a secure connection to the housing pods conditioned space. Gates, fences, and perimeter security drive should all be modified to maintain the overall integrity of the facility. John E Potts Lane will be utilized for ambulance access within the newly secured area. A new roadway will be required around the perimeter of the new facility to facilitate a continued thoroughfare outside the limits of the security fencing.

There are three existing wet detention ponds adjacent to the preferred location of the new facility. It shall be determined if the existing ponds have available volume to receive runoff from the new facility based on the footprint of the structure. If the existing ponds do not have adequate volume, stormwater

management calculations shall include the detailed design of additional pond(s), as well as interconnected systems and outfalls. The design shall be based on the seasonal high elevations as provided by a geotechnical engineer. The analysis must be performed in the Pond Routing Model (ICPR) and designed to meet the Manatee County and Southwest Florida Water Management District (SWFWMD) requirements.

There are existing underground utilities adjacent to the preferred site that may service the new facility. There is a sanitary sewer manhole located in the area of the new facility. The manhole location shall be considered with the design and layout of the new facility. If the manhole is located within the footprint of the new facility the manhole and sanitary lines shall be relocated to facilitate the construction. There is an existing water line to the west of the site. It shall be determined if the existing utilities are of adequate size to service the site. Utility sizing computations shall be based on Manatee County potable and sewer demand requirements. Utility designs shall consider flow rates, fire flows, water distribution system to serve the building, and wastewater collection and transmission system.

Structural Requirements:
This facility shall be risk category IV designed to resist a 160 MPH three-second gust wind speed measured at 33 feet above ground level per ASCE 7-16.

Exterior walls shall be constructed of reinforced concrete or reinforced masonry.

The roof shall be designed to meet the wind load requirements per ASCE 7-16 for the listed design wind speed.

The building is required to have impact resistant protection for exterior glazing, cladding and components. These building components shall be designed to missile criteria as defined by FBC.

Building Façade: Exterior wall system is to comply with the FBC essential facilities category IV requirements to meet missile impact requirements as described in the Structural requirements.

Building Fenestration: Exterior Detention rated windows and doors shall meet the attack and missile impact ratings as described in this document. All fenestration thermal values shall at a minimum meet the requirements of the Florida Energy Conservation Code, 7th Edition.

Building Envelope: Provide an energy efficient and Energy code compliant enclosure to meet the requirements of an essential facility. Envelope thermal requirements shall at a minimum meet the requirements of the Florida Energy Conservation Code, 7th Edition.

Roof: Provide a roof system that will be water-tight and compliant with the wind uplift requirements for an essential facility.

5.0 | Detailed Spatial List and Indoor Environmental Quality Requirements

This section describes anticipated occupancy schedules, space environmental requirements (including lighting, space temperature, humidity, acoustical, air quality, ventilation, and filtration criteria), user ability to adjust systems controls; desire for specific types of lighting; and accommodations for after-hours use.

The intent of the detailed spatial list is to document the spaces needed for the medical wing and include:

- Established industry best practices.
- National Commission on Correctional Health Care (NCCHC) & American Correctional Association (ACA) standards associated with accreditation.
- Current policy and procedures.
- Application of new programs within the correction environment.

The minimum criteria for the program study in a correctional facility are based largely on the inmate population and the level of security assigned to those inmates as well as the Administration's current policy and staffing ability. Manatee County requires NCCHC, ACA, FCAC, NIJO, and CLEA accreditation for the Manatee County Sheriff's Office Facility known as Manatee County Central Jail healthcare facility (additional information can be found in Appendix A). This requires meeting a number of standards including daylighting into cells/dayrooms as well as providing outdoor recreation areas.

Minimum criteria alone doesn't address such issues as future staffing, population growth, and classification shifts. Counties face the same nationwide mental health crises and the need for medical intervention and classification in their jails. This played a role in how this jail must be designed for current and future populations.

This report recommends renovations and additions to meet the program requirements needed for Manatee County to excel within its inmate classification, function of spaces, future obligations, and standard of care for those working and incarcerated within its walls.

Intended Use / Detailed Spatial List on the following pages:

Housing Patient Classifications:

1. Facility has male and female patients. Currently averaging 30% females & 70% males.
2. Facility has a very low number of juveniles (averaging 2, worst case 4) ranging between 14-17-year-old youth adjudicated as adults. Youth have been male for past 3 years and the maximum population will be 24.
3. Open Ward: 16 beds per ward (24 max with boats), 20 patients detoxing on average (acute; stabilization period; some on detox watch but not high risk). Once cleared, patient taken general population within 72 hrs (but must remain stable); 2 showers minimum
    a. Ambulatory: 3 dorms of 12 beds (emulating in medical and it has been working well)
4. Mental Health Step-Down
    a. Individual Cells – 16 bed units (1:16 accreditation ratio for showers needed); can be 1 pod but single cells – most MH Patients do not get along and stay in cells; some are released to general population – transition support spaces help them transition (size/number TBD) (multi-purpose, classroom, counseling); 2 showers minimum
5. Crisis Mental Health Stabilization unit – 16 bed units; 2 showers minimum
6. Quarantine Negative Pressure Cells – queuing patients that were positive; shower within room; shared anterooms or alcoves preferred
7. Continuous Watch (Suicidal, Self-Harm)

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The following spaces best practices allow for a well-functioning unit:

- A clear line of sight from multiple nurse stations to the "Clinic / Infirmary Function Area" consisting of a waiting area, exam rooms, a lab, and multi-functional space.
- A clear line of sight from multiple nurse stations to the "Urgent Care Functions Area" consisting of trauma room(s), procedure room(s), and Vehicular Sallyport access.
- A clear line of sight from multiple nurse stations to the "Acute Patient Area" consisting of negative pressure rooms, single or multi-bed patient rooms, staff & patient support spaces.
- A clear line of sight from multiple nurse stations to the "Step-Down Acuity Patient Area" consisting of infirmary rooms, single, two, or multi-bed patient rooms, staff & patient support spaces.
- Connection of both internal medical corridors to soiled and clean laundry spaces, as well as secure access behind a nurse station to the pharmacy storage, supply storage, and equipment storage. Open nurse stations shall have an enclosed workspace behind the counter to allow for privacy/confidentiality following HIPAA requirements.
- A separate office area for records, discharge, staff toilets/shower, and staff break area allow for staff to operate outside of the secure medical patient area.
- Dedicated janitor closets are needed for supplies and janitorial equipment are contained within specific sections of the medical unit to prevent transmittal of disease/soiled mops/bodily fluids to other areas of the medical wing.
- The medical wing shall allow for a 10'-0" clear corridor for emergency stretcher access. The adjacent secure, covered or enclosed vehicular sallyport shall provide secure and weatherproof connection to the medical wing for medical transportation.

General medical areas:

1. Single – Negative Pressure Cells (not gender specific – in medical unit). Double occupancy negative pressure cells are not allowed per code.
2. Suicide Cells will be flexible for either males or females for continuous observation – 5-6 in one large cell; then 2-3 smaller cells (minimum two people always – no single cells allowed)

Existing Services:

- Intravenous medication delivery, where appropriate
- Central line medication delivery, where appropriate
- Active seizure management
- Orthopedic care
- Care of post-delivery patients
- Wound care management
- Provide supplemental oxygen
- Monitor patients with complex withdrawal symptoms to include administering intravenous fluids and medication
- Provide EKGs
- Provide breathing treatments
- Tracheotomy care
- Monitor intake and output levels, when needed
- Continuous or near continuous observation, when needed
- Sutures /laceration repair
- Onsite dialysis
- Onsite physical therapy
- Care of terminal illness
- Monitoring of suicidal patients
- Care of serious mental illness
- Prenatal care
- Onsite x-ray
- Onsite ultrasound
- Onsite dental care
- Laboratory collection and processing

- Delivery of urgent medical care
- Delivery of urgent mental health care
- Onsite pharmacy/storage of medication
- Physical examinations
- Chronic illness care

Expanded Future Medical Services:
New Staff: To be determined with Medical/Mental Health Dept

- Expanded Medication Assisted Detox area (also see mental health)
- Mental Health Stabilization Unit (also see mental health)
- Current trends: Pandemics. Expanded Viral Quarantining areas (Neg, Pressure cells and Individual Cells)
- Expanded Discharge Planning office
- Consolidation of Medically Needy inmates into one space (rolling step down unit into new medical facility)
- Library View for Nurses' station
- Possible provider dedicated entry and exercise yard
- Video Monitor/ Digital Remote visitation room
- More space overall for staff and inmates

Expanded Future Correctional Services:
- 1 CRO per floor. 2-3 Deputies per floor. Final correctional staff count will vary depending upon the facility size, bed count, and number of floors.

Expanded Future Mental Health Services:
New Staff: To be determined with Medical/Mental Health Dept

- No specific focus group was conducted in this area; however, future trends indicate drug and alcohol pose an increasing demand on resources. The majority programs, including both mental health and medical treatment, determine eligibility for participation by using a diverse set of criteria, including criminal history, the results of a health screening or assessment as well as the recommendation of a health professional.
- Expandability of the facility for this group is a core principal
- A variety of illnesses must be accommodated
- Design should accommodate supervision and proper support of Nursing staff.
- Embedded correctional staff shall have quick access to inmates.

Some of the spaces may only be occasionally used, so can possibly be combined with other functions to maximize the use of the space and features. For example, one of the Exam Rooms might be oversized to serve as a Procedure Room when needed. Also, some rooms may be equipped to serve a special purpose when not being used for their primary purpose, such as Exam Rooms that may serve as Isolation, Forensics, or Pelvic Exam needs. Other spaces may be provided in other departments and may not need to be duplicated here depending on how Patients are processed and which areas they flow through in what order.

Features to include 42"-48" wide doors wherever gurneys or other large equipment is needed throughout the facility. Doors to Patient Toilets to swing outward for Patient safety.

DEPARTMENTAL ADJACENCIES

Optimally located adjacent to the Infirmary, Lab and Pharmacy.

Waiting- Multiple temporary holding cells are required in adjacent staging area
Sized for short term waiting for inmates with scheduled and unscheduled appointments. Patients in Urgent Care Function Area may be more urgent or have scheduled appointments requiring Exam Rooms, while walk-in Patients may present to Infirmary depending on how the Patient flow is designed. Provide access to adjacent Toilet.

Triage
Triage area may not be needed if this function is provided by adjacent Infirmary and all Patients are scheduled or transported in the Unit by Staff. Provide 5 or 6 functional exam rooms.

Nurse Station / Work / Officer
Work area for charting, access to computers and equipment. Locate for good observation of Urgent Care Function Area by Staff, with direct observation of Mental / Medical Patients in Seclusion and possible Observation Holding area. Nurse Station / Work / Officer area may be open or have glass windows to corridor depending on need for Staff security. Include area for Corrections Officer with monitors for observing key departmental areas and entries. A radial or "wagon wheel" configuration is preferred.

Staff Lounge / Dictation
Keep on Unit for Optimal response time in case of emergency. Can also be used for confidential activities including charting, dictation and staff collaboration. Access to Staff Toilet ideal.

Seclusion- Multipurpose / Suicide Cell / Observation
If Patients with unknown mental / detox. issues are triaged in the Urgent Care Function Area, a Mental Seclusion Room for short-term handling of Patients may be advisable. Alternately, the Seclusion Room with adjacent Anteroom Entry and Toilet may be provided in the Mental Health Unit instead. If provided, the Seclusion Room should be equipped to prevent Patients from self-harm and would have a small view window to the Nurse Station.

Exam Rooms - General
Rooms may be specialized or can be general purpose. For occasional use for specialized functions, an adjacent equipment room may hold additional equipment to be used as needed. Rooms can accommodate functions to support: Telemedicine, Pelvic and Forensic Exams

Medications
Area in the Urgent Care Function Area to hold medications for immediate access, this could hold a cart stocked by the Pharmacy or could contain self-dispensing (Pyxis-type) medications equipment. Self-dispensing equipment would be stocked by the Pharmacy and allows tracking and control of medications to authorized personnel. Meds area can be in an alcove off the Nurse Station or can be in a closed room with access control.

Trauma
Trauma Room to be sized to meet expected need but would ideally be designed to handle multiple cases at a time during crisis situations. Subdivision of the room can be accomplished with curtained Patient areas. Shall be located near sallyport.

Procedure
Equip the Procedure room with equipment for specialized procedures such as casting, sutures and

biopsies. Locked cabinets in the room store needed supplies. Handwash sink, adjustable exam light and charting area required. One of the Exam Rooms can be set up to serve as Procedure Room if sized and equipped correctly.

Equipment
Storage for equipment including portable X-ray and CT equipment, crash cart, iv poles, ventilator, pumps and other anticipated equipment. Ideal location is near Trauma, Procedure and Exam Rooms.

Laundry Facility
Serving as holding of soiled linens, biohazard and trash, this can be part of larger soiled handling system. If not, it requires work counters, flushing rim fixture for waste, handwash sink and storage containers for each type of soiled material. If it is part of a larger system, still requires a handwash sink as well as containers for soiled materials. A small laundry room will accommodate this function.

Clean Utility
If not part of a larger system of Clean supply, it requires a work counter, handwash sink and storage for clean and sterile supplies. If part of a larger system, the handwash sink and work counter can be omitted.

Environmental Services (EVS)
Dedicated to the Urgent Care Function Area, requires a service sink, provision of storage for supplies, and a handwash sink or hand sanitizer station.

Decontamination
For decontamination of Patients, requires two hand-held shower heads, one shower chair, and smooth, non-porous scrubbable walls / floors and portable or hard-piped oxygen and suction. One door between Decontamination and Urgent Care Function Area Corridor or treatment space and potentially a second door to the outside depending on security plan. Include (2) ADA accessible showers and (1) tub.

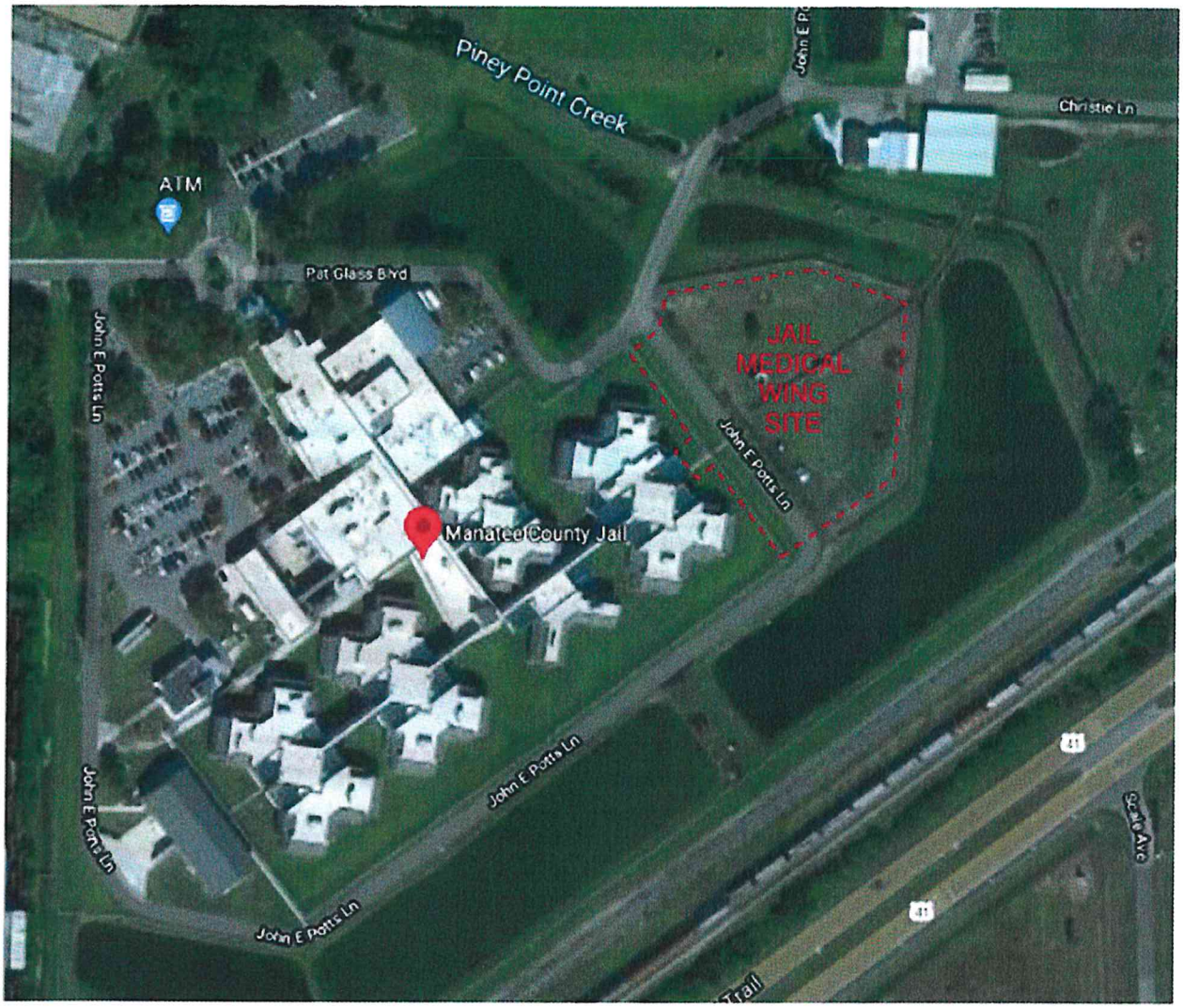
Medical Transport/Patient Discharge/Vehicular Sallyport
Enter through Sallyport to control external traffic, this entry to be covered with exterior canopy and have window to Nurse Station just inside the entry for Staff control purposes. Exit doors to be 6' wide to accommodate gurneys and other equipment. Intake will not occur at this location.

Dentist
Dental Suite shall consist of lockable storage casework/cabinetry, counterspace, hand sink, sink to clean instruments, autoclave, x-ray developer station, computer desk/chair, dental chair, dental chair plumbing, dental equipment, and eye-wash station.

Food Service Prep
Prep area (12' x 12' dimensions) shall provide space for lockable storage casework/cabinetry, counterspace, 3-compartment sink, hot/cold food carts, and a refrigerator.

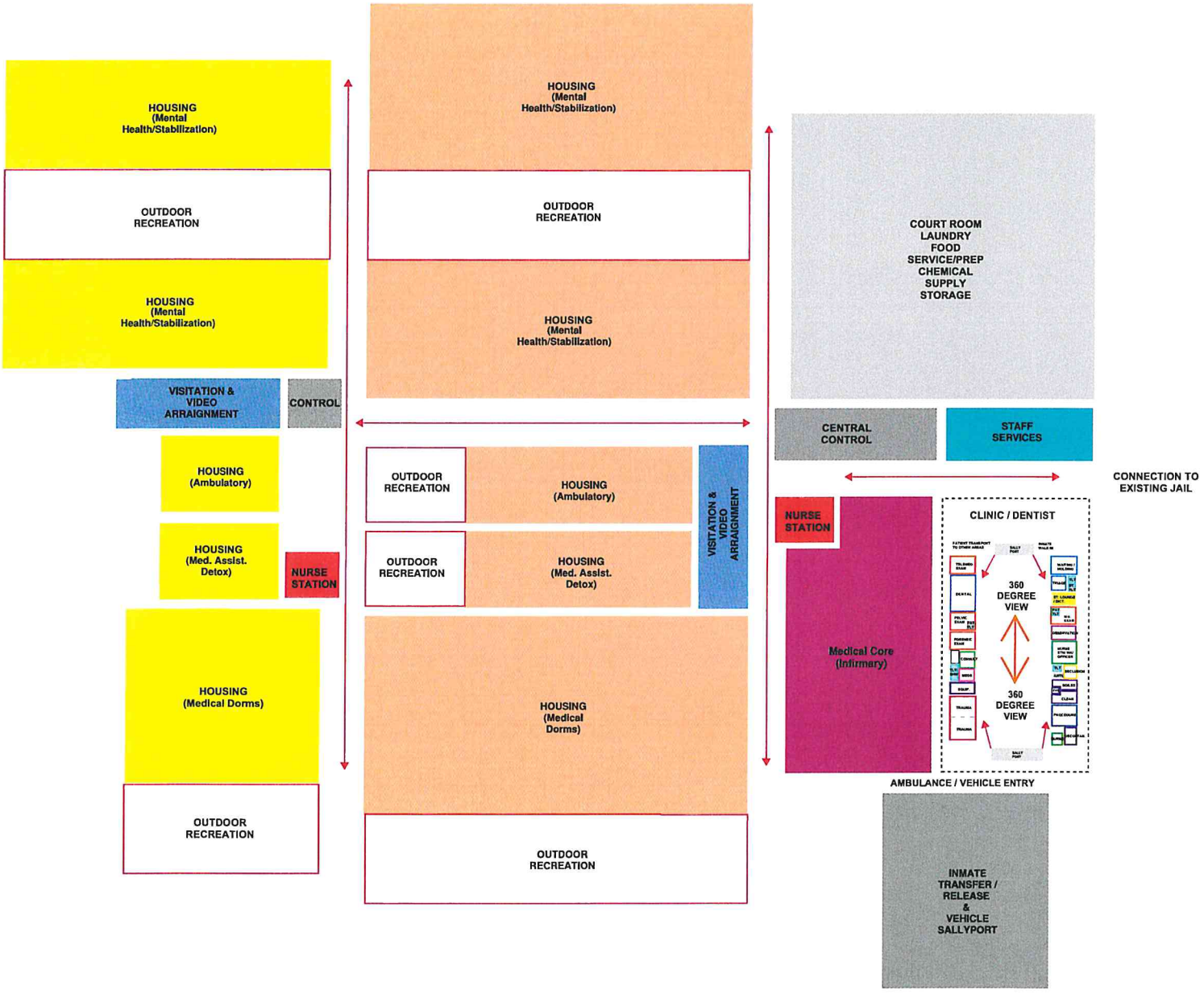
On the following pages, room list adjacencies and minimum clearances are shown.

Medical Wing Adjacency Diagram – Overall



Example layout – Operation and Flow will determine when single or multi-story.

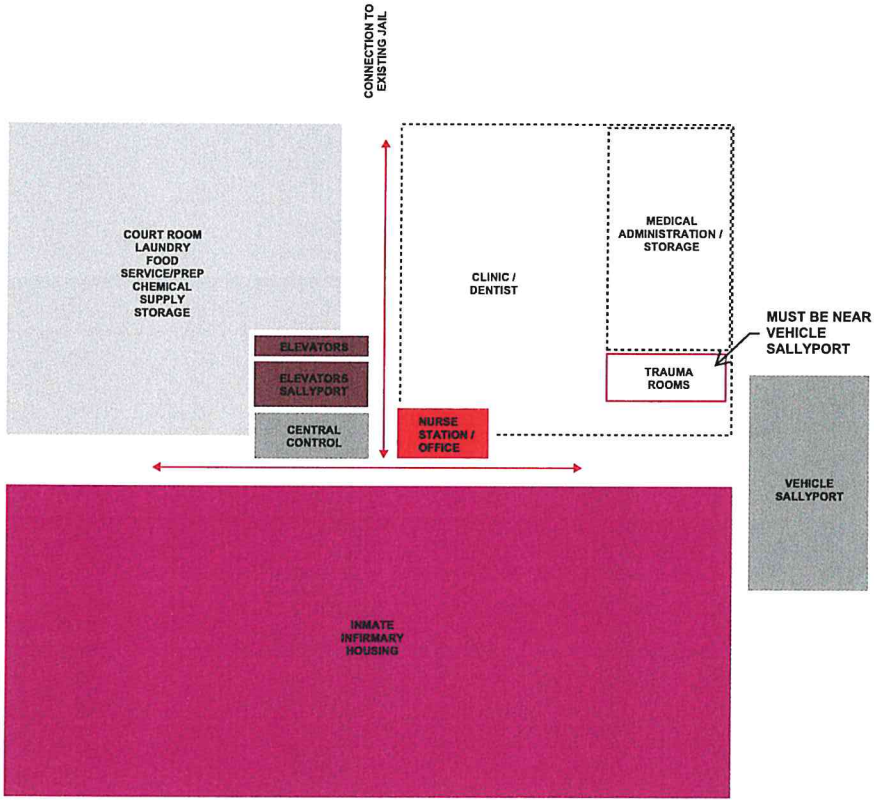
FACILITY OPERATION LAYOUT AND ADJACENCIES SINGLE-LEVEL OPTION



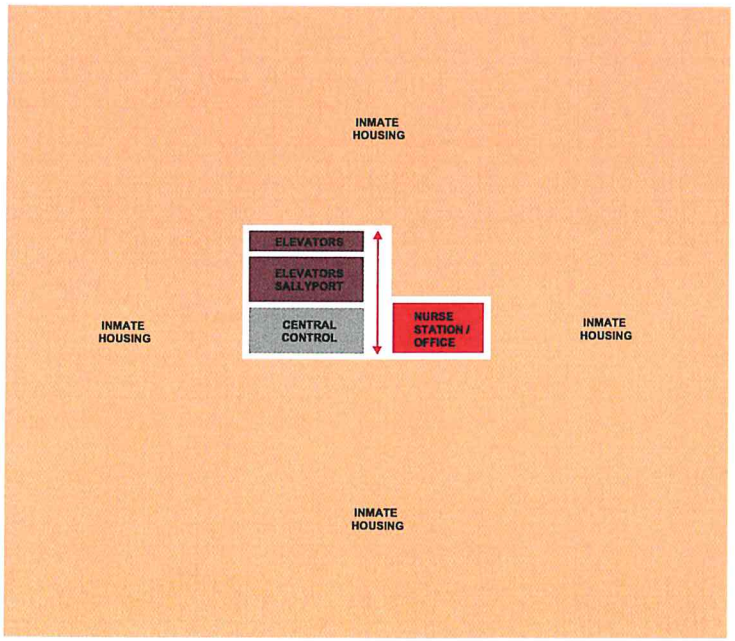
Example layout – Operation and Flow will determine when single or multi-story.

FACILITY OPERATION LAYOUT AND ADJACENCIES MULTI-LEVEL OPTION

PROVIDED & PREFERRED BY SHERIFF'S OFFICE

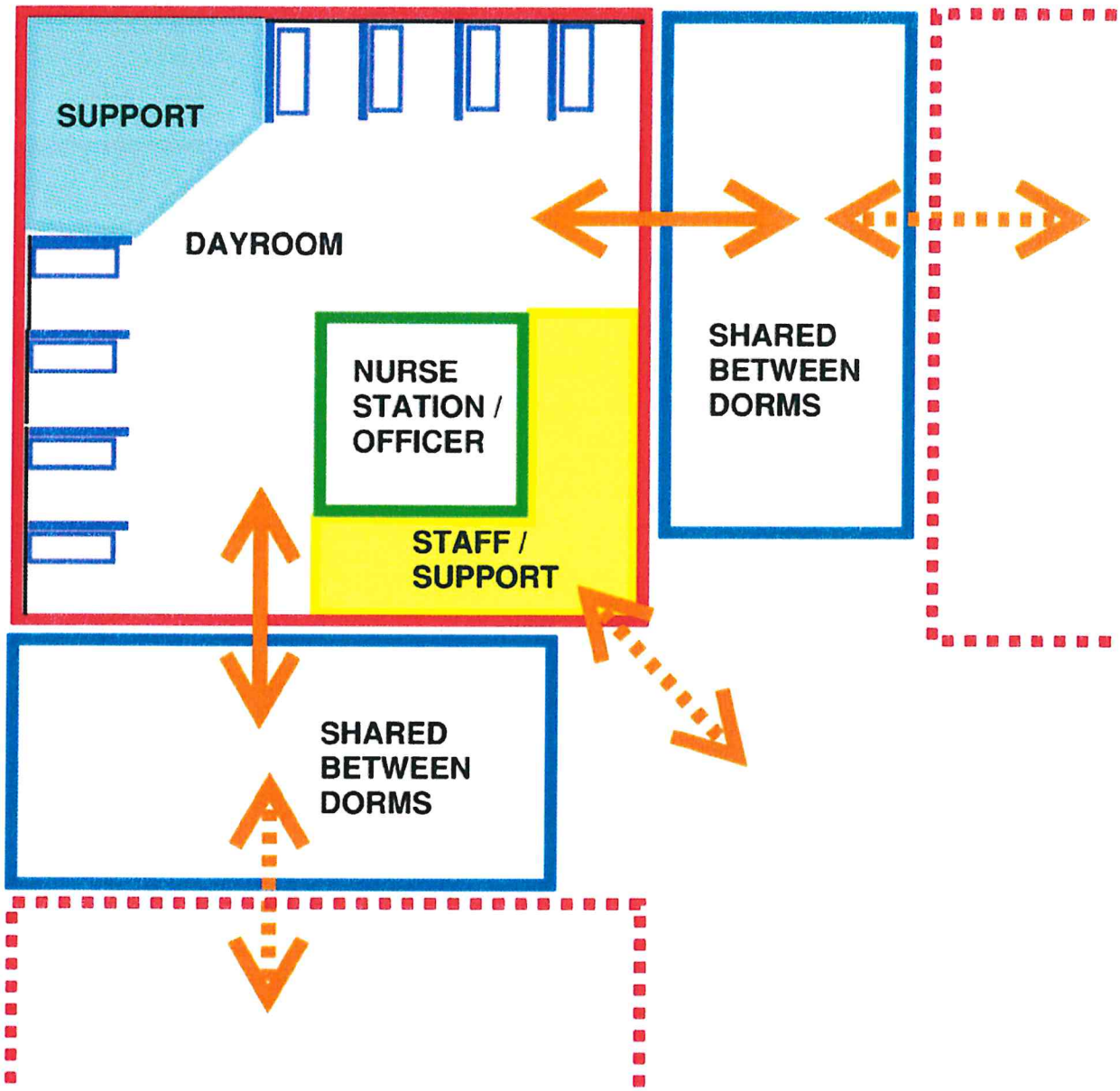


LEVEL ONE



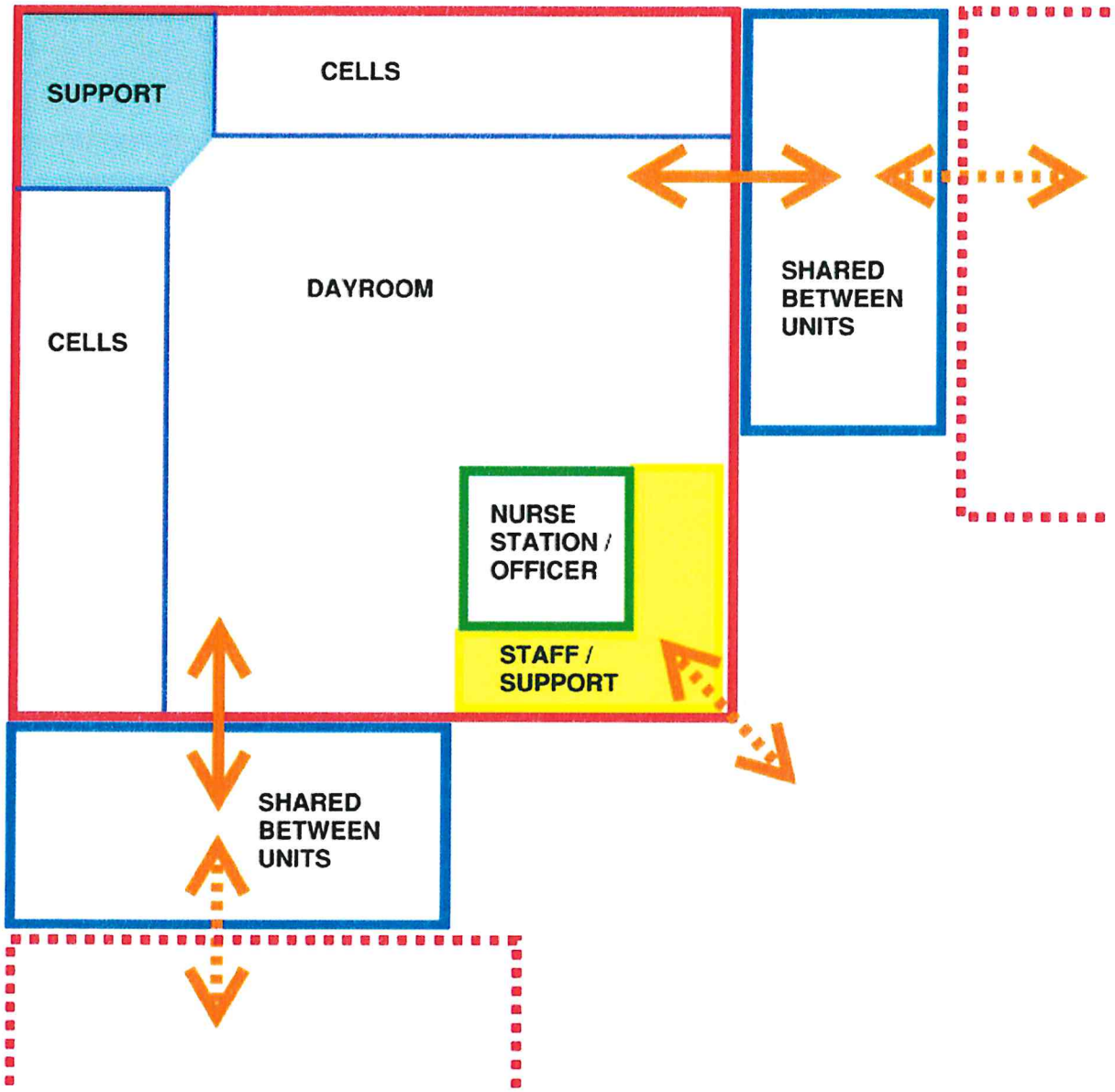
LEVEL TWO

Medical Wing Adjacency Diagram – Housing Units



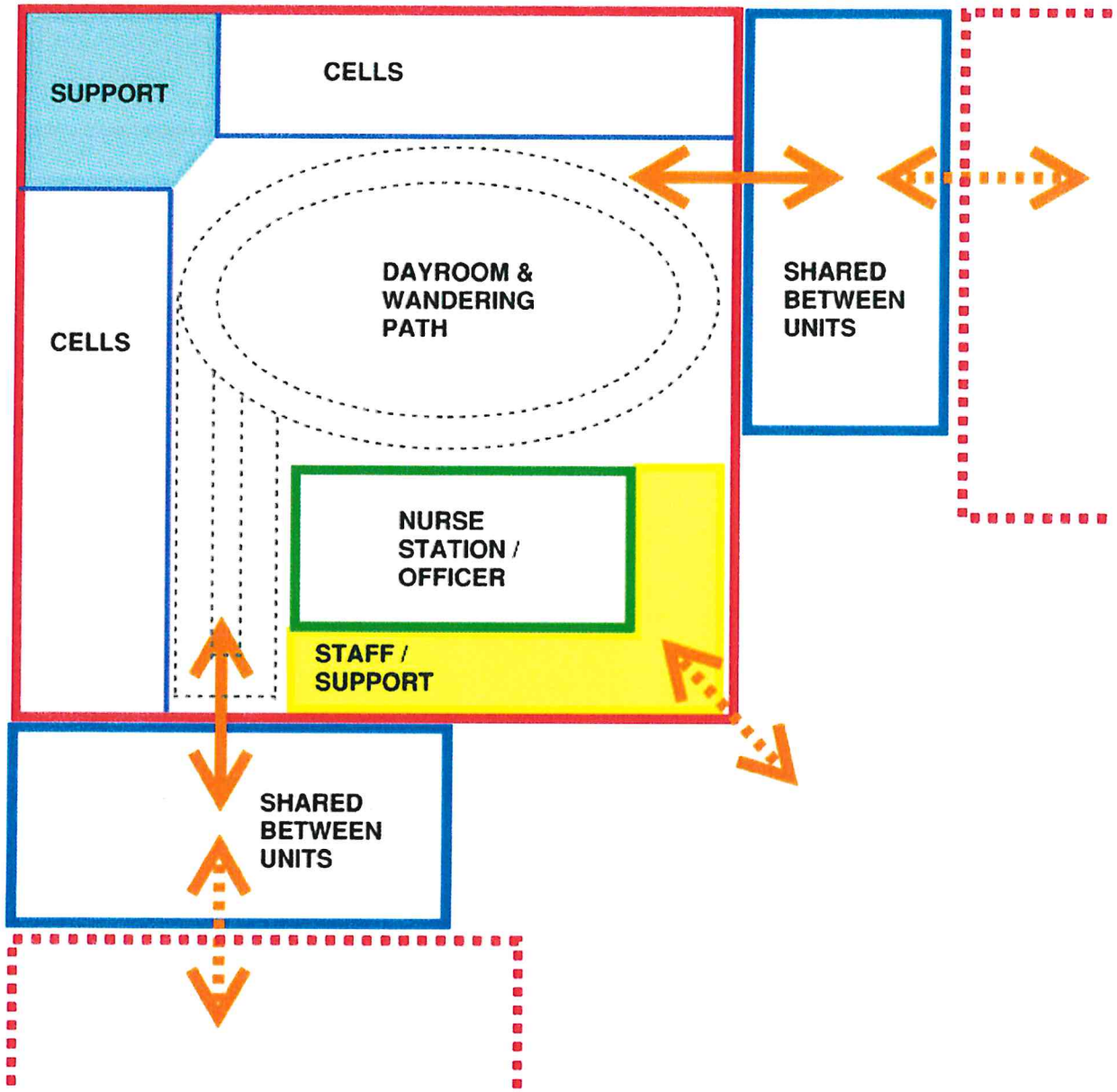
16 BED DORM

Medical Wing Adjacency Diagram – Housing Units



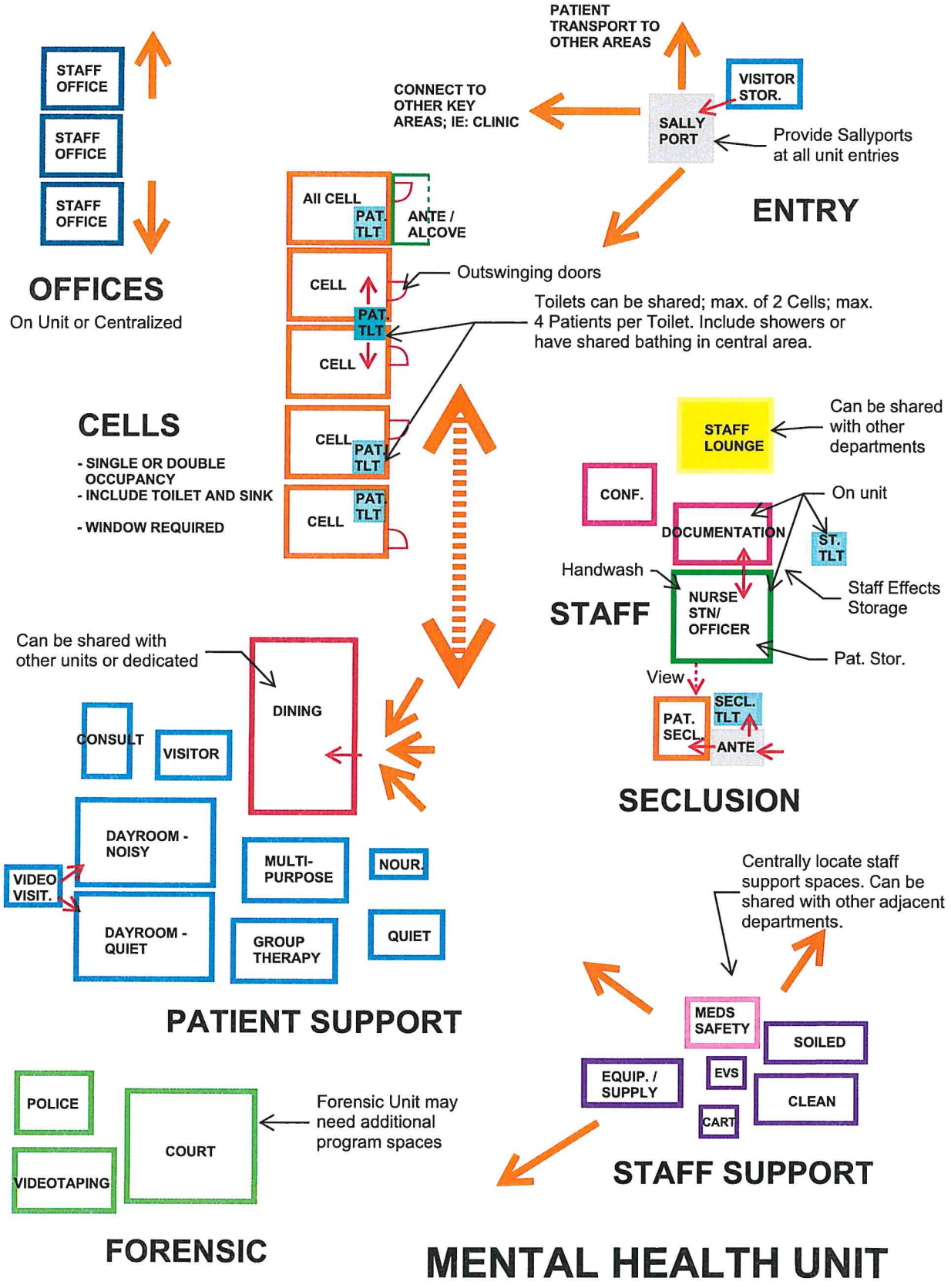
16 BED CELL HOUSING UNIT

Medical Wing Adjacency Diagram – Housing Units

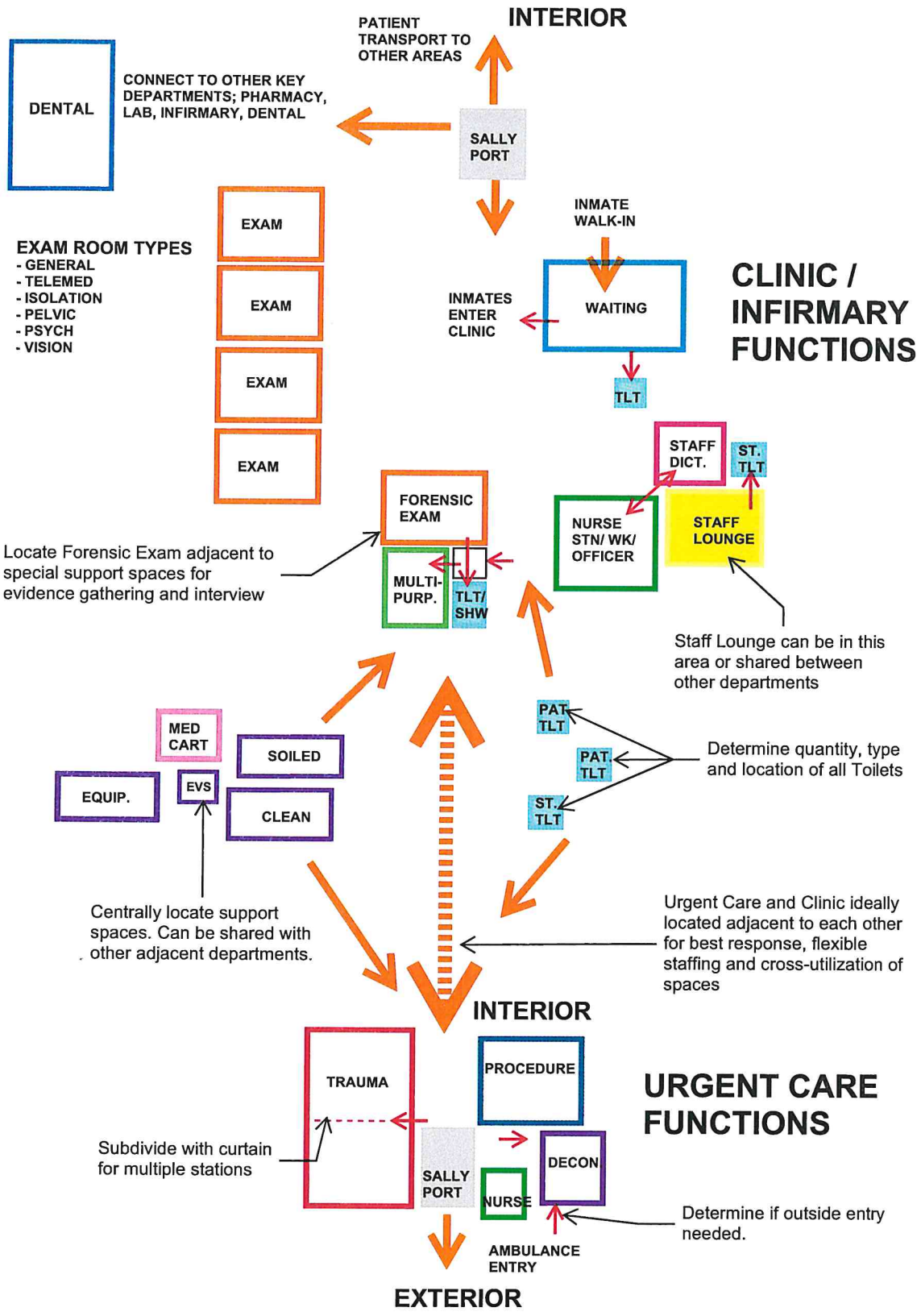


16 BED CELL (GERIATRIC - DEMENTIA) HOUSING UNIT

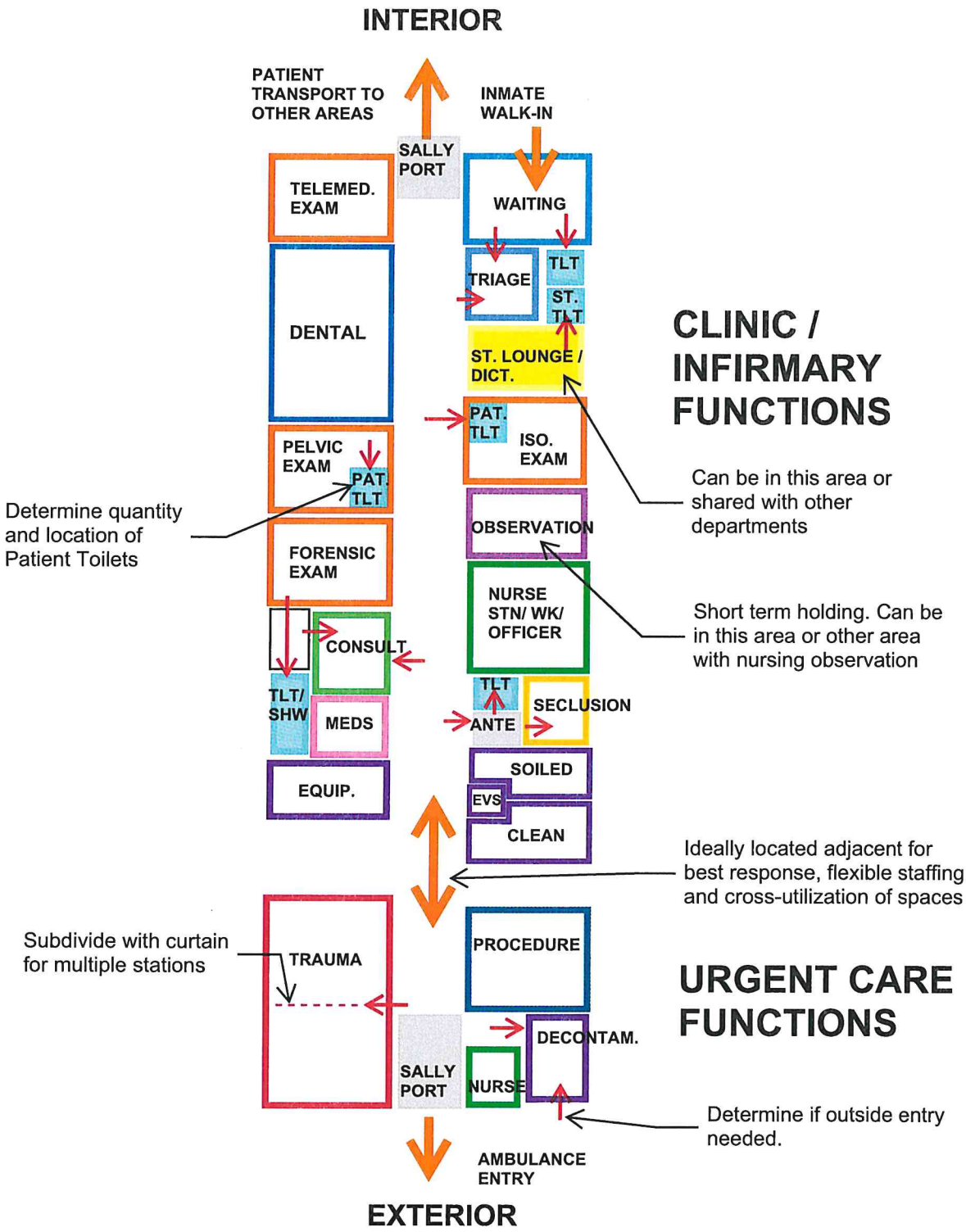
Medical Wing Adjacency Diagram – Housing Units



Medical Wing Adjacency Diagram – Clinic – Infirmary – Urgent Care



Medical Wing Adjacency Diagram – Clinic – Infirmary – Urgent Care: Example Layout



Occupancy Schedule

Occupancy Schedule	Space Type	Schedule
	Medical Wing	24/7
Other		

Indoor Environmental Quality Requirements

General Requirements	HVAC & Plumbing systems, components, and controls shall be designed and specified in accordance with the FBC, all applicable ASHRAE standards, and County construction standards. Enhancement of indoor air and water quality should be considered when specifying systems, components, and controls as to limit waterborne and airborne viruses, bacteria, and mold particles, limit excessive moisture and humidity, limit chemical pollutants, and control odors.
VOC Materials	Provide Low VOC materials, mastics, adhesives etc.

Specific Space Requirements			
Space Type	**Desired Space Temperature** (°F, summer / winter)	**Desired Space Humidity** (%RH, summer / winter)	**Ventilation OutsideAir Conditions** (Dry Bulb (DB), Mean Coincidental Wet Bulb (MCWB))
	Meet ASHRAE 55-2020 (FECC 2020)		
Medical and Mental Health	72/70	50%/50%	ASHRAE 0.4% Cooling DB/MCWB ASHRAE 99.6% Heating DB
Education Areas	72/70	50%/50%	
Holding Areas	72/70	50%/50%	
Kitchen	73/70	50%/50%	
Offices	72/70	50%/50%	
Conference Rooms	72/70	50%/50%	
IT/Data Rooms	72/70	50%/50%	
Staff Lounge	72/70	50%/50%	
Laundry	72/70	50%/50%	
Vestibule	73/68	55%/55%	
Lobby	72/70	50%/50%	
Local Temperature Control	Temperature control on the local and system levels shall be designed per the Florida Building Code – Mechanical 7th Edition and approved by the County.		
After Hours HVAC Override	Coordinate specific space and unit requirements for after-hours HVAC temperature and thermal control overrides with the County.		

Acoustical	
Minimum Requirements	- STC 45 minimum unless otherwise noted.

Lighting Quality

Lighting Controls	Occupancy and vacancy sensors, in non-detention areas, and common spaces within the detention areas that are protected from occupant abuse, network controls for housing areas to the security detention system for space override by facility staff. Local lighting controls shall be provided. Detention grade shall be provided within the housing areas.
Daylighting	Maintain line-of-sight to outdoors. Daylightdimming in all areas except for housing bedrooms. Control line of sight through 3 types: 1) controlled 2) uncontrolled 3) borrowed light.
Lighting Levels	Per Illuminating Engineering Society of North America (IESNA) Recommendations and the American Correctional Association (ACA).
Occupancy Sensor Time Delays	15 minutes to OFF. Use vacancy sensors in offices (manual ON, auto OFF)
Lighting Systems	High Efficiency Fixtures (LED only with dimming drivers)

6.0 | Equipment and System Expectations

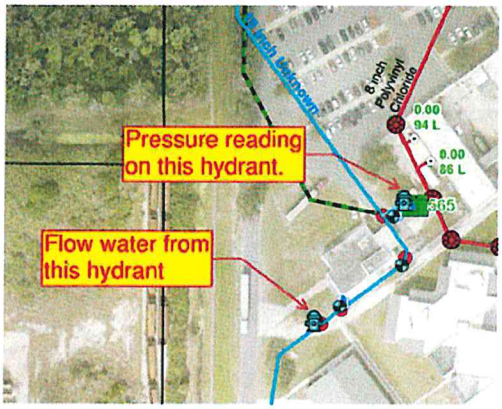
This section describes the desired level of quality, reliability, type, automation, flexibility, and maintenance requirements for each of the systems to be commissioned. When known, specific efficiency targets, desired technologies, or preferred manufacturers for building systems are provided.

First cost and maintenance cost should be addressed when determining which systems to use. Design team shall recommend solutions that demonstrate "value today" operational efficiencies, future flexibility, quality and ease of constructability and maintenance. A Life Cycle Cost Analysis (LCCA) shall be performed on a minimum of three (3) proposed HVAC systems. The LCCA shall demonstrate that the chosen HVAC system is the most efficient when considering first cost, operational cost, maintenance cost, and replacement cost for a 25-year life cycle.

Electrical & Lighting Controls	
Estimated Useful Life	
Source of Normal Power	Normal power shall be from (2) pad mount 480/277V utility transformers sized to building electrical service design requirements and provided by the local utility company (Florida Power and Light). Coordination with the utility company shall be required to confirm local power availability and site locations for these
Source of Emergency Power	Emergency power shall be from an engine driven generator sized to provide back-up power to the entire building. Onsite fuel storage (diesel, natural gas, liquid propane, etc.) used to serve the generator shall be provided with a minimum 96 hour run time capacity. If located on the building exterior, the generator shall be protected by an impact resistant, weatherproof enclosure rated for the local wind load category. The generator shall have an engine fuel system, automatic battery charger and coolant jacket heater powered from a local electrical panel. A 120V receptacle and lighting to service the unit shall be included as part of the installation.
Source of Low Voltage Power	The source of low voltage power within the facility shall be energy efficient dry type 480 volt delta to 208/120 volt 3 phase 4 wire transformers connected to normal and emergency power sources. These transformers shall be sized to the required loads and provide power to 208/120 volt panelboards within the facility.

Type of Lighting	LED light fixtures with a minimum efficacy of 100 lumens per watt. Fixtures in detention areas shall be recessed correctional type for a minimum-security facility. Color temperature shall be based on the spaces needs. Housing areas shall be 3500k maximum. All other areas shall have 4000K color temperature. Bedrooms shall be equipped with amber LED night lights for bed checks.
Mechanical (Ventilation, Air Conditioning, Refrigeration, HVAC Controls)	
Estimated Useful Life	20 years; Commercial Standard Grade
Source of Heating	Source(s) of heating shall be designed and sized in accordance with the Florida Building Code – Mechanical 7th Edition and the Florida Building Code – Energy Conservation 7th Edition. Source(s) of heating can include, but are not limited to, water, natural gas, propane, HFC's, and electric resistance. A Heat Reclaim System should be considered when designing source(s) of heating. Natural gas provider for this area is Tampa Electric (TECO).
Source of Cooling	Source(s) of cooling and refrigeration shall be designed and sized in accordance with the Florida Building Code – Mechanical 7th Edition and the Florida Building Code – Energy Conservation 7th Edition. Refer to "Specific Space Requirements" above for required space temperature and humidity setpoints. Redundancies in the plant-level refrigeration and pumping equipment shall be required and shall be designed to result in an "N+1" redundancy installation.
Source of Ventilation	Source(s) of ventilation shall be designed and sized in accordance with the Florida Building Code – Mechanical 7th Edition and the Florida Building Code – Energy Conservation 7th Edition. Refer to "Specific Space Requirements" above for ventilation air entering conditions. An Energy Recovery System and/or Demand-Controlled Ventilation should be considered when designing source(s) of ventilation. All envelope penetrations required for ventilation (outside air or
Building/Space Pressurization	Overall building pressure shall be positive, as to prevent unnecessary infiltration, uncomfortable drafts, and stratification. Negative pressure shall be maintained in all applicable medical and treatment areas. Specific space pressurizations shall be designed in accordance with the Florida Building Code – Mechanical 7th Edition.
Building Automation	
Estimated Useful Life	20 years; Commercial Standard Grade
System Architecture	As approved by the County.
Levels of User Access	As approved by the County.
Web Based or Local	As approved by the County.
Alarm Capability	As approved by the County.
Connections to Other Systems	A complete Building Automation System (BAS) shall be designed and specified in coordination with both the County, Facility Management, and the IT/Systems design-build team to ensure proper operation, reporting, and sequencing. All energy consuming equipment shall be controlled and monitored via the BAS, unless otherwise approved by the County. Interfacing and interoperability between the existing Facility BAS and new facility will be of the utmost importance and shall be coordinated with the required parties while in the early stages of design.
Plumbing (Domestic Hot Water)	
Estimated Useful Life	20 years; Commercial Standard Grade

Domestic Water	The water supply and distribution system shall be designed in accordance with the Florida Building Code – Plumbing 7th Edition, the Florida Building Code – Mechanical 7th Edition, and any additional AHJ requirements. Redundancies in
Desired Hot Water Temperatures	Unless alternatives are approved by the County and/or the AHJ, potable water shall be stored at 140 Degrees Fahrenheit and delivered to mixing valves at each individual fixture. Fixture temperature setpoints shall be set in accordance with the Florida Building Code – Plumbing 7th Edition and the Florida Building Code – Energy Conservation 7th Edition.
Life Safety / Fire Protection	
Estimated Useful Life	
Fire Suppression/Automatic Sprinkler System(s)	As required by chapter 9 of the FBC, the new facility will be protected throughout with automatic wet pipe sprinkler system(s) designed and installed in accordance with the Florida Fire Prevention Code (FFPC) and NFPA 13. Mechanical rooms, storage rooms, electrical rooms and janitors' closets will be classified as ordinary hazard, group 1 (OH-1) in accordance with NFPA 13. All other area of the building will be classified as light hazard (LH). Special building features, such as trash chutes, laundry chutes, or other as provided by the design-build team shall be designed per the requirements outlined in the FFPC and NFPA 13. The design-build team should specify institutional style sprinklers in areas where inmates could vandalize sprinklers and activate the system.
Fire Suppression/Standpipe System	A Class III standpipe system is required for buildings that meet the following conditions outlined in the FBC section 905: 1. The building is four or more stories above or below grade plane. 2. The floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access. 3. The floor level of the lowest story is located more than 30 feet below the lowest level of fire department vehicle access. Class I standpipes are allowed in lieu of Class III standpipes, when the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.1.1.

Fire Suppression/Water Supply	A waterflow test was performed by Fisher Engineering on July 20, 2021, and was witnessed by representatives from the Manatee County Central Jail. The test was conducted on hydrants off the existing private fire service water main (see figure below).  The flow test results are as follows: Static = 76 psi Residual = 68 psi Flow = 1,150 gpm The ability of the existing water supply to meet the demands of the building fire water needs will depend on the final size and configuration of the proposed building by the design-build contractor. Final determination of the adequacy of the existing water supply is the responsibility of the design-build contractor and must be based on a water flow test performed within 12 months of the final design. This includes evaluation of the amount of water available from the municipal supply, the need for additional water supply via a fire water storage tank, and the need for a fire pump to boost the available water supply to meet the building demands.
Fire Alarm	The building is designated primarily as Group I-2, Condition 2 and Group I-3 occupancy and therefore a fire alarm system, automatic smoke detection system and an occupant notification system is required in accordance with Sections 907.2 and 907.5 of the FBC. All areas will be provided with audible notification appliances (speakers) and visible notification appliances (strobes) in accordance with FBC Sections 907.5.2.2 and 907.5.2.3 respectively. Audible notification will be provided in all occupiable areas of the building and visible notification will be provided in all public and common use areas of the building. A fully addressable fire alarm system with voice evacuation capabilities shall be provided to protect the entire facility.
Paging / Phone System	The telephone system shall have paging capability with connection to the standby emergency generator.

Physical Security / Detention

General Description

Physical Security/Detention will be designed to include all labor, equipment, supplies and materials for the complete installation of fully functional Physical Security/Detention systems. Design will include the following:

Employ a single pre-approved Detention Equipment Contractor (DEC) having met all the requirements

listed in 111900 Section. DEC Contractor shall list his Detention Equipment Contractor on the bid form. Contracting for separate portions of work under Sections 111900 through 111983 is prohibited.

Detention Equipment Contractor (DEC):

1. The Detention Equipment Contractor shall be responsible for submitting an aggregate bid to the General Contractor for all Division 11 Detention and Security work described herein and elsewhere in the Contract Documents.
2. The Detention Equipment Contractor shall be responsible for the interfacing and integration of products and systems with the General Contractor and the Security Electronics Contractor (SEC) to ensure that the entire work of this project will be carried out in an orderly, complete and coordinated fashion.
3. The Detention Equipment Contractor shall provide a full time Superintendent to supervise the work in this section. The Superintendent shall be at the site when the Detention Equipment Contractor's work is being performed at the site.

Quality Assurance

The Detention Equipment Contractor (DEC) shall furnish detention equipment as described in these sections, and shall coordinate this equipment with his manufacturers, fabricators, installers, and with work by others. Questions on the detention equipment must be directed to the Detention Equipment Contractor before being directed to the General Contractor, Architect/Engineer or Owner.

Acceptable Pre-qualified Detention Equipment Contractors:

1. CML Security; Broomfield, CO 80023; 720/466-3650
2. Cornerstone Detention Products, Inc.; Tanner, AL 35671; 877/374-7311
3. Jails Correctional Products; Minster, OH 45865; 419/628-4428
4. Montgomery Technology Systems, LLC; San Antonio, TX 78216; 334/382-7441
5. Noah Detention Construction; Niceville, FL 32578; 850/279-3257
6. Pauly Jail Building Co., Inc.; Noblesville, IN 46062; 317/580-0833
7. SecurTec Inc.; Denham Springs, LA 70726; 225/380-5536
8. Southern Folger Detention Equipment Company; San Antonio, TX 78223; 210/533-1231
9. Stronghold Industries; Racine, WI 53406; 262/886-1077
10. Sweeper Metal Fabricators Corp.; Drumright, OK 74030; 918/352-2133
11. U.S. Security Systems, Inc.; Dadeville, AL 36853; 334/273-8778
12. Valley Security Company; Elgin, IL 60177; 847/888-9972

Other Detention Equipment Contractor(s) who intend(s) to submit a bid on this section of the Specifications shall submit the following data to the Architect in writing twenty (20) days prior to bid date and shall be approved by addendum ten (10) days prior to bid date. Verbal approval will not satisfy this requirement. Grounds for disqualification shall exist if it is proven that the information submitted is inaccurate or, in the opinion of the Architect, does not satisfy the requirements.

1. Contractor Qualification Statement AIA-305A.
2. List of projects under construction. The list shall include the following information for each project:
   a. Name and location of installation
   b. General Project Description
   c. Name of Owner's representative and phone number
   d. Name of Architect/Engineer and phone number
   e. Name of General Contractor and phone number
   f. Contract amount
   g. Percent Complete

h. Scheduled completion date

3. Evidence that this firm or principal members have a minimum of ten (10) years' experience in successfully completing projects of equal scope and magnitude with products as specified. Submit a list of ten (10) projects of similar scope that have been completed and operational for a minimum of three (3) years. The list shall include the following information for each project:
   a. Name and location of installation
   b. General Project Description
   c. Date of occupancy by Owner
   d. Name of Owner's representative and phone number
   e. Name of Architect/Engineer and phone number
   f. Name of General Contractor and phone number
   g. Contract amount
   h. Percentage of the cost of the work performed with your own forces.
4. List of key personnel and qualifications.
5. List of all projects in the past five (5) years in which this firm has been involved in litigation with a City, County, State or Federal government agency. Include the current status of each legal action, and the other parties to the litigation.
6. Letter from an approved and A-15 rated bonding company stating that the Detention Equipment Contractor can be bonded for this complete project if awarded the Contract.
7. Financial Statement for previous fiscal year.
8. List of manufacturers of all equipment intended to be bid as part of your work.
9. Letters from manufacturers of detention hollow metal door and frames, detention hardware and detention sliding door locking devices stating that your firm will be able to purchase all materials required for this project.
10. Letters from specified detention hardware and detention sliding door locking devices manufacturers that your firm is a qualified installer of their products.

Materials required for installation by the Detention Equipment Contractor may be provided by any of the detention equipment manufacturers included in the Project Manual. The Detention Equipment Contractor shall receive the materials and assume complete responsibility for the detailing, coordination, erecting, installation and performance and warranty of such work.

The Detention Equipment Contractor shall be required to provide a labor and materials payment bond in the amount of 100% of the contract sum.

Coordination

1. Coordinate detention work to ensure efficient and orderly installation of each part of detention work. Coordinate detention work that depends on each other for proper installation, connection, and operation.
   a. Develop special procedures required for coordination of detention work.
   b. Coordinate installation of different detention components to ensure maximum accessibility for required maintenance, service, and repair.
   c. Coordinate provisions to accommodate detention work scheduled for later installation.

2. Coordinate selection of detention products for compatibility.

3. Assemble and coordinate Shop Drawings for detention work provided by separate entities responsible for detention work. Submit detention work submittals simultaneously as a group along with applicable Coordination Drawings.

4. Coordinate installation of anchorages and embedment's for detention work. Obtain and distribute, to parties involved, setting drawings, templates, and directions for installing

anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

5. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing detention work to comply with indicated requirements.

6. Coordinate protection of detention work.

7. Coordinate preparation of Project Record Documents for detention work and integrate information from entities responsible for detention work to form one combined record.

8. Coordinate preparation of operation and maintenance manuals for detention work and integrate information from entities responsible for detention work to form one combined record.

Required Shakedown Period

1. The Detention Equipment Contractor shall coordinate with the General Contractor to establish a shakedown period for the detention work. The shakedown period shall be a minimum of thirty days and shall be completed after Substantial Completion.

2. Prior to initiation of the shakedown period, all work related to and supporting the detention material shall be completed.

3. The Detention Equipment Contractor shall maintain a log of all anomalies, malfunctions, and repairs encountered during the shakedown period. The log shall be submitted to the Architect for assessment at the conclusion of the shakedown period.

4. Training of the Owner's staff shall occur after substantial completion.

Warranty

1. The Detention Equipment Contractor shall warrant materials furnished under 111900 Section to be free from defects in material and workmanship. The Detention Equipment Contractor shall provide all labor and materials to repair or replace defective detention equipment work or components.

2. The Detention Equipment Contractor shall maintain the quantities of spare parts provided to the Owner in the original inventory during the warranty period. Components used for repair shall be replaced immediately and Owner shall not be charged for shipping or other costs unless failure is due to abuse or negligence.

3. The Owner and/or Owner's Representative shall notify the Detention Equipment Contractor on a twenty-four (24) hour phone number (supplied by the Detention Equipment Contractor), outlining defects in the detention equipment. The Detention Equipment Contractor shall respond to this call within two hours with a return call by a service technician.

4. The warranty shall exclude vandalism, misuse, acts of nature or abuse.

5. The warranty shall provide for a maximum response time (service technician on the site) of twenty-four (24) hours on the first occurrence and twelve (12) hours on the second occurrence. The Detention Equipment Contractor shall also guarantee shipment of any part request within twenty-four (24) hours during the warranty period.

6. Record maintenance and service calls by signing the Owner's project logbook maintained on

the premises.

Execution and Examination

1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of detention work.
   a. Examine roughing-in for embedded and built-in anchors to verify actual locations of detention work connections before detention work installation.
   b. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of detention work.

2. Inspect built-in and cast-in anchor installations before installing detention work to verify that anchor installations comply with requirements. Prepare inspection reports.
   a. Where inspections indicate that anchors do not comply with specified requirements, re-inspect after repairs or replacements are made.
   b. Perform additional inspections to determine compliance of replaced or additional work. Prepare inspection reports.

3. Verify locations of detention work with those indicated on Coordination Drawings.

Field Quality Control

1. Observe field welding of detention work and anchorages.
2. Verify that detention work is installed and connected according to the Contract Documents.
3. Verify that electrical wiring installation complies with manufacturer's submittal and written installation requirements in Division 26 Sections.
4. Observe startup service of detention work.
5. Observe installation and startup checks of detention work according to manufacturer's written instructions.
6. Inspect installed detention work to verify compliance with requirements. Prepare inspection reports and indicate compliance with and deviations from the Contract Documents.
   a. Perform additional inspections to determine compliance of replaced or additional work. Prepare inspection reports.
   b. Prepare field quality-control certification that states installed detention work and its installation complies with requirements in the Contract Documents.
7. Testing: After installing detention work and after electrical circuitry has been energized, test detention work for compliance with requirements.
   a. When testing reveals detention work not in compliance with requirements, perform additional random testing to determine extent of noncompliance.
   b. Where test results indicate that detention work does not comply with specified requirements, retest after repairs or replacements are made.
   c. Perform additional testing and inspecting, at Contractor's expense, to determine compliance of replaced or additional work.

Security Electronics Systems

General Description

Systems will be designed to include all labor, equipment, supplies and materials for the complete installation of fully functional Security Electronics systems. Design will include the following system infrastructure including but not limited to:

1. 120VAC power
2. Uninterruptable Power Supplies

3. Conduit
4. Back boxes
5. Backup Generator
6. PLC Control/Access control systems including:
7. PLC Graphic User Interface
8. PLC Control Systems
9. Proximity readers/keypads
10. Access control panels
11. Low voltage power supplies
12. Servers
13. Control/Monitoring Workstations
14. Control cabling

CCTV (Video Surveillance Systems) systems including:

1. CCTV (Video Surveillance Systems) cameras
2. Network Switches
3. Control/Viewing Workstations
4. Displays
5. Network storage
6. Video Management and Viewing Software
7. CCTV (Video Surveillance Systems) cabling
8. Video Analytics

Alarm/Intrusion Detection system including:

1. Detection hardware including door position and request to exit switches, duress/panic pushbuttons, motion detectors.
2. Alarm panels
3. Low voltage powers supplies
4. Keypads
5. Monitoring workstations
6. Alarm/intrusion detection cabling

Intercommunications/Paging Systems:

1. Intercom controller/head end
2. Monitoring/Controls workstation
3. Amplification
4. Speakers
5. Intercom master stations
6. Intercom substations
7. Intercom cabling
8. Systems testing
9. Documentation and Submissions
10. Warranty

<u>Contractor Qualifications</u>

1. Qualified Contractors shall have been in existence for a minimum of 5 years.
2. The contractor shall specialize in the installation of Security Electronics systems of equal scope, quality, type, and complexity to that required herein.
3. The Contractor shall be a member in good standing of ASIS.
4. The Contractor will own all required testing equipment. Technicians responsible for operating testing equipment will have successfully completed all manufacturers approved training courses for the successful operation of the testing equipment.
5. The Contractor shall be an authorized dealer for at least 75% of the primary components specified for at least one year prior to bid time, including the PLC, CCTV (Video Surveillance

Systems), and Access Control Solutions.

6. The principal members and key personnel to be assigned to the project shall each have a minimum of 10 years' experience in completing Security Electronics projects of equal scope, quality, type, and complexity to that required herein.
7. Minimum of five Security Electronics systems, of similar size and scope, which have been installed and operational for a minimum of one year.
8. On-site personnel will have successfully completed all training requirement set forth by the primary Security Electronics product manufacturers. A copy of the training certificates will be available upon request.

Project Lead Technician

1. Trained and certified by the primary Security Electronics product manufacturers specified for the project.
2. Minimum 5 years experience as Lead Technician on Security Electronics System projects of similar size and scope.
3. ASIS PSP certification.

Project Technicians

1. Minimum 2 years' experience on projects of similar size and scope.

Applicable Codes, Guidelines, and Standards

1. Systems will be designed following industry recognized standards.
2. System cabling will be designed following EIA/TIA standards as outlined in BICSI's Telecommunications Distribution Methods Manual (TDMM). Current version.
3. All work shall conform to the National Electrical Code (NEC) and to applicable National Fire Protection Association (NFPA) codes.
4. All work shall conform to all Federal, State and local ordinances.
5. Where applicable, all fixtures, equipment and materials shall be as approved or listed by the following:
6. Factory Mutual Laboratories (FM).
7. Underwriters Laboratories, Inc. (UL).
8. National Electrical Manufacturers Association (NEMA).
9. References to the National Electrical Code and National Fire Protection Association (NFPA) are a minimum installation requirement standard. Design drawings and specification sections shall govern in those instances where requirements are greater than those specified in the NEC and NFPA.
10. All material and equipment shall be listed, labeled or certified by Underwriters' Laboratories, Inc. where such standards have been established. Equipment and material which are not covered by UL Standard will be accepted provided equipment and material are listed, labeled, certified or otherwise determined to meet safety requirements of a nationally recognized testing laboratory. Equipment of a class, which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe will be considered, if inspected or tested in accordance with national industrial standards such as NEMA, ICEA or ANSI. Evidence of compliance shall include certified test reports and definitive shop drawings.
11. Florida Model Jail Standards

Quality Assurance

1. All Security Electronic systems shall include a minimum 2-year warranty on all parts and labor.
2. Systems shall be comprised of only new equipment and materials required (less than 1 year from manufacture), unused without blemish or defect.
3. Each major component of equipment shall have the manufacturer's name, address, and model number and rating on a plate securely affixed in a conspicuous place. The nameplate of a distributing agent will not be acceptable. NEMA Code Ratings, UL label, or other data which is die-stamped into the surface of the equipment shall be stamped in a location easily visible.

Performance as delineated in schedules and in the specifications shall be interpreted as minimum performance. In many cases, equipment is oversized to allow for pickup loads which cannot be delineated under the minimum performance.

4. All equipment of the same type shall be the product of one manufacturer.
5. The original factory condition of manufactured equipment shall not be modified.
6. All work shall meet or exceed the standards and procedures of the following:
    a. National Fire Protection Association (NFPA): NFPA 70, NFPA 72, NFPA 90A
    b. National Electrical Code (NEC)
    c. California Electrical Code (CEC)
    d. American National Standards Institute (ANSI/EIA/TIA)
    e. UL1069
    f. UL2560
    g. Facility Guidelines Institute for Hospitals and Outpatient Facilities
    h. IEEE 802.3: Ethernet-based LANs (multiple standards) 2014
    i. IEEE 1100: Recommended Practice for Powering and Grounding Electronic Equipment, 2005
    j. National Electrical Code - NFPA 70-2017 Edition
    k. American National Standards Institute (ANSI)
    l. National Electrical Manufacturers Association (NEMA)
    m. American Society of Testing Materials (ASTM)
    n. Institute of Electronic & Electrical Engineers (IEEE)
    o. Underwriters Laboratory (UL)
    p. Americans With Disabilities Act (ADA)

System Design

1. Expansion areas of the jail will include necessary upgrades to the existing security electronics systems. Existing Security Electronics systems shall be modified to accommodate system needs of expansion including modifications to head end/control electronics and programming.
2. Security Electronics closets are required within the expansion for housing of Security Electronics Systems headend electronics.
3. System electronics shall be sole-sourced to match existing system electronics.
4. System electronics will utilize the current software applications. When necessary, existing software versions shall be upgraded to current version.
5. Provide PLC based control system. System will be used for all control aspects of the security electronics system. System will integrate with the existing PLC control system allowing for fail over/take over from the existing master control.
6. Provide access control system allowing for control of doors. Access control will integrate with PLC control system. System will integrate with existing access control network allowing for shared database.
7. Provide CCTV (Video Surveillance Systems) system capable of viewing, monitoring, and storing camera images for all areas of the expansion. System will integrate with existing CCTV (Video Surveillance Systems) system allowing for remote viewing and monitoring of new cameras.
8. Provide intercom/paging system. System will allow for two-way communications between remote areas and control locations, as well as zoned paging throughout the expansion area. System will integrate with existing intercom/paging system allowing intercom calls to be routed to master control during fail over/take over scenarios. System will also accommodate paging capabilities from master control.
9. Provide building alarm system capable of providing visual and audible alarm notifications. Alarm devices include panic pushbuttons, door position switches, and motion detection devices. System will integrate with existing alarm notification systems allowing for notification at master control during fail over/take over scenarios.

Information Technology Systems

General Description

Systems will be designed to include all labor, equipment, supplies and materials for the complete installation of fully functional Information Communications Technology cabling systems. Design will include the following:

1. System infrastructure including but not limited to
    a. 120VAC power
    b. Uninterruptible Power Supplies
    c. Conduit
    d. Back boxes
    e. Backup Generator
2. Telecommunications Grounding network
3. Horizontal cabling
4. Work area outlets including jack and faceplate
5. Patch panels
6. Backbone fiber optic cabling network
7. Backbone cable terminations
8. Telecommunications closet layout
9. Cellular Distributed Antenna System DAS
10. Emergency Responder Radio Bi-directional Antenna System (BDA)
11. Communication duct bank
12. Equipment racks, cable management
13. Systems testing
14. Documentation and Submissions
15. Warranty

Contractor Qualifications

1. Qualified Contractors shall have been in existence for a minimum of 5 years.
2. The contractor shall specialize in the installation of Telecommunications systems of equal scope, quality, type, and complexity to that required herein.
3. The Contractor shall be a member in good standing of BICSI.
4. The Contractor will own all required testing equipment. Technicians responsible for operating testing equipment will have successfully completed all manufacturers approved training courses for the successful operation of the testing equipment.
5. The Contractor shall be an authorized dealer for at least 75% of the primary components specified for at least one year prior to bid time, including the horizontal cabling solution.
6. The principal members and key personnel to be assigned to the project shall each have a minimum of 10 years' experience in completing Telecommunications projects of equal scope, quality, type, and complexity to that required herein.
7. Minimum of five Telecommunications systems, of similar size and scope, which have been installed and operational for a minimum of one year.
8. On-site personnel will have successfully completed all training requirement set forth by the primary Telecommunications product manufacturers. A copy of the training certificates will be available upon request.
9. Project Lead Technician
    a. Trained and certified by the primary Telecommunications product manufacturers specified for the project.
    b. Minimum 5 years' experience as Lead Technician on Telecommunications System projects of similar size and scope.

c. BICSI RCDD.

10. Project Technician

    a. Minimum 2 years' experience on projects of similar size and scope.

Applicable Codes, Guidelines, and Standards

1. System will be designed following EIA/TIA standards as outlined in BICSI's Telecommunications Distribution Methods Manual (TDMM). Current version.
2. All work shall conform to the National Electrical Code (NEC) and to applicable National Fire Protection Association (NFPA) codes.
3. All work shall conform to all Federal, State and local ordinances.
4. Where applicable, all fixtures, equipment and materials shall be as approved or listed by the following:

    a. Factory Mutual Laboratories (FM).
    b. Underwriters Laboratories, Inc. (UL).
    c. National Electrical Manufacturers Association (NEMA).

5. References to the National Electrical Code and National Fire Protection Association (NFPA) are a minimum installation requirement standard. Design drawings and specification sections shall govern in those instances where requirements are greater than those specified in the NEC and NFPA.
6. All material and equipment shall be listed, labeled or certified by Underwriters' Laboratories, Inc. where such standards have been established. Equipment and material which are not covered by UL Standard will be accepted provided equipment and material are listed, labeled, certified or otherwise determined to meet safety requirements of a nationally recognized testing laboratory. Equipment of a class, which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe will be considered, if inspected or tested in accordance with national industrial standards such as NEMA, ICEA or ANSI. Evidence of compliance shall include certified test reports and definitive shop drawings.
7. Florida Model Jail Standards

Quality Assurance

1. All horizontal cabling systems shall include a minimum 20-year manufacturers Channel warranty of the installed technology system.
2. Systems shall be comprised of only new equipment and materials required (less than 1 year from manufacture), unused without blemish or defect.
3. Each major component of equipment shall have the manufacturer's name, address, and model number and rating on a plate securely affixed in a conspicuous place. The nameplate of a distributing agent will not be acceptable. NEMA Code Ratings, UL label, or other data which is die-stamped into the surface of the equipment shall be stamped in a location easily visible. Performance as delineated in schedules and in the specifications shall be interpreted as minimum performance. In many cases, equipment is oversized to allow for pickup loads which cannot be delineated under the minimum performance.
4. All equipment of the same type shall be the product of one manufacturer.
5. The original factory condition of manufactured equipment shall not be modified.
6. All work shall meet or exceed the standards and procedures of the following:

    a. National Fire Protection Association (NFPA): NFPA 70, NFPA 72, NFPA 90A
    b. National Electrical Code (NEC)
    c. California Electrical Code (CEC)
    d. American National Standards Institute (ANSI/EIA/TIA)

e. TIA-568-D.0: Generic Telecommunications Cabling for Customer Premises Standard, 2015
f. TIA-568-D.1: Commercial Building Telecommunications Cabling Standard, 2015
g. TIA-568-C.2: Telecommunications Cabling, Copper Component and Cabling Standard, 2014
h. TIA-568-C.3: Optical Fiber Cabling Component Standards, 2011
i. TIA-568-C.4: Broadband Coaxial Cabling Component Standards, 2011
j. TIA-569-B: Commercial Building Standard for Telecommunications Pathways and Spaces, 2011
k. TIA-606-A: Administration Standard for The Telecommunications Infrastructure of Commercial Buildings, 2012
l. TIA-607-B: Telecommunications Bonding and Grounding for Customer Premises, 2011
m. TIA-942: Telecommunications Infrastructure Standard for Data Centers, 2011
n. IEEE 802.3: Ethernet-based LANs (multiple standards) 2014
o. IEEE 1100: Recommended Practice for Powering and Grounding Electronic Equipment, 2005
p. Intertek/ETL: Applicable verifications
q. ISO 11801: Generic Cabling for Customer Premises (multiple standards)
r. National Fire Protection Association (NFPA)
s. National Electrical Code- NFPA 70-2017 Edition
t. American National Standards Institute (ANSI)
u. National Electrical Manufacturers Association (NEMA)
v. American Society of Testing Materials (ASTM)
w. Institute of Electronic & Electrical Engineers (IEEE
x. Underwriters Laboratory (UL)
y. Americans With Disabilities Act (ADA)

System Design

1. Coordination is required throughout the design process to assure provisions are met for support of the County furnished and installed communications and network systems.
2. Expansion areas of the jail will include necessary upgrades to existing Information Communication Technology network.
3. An Intermediate Distribution Facility (IDF) equipment room is required in the expansion. When warranted, Telecommunication Rooms (TR) will be required with a minimum of one room per floor. Location and sizes of tele/data closets will be coordinated allowing horizontal cabling to remain within the distance limitations stated in industry standards.
4. The IDF room will be tied to the Facilities existing Main Distribution Facility (MDF) via fiber optic backbone cable and if necessary, copper backbone cable. For consistency, the new equipment will be specified to match the current wire and patch panel system. A fiber optic back bone will connect the IDF to the MDF. Additional fiber optic backbone is required between the IDF and all TR's. A copper back bone between tele/data closets will be included for support of traditional analog connectivity. Sufficient pairs with 25% growth shall be provided. Coaxial backbone is also required between the MDF and the IDF allowing for expansion of the facility CATV system.
5. Telecommunications spaces shall be inclusive of equipment racks, cable management, plywood backboard, cable ladder, telecommunications grounding, 120VAC power, and conduit infrastructure.
6. Structured cable systems will include a Category 6a solution that is in accordance with ANSI/TIA/EIA, and industry standards. Drops will be located adjacent staff workstations, networked control systems, A/V systems field equipment, and other locations as required and identified by the user. Drops will also be provided throughout the building for support of wireless LAN. All necessary cross connects, patch panels, and patch cables shall be provided resulting in a completed and functional system.

7. Design will include a technical grounding network. The grounding network will interconnect all tele/data closets, equipment racks, Building Entrance Termination, and cable tray to the main building ground in accordance with industry standards. Surge protection is required for all copper cable entering and existing the expansion. Coordinate grounding of surge protection to grounding network.
8. Broadband Community Access Television System (CATV) is to be installed throughout the facilities. Expansion of the existing system shall include distribution amplifiers, splitters, tap-offs, backbone, and horizontal cabling, and outlets at all designated locations.
9. Independent Distributed Antenna Systems (DAS) and Bi-directional Antenna Systems (BDA) shall be provided for amplification of Cellular and Emergency Radio service. BDA system shall comply with NFPA 72, FCC part 90, and recognized industry standards. BDA system shall interface with facility fire alarm system for monitoring purposes. A qualified radio frequency engineering firm will be required to conduct an evaluation of all buildings once the exterior of the building is sealed and a minimum of 80% of all interior structure is constructed. Testing shall be conducted on 25'x25' grids, or a minimum of 40 test points. A calibrated spectrum analyzer shall be used for all testing. Antenna system shall be comprised of donor antenna, cabling, booster, tap-offs, and emitters. Delivered audio quality (DAQ) 3.4 or better as defined by TIA TSB 88 in 95% or more of covered area. Recorded downlink signal strength of -95 dBm or better in 95% or more of covered area. Antenna system shall be grounded in compliance with R56 standards. Provisions shall include a redundant donor antenna with redundancy switch. Engineering firm shall be responsible for verifying radio bands utilized for emergency radio service.

Testing

1. Fiber Cable Testing

    a. Test in accordance with ANSI/TIA/EIA 526-7 and 526-14-A-98.
    b. Test all fiber optic cabling using a digital cable analyzer similar to a Fluke DSP-4000 with fiber test adaptors, and certify that the system is complete and functional.
    c. All fiber testing shall be performed on all fibers in the completed end to end system.
    d. Every fiber shall be tested in both directions with a light source tester.
    e. Maximum allowable attenuation for 50 micron fiber shall be 3.0 dB per km at 850nm and 1.0 dB per km at 1300 nm.
    f. Maximum allowable attenuation for Single Mode OS1 fiber shall be 1.0 dB for 1310nm and 1550 nm, per km.

2. Copper Backbone Cable Testing

    a. Test in accordance with ANSI/TIA/EIA TSB 67.
    b. Test all Category 3 cabling for continuity and performance.

3. Horizontal Copper Cable Testing

    a. Test all Category 6a horizontal cabling using a digital cable analyzer and certify that the system is complete and functional.
    b. A level IIe or better test unit is required and must be updated to include the requirements of ANSI/TIA/EIA-568-B.
    c. The basic tests required are:

        i. Wire Map
        ii. Length
        iii. Attenuation
        iv. NEXT (Near and crosstalk)
        v. Return Loss
        vi. Propagation Delay

vii. Delay Skew
viii. PSNEXT (Power sum near-end crosstalk loss)
ix. PSELFET (Power sum equal level far-end crosstalk loss)

Audio/Visual Nurse Call Systems

General Description

Systems will be designed to include all labor, equipment, supplies and materials for the complete installation of fully functional Audio/Visual Presentation and Nurse Call Communication systems. Design will include the following:

- System infrastructure including but not limited to
    - 120VAC power
    - Uninterruptable Power Supplies
    - Conduit
    - Back boxes
    - Backup Generator
- Audio, video, control, and nurse call cabling
- Equipment racks and cabinets
- Source and head end equipment
- Field devices
- Systems testing
- Documentation and Submissions
- Warranty

Contractor Qualifications

1. Qualified Contractors shall have been in existence for a minimum of 5 years.
2. The contractor shall specialize in the installation of Audio/Visual and Nurse Call systems of equal scope, quality, type, and complexity to that required herein.
3. The Contractor shall be a member in good standing of AVIXA.
4. The Contractor will own all required testing equipment. Technicians responsible for operating testing equipment will have successfully completed all manufacturers approved training courses for the successful operation of the testing equipment.
5. The Contractor shall be an authorized dealer for at least 75% of the primary components specified for at least one year prior to bid time, including the nurse call system solution.
6. The principal members and key personnel to be assigned to the project shall each have a minimum of 10 years' experience in completing Audio/Visual and Nurse Call projects of equal scope, quality, type, and complexity to that required herein.
7. Minimum of five Audio/Visual and Nurse Call systems, of similar size and scope, which have been installed and operational for a minimum of one year.
8. On-site personnel will have successfully completed all training requirement set forth by the primary Audio/Visual and Nurse Call product manufacturers. A copy of the training certificates will be available upon request.
9. Project Lead Technician
    a. Trained and certified by the primary Audio/Visual and Nurse Call product manufacturers specified for the project.
    b. Minimum 5 years experience as Lead Technician on Audio/Visual and Nurse Call System projects of similar size and scope.

c. AVIXA CTS-I certification.

10. Project Technicians

a. Minimum 2 years' experience on projects of similar size and scope.

Applicable Codes, Guidelines, and Standards

1. Systems will be designed following industry recognized standards.
2. System cabling will be designed following EIA/TIA standards as outlined in BICSI's Telecommunications Distribution Methods Manual (TDMM). Current version.
3. All work shall conform to the National Electrical Code (NEC) and to applicable National Fire Protection Association (NFPA) codes.
4. All work shall conform to all Federal, State and local ordinances.
5. System shall comply with UL1069, UL2560, and Facility Guidelines Institute for Hospitals and Outpatient Facilities.
6. Where applicable, all fixtures, equipment and materials shall be as approved or listed by the following:

    a. Factory Mutual Laboratories (FM).
    b. Underwriters Laboratories, Inc. (UL).
    c. National Electrical Manufacturers Association (NEMA).

7. References to the National Electrical Code and National Fire Protection Association (NFPA) are a minimum installation requirement standard. Design drawings and specification sections shall govern in those instances where requirements are greater than those specified in the NEC and NFPA.
8. All material and equipment shall be listed, labeled or certified by Underwriters' Laboratories, Inc. where such standards have been established. Equipment and material which are not covered by UL Standard will be accepted provided equipment and material are listed, labeled, certified or otherwise determined to meet safety requirements of a nationally recognized testing laboratory. Equipment of a class, which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe will be considered, if inspected or tested in accordance with national industrial standards such as NEMA, ICEA or ANSI. Evidence of compliance shall include certified test reports and definitive shop drawings.
9. Florida Model Jail Standards

Quality Assurance

1. All Audio/Visual Presentation and Nurse Call systems shall include a minimum 2 year warranty on all parts and labor.
2. Systems shall be comprised of only new equipment and materials required (less than 1 year from manufacture), unused without blemish or defect.
3. Each major component of equipment shall have the manufacturer's name, address, and model number and rating on a plate securely affixed in a conspicuous place. The nameplate of a distributing agent will not be acceptable. NEMA Code Ratings, UL label, or other data which is die-stamped into the surface of the equipment shall be stamped in a location easily visible. Performance as delineated in schedules and in the specifications shall be interpreted as minimum performance. In many cases, equipment is oversized to allow for pickup loads which cannot be delineated under the minimum performance.
4. All equipment of the same type shall be the product of one manufacturer.
5. The original factory condition of manufactured equipment shall not be modified.
6. All cabling work shall meet or exceed the standards and procedures of the following:

    a. National Fire Protection Association (NFPA): NFPA 70, NFPA 72, NFPA 90A

b. National Electrical Code (NEC)
c. California Electrical Code (CEC)
d. American National Standards Institute (ANSI/EIA/TIA)
e. UL1069
f. UL2560
g. Facility Guidelines Institute for Hospitals and Outpatient Facilities
h. TIA-568-D.0: Generic Telecommunications Cabling for Customer Premises Standard, 2015
i. TIA-568-D.1: Commercial Building Telecommunications Cabling Standard, 2015
j. TIA-568-C.2: Telecommunications Cabling, Copper Component and Cabling Standard, 2014
k. TIA-568-C.3: Optical Fiber Cabling Component Standards, 2011
l. TIA-568-C.4: Broadband Coaxial Cabling Component Standards, 2011
m. TIA-569-B: Commercial Building Standard for Telecommunications Pathways and Spaces, 2011
n. TIA-606-A: Administration Standard for The Telecommunications Infrastructure of Commercial Buildings, 2012
o. TIA-607-B: Telecommunications Bonding and Grounding for Customer Premises, 2011
p. TIA-942: Telecommunications Infrastructure Standard for Data Centers, 2011
q. IEEE 802.3: Ethernet-based LANs (multiple standards) 2014
r. IEEE 1100: Recommended Practice for Powering and Grounding Electronic Equipment, 2005
s. Intertek/ETL: Applicable verifications
t. ISO 11801: Generic Cabling for Customer Premises (multiple standards)
u. National Fire Protection Association (NFPA)
v. National Electrical Code-NFPA 70-2017 Edition
w. American National Standards Institute (ANSI)
x. National Electrical Manufacturers Association (NEMA)
y. American Society of Testing Materials (ASTM)
z. Institute of Electronic & Electrical Engineers (IEEE
aa. Underwriters Laboratory (UL)
bb. Americans With Disabilities Act (ADA)

System Design

1. Audio/Visual presentation systems shall be provided for support of all conference, meeting, and training spaces. Systems shall be complete functioning systems comprised of display technologies, signal processing/routing, audio reinforcement, and control technologies.
2. Video conferencing technologies shall be provided allowing for audio/video conferencing between medical staff and inmates located throughout the facility. Conferencing systems shall include video displays, cameras, and audio reinforcement systems.
3. Furnish nurse call system capable of two-way communication between nurse's station and patient rooms. System alerts shall include both visual and audible notification. Nurse call components located in inmate spaces shall be vandal proof. Staff communications is required between phone, dome lights, computer and annunciator panels. System allows staff to send emergency notification calls from their location, or request assistance with a patient. Allow for remote cancel requests from the staff station without having to enter the room.
4. A/V cable systems will include a Category 6a solution that is in accordance with ANSI/TIA/EIA, and industry standards. Horizontal cable and backbone cable needs will be addressed. All necessary cross connects, patch panels, and patch cables shall be provided resulting in a completed and functional system.

Testing

1. Perform all audio system testing for continuity, polarity, gain structure, and performance as

required to assure the system operates free of hums, buzzes, and rattles under normal operating conditions.

2. Perform video system testing for signal and display optimization as required to assure the system operates free of interference, hum bars, and distortion.

7.0 | Building Occupant and Closeout Requirements

This section describes how the facility will be operated, and by whom.

Facility Operation

Facility shall be operated by Sheriff's Office.

Closeout Procedures

Comply with Manatee County's General Conditions and closeout requirements and procedures regarding O&M staff training, closeout documentation, extra material and parts stock.

APPENDIX A

Jail Facility Accreditations & Physical Plant Standards

APPENDIX A

Note: Requirements shown are applicable but do not fully outline all requirements needed for the Project. Refer to Section 3.0 | Applicable Codes & Life Safety for additional requirements.

Information provided by Manatee County Sheriff's Office.

American Correctional Association (ACA) Standards

4-ALDF-1A-06

Print

(Ref. 3-ALDF-2A-01)

The facility conforms to applicable federal, state, and local building codes. (Renovation, Additions, New Construction Only)

Comment: Conformance with codes is indicated by licensing or, in cases where a license is not issued, by letters or certificates of compliance. If the agency is not subject to local building codes, appropriate state or national codes must be applied.

Protocols: Written policy and procedure. Copies of applicable sanitation and health codes. Internal health/sanitation inspection checklists.

Process Indicators: Report, license, or certificate from the appropriate local and/or state agency. Inspection reports/results—internal and external. Maintenance and repair records.

4-ALDF-1A-10

Print

(Ref. 3-ALDF-2C-02)

Multiple-occupancy rooms/cells house between two and 64 occupants and provide 25 square feet of unencumbered space per occupant. When confinement exceeds 10 hours per day, at least 35 square feet of unencumbered space is provided for each occupant.

Comment: "Unencumbered space" is usable space that is not encumbered by furnishings or fixtures. At least one dimension of the unencumbered space is no less than seven feet. In determining the unencumbered space, the total square footage is obtained and the square footage of the fixtures is subtracted. All fixtures must be in operational position for these calculations.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Measurement. Observation.

4-ALDF-1A-11

Print

(Ref. 3-ALDF-2C-03)

Each inmate confined in a cell/room is provided with the following:

- a sleeping surface and mattress that allows the inmate to be at least 12 inches off the floor
- access to a writing surface and proximate area to sit
- a place to store clothes and personal belongings

Comment: The term "writing surface" refers to a fixed or free-standing surface under which the occupant can sit.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Measurement. Observation. Interviews (staff, inmates). Housing and classification records/logs.

4-ALDF-1A-12

Print

(Ref. 3-ALDF-2C-05)

Dayrooms with space for varied inmate activities are situated immediately adjacent to inmate sleeping areas. Dayrooms provide a minimum of 35 square feet of space per inmate (exclusive of lavatories, showers, and toilets) for the maximum number of inmates who use the dayroom at one time. No dayroom encompasses less than 100 square feet of space, exclusive of lavatories, showers, and toilets.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Measurement. Observation. Interviews (staff, inmates). Housing and classification records/logs.

4-ALDF-1A-13

Print

(Ref. 3-ALDF-2C-07)

Dayrooms provide sufficient seating and writing surfaces. Dayroom furnishings are consistent with the custody level of the inmates who are assigned.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation. Interviews (staff, inmates). Housing and classification records/logs.

4-ALDF-1A-14

Print

(Ref. 3-ALDF-2D-01 and 3-ALDF-2D-02)
(Revision from 2010 Supplement)

Revised January 2008. Light levels in inmate cells/rooms are at least 20 foot-candles in personal grooming areas and at the writing surface. Lighting throughout the facility is sufficient for the tasks performed. Measurements are documented by a qualified source and are checked at least once per accreditation cycle.

Comment: None

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Documentation from a qualified source. Measurement. Observation. Maintenance and repair records. Inmate and staff interviews.

4-ALDF-1A-15

Print

(Ref. 3-ALDF-2D-03)
(Revision from 2008 Supplement)

Revised August 2006. (Existing only) All inmate rooms/cells provide access to natural light.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation.

4-ALDF-1A-16

Print

(Ref. 3-ALDF-2D-04)

Revised August 2006. (Renovation, Addition, New Construction only). All inmate rooms/cells provide the occupants with access to natural light by means of at least three-square feet of transparent glazing, plus two additional square feet of transparent glazing per inmate in rooms/cells with three or more inmates.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Measurement. Observation. Housing records and logs. Classification records.

4-ALDF-1A-17

Print

(Ref. 3-ALDF-2D-05)

Each dayroom provides a minimum of 12 square feet of transparent glazing with a view to the outside, plus two additional square feet of glazing per inmate whose room/cell does not contain an opening or window with a view to the outside.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation. Measurement.

4-ALDF-1A-19

Print

(Ref. 3-ALDF-2D-07)
(Revision from 2008 Supplement)

Revised August 2007. A ventilation system supplies at least 15-cubic feet per minute of circulated air per occupant with a minimum of five-cubic feet per minute of outside air. Toilet rooms, and cells with toilets, have no less than four air changes per hour unless state or local codes require a different number of air changes. Air quantities are documented by a qualified technician not less than once per accreditation cycle.

Comment: "Accreditation cycle" is defined as within the past three years.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Measurement. Observation. Inmate and staff interviews. Maintenance and repair records. Report from independent source.

4-ALDF-1A-22

Print

(Ref. 3-ALDF-2E-09)

Adequate space is provided for janitorial closets accessible to the living and activity areas. The closets are equipped with a sink and cleaning implements.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation.

4-ALDF-1A-23

Print

(Ref. 3-ALDF-2E-12)

Separate and adequate space is provided for mechanical and electrical equipment.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation.

4-ALDF-1C-07

Print

(Mandatory)
(Ref. 3-ALDF-2A-02)

(Mandatory) The facility conforms to applicable federal, state, and/or local fire safety codes. The authority having jurisdiction documents compliance. A fire alarm and automatic detection system are required, as approved by the authority having jurisdiction, or there is a plan for addressing these or other deficiencies within a reasonable time period. The authority approves any variances, exceptions, or equivalencies and these must not constitute a serious life-safety threat to the occupants of the facility.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications. Fire regulations and codes. Internal inspection forms. Detention and alarm system testing schedule.

Process Indicators: Documentation of compliance. Reports/inspections from external agencies. Internal inspection results and reports. Documentation of fire alarm and detection system maintenance and testing. Observation.

4-ALDF-1C-10

Print

(Mandatory)
(Ref. 3-ALDF-3B-03)

(Mandatory) Facility furnishings meet fire safety performance requirements.

Comment: Facility furnishings include draperies, curtains, furniture, mattresses and bedding, upholstered or cushioned furniture, wastebaskets, decorations, and similar materials that can burn. Furnishings, mattresses, cushions, or other items of foamed plastics or foamed rubber (for example, polyurethane, polystyrene) can pose a severe hazard due to high smoke production, rapid burning once ignited, and high heat release. Such materials should be subjected to careful fire safety evaluation before purchase or use. All polyurethane should be removed from living areas unless its use is approved in writing by the fire authority having jurisdiction. The fire authority should consider the flammability and toxicity characteristics of the products being evaluated. "Furnishings" applies to all living quarters. This expected practice requires that specifications be known, if available, at the time of selection. There are no expected practices mandating knowledge of fire performance characteristics of furnishings in the facility prior to implementation of the policy relating to this expected practice.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Specifications for all furnishings. Records of approval by external authority.

4-ALDF-2A-01

Print

(Ref. 3-ALDF-2G-01 and 3-ALDF-3A-02)
(Revision from 2008 Supplement)

Revised January 2007. Space is provided for a 24-hour continuously staffed secure control center for monitoring and coordinating the facility's security, life safety, and communications systems. Staff assigned to a control center have access to a toilet and washbasin. There are multiple communication systems between the control center and inmate occupied areas.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications. Staff plan and schedules.

Process Indicators: Facility records and logs. Observation. Maintenance records. Staff deployment records. Staff interviews.

4-ALDF-2A-18

Print

(Ref. 3-ALDF-2B-01, 3-ALDF-2B-03 and 3-ALDF-2C-03)

Physical plant designs facilitate continuous personal contact and interaction between staff and inmates in housing units. All living areas are constructed to facilitate continuous staff observation, excluding electronic surveillance, of cell or detention room fronts and areas such as dayrooms and recreation spaces. (Renovation, addition, new construction only)

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation. Staff and inmate interviews.

4-ALDF-2A-34

Print

(Ref. 3-ALDF-2C-01-1)
(Revision from 2016 Supplement)
(Revision from 2008 Supplement)

Revised January 2014. Single occupancy cells/rooms are provided when indicated for the following:

- Maximum and close custody.
- Inmates with severe medical disabilities.
- Inmates suffering from serious mental illness.
- Sexual predators.
- Inmates likely to be exploited or victimized by others.
- Inmates who have other special needs for single-occupancy housing.

Comment: None.

Protocols: Written policy and procedure. Process for periodic review and appeal. Inmate handbook. Inmate orientation materials.

Process Indicators: Classification records. Documentation of periodic review and appeal. Inmate interviews.

4-ALDF-2A-51

Print

(Ref. 3-ALDF-2C-11 and 2C-12)
(Interpretation in 2006 Supplement)
(Revision in 2016 Supplement)
(Correction from February, 2017 Errata)

(Revised August 2014) Restrictive housing units provide living conditions that approximate those of the general inmate population. All exceptions are clearly documented. Restrictive Housing cells/rooms permit the inmates assigned to them to converse with and be observed by staff members. Cells/rooms in restrictive housing provide a minimum of 70 square feet, and shall provide 35 square feet of unencumbered space for the first occupant and 25 square feet of unencumbered space for each additional occupant.

Comment: Restrictive housing inmates are confined in cells/rooms for more extended periods during the day. Therefore the cell/room must provide additional space for in-cell activity.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation. Measurement. Inmate interviews.

4-ALDF-4C-09

Print

(New)

If infirmary care is provided onsite, it includes, at a minimum, the following:

- definition of the scope of infirmary care services available
- a physician on call or available 24 hours per day
- health care personnel have access to a physician or a registered nurse and are on duty 24 hours per day when patients are present
- all inmates/patients are within sight or sound of a staff member
- an infirmary care manual that includes nursing care procedures
- an infirmary record that is a separate and distinct section of the complete medical record
- compliance with applicable state statutes and local licensing requirements.

Comment: An infirmary is a specific area of a health care facility, separate from other housing areas, where inmates are housed and provided health care. Admission and discharge from this area is controlled by medical orders or protocols.

Protocols: Written policy or procedures. Nursing manual. Licensing requirements and regulations.

Process Indicators: Admission and inpatient records. Staffing schedules. Documentation of compliance with licensing requirements and regulations. Observations. Interviews.

4-ALDF-4C-10

Print

(New)

Inmates in the medical housing unit or infirmary area have access to operable washbasins with hot and cold running water at a minimum ratio of one basin for every 12 occupants, unless state or local building or health codes specify a different ratio.

Comment: None.

Protocols: Policy and procedure. Facility plans and specifications.

Process indicators: Ratio documentation. Observation.

4-ALDF-4C-11

Print

(New)

Sufficient bathing facilities are provided in the medical housing unit or infirmary area to allow inmates to bathe daily. At least one bathing facility is configured and equipped to accommodate inmates who have physical impairments or who need assistance to bathe. Water for bathing is thermostatically controlled to temperatures ranging from 100 degrees Fahrenheit to 120 degrees Fahrenheit.

Comment: None.

Protocols: Policy and procedure. Facility design diagram.

Process indicators: Number of bathing facilities. Observation. Interviews.

4-ALDF-4C-12

Print

(Ref. 3-ALDF-2C-08)

Inmates in the medical housing unit or infirmary have access to toilets and hand-washing facilities 24 hours per day and are able to use toilet facilities without staff assistance. Toilets are provided at a minimum ratio of one for every 12 inmates in male facilities and one for every eight inmates in female facilities. Urinals may be substituted for up to one-half of the toilets in male facilities. All housing units with three or more inmates have a minimum of two toilets. These ratios apply unless state or local building or health codes specify a different ratio.

Comment: None.

Protocols: Policy and procedure. Facility plans and specifications.

Process indicators: Documentation of ratio. Observation.

4-ALDF-4C-41

Print

(New)

Exercise areas are available to meet exercise and physical therapy requirements of individual inmate treatment plans.

Comment: None.

Protocols: Written policy and procedure. Facility diagrams and design measurements.

Process indicators: Documentation of opportunity for exercise. Movement schedules and logs. Observation. Interviews.

4-ALDF-4D-19

Print

(New)

Health care encounters, including medical and mental health interviews, examinations, and procedures are conducted in a setting that respects the inmates' privacy. Female inmates are provided a female escort for encounters with a male health care provider.

Comment: None.

Protocols: Written policy and procedure. Facility diagram.

Process indicators: Observation. Interviews.

4-ALDF-5C-04

Print

(Ref. 3-ALDF-2E-02)
(Revision from 2014 Supplement)

Revised August 2013. Segregation units have either outdoor uncovered or outdoor covered exercise areas. The minimum space requirements for outdoor exercise areas for segregation units are as follows:

- Group yard modules: 330-square feet of unencumbered space can accommodate two inmates. For each additional 150-square feet of unencumbered space, an additional inmate may use the exercise area simultaneously. (Formula: for each 150 square feet of unencumbered space exceeding the base requirement of 180 square feet for the first inmate, equals the maximum number of inmates who may use the recreation area space simultaneously). No more than five inmates are to use a group module at one time.
- individual yard modules—180 square feet of unencumbered space

In cases where cover is not provided to mitigate the inclement weather, appropriate weather-related equipment and attire should be made available to the inmates who desire to take advantage of their authorized exercise time.

Comment: None.

Protocols: Written policy and procedure. Facility plans/specifications. Schedules.

Process Indicators: Observation. Measurement. Facility logs and activity records.

4-ALDF-6B-04

Print

(Ref. 3-ALDF-2C-13)

Inmates with disabilities, including temporary disabilities, are housed in a manner that provides for their safety and security. Housing used by inmates with disabilities, including temporary disabilities, is designed for their use and provides for integration with other inmates. Program and service areas are accessible to inmates with disabilities who reside in the facility.

Comment: Temporary disabilities are conditions that can be treated with an expectation of healing. Temporary disabilities are not the result of chronic conditions, are short-term in nature and resolve over time.

Protocols: Written policy/procedure. Facility plans/specifications.

Process Indicators: Inmate records. Observation. Interviews. Inmate health records.

4-ALDF-6B-07

Print

(New)

Inmates with disabilities are provided with the education, equipment, and facilities, and the support necessary to perform self-care and personal hygiene in a reasonably private environment.

Comment: A 'reasonably private' environment will vary, depending on individual and institutional circumstances, but is one that will maintain the dignity of the disabled individual in light of the person's disability.

Protocols: Written policy and procedure. Facility plans/specifications.

Process Indicators: Observation. Inmate interviews.

Florida Model Jail Standards (FMJS)

CHAPTER 16 – PHYSICAL PLANT

16.1 The following housing standards apply to all facilities: (See Appendix C concerning Youth Detention Facilities)

a. Specified Unit of Floor Space:

1. Single cells shall contain a minimum of 63 square feet of floor space.

2. Multiple occupancy cells shall contain a minimum of 40 square feet of floor space per inmate in the sleeping area.

3. Dormitory housing units shall contain a minimum of 75 square feet of floor space per inmate, including both sleeping and day room areas. However, inmates who are allowed out of their unit for a minimum of 8 hours per day (e.g., work programs, treatment programs, educational programs, etc.) may be housed in areas designated with a minimum of 70 square feet of floor space per inmate (sleeping and day room areas included).

4. Day rooms shall contain a minimum of 35 square feet per inmate for all cell areas, except disciplinary and administrative confinement.

5. Any facilities constructed prior to October 1, 1996, may also use the applicable factoring procedures as set forth in Appendix A or B.

16.2 Each single cell will contain at least:

a. A sink with cold and either hot or tempered running water;

b. Flushable toilet;

c. Bunk;

d. Acoustics that ensure noise levels that do not interfere with normal human activities;

e. Temperatures shall be maintained within a normal comfort range.

16.3 All other housing areas shall provide a minimum of:

a. Toilets and sinks in the ratio of a minimum of 1 to 12 inmates. Urinals may be substituted for up to one-half of the toilets in male housing units;

b. Shower facilities in the ratio of a minimum of 1 to 16 inmates;

c. Ready access during non-sleeping hours to tables and chairs or areas designed for reading or writing;

d. Temperatures shall be maintained within a normal comfort range.

16.4 Adequate heating facilities shall be provided to maintain a minimum temperature of 60 degrees Fahrenheit at a point twenty (20) inches above the floor in inmate sleeping areas.

16.5 Beds, Cots and Bunks

a. Every bed, cot or bunk shall have a space of at least twelve (12) inches from the floor.

b. There shall be a clear ceiling height of not less than thirty-six (36) inches above any mattress and there shall be a clear space of not less than twenty-seven (27) inches between the top of the lower mattress and the bottom of the upper bunk of a double deck facility.

c. Single beds, cots or bunks shall be spaced not less than thirty-six (36) inches laterally and end-to-end.

d. Sleeping arrangements shall ensure that a minimum distance of six (6) feet is provided between inmate's heads, if a solid barrier is not used.

16.6 Sufficient space shall be provided in all living and sleeping quarters to satisfy sanitary needs of all individuals incarcerated.

16.7 All areas of the detention facility other than closets or cabinets shall be well lighted. Cell areas, dormitories, toilets, and day rooms shall have light fixtures capable of providing at least 20 foot candles of illumination at 30 inches above the floor to permit observation, cleaning, maintenance, and reading.

16.8 Floors, walls, ceiling, windows, doors, and all appurtenances of the structure shall be of sound construction and easily cleanable. Walls, ceilings, and area partitions shall be of light color.

16.9 Plumbing

a. Water supplies will be adequate to serve the demands of the detention facility and should be from an approved existing public supply where possible. When an on-site water supply is developed, the system shall be constructed, operated, and maintained in accordance with requirements of Chapter 62-550, Florida Administrative Code, to ensure that the water supply is of safe bacteriological and chemical quality. Routine water samples shall be submitted to determine that the quality of the water does not deteriorate.

b. Drinking water shall be accessible to all inmates.

c. Showers shall have tempered running water under pressure and shall be available for inmates to take showers at least twice weekly (daily access to showers is preferred). The hot water supply to the shower shall not exceed 120 degrees Fahrenheit to prevent scalding.

d. Sinks will have cold and either hot or tempered running water.

e. All plumbing shall comply with requirements stated in Chapter 153, Florida Statutes.

f. Plumbing fixtures such as toilets, water fountains, and sinks shall be constructed of smooth nonabsorbent easily cleanable material. Penal or security type fixtures may be used if construction meets the above requirements. If conventional toilets are installed, they shall be equipped with open front seats.

g. Mop sinks or curbed areas where floor drains equipped with hot and cold running water shall be available in convenient locations throughout the facility for the proper disposal of cleaning water and to facilitate cleaning.

h. All floor drains shall be equipped with tamper proof drain covers at all times. If self-priming floor drains are utilized, proper backflow devices shall be installed to prevent siphonage. All floor drain traps shall be kept wet to prevent sewer gas from entering the building.

i. All sewage and liquid waste shall be disposed of into an approved public sewerage system, if available. The disposal system shall meet requirements stated in Section 381.0065, Florida Statutes.

16.10 All housing facilities shall be kept free of offensive odors with adequate ventilation.

a. If natural ventilation is utilized, the opened window area for ventilation purposes shall be equal to one-tenth of the floor space in the inmate residential area.

b. When mechanical ventilation or cooling systems are employed, the system shall be kept clean and properly maintained. Intake air ducts shall be designed and installed so that ducts or filters can be readily removed.

c. In inmate residence areas and segregation cells with solid doors, mechanical ventilation systems shall provide a minimum of 10 cubic feet of fresh or filtered air per minute for each inmate occupying the areas.

d. All toilet rooms shall be provided with direct openings to the outside or provided with mechanical ventilation to the outside.

16.11 Laundry and Dry Cleaning - Where laundry facilities are provided, they shall be adequate to ensure an ample quantity of clean clothing, bed linens, and towels. Laundry facilities shall be of sound construction. Laundry rooms shall be well lighted and properly ventilated. Clothes dryers and dry cleaning machines shall be vented to the exterior. Exposure to dry cleaning solvents shall not exceed threshold limit values set by the American Conference of Governmental Hygienists.

16.12 Industrial areas: Noise levels shall not exceed an average of 90 dBA on a time weighted average for an eight hour day as measured on the A scale of a sound level meter set at slow response, unless proper ear protection is provided. Thirty foot candles of illumination shall be provided at task level. Adequate ventilation shall be provided to prevent exposure to dust and toxic gases or fumes.

16.13 Repair and Maintenance – The following items will be properly maintained and repaired:

a. Light fixtures

b. Floors, walls, ceiling, windows, window sills, window screens, doors, and all appurtenances of the structure

c. Plumbing fixtures

d. Sinks, toilets, water fountains, and floor drains

e. Laundry facilities

16.14 Preventative Maintenance – A preventative maintenance program will be established to include but not be limited to: periodic painting, repairs, and other such maintenance as required.

16.15 Outdoor Areas – If a facility has an outdoor exercise area, it shall be well drained. If toilet and lavatory facilities are provided, they shall be maintained.

16.16 American with Disabilities Act – Compliance with the Florida Model Jail Standards will require that a correctional facility comply with Title II of the American Disabilities Act. Examples of best practices are set forth in the department of Justice ADA best practices toolkits for state and local governments.

CHAPTER 17 - MINIMUM CONSTRUCTION STANDARDS

17.1 Any county or municipal government contemplating extensive renovation or new construction shall, prior to the conceptual development, establish the purposes and objectives of the facility. Such decisions should be the result of a consultation with the Public Safety Coordinating Council. The facility should obtain technical assistance in determining what type of renovation or construction of a new facility will best meet the needs of local government entities.

17.2 When renovation is contemplated, those items which are to be renovated must come into complete compliance with these standards. In addition, if any renovation affects square footage, bed space or out-of-cell time, then that part of the facility which is to be renovated must come into complete compliance with the standards established herein.

17.3 Design Standards - The following design standards are mandatory for all renovations, remodeling or new construction:

a. All aspects of design and construction shall conform to fire and safety standards and the Americans with Disabilities Act (A.D.A.) requirements.

b. All correctional facility designs shall provide for the maximum visibility of inmates by correctional officers and shall provide for the protection and safety of the correctional officers.

c. Entry of inmates into a detention facility by vehicle shall be through a secure vehicular sally port. This provision does not apply to facilities utilized exclusively as temporary holding facilities or to house reduced custody inmates.

d. Modular construction, other than pre-cast, shall comply with all safety and building codes.

e. All exterior confinement walls shall be either 6 inches of poured, reinforced concrete, 4 inches of pre-cast concrete, or other material deemed secure, or 8 inches of reinforced and filled concrete block. If concrete block is used, it must be reinforced horizontally with masonry reinforcing 16 inches on center and vertically with #4 steel reinforcing rods 16 inches on center and all voids filled with 3,000 PSI of concrete from top to bottom.

f. All interior walls surrounding a secure area shall meet the requirements for exterior walls. Wet areas shall conform to all safety and building codes.

g. All walls within a reduced custody housing area shall be standard masonry construction or other durable material to include, canvas, cloth, or any material similarly flexible or woven which is supported by a structural frame of metal or similar durable material, is flame resistant, and provides for a secure exterior wall.

h. Ceilings in a secure housing area shall be either poured or pre-cast concrete. Poured in place concrete will be a minimum of 4 inches thick and reinforced. Pre-cast concrete panels will be 5,000 PSI reinforced concrete and shall be the manufacturer's standard thickness. Three quarters of an inch of cement plaster on ribbed metal lathe will be acceptable when the structural frame and secure walls of the building restrict escape routes. Cement plaster ceilings are required to cover pipe work, conduit, and duct work in areas where accessible to inmates.

i. Single occupancy cells will be designed with a minimum of 63 square feet of floor space.

j. Multiple occupancy cells will be designed with a minimum of 40 square feet of floor space per inmate in the sleeping area.

k. Day room space shall be furnished providing a minimum of 35 square feet per inmate for all cell areas, except disciplinary and administrative confinement.

l. Open dormitory or reduced custody housing units shall be designed with a minimum of 75 square feet of floor space per inmate, including both sleeping and day room area. However, inmates who are allowed out of their unit for a minimum of 8 hours per day (e.g., work programs, treatment programs, educational programs, etc.), may be housed in areas

designated with a minimum of 70 square feet of floor space per inmate (sleeping and day room area included). The configuration of sleeping areas shall be such as to afford maximum visibility for the correctional officer.

m. Holding cells will be designed to include sufficient space for seating of inmates. Holding cells shall be located within sight or normal sound of an officer at all times. Inmates in a holding cell shall have reasonable access to toilet, sink, and drinking water facilities upon request.

n. Impervious floors shall be used in all areas. Suitable floor drains shall be installed so as to control vandalism.

o. Provisions shall be made for emergency power to be constantly available for the purpose of maintaining essential services, security, and safety systems throughout the facility.

p. Security vestibules are required whenever an entrance or exit penetrates the secure housing area or exterior confinement walls. Security vestibule doors shall be equipped with an interlock device to prohibit both doors being opened at the same time. Security vestibule door locks shall be either electrically or mechanically operated from a control box located remotely from the vestibule.

q. Detention facilities shall provide a secure outside recreation area and multipurpose housing shall provide space for programs, visiting (including social and attorney visiting), and inside recreation. There shall also be adequate areas for medical examination and for storage of inmate property.

r. Provision shall be made for secure sensitive storage and for a safe storage for items such as chemicals and flammable material.

17.4 All furnishings and equipment in secure housing areas shall be security type.

a. Tool resistant steel of the latest industry standards shall be used in all security devices which control access to the exterior of the facility.

b. Window sash of all types located in inmates' secure housing quarters shall be of the security type. Detention windows, fixed or operable, shall not have a clear opening width exceeding 5 inches.

c. Glass and glazing materials shall have the proper security values for the area in which they are used.

d. View panels in security areas shall be security type with security type glazing.

e. Doors leading into secure housing areas shall be either a minimum of 12 gauge sound deadened hollow metal with security glazed viewing panel or bar grille doors of not less than 7/8" steel bars, round or hexagonal spaced 5" on centers. These doors shall be a minimum of 3 feet wide.

f. Cell doors shall be a minimum of 2'8" wide. Doors for single, multiple occupancy or dormitory type cells shall be of a material and design consistent with the security requirements of the area. Maximum security cell doors shall be either 12 gauge sound-deadened hollow metal with security glazed panel or bar grille type.

g. Doors to rooms in a reduced custody area or to individual cells in direct supervision areas shall be sound-deadened hollow metal or solid core wood with viewing panels.

17.5 Mechanical systems shall include the following:

a. Heating, ventilating and/or air conditioning shall be designed to maintain temperatures at a normal comfort range in the occupied areas of the facility. Ducts penetrating inmates' access areas, which exceed 5 inches in length and width, shall have security grilles securely anchored wherever ducts penetrate secure walls, ceiling, or floors.

b. Mechanical ventilation of all confinement areas not having adequate natural ventilation is mandatory.

c. If natural ventilation is used, the window shall have a free area equal to one-tenth of the floor space. Cross ventilation is required.

d. In secure housing areas, light fixtures shall be secure and tamper-proof with no exposed electrical conduit accessible to inmates. All switches and outlets with inmate access shall have a remote override.

e. All sinks and showers shall have cold and either hot or tempered water.

f. Single occupancy cells shall have a toilet and sink. Showers should be located in the day room area.

g. Multiple occupancy units, dormitory units, and direct supervision type housing units shall allow ready access to toilets, sinks, and showers.

h. Fixture counts shall be 2 toilets, 2 mirrors, 1 shower, and 2 sinks for each 16 inmates or fraction thereof. Stainless steel fixtures are recommended.

i. Bunks and tables in maximum security housing areas shall be security type substantially anchored.

j. Flooding protection. Floor drains in inmate housing areas and holding cells shall be located to reduce the incidence of malicious tampering and flooding. Where practical, a drain shall be located in security corridors and not inside cells or day rooms.

17.6 All facilities shall be architecturally designed to satisfy all of the requirements of these standards.

17.7 Individual criteria. The aforementioned standards have been established for design and construction of correctional facilities to provide for security, custody, control, programs, and welfare of incarcerated inmates held under local authority.

17.8 USE OF REDUCED CUSTODY HOUSING AREA - Any county detention facility or municipal detention facility may provide for the custody on a temporary basis in a reduced custody housing area of sentenced or un-sentenced misdemeanants, non-dangerous felons, or such other inmates who are determined by the Sheriff or other Chief Correctional Officer to not present a risk of escape or a threat to the staff, other inmates, or themselves.

a. Canvas, Cloth, or Facilities of Similar Materials. Pursuant to Section 951.23, Florida Statutes, inmates may be housed in a reduced custody housing area which traditionally would have been an exterior security wall, but in lieu thereof, may be constructed of canvas, cloth, or any materials similarly flexible or woven, which is flame resistant and is supported by a structural frame of metal or similar durable material. Notwithstanding provisions of the otherwise applicable building code, a reduced custody housing area may be occupied by inmates or may

be used for sleeping purposes. The Sheriff or Chief Correctional Officer shall provide that a reduced custody housing area shall be governed by fire and life safety standards which do not interfere with the normal use of the facility and which effect a reasonable degree of compliance with rules of the State Fire Marshal for correctional facilities, Rule 69A-3.012 and Chapter 69A-54, Florida Administrative Code.

Florida Corrections Accreditation Commission (FCAC)

26.01 M

The facility conforms to all applicable federal, state, and/or local fire safety codes, including:

I. Bullets

A. A fire alarm, automatic detection system, and lighted or reflective emergency exits; and

B. A documented fire/safety inspection by a certified or authorized federal, state, or local fire official.

26.02 M

The facility has portable operational fire suppression equipment available in all secure and custody areas.

26.03

Inmate living areas are inspected annually for adequate ventilation and illumination.

26.04

Utility closets, pipe chases, corridors, and ventilation ducts are kept clean and free of clutter.