Agenda Vance County Board of Commissioners Work Session April 15, 2024 4:00 PM

- I. Discussion Jail Renovations or New Construction
- **II. Other Business**

VANCE COUNTY DETENTION CENTER NEEDS ASSESSMENT PRESENTATION

June 5th, 2023

MOSELEYARCHITECTS

Agenda

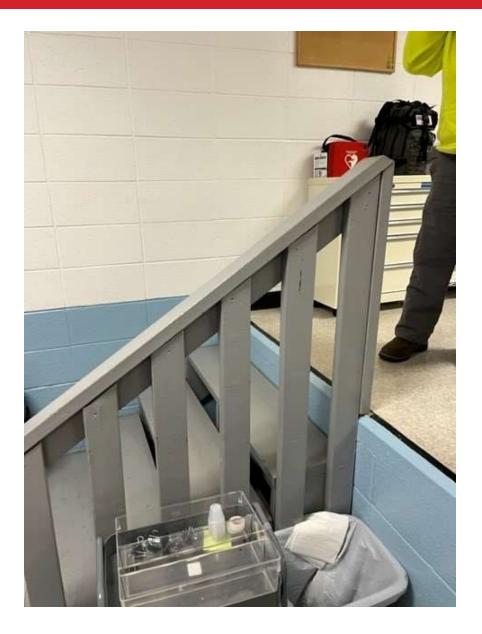


- Introductions
- Current Conditions
- Inmate Bed Projections
- Offender Admissions (Bookings)
- Average Length of Stay (ALOS)
- Calculation and Importance of Peaking Ratio
- Bed Need Projections to Include Classified and Peaked
- Architectural Plan Options
- Opinion of Probable Costs
- Conclusions and Recommendations

Introduction

- The planning team consists of:
 - Todd Davis. Vice President Moseley Architects
 - Bryan Payne. Vice President Moseley Architects
 - Dan Mace. Vice President Moseley Architects
 - Ben Sullivan. Project Designer Moseley Architects
- The focus of this meeting is to inform the Board of Commissioners for Vance County:
 - The current jail's numerous maintenance issues.
 - Factors contributing to an over-populated facility.
 - Architectural options for future expansion or replacement.
 - Opinion of Probable Cost for the options presented.
 - Recommendations moving forward.

- The Vance County Detention Center is operated under the supervision of the Vance County Sheriff's Office.
- It has a state rated capacity of 150 beds with an operational capacity of 112.5 beds, & includes both male and female housing units.
- The current jail has numerous maintenance issues as noted in previous state jail inspections -- common for a jail of Vance County's age.
- Jails, once they are opened never close so the building ages much faster than other county buildings.
 - 16-year-old building → 30-year-old building.



























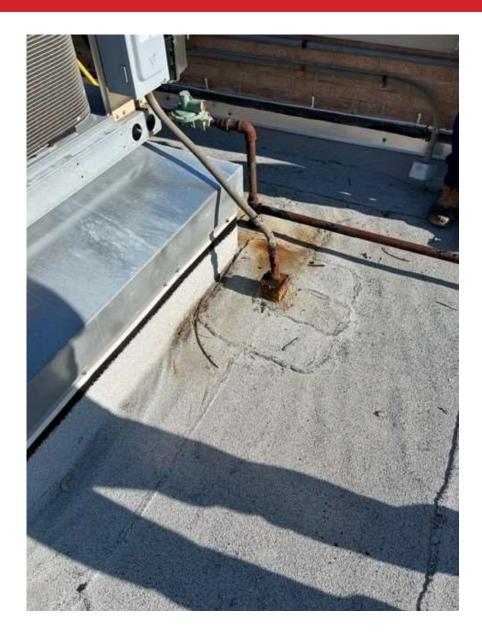














Opinion of Probable Cost – Repairs to Existing Jail

- Cost of Repairs to Existing Jail Summary:
 - Cost of Work = \$4,649,724
 - CM General Conditions (6 months) = \$330,000
 - Construction Management Fee @ 6.00% = \$246,888
 - CM Bonds & Insurances @ 1.25% = \$65,333

Total: \$5,291,945

Inmate Bed Projections

Historical Trends in Average Daily Detention Center Populations

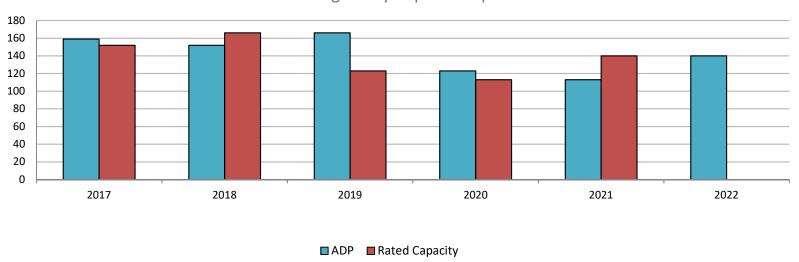
| Table I Inmate Average Daily Population Per Year | | | | | | | |
|---|-------|--|--|--|--|--|--|
| Year ADP Amount of change from previous year | | | | | | | |
| 2017 | 159 | | | | | | |
| 2018 | 152 | -7 | | | | | |
| 2019 | 166 | +14 | | | | | |
| 2020 | 123* | -43 | | | | | |
| 2021 | 113* | -10 | | | | | |
| 2022 | 140 | +27 | | | | | |
| Average Daily Population during study period: | 142.2 | 2020 & 2021 reflect the Covid impact on data | | | | | |

- The ADP reflects the average number of offenders being housed, which is used to establish a baseline figure for future bed-space needs.
- The current Vance County Jail has a state-rated capacity of 150.
- 2020 caused inconsistent data.

Inmate Bed Projections

Historical Trends in Average Daily Detention Center Populations

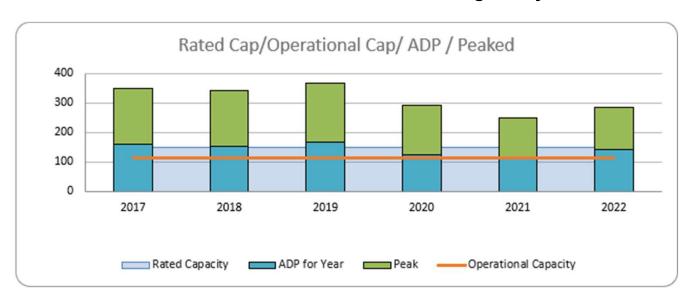
Inmate Average Daily Population per Year



- A jail is technically full when it reaches 75% of it's rated capacity. This is known as it's Operational Capacity.
- The ADP has exceeded it's rated capacity for 3 of the 6 study years. And has been over it's
 operational capacity for each of the 6 study years.
- Despite the abnormal drop in 2020-2021, data indicates an increase for 2022 ADP, as it trends back up towards pre-covid populations.
- The average of the 6-year study period was consistently above operational capacity by as many as 54 inmates.

Inmate Bed Projections

Historical Trends in Average Daily Detention Center Populations



- Vance County has exceeded their rated capacity 3 out of the last 6 years and exceeded the operational capacity consistently over the past 6 years.
- The County's overall population growth trends continue to decline during this study period but maintains a county population near 41,500 reported residents in 2022.
- County population plays a role in calculating future jail admissions, and jail bed needs.

Offender Admissions

- One of the first steps towards determining long-range projections is to calculate the projected ADP by using:
 - Historical and projected number of offender admissions
 - Average length of stay of inmates

| Table II Historic Admissions to Vance County Jail | | | | | |
|--|--|--|--|--|--|
| Year | Number of offenders admitted into the jail | | | | |
| 2017 | 2,484 | | | | |
| 2018 | 2,531 | | | | |
| 2019 | 2,217 | | | | |
| 2020 | 1115 | | | | |
| 2021 | 1113 | | | | |
| 2022 | 1099 | | | | |

Offender Admissions

| Table III Projected Admissions | | | | | |
|-----------------------------------|------|--|--|--|--|
| Year Using Admission Rate of 565. | | | | | |
| 2025 | 2344 | | | | |
| 2030 | 2331 | | | | |
| 2035 | 2328 | | | | |
| 2040 | 2327 | | | | |
| 2045 | 2327 | | | | |

- The number of admissions shown above in Table III follows similar growth/ declining patterns as general county population growth.
- However, it is typical for these numbers to increase with any revisions to current laws, best law enforcement practices, actions of the courts, crime trends, or county population growth.

- Determining the Average Length of Stay (ALOS) is critical to bed-space projections.
- The longer the ALOS, the greater need for bed space.
- When daily population starts to exceed the rated capacity, an increase in ALOS happens for a combination of reasons:
 - Most often it is contributed to lower-level crimes being moved out of the facility much faster.
 - Actions taken to prevent admission into the jail.
 - The more serious crimes, which require longer lengths of stay due to the processing time through the justice system, are being housed in the jail.
- Recent state sentencing law changes that have had an impact on the ALOS:
 - North Carolina Department of Adult Corrections does not house inmates convicted of misdemeanor type offenses. They are the responsibility of the county jails.
 - This has proven to have some impact on Vance County's Average Length of Stay numbers.

- The national average for county jails Average Length of Stay (ALOS) ranges from 10 days to 20 days per offender.
- It has typically ranged, in North Carolina jails, between 15 and 24 days.
- When ALOS exceeds 20 days:
 - There is a slowdown in the criminal justice system to process inmate's cases through the court system.
 - The criminal justice system has taken an aggressive approach to accelerate less serious offenders' ALOS & only the more serious offenders are being housed.
- Vance County has many more offenders charged with murder and other high-level felony cases that require longer pre-trial incarceration to get through the criminal justice system.

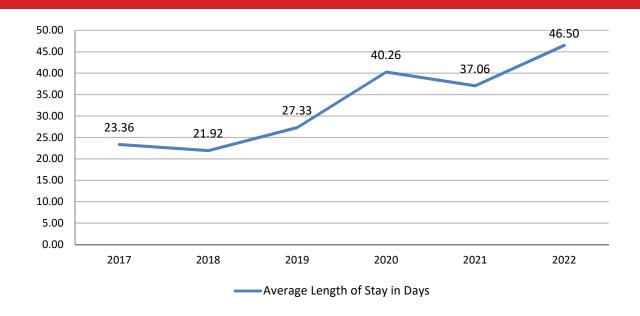
The average length of stay is calculated by taking the

ADP x 365 ÷ # of admissions for that year

 This methodology is suggested by the National Institute of Corrections and is found to be the proper method when calculating the Average Length of Stay of offenders in Vance County Jail.

| Table IV Vance County Average Length of Stay (ALOS) | | | | | | |
|--|-------|--|--|--|--|--|
| Year Average Length of Stay | | | | | | |
| 2017 | 23.26 | | | | | |
| 2018 | 21.92 | | | | | |
| 2019 | 27.33 | | | | | |
| 2020 | 40.26 | | | | | |
| 2021 | 37.06 | | | | | |
| 2022 | 46.50 | | | | | |
| ALOS for the period of study | 32.74 | | | | | |

*It should be noted that Vance County's number of inmates charged with high level offenses compared to county and overall jail population is extremely high and plays an important factor for why the ALOS is so much higher than most other North Carolina counties.



- The highest average length of stay was 46.50 -- more than <u>double</u> the national average. Reasons contributing to this may include:
 - Less serious offenders were released to alleviate Covid-19 pressures.
 - Housing of high-level felony cases such as murder, drug trafficking, etc. which also go through the Criminal Justice System slowly.
 - Absence of court staff to process cases such as Clerk of Court, DA, & Judges.
 - Absence of court room spaces.

- Due to the importance that ALOS plays in bed-space projections, all efforts should be made to reduce the amount of time inmates are incarcerated prior to trial and sentencing, especially after additional beds are available.
- For example, if the average length of stay were 12 days and the number of inmates admitted for one year were 3000, we use the formula: # admitted * ALOS/365, to find that 3000 * (12/365) = 99; the average number of beds needed would be 99.
- Suppose that by changing some of the practices, the detention center reduces the average length of stay to 10 days. (3000 * 10/365)
 - The number of beds needed would be reduced from 99 to 82.
- 46.5 ALOS is well above what we have seen in comparison with other North Carolina Counties. All efforts should be made to reduce the ALOS.

Calculation and Importance of Peaking Ratio

- Additional space must be allocated to include peak admissions (highest admissions) and classified bed space for specific categories of inmates.
- When considering the total number of new beds needed, if the county should construct a new facility, or add bed space to an existing one, "peaking" must be considered.
- Adjusting for peaking factors helps to see that the county can reasonably accommodate the large number of inmates that may be admitted for housing at certain times.
- Often, local government officials fail to accommodate for peaking and later find themselves faced with costly lawsuits filed by inmates claiming the conditions of confinement are inadequate due to overcrowding.
- Overcrowding alone is not unconstitutional, however some of the conditions
 associated with jail overcrowding such as limited toilet and shower facilities,
 minimum square footage requirements, access to exercise, etc. are items that are
 cited in a U.S. 42 1983 Federal lawsuit.

Calculation and Importance of Peaking Ratio

 Table V below displays that many times the Vance County jail population peaked above the rated capacity, as well as the operational capacity.

| Table V Vance County Jail Calculation of Peaking Ratio | | | | | | |
|--|-------|-------|------|--|--|--|
| Year ADP for Study Years Highest Population for study year | | | | | | |
| 2017 | 159 | 190 | 1.19 | | | |
| 2018 | 152 | 189 | 1.24 | | | |
| 2019 | 166 | 201 | 1.21 | | | |
| 2020 | 123 | 169 | 1.37 | | | |
| 2021 | 113 | 136 | 1.20 | | | |
| 2022 | 144 | 160 | 1.14 | | | |
| Averages | 142.8 | 174.2 | 1.25 | | | |

Calculation and Importance of Peaking Ratio

Bed need projections to include Classified and Peaked

- Table VI shown below illustrates projected Average Daily Population (ADP) for the Vance County Jail and includes the classified (ADP increased by 20%) These projections reflect the future growth of the Vance County Jail if the Average Length of Stay remains at 46.50.
- The classified and peaked projections reflect the highest offender population that the Vance County Jail may expect to have on any given day.
- The forecast and classified projections are more likely to reflect the actual number of detainees being housed in Vance County Jail.

| Vance | Table VI Vance County Forecasted Population using the <u>Admission</u> rate of 565.8 and ALOS of 46.5 | | | | | | |
|---|---|--------|------|--------|--|--|--|
| Year Forecasted ADP Classified ADP (+20 %) Peaked ADP Classified & Peaked ADP | | | | | | | |
| 2025 | 298.64 | 358.36 | 1.25 | 446.29 | | | |
| 2030 | 296.97 | 356.37 | 1.25 | 443.80 | | | |
| 2035 | 296.57 | 355.88 | 1.25 | 443.20 | | | |
| 2040 | 296.46 | 355.75 | 1.25 | 443.04 | | | |
| 2045 | 296.45 | 355.73 | 1.25 | 443.01 | | | |

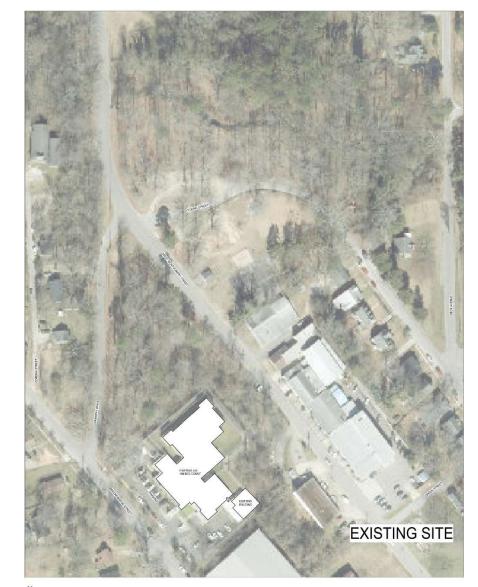
| Table VII Vance County Forecasted Population using the <u>Admission</u> rate of 565.8 and ALOS of 25 | | | | | | | |
|--|--------|--------|------|--------|--|--|--|
| Year Forecasted ADP Classified ADP (+20 %) Peaked ADP Classified & Peak | | | | | | | |
| 2025 | 160.57 | 192.68 | 1.25 | 239.96 | | | |
| 2030 | 159.67 | 191.61 | 1.25 | 238.62 | | | |
| 2035 | 159.46 | 191.35 | 1.25 | 238.29 | | | |
| 2040 | 159.40 | 191.28 | 1.25 | 238.21 | | | |
| 2045 | 159.39 | 191.27 | 1.25 | 238.20 | | | |

EXISTING SITE + OPTIONS A & B

COURTHOUSE

OPTION C

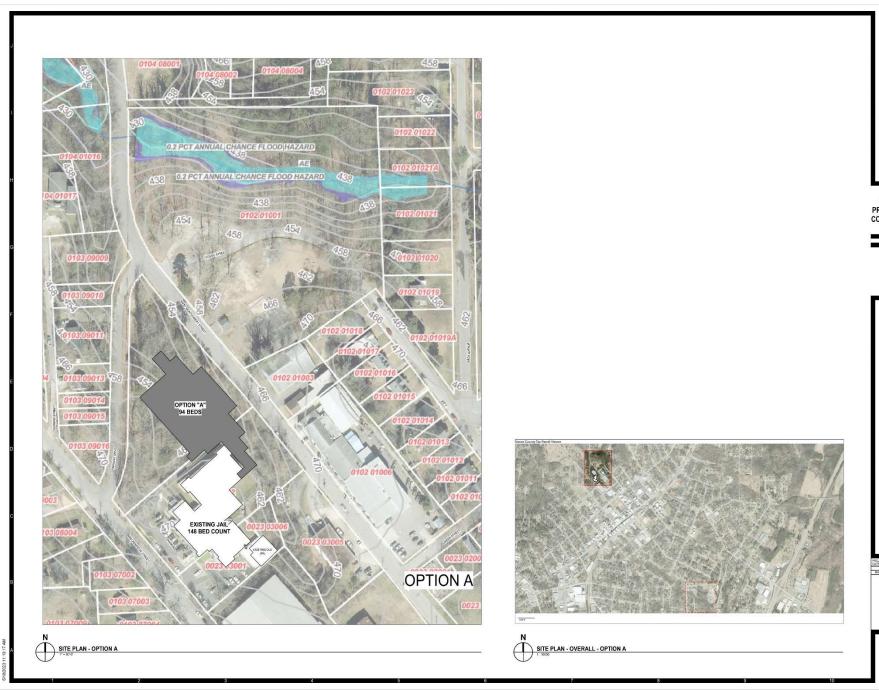
N SITE PLAN - OVERALL



A1.0

EXISTING SITE PLAN

Vance County Jail



MOSELEYARCHITECTS

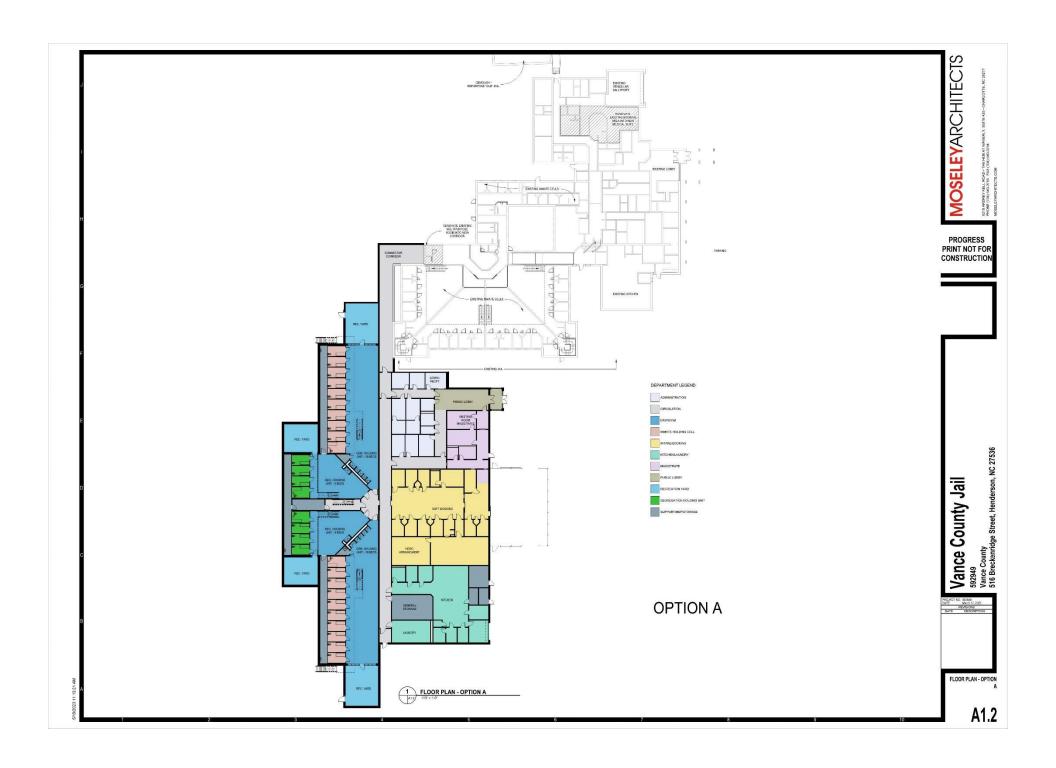
PROGRESS PRINT NOT FOR CONSTRUCTION

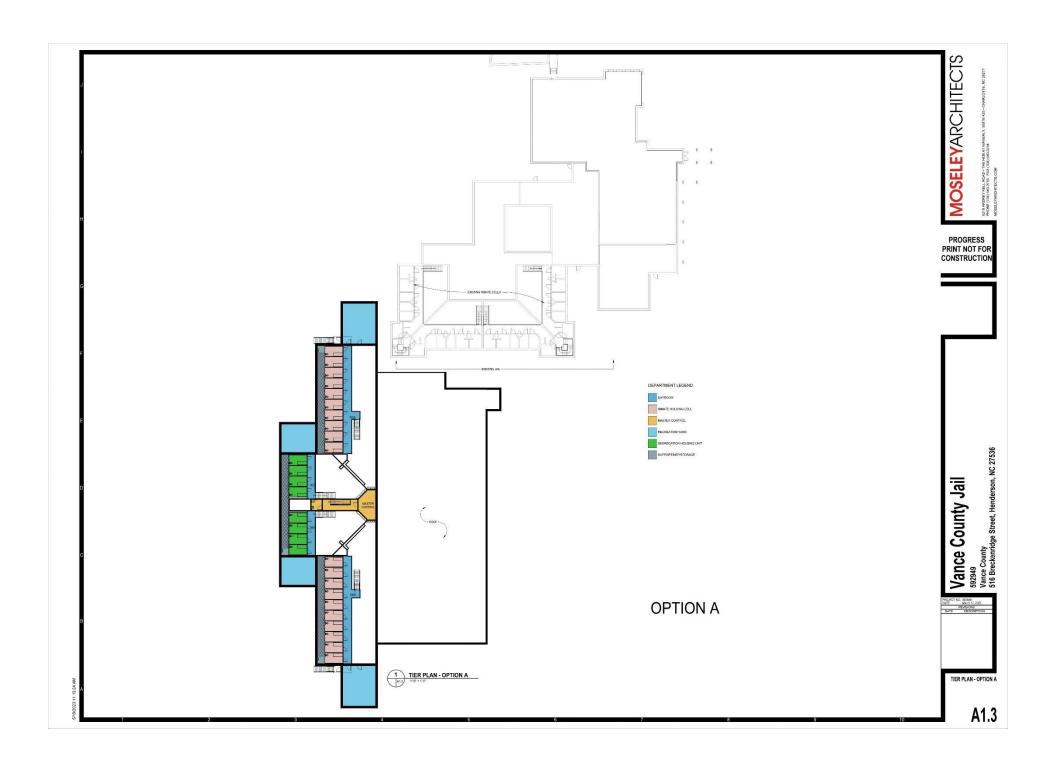
Vance County Jail

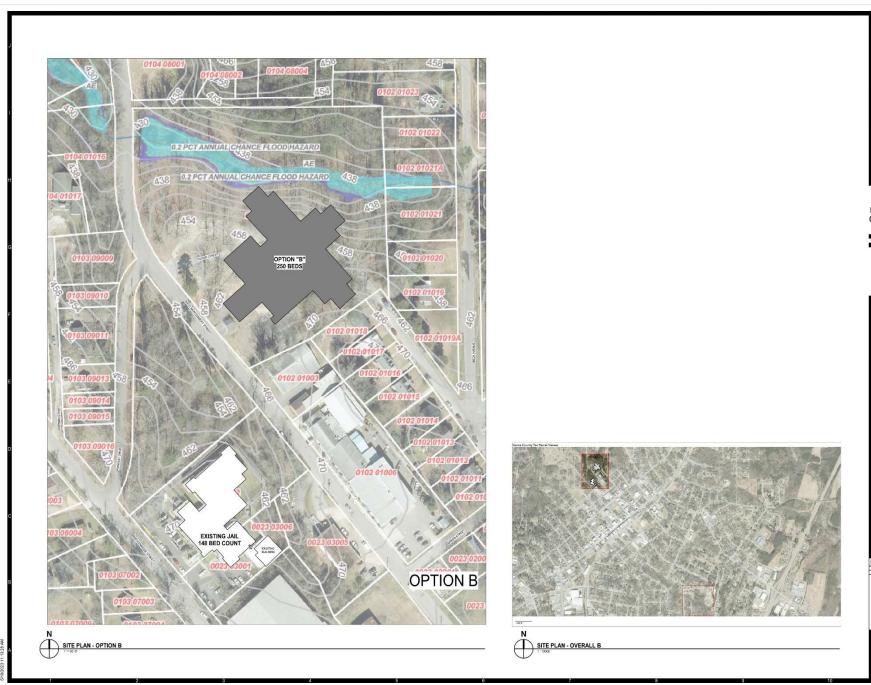
592949
Vance County
516 Breckenridge Street

SITE PLAN - OPTION A

A1.1







MOSELEYARCHITECTS

PROGRESS PRINT NOT FOR CONSTRUCTION

Vance County Jail

MACRO NO. 20099

DATE RECORDING

MERCHAN C. 20099

DATE RECORDING

MERCHAN C. 2009

DATE RECORD C. 2009

MERCHAN C. 2009

DATE RECORD C. 2009

MERCHAN C. 2009

MERCAN C. 2009

MERCHAN C. 2009

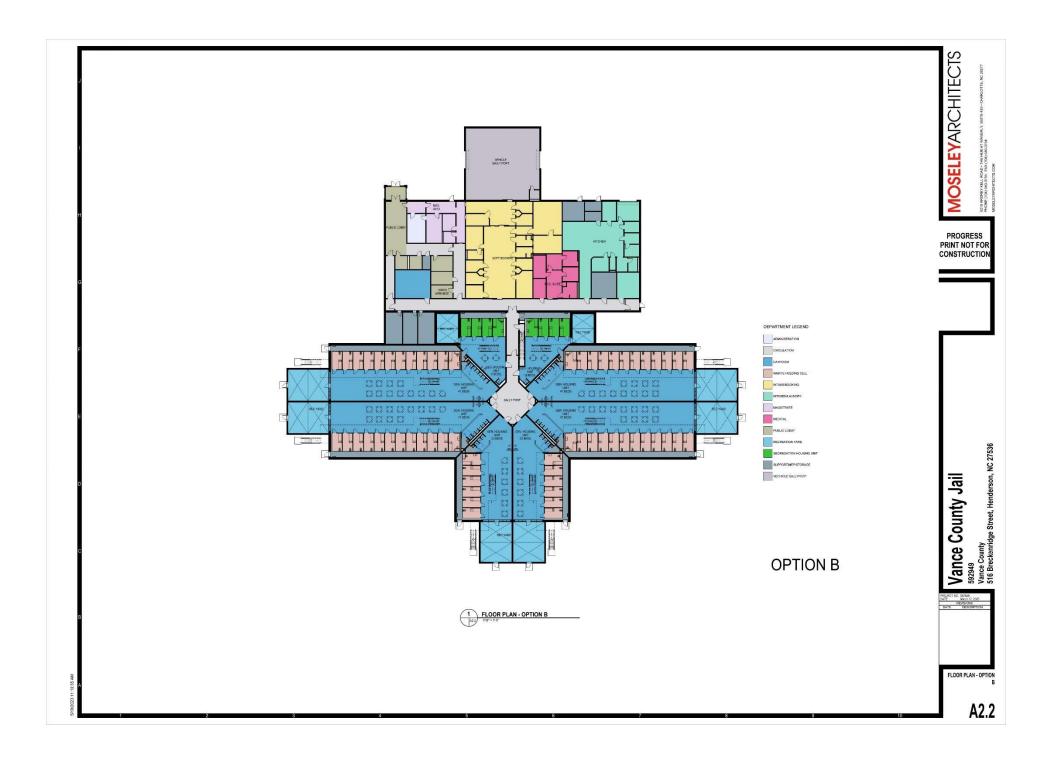
MERCHAN C. 2009

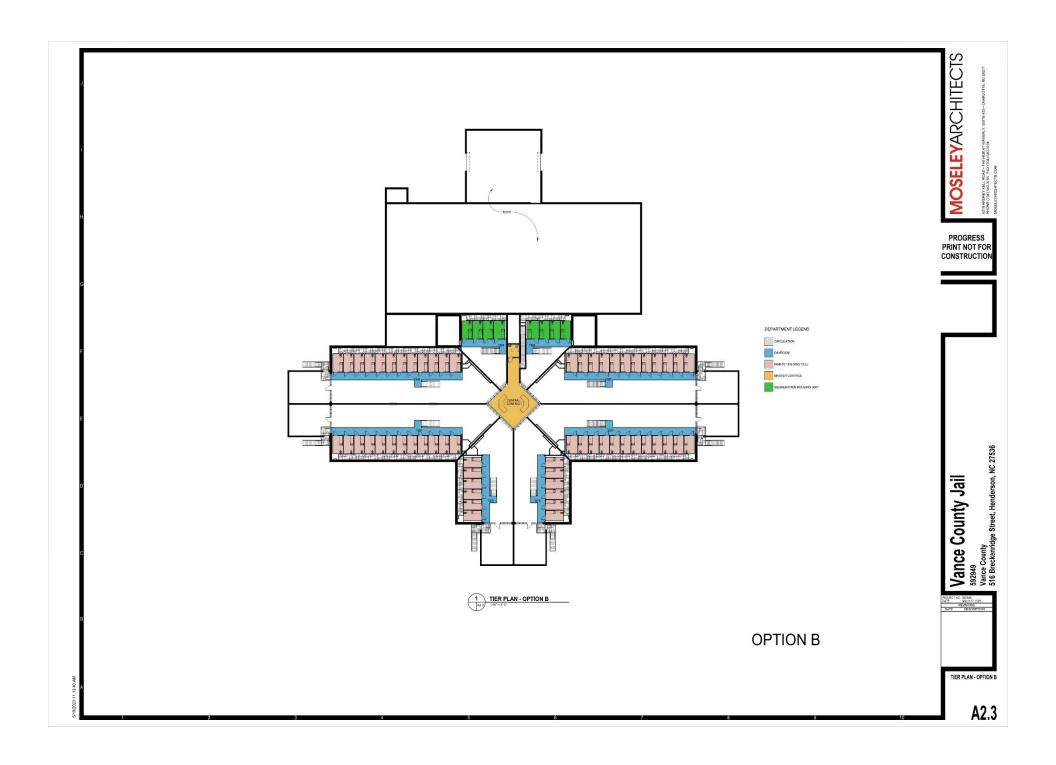
MERCHAN C. 2009

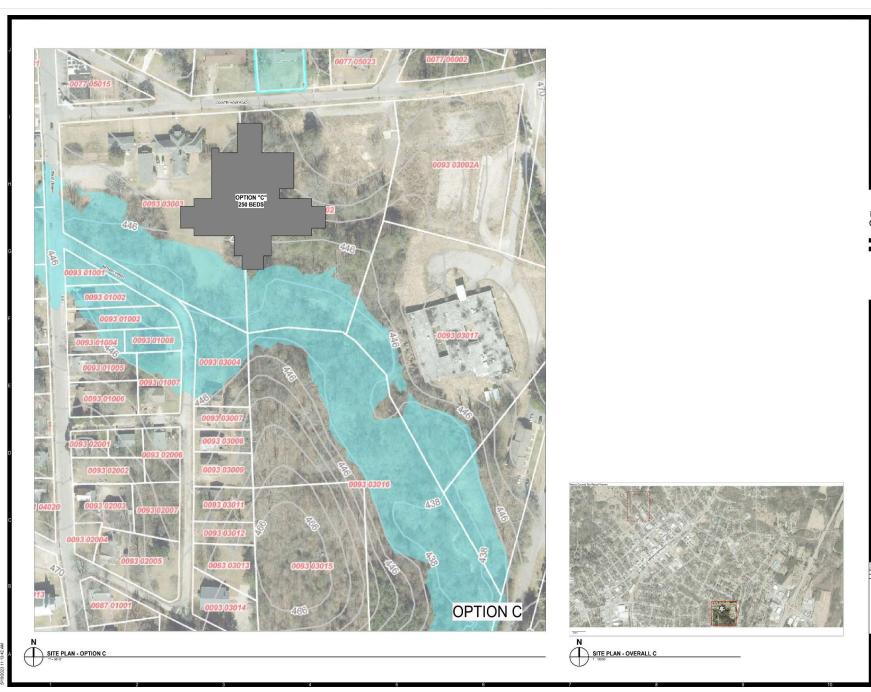
M

SITE PLAN - OPTION B

A2.1







MOSELEYARCHITECTS

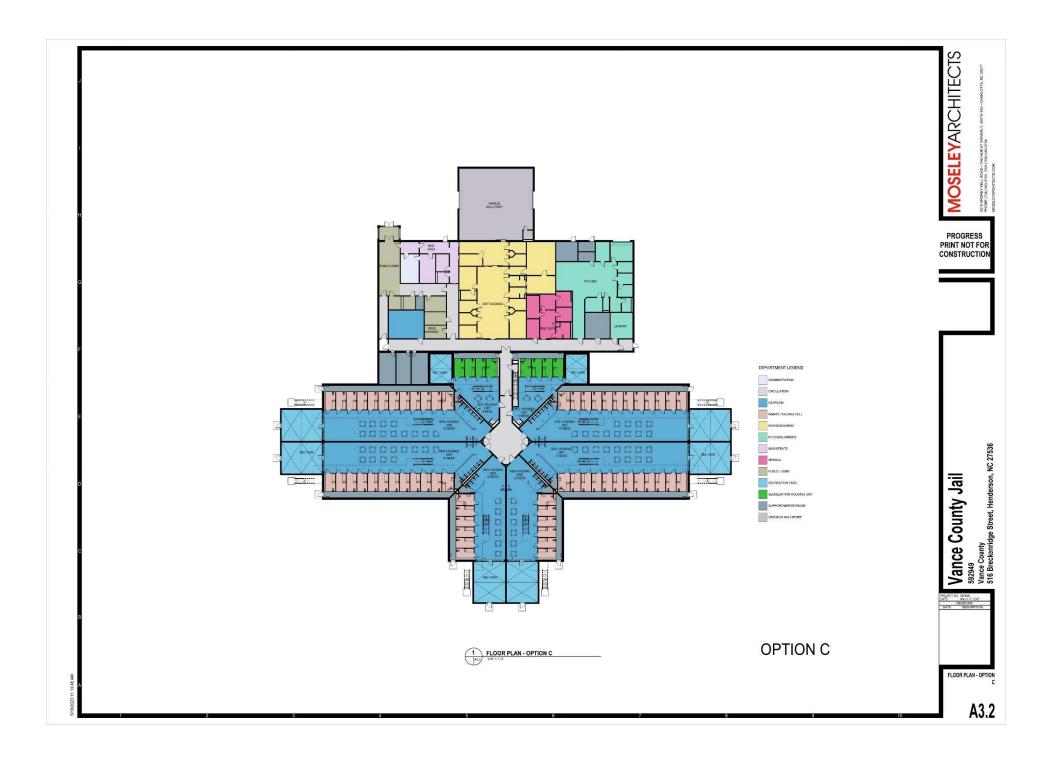
PROGRESS PRINT NOT FOR CONSTRUCTION

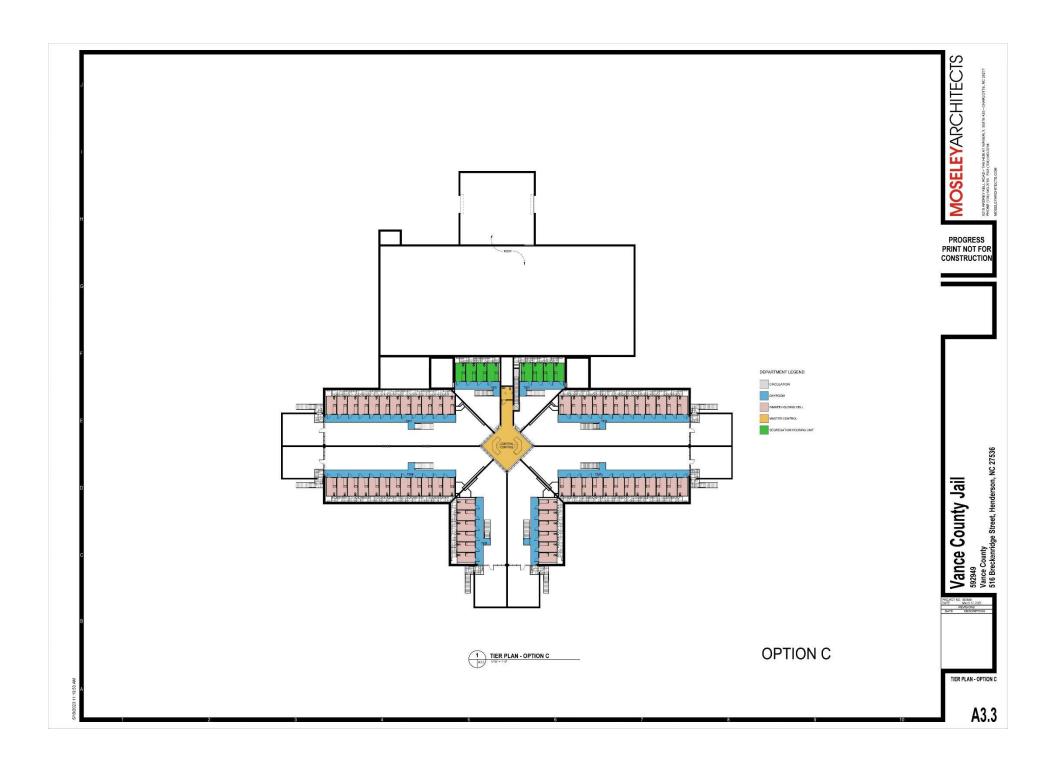
Vance County Jail
592949
Vance County
516 Breckenridge Street, Henderson, NC 27536

PROJECT NO. 96949
DATE Merch 72 209
DATE ORBICONTRON

SITE PLAN - OPTION C

A3.1





Opinion of Probable Cost – Option A – Expansion of Existing Jail

OPINION OF PROBABLE TOTAL PROJECT COST



 Client:
 Vance County, NC
 Date: May 10, 2023

 Project Name:
 Vance County New Detention Center
 Computed By: BJS

 Description:
 34800 SF Detention Facility OPTION A
 Checked By: TBD

 Project # 592949
 with 94 Bed Core and 148 Existing Beds
 Sheet Number: 1 of 1

| Item No. | Description | Area | Unit | Unit Cost | Total Cost |
|-------------|--|--------|------|---------------|-----------------|
| | Construction Costs | | | | |
| 1 | New Jail Housing Construction - "conditioned" SF | 15,650 | SF | \$575.00 | \$8,998,750.00 |
| 2 | New "Core" Construction - "conditioned" SF | 16,000 | SF | \$525.00 | \$8,400,000.00 |
| 3 | New Jail Control Room Construction - "conditioned" SF | 550 | SF | \$575.00 | \$316,250.00 |
| 4 | Vehicle Sallyport | 0 | SF | \$400.00 | \$0.00 |
| 5 | Outdoor Recreation Yards | 2,600 | SF | \$375.00 | \$975,000.00 |
| 6 | Existing Building Renovations / Security Systems integration | N/A | N/A | lump sum est. | \$5,291,945.00 |
| 7 | Site Development / Demolition | N/A | N/A | lump sum est. | \$1,000,000.00 |
| 8 | Parcel Purchase from Henderson | N/A | N/A | lump sum est. | \$105,000.00 |
| 9 | Construction / Design Contingency | N/A | % | 5.00% | \$1,254,347.25 |
| 10 | Cost Escalation Contingency (12 months) | N/A | % | 5.00% | \$1,317,064.61 |
| | | | | | |
| | Subtotal | | | | \$27,658,356.86 |
| | | | | | |
| | Estimated Construction Cost - Building and Sitework | 34,800 | SF | \$794.78 | \$27,658,356.86 |
| | | | | | |
| | | | | | |
| | Project Costs | | | | |
| 1 | Fixtures. Furnishings & Equipment (FF&E of finished space) | N/A | % | 2.00% | \$553,167.14 |
| 2 | Site and Construction Testing | N/A | % | 1.00% | \$276,583.57 |
| 3 | Misc. Fees / Costs | N/A | % | 10.00% | \$2,765,835.69 |
| | | | | | |
| | | | | | |
| | Subtotal | | | | \$3,595,586.39 |
| | "RADIAL" CONCEPT - Single Floor Operational Design | | | | |
| | TOTAL ESTIMATED PROJECT BUDGET - 94 beds | | | | \$31,253,943.25 |
| | | | | | |
| | Notes: | | | | |
| | 4 Housing units - single level operation, 'rear' chases | | | | |
| | Radial Concept with Elevated Control Room | | | | |
| | Housing units to consist of: | | | | |
| | 2 - General Population Units - 39 beds each | | | | |
| | 2 - Segregation Units - 8 beds each | | | | |
| | | | | | |

Opinion of Probable Cost – Option B & C – Full Replacement

OPINION OF PROBABLE TOTAL PROJECT COST

MOSELEYARCHITECTS A PROFESSIONAL GORPORATION

 Client:
 Vance County, NC
 Date: May 16, 2023

 Project Name:
 Vance County New Detention Center
 Computed By: BJS

 Description:
 59,500 SF Detention Facility OPTION B
 Checked By: TBD

 Project # 592949
 with 250 Beds
 Sheet Number: 1 of 1

| Item No. | Description | Area | Unit | Unit Cost | Total Cost |
|-------------|---|--------|------|---------------|-----------------|
| | Construction Costs | | | | |
| 1 | New Jail Housing Construction - "conditioned" SF | 36,050 | SF | \$575.00 | \$20,728,750.00 |
| 2 | New "Core" Construction - "conditioned" SF | 15,000 | SF | \$525.00 | \$7,875,000.00 |
| 3 | New Jail Control Room Construction - "conditioned" SF | 800 | SF | \$575.00 | \$460,000.00 |
| 4 | Vehicle Sallyport | 2,750 | SF | \$375.00 | \$1,031,250.00 |
| 5 | Outdoor Recreation Yards | 4,900 | SF | \$400.00 | \$1,960,000.00 |
| 6 | Site Development / Demolition | N/A | N/A | lump sum est. | \$2,000,000.00 |
| 7 | Parcel Purchase from Henderson | N/A | N/A | lump sum est. | \$105,000.00 |
| 8 | Construction / Design Contingency | N/A | % | 5.00% | \$1,708,000.00 |
| 9 | Cost Escalation Contingency (12 months) | N/A | % | 5.00% | \$1,793,400.00 |
| | | | | | |
| | Subtotal | | | | \$37,661,400.00 |
| | | | | | |
| | Estimated Construction Cost - Building and Sitework | 59,500 | SF | \$632.96 | \$37,661,400.00 |
| | | | | | |
| | | | | | |
| | Project Costs | | | | |
| 1 | Fixtures. Furnishings & Equipment (FF&E of finished space) | N/A | % | 2.00% | \$753,228.00 |
| 2 | Site and Construction Testing | N/A | % | 1.00% | \$376,614.00 |
| 3 | Misc. Fees / Costs | N/A | % | 10.00% | \$3,766,140.00 |
| | | | | | |
| | | | | | |
| | Subtotal | | | | \$4,895,982.00 |
| | | | | | |
| | "RADIAL" CONCEPT - Single Floor Operational Design | | | | |
| | TOTAL ESTIMATED PROJECT BUDGET - 250 beds | | | | \$42,557,382.00 |
| | | | | | |
| | Notes: | | | | |
| | 8 Housing units - single level operation, 'rear' chases | | | | |
| | Radial Concept with Elevated Control Room Housing units to consist of: | | | | |
| | | | | | |
| | 4 - General Population Units - 47 beds each | | | | |
| <u> </u> | 2 - General Population Units - 23 beds each | | | | |
| | 2 - Segregation Units - 8 beds each | | | | |
| | | | | | |

Conclusions and Recommendations

- Based on the projections utilizing the admission rate of 565.8 per 10,000 of county population, a total of 238 to 443 beds with a 300 to 500 bed core is recommended. This depends on how the inmate population is managed and if the ALOS is able to be reduced.
 - The core would consist of support areas such as kitchen, laundry, booking/intake, and inmate property storage which are very difficult to expand without interrupting operations.
 - This overall size would be required to meet the classification and peaking requirements through the year 2045.
 - Should jail use increase significantly or if the county grows faster than state projections suggest, jail bed space needs could grow at a much higher rate.
 - Another factor is the potential change in state sentencing laws, which also could impact jail population.
- The identified bed type to aid in proper classification as required by state standards should be 90% in 2-man occupancy cells and 10% in single restrictive housing type.
 - The actual bed count per unit will be more defined during the design phase.

Conclusions and Recommendations

- Recommendations would be most important to:
 - Reduce the average length of stay.
 - Provide more cell type housing.
 - Improve sight lines.
 - Make maintenance repairs as noted in the state jail inspection.
 - Implement an inmate classification plan.
 - Improve security electronics.
 - Consolidate control rooms to provide for more efficient operations.
 - Save on man hours.

Questions?