Davidson-Davie COMMUNITY COLLEGE

Dr. Slate Medical Training Facility

Pre-Proposal Information

- Construction Manager at Risk
- Commissioning
- Geotechnical & Special Inspections

OCTOBER 20, 2025

MICHAEL GRAVES

Allied Design, Inc.

SKA CONSULTING ENGINEERS

CES CONSULTANT ENGINEERING SERVICE, INC.

HarrisCost, LLC

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Introductions

Davidson-Davie COMMUNITY COLLEGE

Design Team:

1. Walter Robbs Architects, a Michael Graves Co. – Leadership / AOR
2. Allied Design, Inc. – Civil Engineer
3. SKA Consulting Engineers – Structural Engineer
4. Consulting Engineering Services, Inc. – MEP/FP Engineer
5. HarrisCost, LLC – Cost Consulting

DDCC Selection Committee:

1. Keith Raker – Director, Physical Plant Services
2. Ken McDaniel – Principal, Michael Graves Architecture
3. Josh Frey – State Construction Monitor
4. Cameron Shirley – Davie Administrator
5. (a – CM@R & Commissioning) Laura Yarbrough – Executive VP, Financial & Administrative Services
   (b – Geotech & Special Inspections) Bobby Griffey – DDCC Maintenance Supervisor

All will have input on the selected firms to interview

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Selection Schedule

Davidson-Davie COMMUNITY COLLEGE

1. October 21, 2025 – Post for Professional Services in eVP
2. November 6, 2025 – Closing Date for 3 professional service selections
3. November 7, 2025 – Distribute qualified proposals to the selection committee
4. November 14, 2025 – DDCC Selection Committee Proposal Review
5. November 17 - 21, 2025 – Notification of Firms to Interview (Top 3-6 Firms)
6. Interviews, Review, and Ranking of top 3 firms in each category
    - December 2, 2025 – CM@R Interviews (1:00pm to 5:00pm)
    - December 8, 2025 – Commissioning Interview (8:30am to 12noon)
    - December 19, 2025 – Geotech & Special Inspections (8:30am to 12noon)
7. December 22, 2025 - DDCC to Send Top 3 Firm Ranking, in each category, to SCO for Review and Approval

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Project Overview

Davidson-Davie COMMUNITY COLLEGE

SITE EVALUATION

The project will be located on approximately 3 acres of a 15-acre tract, to be leased from Atrium Health (formerly as Wake Forest Baptist Medical Center, aka North Carolina Baptist Hospital, "NCBH") in Davie County, North Carolina – adjacent to and subject to the jurisdiction of the Town of Bermuda Run. The site is located 'outside' the River Hill Commons loop road around the Atrium Health Wake Forest Baptist Davie Medical Center, accessible from NC Highway 801 N, near the Interstate 40 Interchange.

A 2011 Development Agreement between the property owner and the Town of Bermuda Run was contingent upon annexation into the Town and obtaining appropriate zoning, subdivisions, and other approvals. Development must adhere to the Town of Bermuda Run Zoning Ordinance and the Lease Agreement (2/27/24) between the Wake Forest University Baptist Medical Center and The Trustees of Davidson-Davie Community College.

Anticipated Local Development Permits include the following:

- Erosion and Sedimentation Control Permits
- Water Extension Permits
- Sewer Extension Permits
- Zoning Permits
- Building Permits
- Other local, state or federal permits (e.g. State Stormwater Control)
    - *The Site is not located in Floodplains (>1000 feet from the parcel).*
    - *Jurisdictional streams are not located onsite, but there may be an intermittent channel along the southern boundary, and buffers will be maintained*

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The *Report of Preliminary Geotechnical Exploration, Proposed Davie Health Science Center* (S&ME Proj. No. 23580547) was prepared on December 29, 2023. This 31-page document identifies the "general subsurface conditions with the proposed building, driveway and parking areas and evaluate[s] those conditions with regard to anticipated site grading and foundation and pavement support." Cut/fill was assumed on the order of 10 to 15 feet to grade the proposed building area. Five borings were evaluated. The site subsurface

conditions appear suitable for proper building support. Some plastic soils were encountered but deemed manageable with undercut to depths of 2-3'. Groundwater was not encountered.

Davie County Utilities has previously committed sufficient water capacity for the development and the Town has indicated it will provide for initial sewer needs and will assist with remaining sewer capacity as needed.

Interior drives will be private and maintained by NCBH, and these will be developed to

the Design Standards agreed to in the Lease Agreement. The primary access drive will align with an existing entry drive to the Medical Center, with secondary access further along River Hill Commons. The existing topography rises and falls 50 feet across the development area.

ZONING, PARKING, AND SITE UTILITY ANALYSIS

The site lies within the Extra Territorial Planning Jurisdiction of Bermuda. Already zoned appropriately as *Commercial Mixed* (CM) District, which allows for the uses of Colleges, Hospital, Health Services, and Medical Office, permits shall be obtained from the Zoning Administrator with additional conditions that apply to the site

Along the proposed lease lines, setbacks range from 0' (Front & Side) to 15' (Rear) and 30' from the Loop/collector Road.

There are no limits for maximum building coverage within the CM District. Building height shall not exceed 45'.

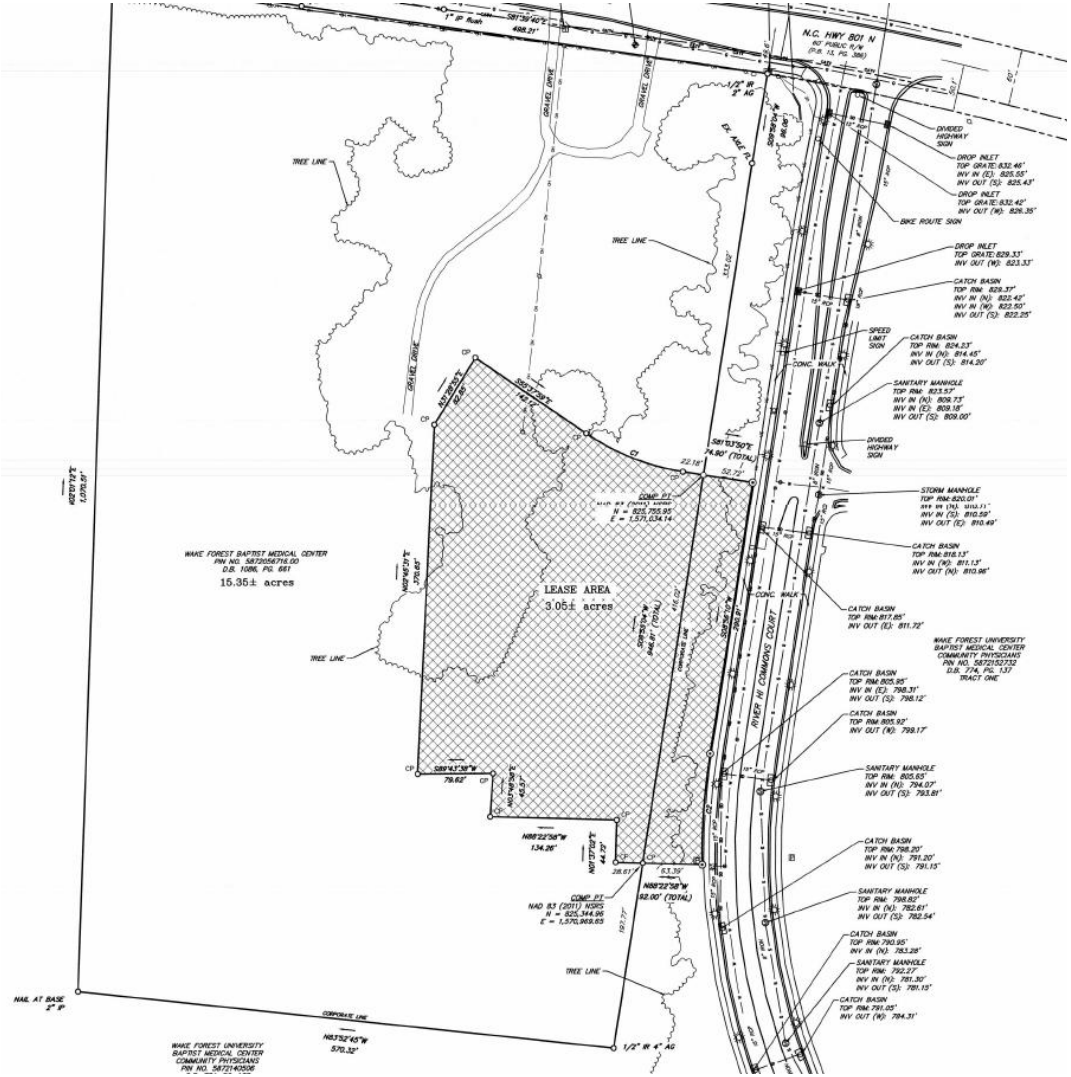
Off-street parking will likely be required at a rate of 1 space per 250 sf (gross floor area), with 1 space per 50 sf for assembly area. The current projections are for 132 parking spaces. Off-street loading spaces are not required for this district/use.

Development will adhere to the Design Standards set forth in Exhibit B of the Development Agreement between North Carolina Baptist Hospital and the Town of Bermuda Run. Standards include the following:

- Site design – shared parking, access drives (with 6' buffer strip and 6' wide sidewalk), and linked circulation
- Landscaping – buffers and open space; street trees (deciduous, 40-60' on center); street yard and parking screening or berms
- Exterior lighting – street light height is limited to 25'; pedestrian lighting (max. 15' height) located 80' on center; site lights limited to ½ foot-candle and the property line with shielding
- Sign – (1) externally illuminated monument sign with decorative cap and materials to complement the building facade
- Infrastructure – water and sewer mains to be installed along interior drives to serve future outparcel development; stormwater drainage/retention facilities (NC DEQ permits); service yard and mechanical screening

Water and Sewer are available within the River Hill Commons Circle loop road. Both water and sewer will be extended along the primary entry drive to serve future outparcel development. Separate service connections will be provided in the vicinity of the proposed building's mechanical room.

Lease Exhibit (not to scale)



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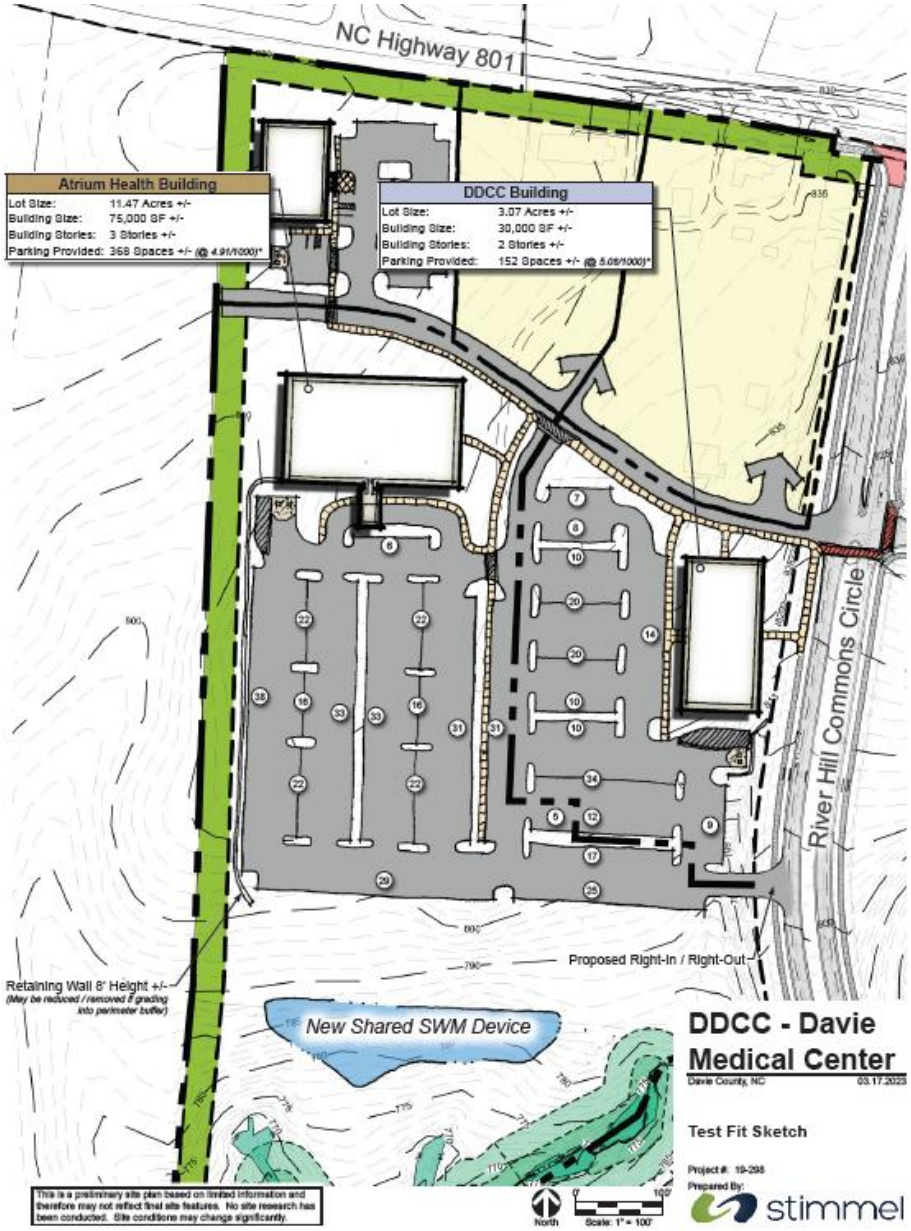
DDCC Concept Plan (Not to Scale)



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We understand that DDCC does NOT wish to pursue LEED Certification on this project. Due to the limited budget, items such as rainwater collection, super insulated buildings, solar PV and solar hot water, and EV charging stations are not required.

The OPR for the project:
The plumbing system shall consist of low flow plumbing fixtures. Domestic water heating shall be electric.

The HVAC system desired is the same as most of the buildings owned and operated by DDCC. This system is a 4-pipe, VAV system (hot water coils) with central station air handling units, an air-cooled chiller, condensing boilers (two), and primary/secondary variable volume pumping. The heating coils shall be designed as 140F- 120F with outside air temperature reset to utilize the benefits of condensing boilers. We understand the Baseline for the ASHRAE 90.1, 2004 system is Rooftop Units (RTU) with VAV boxes and electric heating coils. DDCC does not like to have equipment on the roof that requires regular maintenance. The Life Cycle Cost Analysis may indicate a lower first cost for the RTU system but the safety and maintenance costs of exterior roof equipment will hopefully result in the much preferred 4-pipe system.

The electrical system shall include LED light fixtures. In classrooms, manual dimmers are desired. Occupancy sensors shall be as required by code.

Davidson County Community College **DRAFT 1/4/2019**
Dr. Slate Training Facility **Revised 10/30/2024**
Proposed Program Summary

EMS	Current SF	Proposed SF
Offices (2)		*See Admin Spaces*
Classroom (20 av, 30 max)	*1,000sf + 1,200sf*	*See Shared Spaces*
~~EMS Lab (nested tables and integrated storage)~~	~~500sf~~	~~850sf~~
~~Simulated ER~~	~~N/A~~	~~800sf~~
Combine EMS Lab & ER		**800sf combined**
Storage (lockers/cubbies)	80sf + 350sf	450sf
Total	**3,130sf**	**1,450sf**

Special programmatic considerations:

- (2) Ambulance parking spaces
- Simulation would utilize virtual reality projection on blank walls
- Provide parking for the mobile unit with electrical power outlet (can be remote from the building)

SURGICAL TECHNOLOGY/STERILE PROCESSING	Current SF	Proposed SF
Offices (1 current, 3 future)	*210sf*	*See Admin Spaces*
Classroom (Sterile Processing 7 av, 10 max)	*200sf*	*See Shared Spaces*
Classroom (Surg Tech 13 av, 16 max)	*377sf*	*See Shared Spaces*
Sterile Processing Lab (7 av, 10 max)	496sf	496sf
~~OR Simulation Labs~~ **Surgical Tech Lab**	746sf	746sf
Scrub Room/Storage	174sf	174sf
Changing Room	219sf	219sf
Anesthesia	90sf	90sf
Library	*95sf*	*See Shared Spaces*
Storage (Central Sterilization) **Cabinetry**	180sf	180sf
Storage (Surg Tech)	88sf	88sf
Total	**2,875sf**	**1,993sf**

Special programmatic considerations:

- Sterile Processing is ideally located next to Surgical Tech and should remain in same general location

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~~ANESTHESIA TECH – NEW PROGRAM~~	~~Current SF~~	~~Proposed SF~~
~~Offices (1)~~	~~N/A~~	~~N/A~~
~~Classroom (10-16)~~	~~N/A~~	~~N/A~~
~~2 OR Simulation Labs (2) (10-16)~~	~~N/A~~	~~N/A~~
~~Changing Room~~	~~N/A~~	~~N/A~~
~~Anesthesia~~	~~N/A~~	~~N/A~~
~~Storage~~	~~N/A~~	~~N/A~~
~~**Total**~~	~~**N/A**~~	~~**N/A**~~

See Surgical Technology/ Sterile Processing above. Anesthesia Tech will use same spaces (office, classroom, lab) as Surg Tech.

PRACTICAL NURSING	Current SF	Proposed SF
Offices (4)		*See Admin Spaces*
Classroom (32 students)	*600sf*	*See Shared Spaces*
~~*Nursing Simulation Lab (32 students, 4 beds)*~~	~~*600sf*~~	~~*See Shared Spaces*~~
~~*Patient Simulation Room (2)*~~		~~*See Shared Spaces*~~
~~*Patient Control Room (2)*~~		~~*See Shared Spaces*~~
~~*Debriefing Room (1)*~~		~~*See Shared Spaces*~~
Practical Nursing Sim Lab		**1000sf**
Debriefing Room		**250sf**
Storage		180sf
Total	**1,200sf**	**1430sf**

Special programmatic considerations:

- Would utilize Simulation Living Apartment and Observation Rooms

NURSE AID	Current SF	Proposed SF
Offices (4)		*See Admin Spaces*
Classroom (32 students)	*600sf*	*See Shared Spaces*
~~*Nursing Simulation Lab (32 students, 6 beds)*~~	~~*600sf*~~	~~*See Shared Spaces*~~
CNA Sim Lab		**1000sf**
Storage	210sf	210sf
Total	**1,410sf**	**1,210sf**

Special programmatic considerations:

- Would utilize Simulation Living Apartment and Observation Rooms

~~NURSING ASSISTANT~~	~~Current SF~~	~~Proposed SF~~
~~*Offices (2 in shared office)*~~		~~*See Admin Spaces*~~
~~*Classroom (20 students)*~~	~~*975sf*~~	~~*See Shared Spaces*~~
~~*Nursing Simulation Lab (20 students, 4-5 beds)*~~	~~*1,300sf*~~	~~*See Shared Spaces*~~
~~Storage~~		~~210sf~~
~~**Total**~~	~~**2,275sf**~~	~~**210sf**~~

Special programmatic considerations:

- Would utilize Simulation Living Apartment and Observation Rooms

RESPERATORY THERAPY	Current SF	Proposed SF
Lab	**sf**	**800sf**

Special programmatic considerations:

- Oxygen needed (compressor)

BIOLOGY	Current SF	Proposed SF
Lab	**sf**	**1000sf**

Special programmatic considerations:

- Multiple sinks needed

- Standard lab countertops
- Storage space needed with refrigerator

MEDICATION AID	Current SF	Proposed SF
Offices (1)		*See Admin Spaces*
Classroom (10 students)		*See Shared Spaces*
Storage (for cart)		60sf
Total		**60sf**

HUMAN SERVICES	Current SF	Proposed SF
Offices (1)		*See Admin Spaces*
Classroom (30 students)	*1,000sf*	*See Shared Spaces*
Interview Room (one-way glass)	100sf	100sf
Storage (props & books)	100sf	100sf
Total	**1,200sf**	**200sf**

Special programmatic considerations:

- Would utilize Simulation Living Apartment and Observation Rooms

HEALTH CE	Current SF	Proposed SF
Offices (1)		*See Admin Spaces*
Classroom (16 students)		*See Shared Spaces*
Storage (locked)		100sf
Total		**100sf**

MAMMOGRAPHY- NEW PROGRAM	Current SF	Proposed SF
Offices (1)		*See Admin Spaces*
Classroom (12 students)		Online?
Simulation exam booth (5 students), changing room, and tech room		600sf
Storage		100sf
Total		**700sf**

HOME HEALTH AIDE – NEW PROGRAM	Current SF	Proposed SF
Offices (2)		*See Admin Spaces*
Classroom (10-20 students)		*See Shared Spaces*
Total		**0sf**

Special programmatic considerations:

- Would utilize Simulation Living Apartment and Observation Rooms

PHARMACY TECH	Current SF	Proposed SF
Offices (2)		*See Admin Spaces*
Classroom (10-12 students)		Online
Pharmacy Lab with lab and OTC counter	1,500sf	1,000sf
Ante room (gowning with sink)		500sf
Storage (locked)		100sf
Total	**1,500sf**	**1,600sf**

OTHER PROGRAM SPACES	Current SF	Proposed SF
Ophthalmology		150sf[2]
Total		**150sf**

SHARED SPACES	Current SF	Proposed SF
Classrooms (2 @ 32 students each)		2,000sf (1000each)
Classrooms (3 @ 16 students each)		1,800sf (600each)
~~Nursing Simulation Lab (32 students, 6 beds)~~	**move to nursing not shared**	~~1,200sf~~
~~Patient Simulation Room (2)~~		~~360sf~~
~~Patient Control Room (2)~~		~~120sf~~
Simulation Living Apartment (LR/K/BR/BA/stor)	500sf	1,000sf
~~Simulation Living Apartment Obers. Rooms (4)~~		~~240sf~~
Library (with PC for printing)	95sf	~~500sf~~ **150sf**
Student Vending	132sf	**200sf**
Conference Large/Debriefing (12 people)	200sf/350sf	350sf
Conference Small/PBL (4) (9 people)	88sf/130sf	600sf
Total	**1,207sf**	**6,100sf**

ADMIN SPACES	Current SF	Proposed SF
Admin Greeter Station		110sf
Closed Offices[1] (6)	720sf (9)	600sf
Open Office Cubicles[2] (15)		750sf
~~Landing Stations (6)~~		~~250sf~~
Faculty Lounge/Kitchen	253sf	250sf
Workroom (Mail, Copy, Scantron)		80sf
Central Record Room (locked)		120sf
Total	**973sf**	**1,910sf**

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SUPPORT SPACES	Current SF	Proposed SF
IT Room	110sf	110sf
Mechanical Room	500sf	1,000sf
Electrical Room	50sf	200sf
Janitor Closet	17sf	150sf
Toilets	1,650sf	1,000sf
Corridors	3,055sf	5,000sf
Total	**5,382sf**	**7,460sf (~30% of bldg)**

GRAND TOTAL	**25,425sf (7,754sf over available)**

[1] Office size at Smith Health Science Building is approximately 90sf per office. We are assuming 100sf per office.
[2] Assumes 6x8 cubicle size.
~~[3] We heard Ophthalmology mentioned in one of the programming meetings but, if this department will be included on the Dr. Slate campus, we would like to further clarify space requirements. For now, we are assuming a 150sf exam room.~~

Our engineering team proposes a 4-pipe system, with air-cooled chiller & condensing boilers. We will also have a central station air handling unit, one per floor with VAV boxes and hot water coils. Two mechanical rooms will be provided (one per floor).

Davidson-Davie Community College
Dr. Slate Medical Training Center
Advanced Planning Design Phase
Structural Narrative
SKA Job Number: 230391.0

NARRATIVE OBJECTIVE

The purpose of this document is to define Structural design considerations and provide a description of the basic structural systems, materials, loading, and code criteria that will guide the design for the proposed new Dr. Slate Medical Training Center. The facility will be an approximately 30,000 sf square foot educational building that will support classroom and lab spaces for the Dr. Slate Medical Training Center. The new facility is to be located on the West side of River Hill Commons Circle in Bermuda Run, North Carolina.

BASIC STRUCTURAL SYSTEM

FOUNDATIONS

Conventional shallow foundations are anticipated for the support of the new building structure, per the recommendations of the preliminary Geotechnical Report dated December 29, 2023 (S&ME Project Number 23580547). A final Geotechnical report with corresponding allowable foundation design pressures based on the anticipated column loads should be produced and reviewed by all parties prior to final design.

Shallow foundations will consist of reinforced concrete spread footings at column locations, and wall footings where continuous wall support is required. Footing concrete will be normal-weight with a 28-day design compressive strength of 3000 pounds per square inch (psi). For the schematic design phase, SKA is assuming that the residual soil supporting the foundations will have an approximate bearing pressure of 2000-3000 pounds per square foot (psf). Footing sizes on the order of 4-foot square to 8-foot square are anticipated.

SLABS-ON-GRADE

A typical 4-inch thick, reinforced, cast-in-place concrete slab-on-grade is anticipated as the ground floor system for the facility, except where very heavy floor loads for equipment would be anticipated. At these heavy-load locations, a 6-inch-thick reinforced concrete slab could be required. The slab-on-grade will be installed over a vapor barrier and a layer of compacted stone.

SKA anticipates that the slab-on-grade will be reinforced with 6x6 W4.0xW4.0 welded wire fabric placed on 4" thick stone sub-base and a 10-mil vapor barrier. In addition, control joints will be utilized in the slab-on-grade construction to help mitigate random cracking of the slab.

The control joint spacing will not exceed 12'-0" on center for a 4-inch-thick slab or 18'-0" on center at a 6-inch-thick slab. Slab-on-grade concrete will be normal-weight with a 28-day design compressive strength of 4000 psi. Finishes to the slab-on-grade top surface will be coordinated with and dependent upon the use of the space and architectural finishes.

PERIMETER AND INTERIOR WALLS

Walls will likely consist of non-load bearing light gauge metal framing (LGMF). At this time, it is assumed that the elevator and stairwells will be constructed out of LGMF. However, in the design process these could be altered to be constructed out of CMU for a variety of reasons, including durability or fire rating.

The LGMF exterior walls will likely vary in depth depending on the façade that is being supported. Locations of the façade where brick veneer is installed, will have more stringent deflection limitations (L/600) than at other, non-rigid materials (L/240 or less). The LGMF is expected to range from a depth of 6" to 8" with a minimum thickness of 16 gauge. Secondary structural steel columns and lintels

may be required to be installed around larger openings in the exterior wall to be able to resist the wind loading that is transferred back to the wall system from the window frames.

Interior walls will primarily be non-load bearing partition walls constructed of 4”- 6” non-structural, LGMF and impact resistant gypsum board.

ELEVATED FLOOR SLABS

The elevated slab details have not yet been fully vetted. Two potential systems are under consideration and will be finalized once the layout, schedule, and other construction details are decided upon. Overall, the anticipated floor system will have a steel weight of approximately 6 psf to 10 psf for the steel framing only.

- The first option has the elevated floor level consisting of a 3½ inch thick concrete slab on 2-inch deep, 20 gauge, VLI-Type composite metal deck (5½ inch total thickness) reinforced with #4 bars at 18 inches to 24 inches on center reinforcing steel. The concrete slab on the composite metal deck will be lightweight with a minimum 28-day design compressive strength of 4000 psi. Supporting the floor slabs will be wide-flange steel beams and girders with ¾ inch diameter by 4-inch-long shear studs for composite action with floor slab.
- The second option is a 4-inch total thickness non-composite, concrete slab on 9/16 inch deep, 20-gauge, C-Type metal form deck. The slab will be reinforced with 6x6 W4.0xW4.0 welded wire fabric. The non-composite slab will be normal-weight with a minimum 28-day design compressive strength of 4000 psi. Supporting the floor slabs will be structural steel open web joists and wide-flange steel beams and girders.

Exterior cladding will consist of a combination of brick veneer, metal panels and composite siding material along with integral windows and curtainwalls. The primary support for veneer at the lower levels will be continuous wall footings, where applicable. Masonry and steel lintels will be utilized to support the veneer at wall openings, with shelf angles planned for veneer in excess of 30 feet in height, which is not expected on this project. The supporting structure will be designed for a deflection criteria of L/600, or greater, to help minimize cracking in the masonry elements.

As part of the floor design considerations, a few unique conditions could require design and detailing. Large, operable partition walls may be utilized for select areas throughout the facility to help provide additional functionality. The operable partitions could allow for reconfiguration of spaces and offer flexibility in how the spaces are utilized. Loading and serviceability criteria will be coordinated with the anticipated manufacturers of the partition walls and incorporated into the design. Bracing for the partition supports are anticipated. This will be accomplished using structural steel shapes such as angles, channels and HSS tube sections.

COLUMNS

It is anticipated that columns for new construction will consist of structural steel wide-flange or HSS sections. Wide-flange columns will likely be W8 to W12 shapes and utilized in most of the structure. HSS column with sizes ranges of 6-inch square to 10-inch square may be utilized in limited areas

ROOF STRUCTURE

The roof system generally will consist of 1½ inch deep, B-Type 20-gauge, galvanized metal roof deck. Supporting the roof deck will be open-web steel joists and wide-flange steel beams and girders. At open footprint, large span spaces, long-span joists or steel trusses will be utilized to reduce the need for columns. Overall, the anticipated roof system will have a steel weight of approximately 6 psf to 8 psf for the steel framing only.

The building program may also call for the support of rooftop mechanical equipment or other equipment such as solar arrays. This information has not yet been fully developed, but in all cases, the equipment would be supported on the roof structure through the use of curbs or galvanized rooftop steel frames.

STAIR TOWERS AND ELEVATOR SHAFTS

Stair towers and elevator shaft walls are currently being vetted. The options under consideration for the walls are reinforced, grouted 8-inch or 12-inch CMU or structural steel framing with metal stud infill. The elevator shaft walls, in either case, will extend down below the slab-on-grade elevation to form the elevator pit and will be supported on a reinforced concrete mat slab with an integral sump pit. The final elevator selection has not yet been made, but we anticipate the elevator pit to be on the order of 4'-0" to 5'-0" deep.

Currently, the plan is for the stair towers to be framed with structural steel framing, similar to the floor framing, using wide flanged beams and columns. Diagonal bracing may be installed within the stair tower walls for the lateral load resistance system. See other sections for additional information

LATERAL FORCE RESISTING SYSTEMS

The lateral wind and seismic force resisting system will consist of concentrically braced steel frames. The structural steel braced frames will likely be constructed using Wide Flange or HSS sections single diagonal, "K"-brace or "X"-brace configuration. Braces will be installed along the stairs and elevator walls, as well as the bathroom wall on the plan South side of the building.

SITE CONSIDERATIONS

Site retaining walls will be required for this project due to the drop in grade at the building. We anticipate 8-inch to 12-inch-thick, reinforced concrete retaining walls will be utilized, depending on the required height of retaining. Retaining wall concrete will be normal-weight with a 28-day design compressive strength of 5000 pounds per square inch (psi). If the retaining walls are site walls and exposed to weather, the concrete will be air-entrained

REFERENCE CODES AND STANDARDS

NCSBC:	2018 North Carolina State Building Code
ASCE 7-10:	Minimum Design Loads for Buildings and Other Structures
ACI 318-14:	Building Code Requirements for Structural Concrete
ACI 530-13:	Building Code Requirements for Masonry Structures
AISC 360-10:	Specification for Structural Steel Buildings
SJI K-10:	Standard Specification for Open Web Steel Joists, K-series
ANSI/RD1.0-10	Standard for Steel Roof Deck
SDI-C-2011	Standard for Composite Steel Floor Deck Slabs

SPECIAL INSPECTIONS AND MATERIALS TESTING

Special inspections and material testing will be required for the project in accordance with Chapter 17 of the 2018 North Carolina State Building.

STRUCTURAL MATERIALS AND STANDARDS

Exterior Exposed Concrete*:*	ACI 318, Exposure Classes F2, S0, P1, C2 Normal-weight (NW), typical 4,000 psi (minimum 28-day compressive strength) Air-entrained Includes all exterior exposed concrete.
Non-Exposed Concrete:	ACI 318, Exposure Classes F0, S0, P0, C1 Normal-weight (NW), slab on grade, elevated slabs, typical Light-weight (LW), concrete for elevated slabs Interior Slab-on-Grade (NW) – 4,000 psi (min 28-day comp. strength) Interior Elevated Slabs (NW,LW) – 4,000 psi

	(min 28-day comp. strength) Walls and Piers (NW) – 5,000 psi (minimum 28-day compressive strength) Footings (NW) – 3,000 psi (minimum 28-day compressive strength)
Reinforcing:	ASTM A615, Grade 60, deformed reinforcing steel ASTM A184/A185, welded wire fabric ASTM A1064, deformed bar anchor studs ASTM A706, rebar anchor studs
Structural Steel:	
Rolled W and C Shapes:	ASTM A992, Grade 50
Plates, Angles, and Bars:	ASTM A572, Grade 50
Cold-Formed Tubing (Sq. & Rect. HSS):	ASTM A500 Gr. C, Fy = 50 ksi
Cold-Formed Tubing (Round HSS):	ASTM A500 Gr. C, Fy = 50 ksi
High Strength Bolts:	ASTM A325, ASTM A490
Anchor Bolts:	ASTM F1554, 36 ksi minimum
Welding Electrodes:	ASTM A233-E70 Series, low hydrogen
Shear Studs:	ASTM A29/A108, Grade 1010-1020 (Type B, 65 ksi min.)
Metal Roof Deck:	ASTM A1008, 33 ksi yield strength minimum (hot-dip galvanized)
Composite Metal Deck:	ASTM A1008, 50 ksi yield strength minimum (hot-dip galvanized)
Non-Composite Metal Deck:	ASTM A 653, 33 ksi yield strength minimum (hot-dip galvanized)

Concrete Masonry:

Concrete Masonry Units:	ASTM C90, 2,000 psi min compressive strength
Mortar:	ASTM C270, Type 'S'
Masonry Reinforcing:	ASTM A615, Grade 60, deformed
Grout:	ASTM C476, 3,000 psi min compressive strength

STRUCTURAL DESIGN CRITERIA

Occupancy Risk Category III per Table 1604.5 of the 2018 North Carolina State Building Code and in conformance with the original design criteria for the facility

Live Loads

Typical Slab-on-Grade	100 psf
Stairs	100 psf
Classrooms	40 psf
Corridors Above First Floor	80 psf
Partitions	15 psf
Typical Roof	20 psf

Snow Loads

Ground Snow Load (P_g)	15 psf
Snow Exposure Factor (C_e)	1.0
Thermal Factor (C_t)	1.0
Snow Importance Factor (I_s)	1.1

Wind Loads

Basic Wind Speed (V)	118 mph
Exposure Category	C
Internal Pressure Coeff.	±0.18

Seismic Loads

Seismic Importance Factor (I_e)	1.25
Site Classification	D
Seismic Design Category	B
Spectral Response Coefficients	S_S = 0.168 g, S_1 = 0.071 g
Seismic Force Resisting System	Steel System Not Specifically Detailed For Seismic Resistance
Response Modification Factor (R)	3.0
Seismic Response Coefficient (C_s)	0.075
Analysis Procedure	Equivalent Lateral Force

Budget & Schedule

Davidson-Davie COMMUNITY COLLEGE

Budget

- **29,955 SF is $17,452,530** plus 20% soft cost of $3,490,506 = $20,943,036 Total Project Cost.
- Reserve funds* for furniture, equipment, utilities, landscaping, communications, special inspections, etc. (*Some of these items may not be in design/construction contracts).
- We understand furniture and fixtures are funded from another budget, and other items listed here will be accommodated in the “soft costs” described above.
- Schematic Design has already been completed – budget will be confirmed once a CM@R is selected.

Schedule

Design + Documentation:	Spring 2025 (SD complete) – May 2026
Bidding:	June 2026
Construction:	July 2026 – July 2027
Target Move-In:	July 2027

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RFQ Review

Davidson-Davie COMMUNITY COLLEGE

- DDCC has revised the submittal requirements
  - The SF 254 is required
  - Letter of Interest (2 pages max.). Include Licensure, License Holder, NC E Procurement Number and SCO Vendor Number
  - Up to 3 Letters of Recommendation from previous Higher Ed clients on their letterhead (Optional)
  - Up to 10 Single-Sided or 5 Double-Sided pages of Additional Information CM@R would like the Selection Committee to consider (Optional)

- Submit eight (5) hard copies and one (1) electronic copy on a thumb drive
- Deliver to Mr. Keith Raker, Davidson-Davie CC, 297 DCC Road, Thomasville, NC 27360-7385 or P.O. Box 1287, Lexington, NC 27293-1287
- Submit any questions in writing to Mr. Keith Raker at kraker4708@davidsondavie.edu

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