

NEW MEXICO BIOSCIENCE AUTHORITY

FEASIBILITY STUDY, WET & DRY LAB AND SHARED OFFICE FACILITY

VOLUME I
JULY 31, 2026

LIVING DOCUMENT

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NEW MEXICO
BIOSCIENCE
AUTHORITY
A BIOSCIENCE CENTER OF EXCELLENCE



PROJECT TEAM AND STAKEHOLDERS

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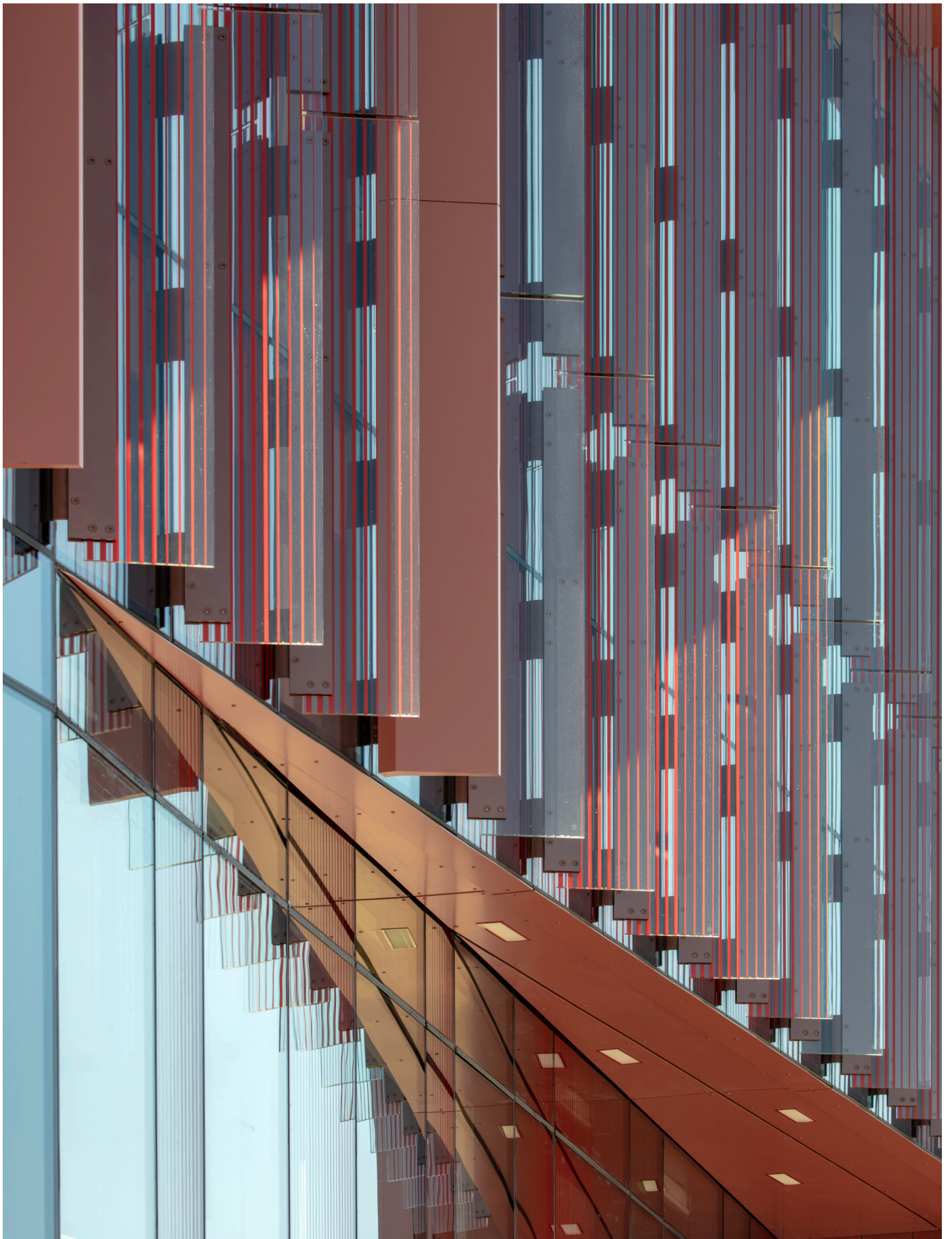
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INDEPENDENT COST ESTIMATOR

BALIS & CO.



UNIVERSITY OF ARIZONA APPLIED RESEARCH BUILDING - TUSCON, AZ

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CONNECT LABS AT AGGIE SQUARE - SACRAMENTO, CA

CHAPTER 01

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

STUDY PURPOSE AND OBJECTIVES

This feasibility study evaluates the development of a bioscience incubator and multi-tenant laboratory facility in Albuquerque, New Mexico to support the state's growing life sciences ecosystem. The study's primary objective is to identify a viable site, program, and development strategy that aligns with statewide economic development goals and the priorities identified in the NM GrowBio Report, including workforce development, commercialization of research, and industry clustering. The New Mexico Bioscience Authority (NMBSA) were the clients and stakeholders for the projects and were key in informing the feasibility studies findings.

KEY FINDINGS

The analysis finds that demand exists for flexible wet lab space, early-stage company supporting infrastructure, and shared core facilities. Benchmarking against peer markets and comparable projects, demonstrates that successful incubators combine flexible design, strong operator models, and proximity to academic and clinical institutions. Three development scenarios were evaluated; a renovation of an existing facility and two new development sites. The renovation of the FatPipe Building was eliminated from consideration due to the lack of available space, inadequate infrastructure and design constraints that drove up the cost to bring the building up to an industry standard. The two new development sites that were evaluated further were the Innovate ABQ and the Lomas Corridor sites.

RECOMMENDED SCENARIO AND SITE

The recommended approach is a phased development strategy favoring new construction at the Lomas Corridor site, based on its ability to meet the program requirements, expectations of a modern incubator lab tenant, and long-term growth potential. While the Innovate ABQ site option offers cost advantages and faster delivery not encumbered with the demolition of an existing building, it is site constrained and remote from amenities desired by potential lab tenants.

COST OVERVIEW

The cost analysis evaluated both the Innovate ABQ and the Lomas Corridor sites for development and found that the development of the Lomas Corridor Site was more cost effective for site grading and utility connections. There will be no cost for site procurement, as the University of New Mexico will be providing the land at no cost to the project. Building sizing and development strategies were also considered, with the cost analysis concluding that a scalable building project building with phased construction was best. The phased construction would most effectively be achieved through the creation of shell space during the original construction phase. This will minimize construction costs at a later date by providing a low barrier to expansion for the facility. It has been discussed that the shell space could also be built out by tenants as needed. The cost analysis concludes that a three-story, 65,100SF building with 24,300SF of shell space on the Lomas Corridor would be the most cost effective per square foot. Alternatively, three-story, 39,800SF building on the Lomas Corridor is the least expensive overall. However, the operational cost model shows that there is a better economic outcome at the larger building along the Lomas Corridor.

IMPLEMENTATION ROADMAP OVERVIEW

Implementation should advance through phased planning, public-private partnerships, and early operator engagement to ensure market alignment. The Lomas Corridor site provides an excellent framework and launchpad for the expansion of the biosciences in Albuquerque and offers partnership with university or private industry. A conceptual scenario for development on the site is described in this document noting opportunities and considerations to be addressed while moving forward into the next phase of the project. This report also outlines potential staffing and operating cost scenarios, providing a broader picture of what is required to bring the project to fruition and a roadmap for advancing into design, funding, delivery, and operation.



UC BERKELEY ENERGY BIOSCIENCES BUILDING - BERKELEY, CA



UC BERKELEY ENERGY BIOSCIENCES BUILDING - BERKELEY, CA

CHAPTER 02

PROJECT OVERVIEW

PROJECT OVERVIEW

BACKGROUND AND PROJECT CONTEXT

This feasibility study builds on findings from the NM GrowBio Report, which identified critical infrastructure gaps in New Mexico’s bioscience ecosystem, particularly the lack of scalable, incubator-style, flexible lab space for startups and growing companies. This gap limits the ability of early-stage bioscience firms to remain in the state as they transition from university research, proof-of-concept work, and small-scale experimentation into commercialization. Without access to affordable, appropriately sized wet and dry lab environments, companies may be forced to delay growth, occupy spaces not designed for their work, or relocate to more mature life science markets.

Albuquerque is well positioned to respond to this need because of its concentration of research, healthcare, academic, and entrepreneurial assets. Home to the University of New Mexico (UNM), the city offers proximity to faculty expertise, students, clinical partners, technology transfer resources, and workforce pipelines that are essential to a healthy bioscience innovation ecosystem. Locating a new incubator facility in Albuquerque would help connect emerging companies to these resources while reinforcing the city’s role as a regional hub for translational research, commercialization, and life science business development.

The recommended concept building site along the Lomas Corridor further strengthens this opportunity because of its direct adjacency to the Medical District and the future UNM School of Medicine. This location provides excellent potential for collaboration with UNM and access to shared research resources, while also placing the facility near the academic and clinical activity most relevant to bioscience tenants. As a result, the project is not only a real estate solution, but also a strategic investment in the infrastructure, partnerships, and physical setting needed to grow New Mexico’s bioscience economy over time.

STUDY GOALS, VISION, AND SUCCESS CRITERIA

The study’s vision is to create a bioscience incubator that catalyzes innovation, supports commercialization, retains local talent, and attracts business development in Albuquerque and across New Mexico. **Four primary goals emerged from stakeholder conversations.**

GOAL ONE

The project must fill a critical gap in the market for flexible, right-sized laboratory space. Existing facilities in New Mexico primarily offer small labs, while growing companies often need 1,000 to 1,500 square feet, with some requiring a 3,000 to 5,000 square foot step-up environment before moving into independent space. The facility should support both early startups and companies preparing for their next stage of growth.

SCHEDULE	April '26				May '26				June '26				July '26			
Feasibility & Needs Assessment					5/4-5/15											
Site & Building Location Evaluation					5/4-5/22											
Programming & Space Planning						5/11-5/29										
Building Systems Analysis						5/18-5/29										
New Facility Systems & Site Analysis Report																
Cost Modeling & Phasing									6/1-6/12							
Pros & Cons Assessment									6/8-6/26							
Implementation Roadmap													6/29-7/31			

OVERALL FEASIBILITY SCHEDULE

GOAL TWO

The program should balance shared resources with tenant privacy and control. Stakeholders emphasized the value of shared laboratories, reservable benches, and sharing of expensive core equipment such as LCMS, while also noting the need for secure dedicated space for proprietary work, BSL-2 activities, restricted access, and intellectual property protection. Shared amenities, business support, conference areas, and collaboration spaces should help researchers move toward commercialization while maintaining clear operational boundaries and avoiding uncertainty about ownership of tenant-developed intellectual property.

GOAL THREE

Third, the project should strengthen the broader bioscience ecosystem by attracting and retaining talent in New Mexico. The goal is not simply to maximize revenue, but to help companies succeed, remain in the state, and contribute to a more complete innovation pipeline. Success will depend on recruiting the right tenants, providing flexible lease terms, supporting transportation and parking access, and connecting companies to state institutions, healthcare partners, investors, mentors, and workforce resources. The facility should also be practical to operate and capable of supporting specialized needs such as shared equipment, server-intensive research, cylinder storage, and potentially separated greenhouse functions.

GOAL FOUR

Fourth, the facility should provide business and commercialization support that helps researchers

become viable companies, filling a critical gap in New Mexico's bioscience ecosystem. The incubator should function as a structured environment where companies can access mentorship, investor connections, regulatory guidance, intellectual property support, and practical business resources. By pairing flexible labs with targeted commercialization services, the facility can help startups advance from concept to market while reducing the risk that promising companies leave New Mexico for more mature support ecosystems elsewhere.

SCOPE OF WORK

The scope of work included market analysis, program development, site evaluation, conceptual design test fits, benchmarking, stakeholder engagement, and cost modeling to determine the feasibility of a bioscience incubator and multi-tenant laboratory facility in Albuquerque. The team evaluated the project within the context of the NM GrowBio Report, local demand for flexible wet and dry lab space, and the broader need to support commercialization, workforce development, business formation, and talent retention in New Mexico. This work established the basis for understanding why the facility is needed, what types of tenants it should serve, and what size and program mix would best address current gaps in the market.

The methodology combined stakeholder input from NMBSA representatives, researchers, and leaders within the NM Bioscience ecosystem. Benchmarking and case study reviews were used to identify best practices from comparable incubator and multi-tenant lab facilities, including appropriate lab-to-

Incubator Research Space for Independent IP Ownership

Translational Space with Resources to bring Research to Market

Attract & Retain Private Research to Help Diversify the NM Economy

Fill a critical gap in the NM Biosciences ecosystem

SUMMARIZED PROJECT GOALS, VISION, AND SUCCESS CRITERIA

office ratios, shared core equipment, collaboration areas, flexible lease rates and structures, and operator models. Stakeholder work sessions, surveys, site tours, and engagement exercises helped define priorities related to affordability, right-sized lab modules, shared resources, commercialization support, transportation and parking access, and proximity to academic, clinical, and research assets.

The study also included evaluation of development scenarios and site options, including the FatPipe adaptive reuse option, Innovate ABQ, and the Lomas Corridor site. Conceptual test fits, site plans and guideplate studies were used to assess whether each option could support the proposed program, including flexible wet labs, dry labs, offices, shared support spaces, conference and collaboration areas, and future expansion. The team reviewed site opportunities, constraints, planning efficiency, adjacency to research partners, and long-term growth potential, while cost modeling provided a basis for comparing scenarios. Together, these tasks informed the recommendation to advance a phased new construction strategy at the Lomas Corridor site, supported by continued planning, funding coordination, operator engagement as noted in the implementation plan.

METHODOLOGY AND PROCESS OVERVIEW

Engagement with NMBSA stakeholders was essential to the project’s success, achieved through multiple reviews and collaborative work sessions and direct communication with users and stakeholders. This process ensured broad input,

aligned expectations, and built a shared understanding of the assessment and analysis process this level of engagement generated greater awareness, ownership, and advocacy for a strong and sustainable bioscience ecosystem.

The preliminary assessment focused on three primary questions: *why the facility was needed, what size it should be, and how much it would cost.* The “why” centered on the need to supplement or replace existing research infrastructure to better attract and retain early-stage bioscience companies. These companies require specialized wet and dry lab environments, safe and amenity-rich workplaces, reliable utility capacity with emergency backup, and access to shared core laboratory equipment that reduced overhead costs.

The assessment also defined the appropriate facility size and probable build-out cost for a new or renovated incubator wet and dry lab facility. Through a comprehensive evaluation and consensus-building process, the team identified needs related to affordable move-in-ready lab space, shared equipment, collaborative environments, commercialization of research, economic development, and workforce retention. Using stakeholder workshops, graphic materials, and engagement exercises, the team developed right-sized scenarios and recommendations that supported implementation of a facility capable of attracting business and capital investment to New Mexico’s bioscience community.

Our Values

We Prioritize Collaboration

We believe that great ideas are best nurtured in an environment where people with different backgrounds, perspectives, and areas of expertise can work side by side. At every level of business – from startup support to workforce development – the Center for Entrepreneurial Innovation encourages, enables and practices collaboration. By being team-oriented and community-centered, we strive to help everyone we work with get further, faster.

We Act With Integrity

We believe in delivering the highest quality support, resources, and programming possible to everyone we serve. We aim for transparency in all aspects of our work, and take the feedback we receive – both internally and externally – to heart. By setting a standard of open and honest communication with those in our community, we are able to reflect, iterate, and improve our services in the pursuit of excellence.

We Strive For Growth

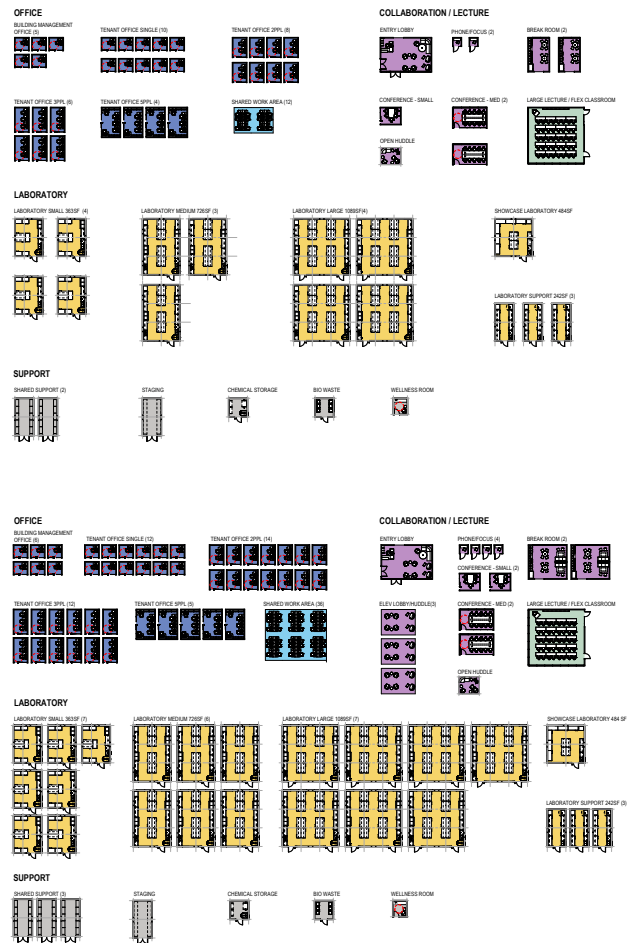
Advances in science, technology and business are nonstop, and it’s crucial that CEI keeps up. With each year since opening, we have committed to growth in big and small ways. By staying flexible and receptive to new ideas, we are able to evolve to best support our clients, partners and community.

VALUES OUTLINED IN THE NMBSA GROWBIO REPORT

STAKEHOLDER ENGAGEMENT SUMMARY

The process began with data gathering and a needs assessment kick-off, during which the team toured and collected existing building, site, and program information; issued surveys; and met with stakeholders to establish the project vision, goals, and objectives. During Work Session #1, the team gathered input, presented trends in incubator research buildings, reviewed program requirements, confirmed the project schedule, and conducted field observations of potential sites, including the Lomas Corridor, Innovate ABQ, and FatPipe locations. This early phase also included developing criteria for the site selection matrix that would guide evaluation and decision-making.

The process then moved into data synthesis through a virtual interim review and progress work session, where the team reviewed initial recommendations, discussed site rankings based on the selection matrix, and began developing the cost model. The team then worked to integrate all the information into this final report. Stakeholder feedback emphasized the need for affordable lab space, shared equipment, business support services, and proximity to talent pipelines. Flexibility, scalability, and operational excellence emerged as key priorities.



FEASIBILITY STUDY WORKSHOP #1 HELD IN FBT'S DOWNTOWN ALBUQUERQUE OFFICES



GATEWAY COMMUNITY COLLEGE CENTER FOR ENTREPRENEURIAL INNOVATION - PHOENIX, AZ

CHAPTER 03

MARKET CONTEXT & BENCHMARKING

BIOSCIENCE INDUSTRY TRENDS & PEER FACILITY BENCHMARKING

The benchmarking, trends research, and case study review were used to establish a clear understanding of what a successful bioscience incubator and multi-tenant laboratory facility should provide for Albuquerque and the entire state of New Mexico. The process began by identifying local needs, including the lack of affordable, flexible wet lab space for early-stage companies, the need for access to shared core equipment, and the importance of proximity to research institutions, clinical partners, investors, and workforce pipelines. This analysis helped define the facility not only as a place for laboratory work, but as a platform for commercialization, mentorship, business development, and talent retention.

The case studies reviewed for the incubator lab study demonstrated a range of successful approaches to planning flexible, multi-tenant research environments.

GATEWAY CENTER FOR ENTREPRENEURIAL INNOVATION

MARICOPA COMMUNITY COLLEGE - PHOENIX, AZ

The Gateway Center for Entrepreneurial Innovation was identified as a compact 21,000 GSF model with approximately 47% of its area dedicated to labs, combining wet labs, industrial labs, office space, collaboration areas, and flexible indoor-outdoor environments. Its floor plan emphasized the importance of organizing labs around shared support functions, conference space, loading access, and collaborative office areas so that early-stage companies can operate efficiently within a relatively small footprint. For Albuquerque, this example is especially relevant because it shows how a modestly scaled facility can still support meaningful entrepreneurship if the program is carefully organized around shared resources, visible collaboration zones, and practical tenant support spaces that reduce barriers to entry.

CONNECT LABS @ 850 PBC

PHOENIX BIOSCIENCE CORE, PHOENIX, AZ

The Connect Labs @ 850 PBC case study illustrated a slightly larger incubator model at 24,000 ASF, with approximately 49% of the facility dedicated to labs. Its program included wet labs, showcase lab space, office areas, collaboration zones, shared support, conference rooms, a lobby, break areas, and a central hub, reinforcing the value of adaptable wet lab environments that support both technical work and community-building. The plan showed how a multi-tenant facility can integrate shared infrastructure with a variety of office and lab types, allowing companies to grow while maintaining access to common amenities and support spaces. This model also demonstrates the importance of creating a front door for the innovation community, where tenants, mentors, investors, and institutional partners can interact without compromising the security or functionality of laboratory areas.

CONNECT LABS @ AGGIE SQUARE

UC DAVIS CAMPUS - SACRAMENTO, CA

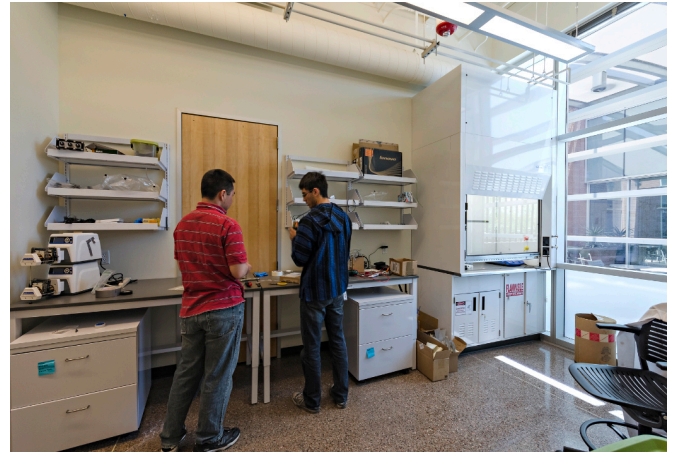
The Connect Labs @ Aggie Square case study represented the largest benchmark at 35,000 ASF, with approximately 62% of the area dedicated to labs. Its program highlighted wet lab variety, showcase spaces, office areas, split functional zones, lobby, break room, and future tenant space, showing how a larger incubator can provide both immediate flexibility and long-term adaptability. Together, these case studies reinforced several planning themes relevant to Albuquerque and New Mexico: a meaningful lab-to-office ratio, access to shared support and collaboration spaces, flexible tenant modules, strong visibility for showcase areas, and the ability to scale with company growth over time. The Aggie Square example is particularly useful for testing future expansion scenarios because it illustrates how shell space, varied tenant suites, and shared amenities can be planned as part of a growth-oriented ecosystem rather than as isolated real estate components.

CASE STUDY

GATEWAY CENTER FOR ENTREPRENEURIAL INNOVATION



MEETING AREAS ADJACENT TO SHARED OUTDOOR SPACE



FLEXIBLE LAB ENVIRONMENTS



GATEWAY CENTER FOR ENTREPRENEURIAL INNOVATION FLOOR PLAN - NOT TO SCALE

CASE STUDY

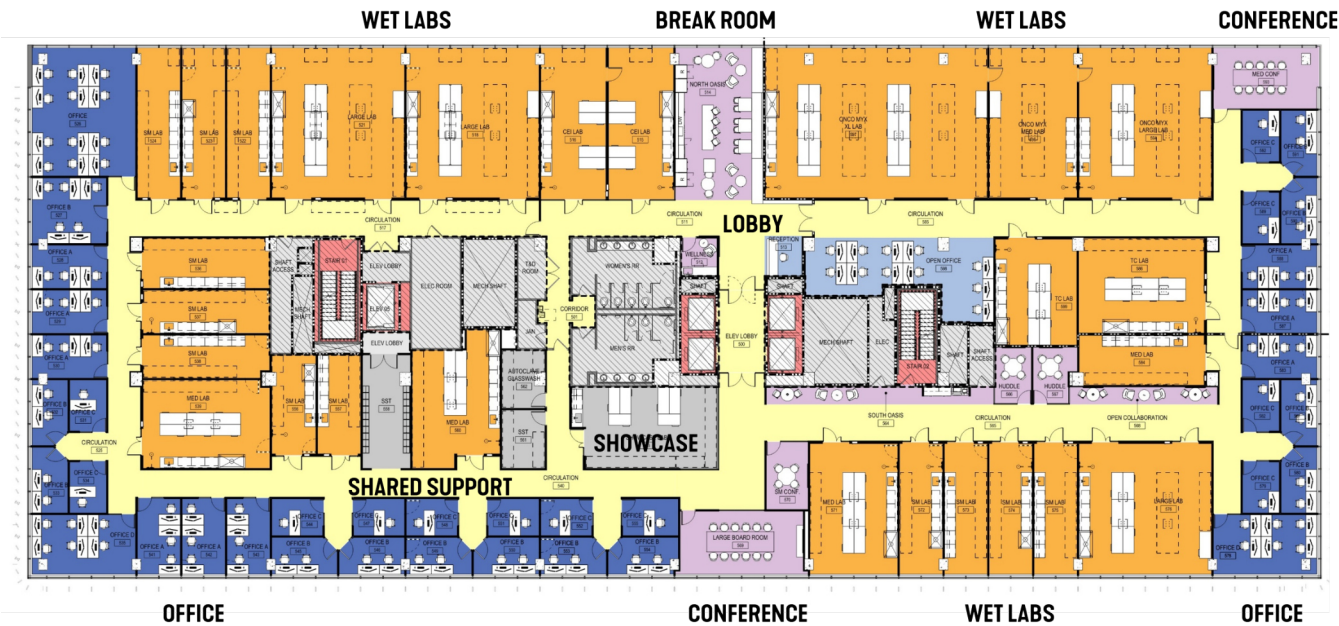
CONNECT LABS @ 850 PBC



CENTRAL BREAK ROOM AND COLLABORATION AREA



INFRASTRUCTURE ENABLED WET LABS



CONNECT LABS @ 850 PBC UPPER LEVEL FLOOR PLAN - NOT TO SCALE

CASE STUDY

CONNECT LABS AT AGGIE SQUARE



COLLABORATION AND INTERACTION HUB AT ENTRY



SHOWCASE LABORATORY WITH GLAZING FOR TOURS



CONNECT LABS AT AGGIE SQUARE GROUND LEVEL FLOOR PLAN - NOT TO SCALE

INCUBATOR & MULTI-TENANT LAB BEST PRACTICES

The case studies introduced key trends shaping successful incubator environments including:

- Agile space offered at entry-level prices
- Flexible lab modules
- Short-term or scalable lease options
- Shared equipment access
- Strong operational support.

Comparable facilities also demonstrated the value of in-house mentorship teams, industry advisors, investor programming, and networking events that help startups move from research to market. These findings reinforced the importance of locating the facility within an active innovation ecosystem and establishing a focused mission (such as helping startups reach commercialization while supporting companies in building and retaining talent in New Mexico).

IMPLICATIONS FOR ALBUQUERQUE / NEW MEXICO

Benchmarking confirmed that NMBSA's facility should be planned as an accessible, mission-driven incubator rather than a conventional revenue-maximizing real estate project. Comparable facilities show that early-stage bioscience companies need a low-cost entry point into laboratory work, which may include a large shared laboratory where companies can rent benches for standard lab activities, as well as small dedicated lab suites for startups ready for their first independent space. This approach would help address the current gap in New Mexico for flexible 1,000–1,500 square foot lab spaces while supporting companies at multiple stages of growth.

The benchmarking also reinforced the importance of shared infrastructure and institutional partnerships. For NMBSA, this means pursuing access to core lab resources through UNM while also providing essential in-building capabilities such as BSL-2 lab space with restricted access, shared support areas, and offices for the management team. Tenant lease terms should be flexible enough to accommodate startups with uncertain growth trajectories, and the operating model should prioritize company support, talent retention, commercialization, and ecosystem development over direct profit generation.

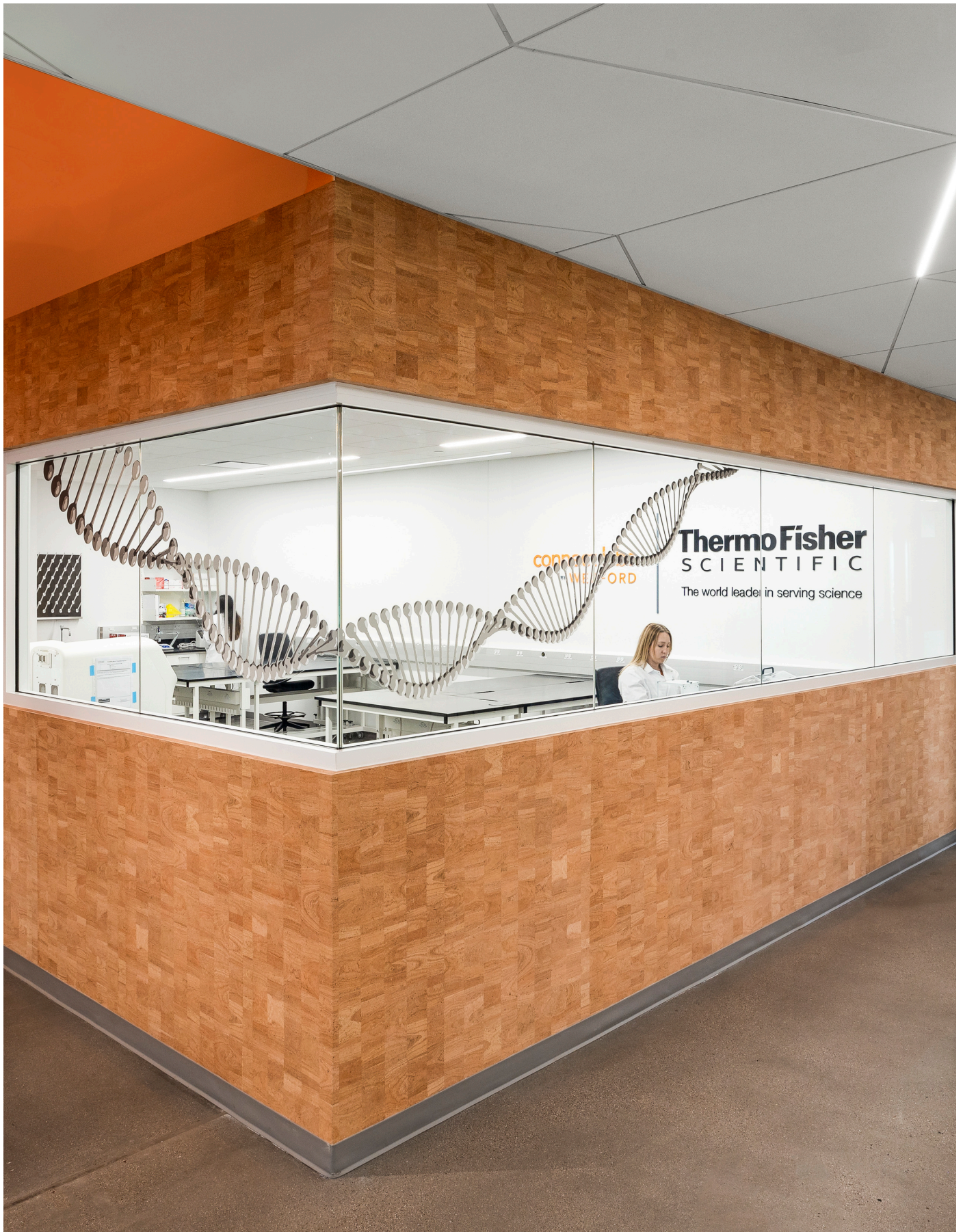
Programmatically, the case studies suggest that NMBSA should evaluate a right-sized first phase that balances near-term affordability with long-term flexibility. A 25,000 square foot facility could provide a focused initial platform, while a 40,000 square foot concept with approximately 15,000 square feet of shell space could preserve future expansion capacity as demand grows. In addition to labs and offices, the facility should include larger lecture, instructional, and multipurpose spaces that can support internships, investor programming, workshops of approximately 30 people, meetings of 24–60 people, and occasional events of up to 100 people through flexible indoor, atrium, or outdoor gathering areas.



CONNECT LABS @ 850 PBC - PHOENIX, AZ



GATEWAY CENTER FOR ENTREPRENEURIAL INNOVATION BREAK ROOM - PHOENIX, AZ



CONNECT LABS @ 850 PBC SHARED CORE LAB FACILITIES - PHOENIX, AZ

BUILDING TOURS OF COMPARABLE LABS & TAKEAWAYS

THE BIOSCIENCE CENTER

Albuquerque, NM

Total Size: 19,500SF (15,000NSF)

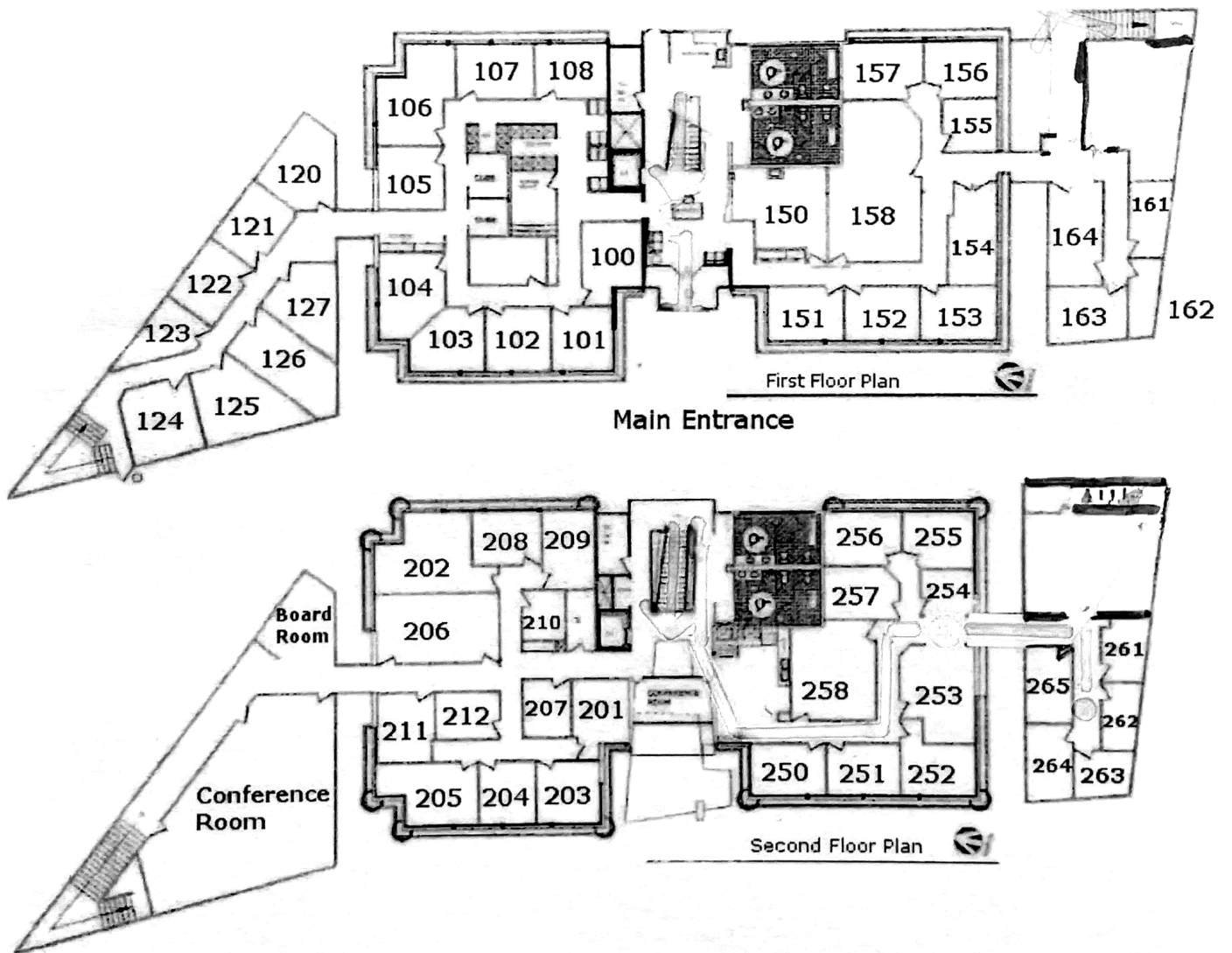
- The building was repurposed into lab space in 2013, was not purpose built as an incubator.
- Now fully occupied with a waiting list, indicates high demand for lab space in Albuquerque.
- Labs are small in size:
 - Largest ~480-500 SF
 - Smallest ~20 SF (Closet-Sized)
 - Typical ~250 SF
- Most tenants want 1,000 SF+, contiguous spaces to transition into, but that does not exist.
- \$35/SF office and \$50/SF lab spaces, all inclusive.
- Approximately 60% lab space to 40% office space.



TYPICAL LAB ENVIRONMENT



THE BIOSCIENCE CENTER EXTERIOR AND MAIN ENTRY



THE BIOSCIENCE CENTER FLOOR PLANS - NOT TO SCALE

SANTA FE BUSINESS INCUBATOR

Santa Fe, NM

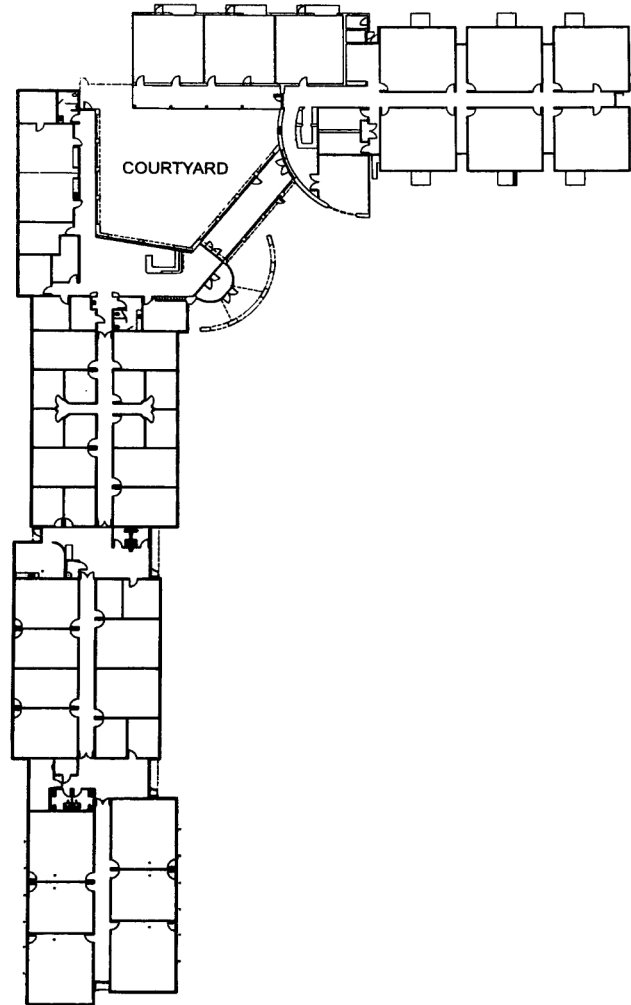
Total Size: 30,000 SF

- This building was purpose built as an incubator space in 1997 and expanded on in 2001.
- The incubator is operating at high capacity with strong demand, including a wait list. Indicates need for larger labs.
- Labs are small in size but larger than The Bioscience Center:
 - Largest ~840 SF
 - Range ~200 SF - 840 SF
- Tenants' rental costs for this facility are very low, in the dollars per square foot range.
- Approximately 60% lab space to 40% office space.
- Successful shared wet lab (~672 SF) with equipment and reservable bench space.
- Currently has two large tenants that are leasing a majority of the lab space. Freeing up this space with the new larger labs would allow for smaller start-ups to move in.

TOUR IMPLICATIONS FOR NMBSA

The tours highlighted best practices including modular lab design, shared core facilities, strong operator presence, and integrated support services. Successful incubators typically provide flexible leases, centralized equipment, and community programming. Peer facilities demonstrate that early investment in infrastructure attracts both startups and established firms. However, supply remains constrained in secondary markets like Albuquerque, presenting a strategic opportunity.

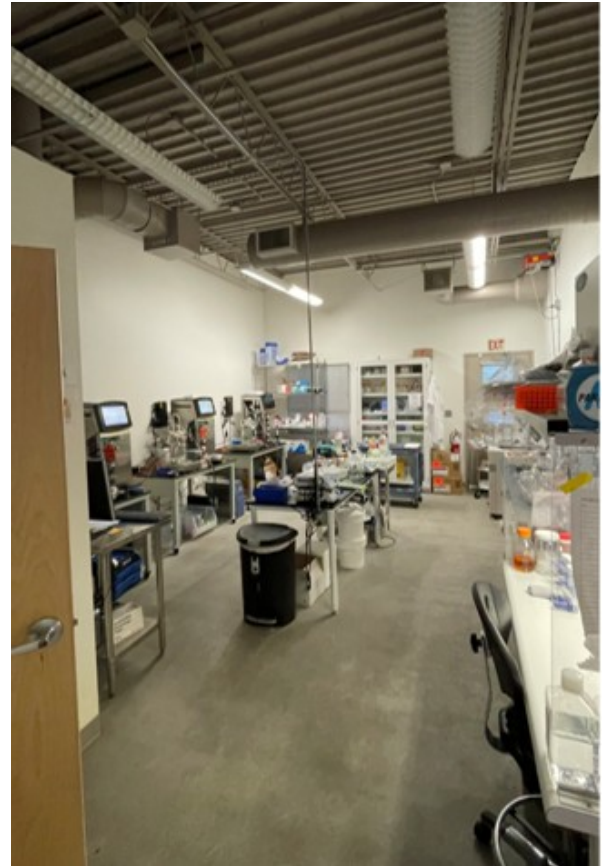
For the state of New Mexico, this translates to a need for right-sized, cost-effective facilities that balance flexibility with technical capability. Proximity to universities and hospitals is critical, as is ensuring affordability relative to larger markets. The goal is that this facility can be a resource for the entire state, allowing businesses to expand within the state, offering flexibility in space size, capability, and location. This initial program and location in Albuquerque fills the existing gaps in performance, proximity and scale identified in the comparable lab analysis allowing New Mexico's research ecosystem to thrive.



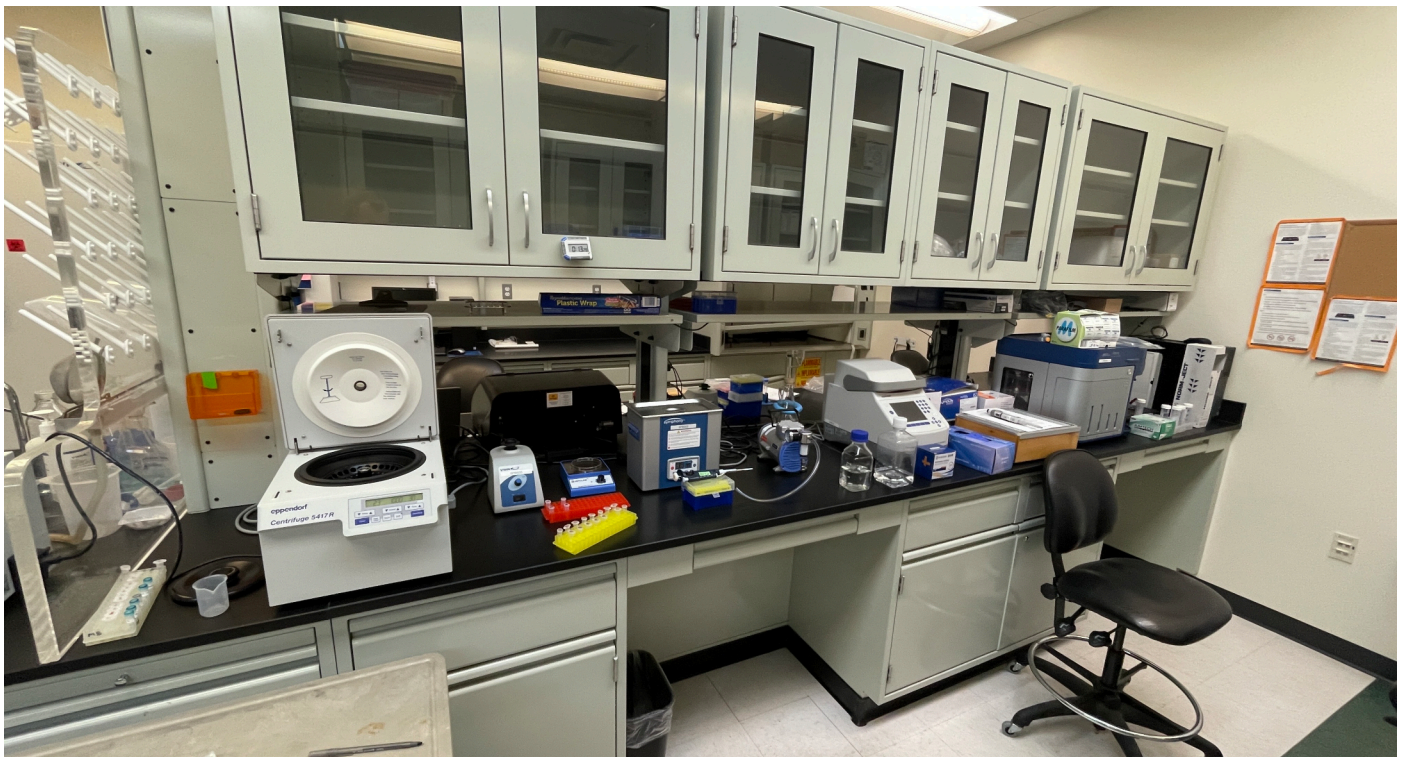
SANTA FE BUSINESS INCUBATOR FLOOR PLAN - NOT TO SCALE



SANTA FE BUSINESS INCUBATOR MAIN ENTRY



SHARED CORE LAB SPACE



TYPICAL LAB ENVIRONMENT



CONNECT LABS AT AGGIE SQUARE - SACRAMENTO, CA

CHAPTER 04

PROGRAM REQUIREMENTS

SPACE NEEDS AND PROGRAM

The proposed program was presented to stakeholders quantitatively through a tabulated spreadsheet that tracked the assignable (ASF) and gross sf (GSF) for the facility. The team also represented the program in a graphical format called “guide plates” that are 3-dimensional models of each assignable room to validate furnishing and functionality of the square footage. The “guide plates” are color coded to reflect the typology of the spaces differentiating the performance, finish, system requirements to help inform an accurate accounting of cost for each of the spaces.

PROGRAMMATIC BREAKDOWN

The programming process identified three primary user groups for the facility and has broken down the space allocations into three groups:

1. NMBSA – Wet + Dry Lab and Shared Office Facility
2. Mixed-Use Space – Additional Lab
3. Mixed-Use Space – Retail

For NMBSA the proposed program includes a mix of wet labs, dry labs, office space, and shared amenities; space allocation emphasizes flexibility to accommodate companies at various stages. The program key components including lab modules, shared equipment rooms, collaboration areas, and administrative functions are based around an 11'x11' planning module to aid in planning and future reconfiguration of the spaces. Wet labs are expected to represent just over 50% of total ASF, with dry lab, office, collaboration, and support spaces comprising the remainder. Lab support spaces, represented in the wet lab allocations, could house shared equipment (i.e. autoclaves, cold storage, and/or specialized instrumentation) which are beneficial to tenants in reducing startup costs.

Spaces for the Mixed-Use Space contemplated the addition of shell space for two different purposes. The program has currently held 5,500 ASF of shell space for some type of lab usage. Additionally, another 5,000 ASF of shell space is being set aside for retail. In both cases, this square footage is anticipated to occupy the ground floor at present time.

With these programmatic groupings, the design team explored two distinct scenarios that tested the program distribution and building size. Square footage numbers have been rounded up at this study phase:

- Base Scenario: 40,000 GSF (25,000 ASF)
- Base + Future Scenario: 67,000 GSF (42,000 ASF)

BUILDING EFFICIENCY

CALCULATING FROM ASF TO GSF

Beyond primary program areas (labs, conference rooms, etc.) the building must also accommodate essential support spaces. These include mechanical, electrical, data, plumbing rooms, and restrooms to name common spaces. Circulation areas, including corridors, stairs, and elevators, are also factored into the total square footage. The extent of these support and circulation spaces depends largely on the building's size, number of levels, and desired service and accessibility standards. Exterior walls and mechanical shafts are included within this calculation as well.

During the programming phase, these components are estimated utilizing percentage-based factors derived from comparable projects. For this study, we settled on an overall efficiency rate of 62%, a figure confirmed by the layout studies developed for each program scenario. Note that this efficiency rate varies depending on the size of the facility with larger buildings generally being more efficient than smaller buildings. More often than not, a larger facility allows for more usable programmed space as a percentage of the overall facility size.



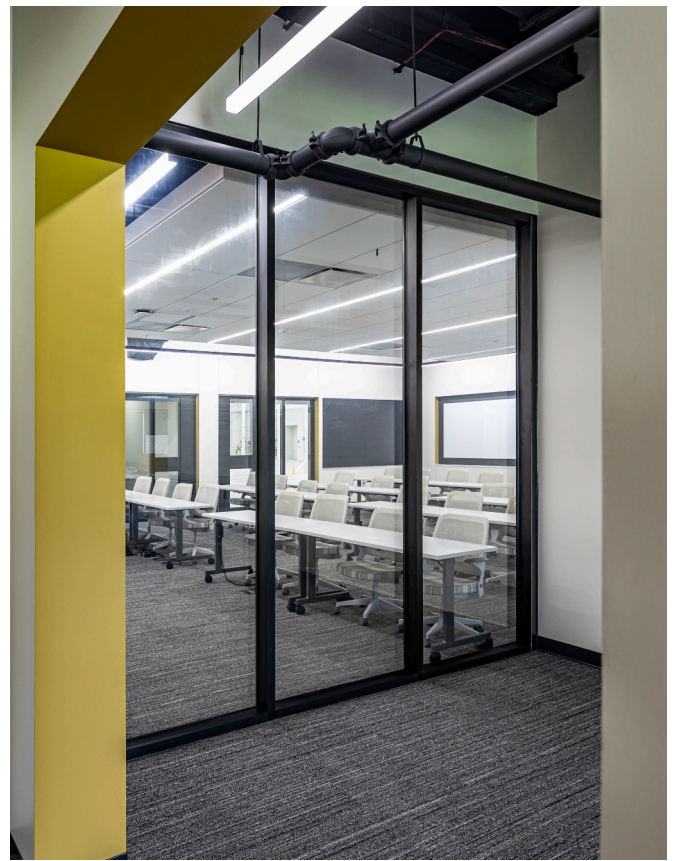
CONNECT LABS @ 850 PBC - PHOENIX, AZ



OAKLAND UNIVERSITY RESEARCH AND INNOVATION CENTER - ROCHESTER, MI



OLD DOMINION UNIVERSITY NEW SCIENCES BUILDING - NORFOLK, VA



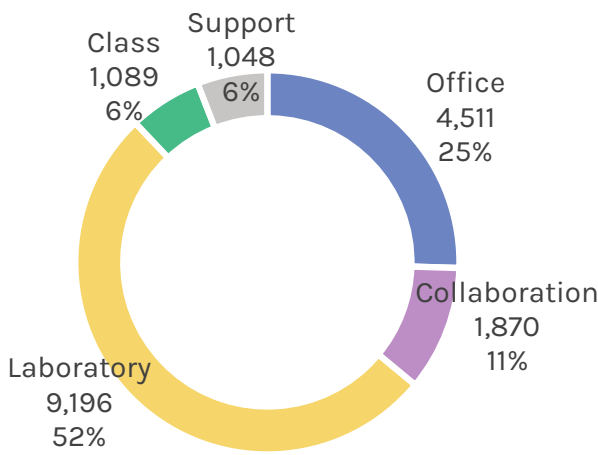
OAKLAND UNIVERSITY RESEARCH AND INNOVATION CENTER - ROCHESTER, MI

SPACE NEEDS AND PROGRAM

BASE SCENARIO

40,000 GSF | 25,000 ASF | 17,500 ASF NMBSA

This program meets the minimum operational requirements outlined in the initial project description. The scale of this program was further validated through the benchmarking analysis performed during the data gathering phase of the feasibility study.



NMBSA PROGRAM PERCENTAGE MIX BY SPACE TYPE

NEW MEXICO BIOSCIENCE AUTHORITY FEASIBILITY STUDY (~40,000 GSF BUILDING)							
NMBSA Wet + Dry Lab and Shared Office							
Space Name	Staff	NSF	Qty.	Total NSF	Mult.	ASF	Total ASF
Office							
Buiding Management Office	5	62	5	310	1.3	403	
Tenant Office - Single	10	62	10	620	1.3	806	
Tenant Office - 2PPL	16	95	8	760	1.3	988	
Tenant Office - 3PPL	18	120	6	720	1.3	936	
Tenant Office - 5PPL	20	190	4	760	1.3	988	
Shared Work Area	12	25	12	300	1.3	390	
Sub-Total	81			3,470			4,511
Collaboration							
Entry Lobby		600	1	600	1.0	600	
Break Room		250	2	500	1.0	500	
Open Huddle		120	1	120	1.0	120	
Conference - Small		120	1	120	1.0	120	
Conference - Medium		240	2	480	1.0	480	
Conference - Large		500	0	0	1.0	0	
Phone/Focus		25	2	50	1.0	50	
Sub-Total	0			1,870			1,870
Classroom							
40-Person Classroom		1,089	1	1,089	1.0	1,089	
Sub-Total	0			1,089			1,089
Laboratory							
Lab Sm		363	4	1,452	1.0	1,452	
Lab Med		726	3	2,178	1.0	2,178	
Lab Large		1,089	4	4,356	1.0	4,356	
Lab Support		242	3	726	1.0	726	
Showcase Lab		484	1	484	1.0	484	
Sub-Total	0			9,196			9,196
Support							
Shared Support		242	2	484	1.0	484	
Staging		242	1	242	1.0	242	
Chemical Storage		121	1	121	1.0	121	
Bio Waste		121	1	121	1.0	121	
Wellness Room		80	1	80	1.0	80	
Sub-Total	0			1,048			1,048
TOTAL	81			16,673			17,714

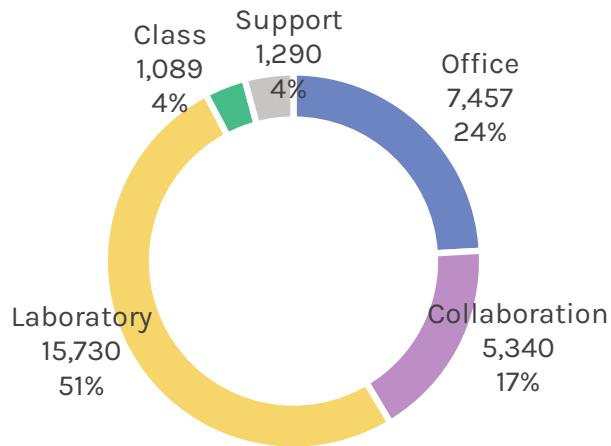
Facility Summary	Staff	Efficiency	Total ASF	Total GSF
NMBSA Wet + Dry Lab and Shared Office	81	62%	17,714	28,571
Mixed Use - Shell (Or Additional Future Lab)		62%	2,500	4,032
Mixed Use - Shell		62%	4,000	6,452
Facility TOTAL	81	62%	24,214	39,055

SPACE NEEDS AND PROGRAM

BASE + FUTURE SCENARIO

67,000 GSF | 42,000 ASF | 30,000 ASF NMBSA

This program is more robust and meets the minimum operational requirements outlined in the initial project description while also accommodating near term growth in the program.



NMBSA PROGRAM PERCENTAGE MIX BY SPACE TYPE

NEW MEXICO BIOSCIENCE AUTHORITY FEASIBILITY STUDY (~67,000 GSF BUILDING)							
NMBSA Wet + Dry Lab and Shared Office							
Space Name	Staff	NSF	Qty.	Total NSF	Mult.	ASF	Total ASF
Office							
Building Management Office	6	62	6	372	1.3	484	
Tenant Office - Single	12	62	12	744	1.3	967	
Tenant Office - 2PPL	28	95	14	1,330	1.3	1,729	
Tenant Office - 3PPL	36	120	12	1,440	1.3	1,872	
Tenant Office - 5PPL	25	190	5	950	1.3	1,235	
Shared Work Area	36	25	36	900	1.3	1,170	
Sub-Total	143			5,736			7,457
Collaboration							
Entry Lobby / Event Space		2,000	1	2,000	1.0	2,000	
Break Room		650	2	1,300	1.0	1,300	
Elevator Lobby/Huddle		300	3	900	1.0	900	
Open Huddle		180	1	180	1.0	180	
Conference - Small		120	2	240	1.0	240	
Conference - Medium		300	2	600	1.0	600	
Conference - Large		500	0	0	1.0	0	
Phone/Focus		30	4	120	1.0	120	
Sub-Total	0			5,340			5,340
Classroom							
40-Person Classroom		1,089	1	1,089	1.0	1,089	
Sub-Total	0			1,089			1,089
Laboratory							
Lab Sm		363	7	2,541	1.0	2,541	
Lab Med		726	6	4,356	1.0	4,356	
Lab Large		1,089	7	7,623	1.0	7,623	
Lab Support		242	3	726	1.0	726	
Showcase Lab		484	1	484	1.0	484	
Sub-Total	0			15,730			15,730
Support							
Shared Support		242	3	726	1.0	726	
Staging		242	1	242	1.0	242	
Chemical Storage		121	1	121	1.0	121	
Bio Waste		121	1	121	1.0	121	
Wellness Room		80	1	80	1.0	80	
Sub-Total	0			1,290			1,290
TOTAL	143			29,185			30,906

Facility Summary	Staff	Efficiency	Total ASF	Total GSF
NMBSA Wet + Dry Lab and Shared Office	143	62%	30,906	49,848
Mixed Use - Shell (Or Additional Future Lab)		62%	5,500	8,871
Mixed Use - Shell		62%	5,000	8,065
Facility TOTAL	143	62%	41,406	66,784

PROGRAM GUIDEPLATE BOARD

The program guideplate boards graphically illustrate form and function of the assignable square feet by validating the furniture layout circulation and workflow within each room. Printed at a large scale, the boards allow stakeholders to see the entirety of their program which is useful in identifying gaps or overlaps in function or use case while giving the design team to confirmation the program will meet their specific needs. The spaces are color coded to differentiate function and performance of the assignable square footage accounted in the program spreadsheet.



GUIDEPLATE BOARD - NMBSA BASE SCENARIO

COLOR LEGEND

LAB

CLASSROOM

SHARED & PRIVATE OFFICES

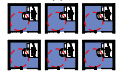
OPEN OFFICE WORKSTATIONS

INTERACTION AND COLLABORATION

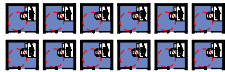
BUILDING SUPPORT

OFFICE

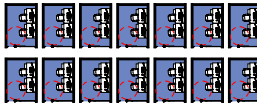
BUILDING MANAGEMENT
OFFICE (6)



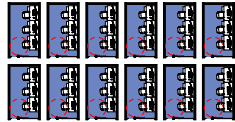
TENANT OFFICE SINGLE (12)



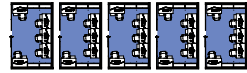
TENANT OFFICE 2PPL (14)



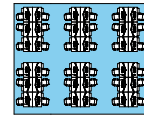
TENANT OFFICE 3PPL (12)



TENANT OFFICE 5PPL (5)

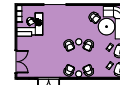


SHARED WORK AREA (36)



COLLABORATION / LECTURE

ENTRY LOBBY



PHONE/FOCUS (4)



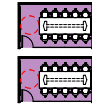
BREAK ROOM (2)



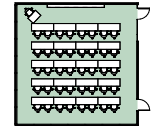
CONFERENCE - SMALL (2)



CONFERENCE - MED (2)



LARGE LECTURE / FLEX CLASSROOM



ELEV LOBBY/HUDDLE(3)

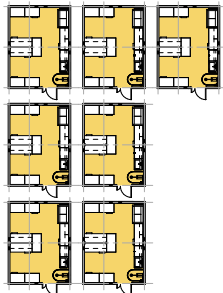


OPEN HUDDLE



LABORATORY

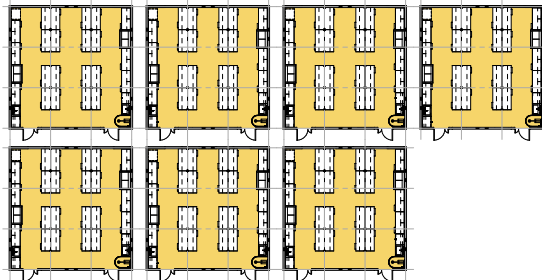
LABORATORY SMALL 363SF (7)



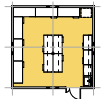
LABORATORY MEDIUM 726SF (6)



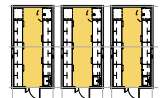
LABORATORY LARGE 1089SF (7)



SHOWCASE LABORATORY 484 SF

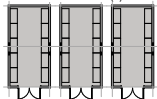


LABORATORY SUPPORT 242SF (3)



SUPPORT

SHARED SUPPORT (3)



STAGING



CHEMICAL STORAGE



BIO WASTE



WELLNESS ROOM





CODIAK BIOSCIENCE HEADQUARTERS - CAMBRIDGE, MA

CHAPTER 05

SITE ANALYSIS & EVALUATION

INTRODUCTION

FATPIPE BUILDING EVALUATION

A facility tour and engineering assessment was performed for the FatPipe Building. This location initially held promise due to its proximity to the existing offices of NMBSA within the Innovate ABQ Rainforest building and its perceived low cost of renovation. The tour and assessment indicates that there is structural viability but limitations in mechanical systems capacity, electrical systems capacity and space, floor-to-floor heights, and infrastructure for wet labs would be limiting and cost drivers for a renovation. Furthermore code upgrades and system retrofits would be required to bring the facility up to research industry standards. The benefits of faster delivery and lower upfront costs are outweighed by the constraints of limited long-term flexibility and suitability for modern research.

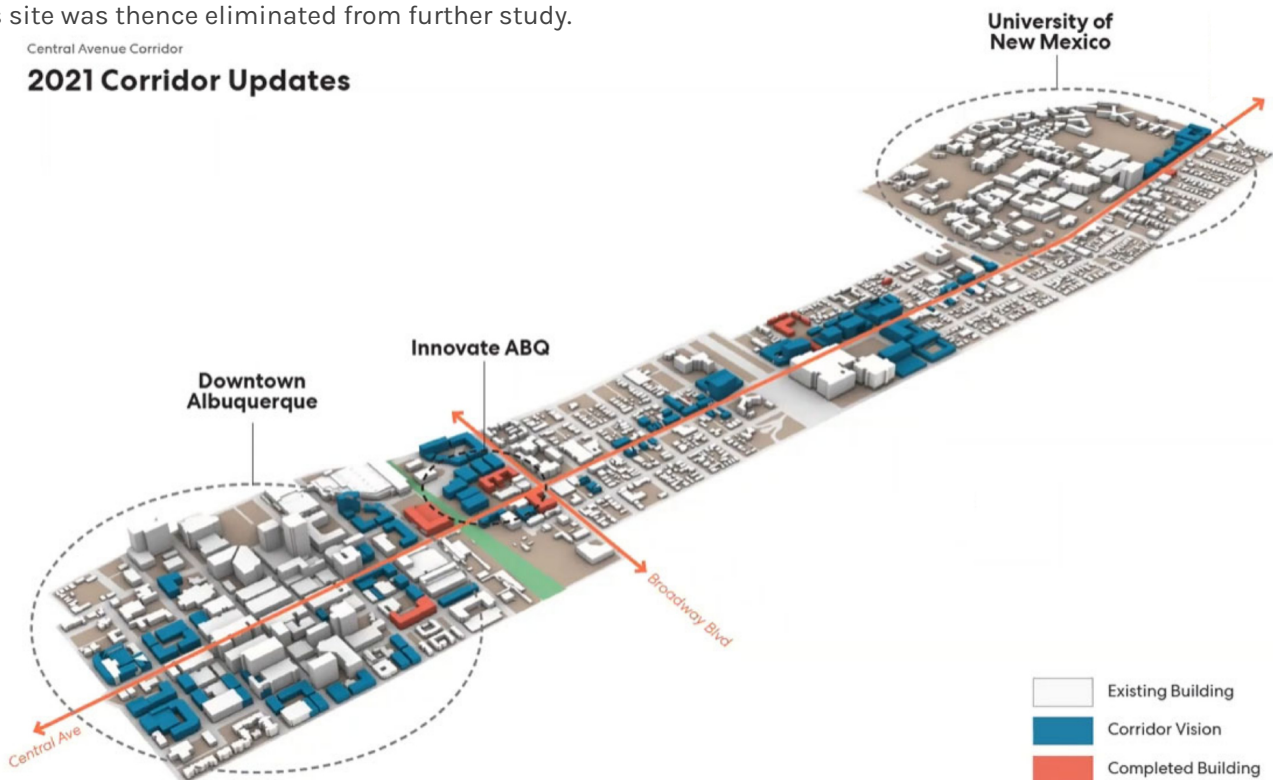
The test-fit performed yielded 7,653 ASF, far short of the minimum target for the new facility. In addition the layout exposed functional and performance compromises that were not acceptable to NMBSA. This site was thence eliminated from further study.



FAT PIPE BUILDING - EXISTING CONDITION

Central Avenue Corridor

2021 Corridor Updates



INNOVATE ABQ PROXIMITY TO DOWNTOWN AND UNM CAMPUS

SITE IDENTIFICATION AND DESCRIPTION

Two primary sites were evaluated as part of this feasibility study: the Innovate ABQ master planned development and the Lomas Corridor site. These sites were identified for the study due to their strategic positioning within Albuquerque, particularly their proximity to downtown, availability for near-term development, and adjacency to the University of New Mexico (UNM) with its associated research and medical institutions.

The Innovate ABQ site represents an emerging innovation district with both an existing and future planned ecosystem of research, entrepreneurship, and collaboration. Anchored by facilities such as the UNM Lobo Rainforest Building and the FUSE Makerspace, the area is designed to foster cross-disciplinary interaction and public engagement. Its location within a master-planned development provides access to transit, visibility within the urban core, and integration with planned open spaces and mixed-use amenities. The Lomas Corridor site offers located adjacent to the UNM Medical District and the future School of Medicine provides immediate proximity to clinical, academic, and research partners essential for bioscience collaboration and talent development. Both sites have characteristics that make them compelling options for creating a highly visible, community-oriented bioscience incubator that supports networking, commercialization, and public-private partnerships.



LOMAS CORRIDOR SITE - EXISTING CONDITION



INNOVATE ABQ SITE - EXISTING CONDITION

INNOVATE ABQ SITE

The Innovate ABQ site is bounded by Tijeras Avenue to the north, Broadway Boulevard to the east, Central Avenue to the south and train tracks to the west. The master planned site includes three existing buildings; a renovated church, FUSE makerspace, and the UNM Lobo Rainforest Building. An extension of Union Square Street and Copper Avenue are planned to extend into the site with 5 additional building footprints and a shared parking garage planned for the remainder of the site. Open space includes a network of Paseo's and the shared amenity of the rail trail fronting the train tracks bordering the west side of the site.

EXISTING CONDITIONS AND BUILDING SYSTEMS ASSESSMENT

The proposed siting for the building is at the northwest corner of development within the existing parking lot. The geometry of the site with the chamfer of the corner of the development and alignment with the planned street extensions and Paseo space is a triangle. This has informed the L-shaped layout of the building footprint.

TOPOGRAPHY AND STORM DRAINAGE

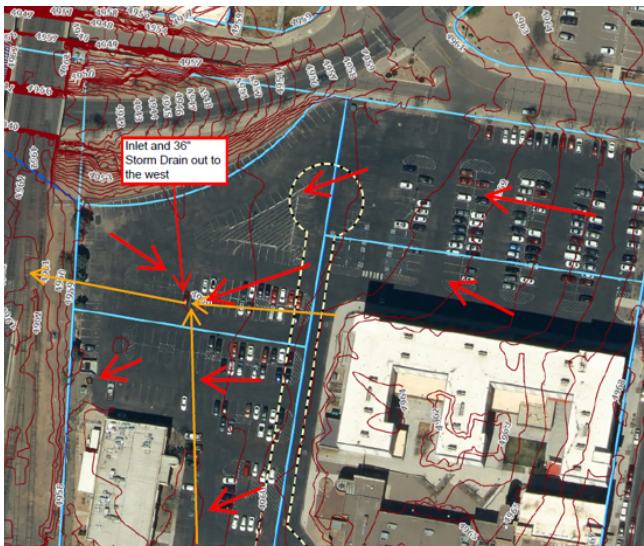
As shown by the exhibit below with City of Albuquerque GIS 1 ft contour intervals, the overall site exhibits moderate topographic relief with the site draining from east to west over paved surfaces as sheet flow to a low spot with an inlet that is piped

out to the west to the public City downstream system. This inlet also appears to receive piped runoff from the north and south, and also from the existing Innovate Building. The site is not encumbered by designated FEMA floodplain and primarily drains as surface flow with runoff controlled by curb and gutter.

The proposed northwest corner location currently receives local surface stormwater runoff with a centralized storm drain low spot and inlet. Development as proposed at this location will require site grading, drainage, and storm drain infrastructure modifications and improvements to accommodate existing and future drainage patterns and infrastructure. As is the case with all City or UNM projects, and per EPA requirements, the site will be required to manage (retain) the 80th percentile storm runoff on-site for water quality purposes prior to the remaining discharge. We anticipate this volume to be retained will amount to approximately 10,000 gallons per acre of redeveloped site. It is anticipated that the existing drainage outfalls will continue to serve the redeveloped site with the addition of 80th percentile stormwater quality measures and site drainage modifications.

WATER AND SANITARY SEWER INFRASTRUCTURE

The overall site has public Albuquerque Bernalillo County Water Utility Authority (ABCWUA) water lines in the Broadway, Central, and Tijeras frontages, and public sanitary sewer in the Broadway and Tijeras frontages. There are nearby public fire hydrants, but they are not well positioned to serve this site as Albuquerque Fire & Rescue does not consider hydrants on opposite sides of streets for coverage, and new lines for hydrants are therefore anticipated.



EXISTING SURFACE DRAINAGE AND STORM SEWER LINES



EXISTING SANITARY SEWER AND WATER LINES



INNOVATE ABQ EXISTING SITE CONDITION



INNOVATE ABQ EXISTING SITE CONDITION

Domestic water and sanitary sewer service is readily available via routine connection to existing public lines. The proposed building will require extension of a sanitary sewer service, construction/installation of a new domestic metered service, and a fire sprinkler line extension. Fire flow requirements and internal circulation will need to be confirmed and documented through coordination with the City Fire Marshal's Office. The proposed Copper and Union Square extensions are a logical corridor to loop public water lines through the site to provide domestic and fire protection to the proposed NMBSA and other developments, as opposed to each building extending their own lines from the fronting streets.

VEHICULAR ACCESS

The overall site is currently served by existing full access driveway connections to Broadway that are well positioned to continue to serve the overall site as it evolves.

CODE AND REGULATORY CONSIDERATIONS

OWNERSHIP

The Innovate ABQ land is owned outright by the University of New Mexico who will be providing the land for development in a leasing agreement with the New Mexico Bioscience Authority.

PERMITTING JURISDICTION

Land owned by the University of New Mexico is outside the jurisdiction of the cities that the land falls within because the University is a State Institution. This has been established historically, and the New Mexico Construction Industries Division (CID) serves as the permitting body for work done on all State Universities. Permitting through CID will require stamped and sealed construction documents and project manual to include Architectural, Structural, Plumbing, Mechanical, Electrical, and Civil designs for new construction.

BUILDING CODE

The State of New Mexico has Adopted the following applicable codes for permitting with CID:

- 2021 New Mexico Commercial Building Code NMAC 14.7.2
 - Adaptation of the IBC 2021
- 2021 New Mexico Commercial Energy Code NMAC 14.7.9
 - Adaptation of the IECC 2021
- 2021 New Mexico Plumbing Code NMAC 14.8.2
 - Adaptation of the UPC 2021

- 2021 New Mexico Mechanical Code NMAC 14.9.2
 - Adaptation of the UMC 2021
- 2020 New Mexico Electrical Code NMAC 14.10.4
 - Adaptation of the NEC 2020
- 2012 New Mexico Electrical Safety Code NMAC 14.10.5
 - Adaptation of the NESC 2012
- 2021 International Fire Code
- ANSI ICC+A117.1-2017

SPECIAL CONSIDERATIONS

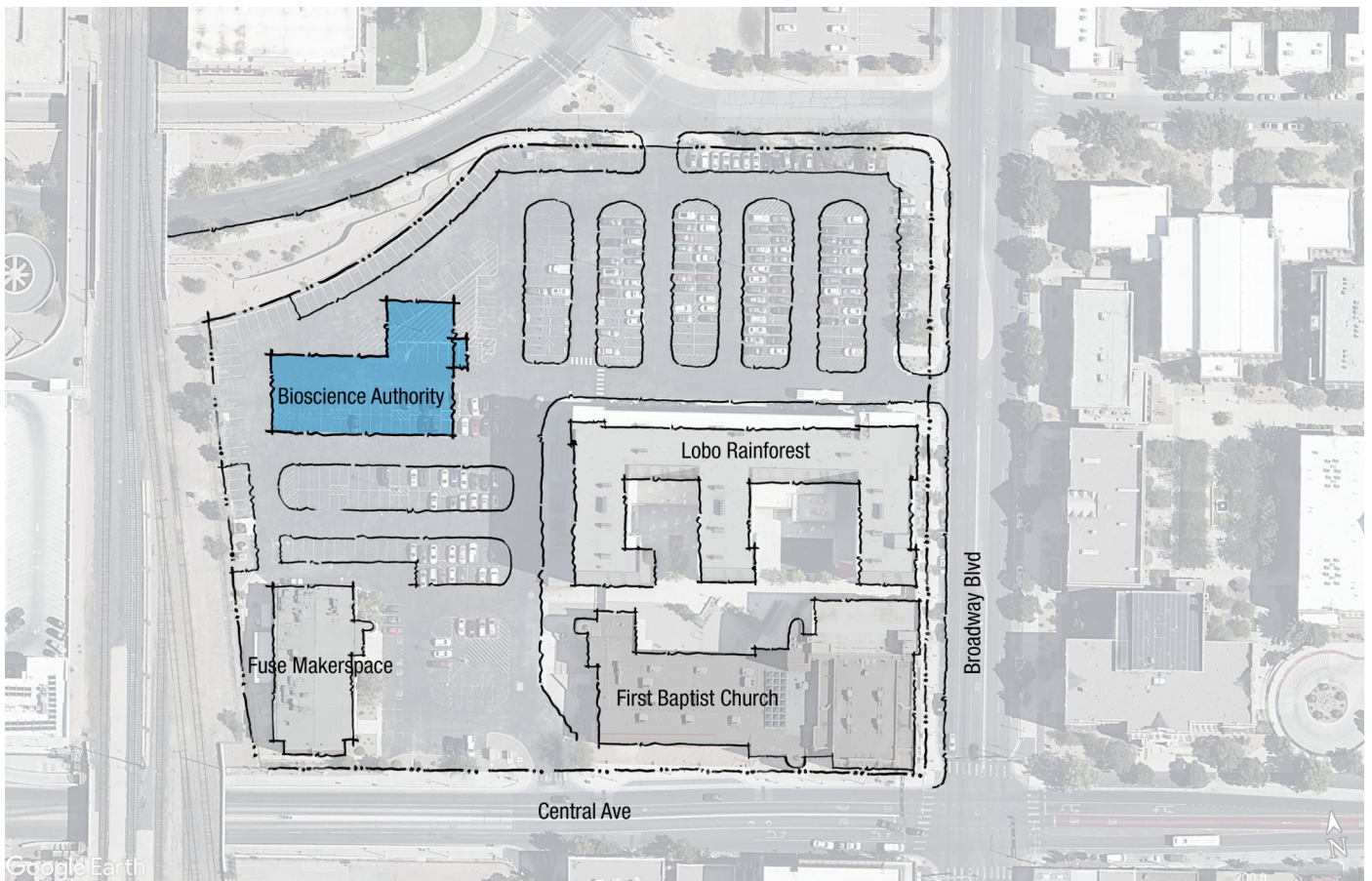
The City of Albuquerque will be providing emergency responses for Fire and Medical incidents through Albuquerque Fire and Rescue. To ensure there is adequate site access, a Fire 1 Plan must be submitted to the Fire Marshall for coordination with site design for comment and approval.

Police Services will be shared between University of New Mexico Police and the Albuquerque Police Department with UNM taking priority over non-violent crimes.

The trash removal and recycling services will have to be negotiated with either the City of Albuquerque, The University of New Mexico, or Waste Management.

OPPORTUNITIES AND DEVELOPMENT CONSTRAINTS

- Innovate ABQ offers an opportunity to build on an emerging innovation-district setting with direct adjacency to the UNM Lobo Rainforest Building, FUSE Makerspace, and future mixed-use development.
- The site supports public engagement, entrepreneurship, and cross-disciplinary collaboration, reinforcing the incubator's role as a civic-facing investment in New Mexico's bioscience ecosystem.
- Planned street extensions, paseo open space, and transit-oriented urban conditions strengthen access and identity but also create a constrained triangular parcel.
- The constrained geometry may reduce laboratory planning efficiency, floor plate size, complicate modular tenant layouts, and limit long-term expansion flexibility.
- Parking, service access, and dependence on broader master plan improvements remain key implementation considerations.



INNOVATE ABQ BUILDING LOCATION SKETCH



INNOVATE ABQ DEVELOPMENT MASTERPLAN WITH BASE PROGRAM SCENARIO SHOWN

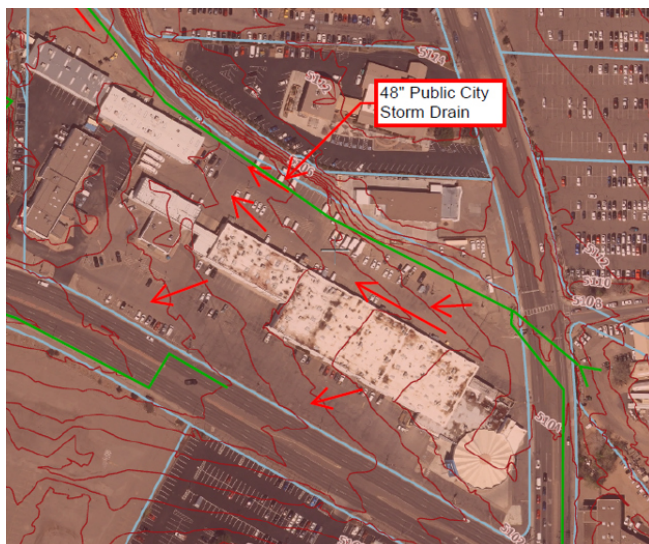
LOMAS CORRIDOR SITE

The Lomas Corridor site is located north side of Lomas Boulevard west of the University Boulevard intersection at the site of an existing car dealership. The car dealership is currently being utilized by the University facilities for fleet maintenance and storage and is planned to be demolished as part of a master planner redevelopment of the area. Consistent with the planned development adjacent to the parcel, street level retail is required per the master plan and due to it's frontage along Lomas Boulevard to provide an active engaging pedestrian experience for research staff and students.

EXISTING CONDITIONS AND BUILDING SYSTEMS ASSESSMENT

TOPOGRAPHY AND STORM DRAINAGE

As shown by the exhibit below with City of Albuquerque GIS 2 ft contour intervals, the overall site exhibits moderate (approximately 1%) topographic relief with the site generally draining from east to west over paved surfaces as sheet and concentrated surface flow. The existing building, slated for demolition, currently divides the site whereby runoff on the north side drains to the west to a public City 48" storm drain, and runoff on the south side drains out to Lomas in a largely uncontrolled manner. The site is not encumbered by designated FEMA floodplain.



EXISTING SURFACE DRAINAGE AND STORM SEWER LINES

The proposed building location is well suited with respect to grading and drainage given the moderate slopes and minimal need to modify existing site drainage patterns or infrastructure. As is the case with all City or UNM projects, and per EPA requirements, the site will be required to manage (retain) the 80th percentile storm runoff on-site for water quality purposes prior to the remaining discharge. We anticipate this volume to be retained will amount to approximately 10,000 gallons per acre of redeveloped site. It is anticipated that the existing drainage outfalls will continue to serve the redeveloped site with the addition of 80th percentile stormwater quality measures and site drainage modifications. Roof drainage should be directed to the north to minimize drainage to Lomas that has limited capacity.

WATER AND SANITARY SEWER INFRASTRUCTURE

The overall site has public Albuquerque Bernalillo County Water Utility Authority (ABCWUA) water and sanitary sewer lines in the Lomas and University frontages. There are nearby public fire hydrants, but they are not well positioned to serve this site as Albuquerque Fire & Rescue does not consider hydrants on opposite sides of streets for coverage, and new lines for hydrants are therefore anticipated.



EXISTING SANITARY SEWER AND WATER LINES

Domestic water and sanitary sewer service is readily available via routine connection to existing public lines, with the sanitary connection being a short efficient service to the exiting line that runs under the sidewalk on the north side of Lomas and will require minimal effort. The proposed building will require construction/installation of a new domestic metered service, and a fire sprinkler line extension. Fire flow requirements and internal circulation will need to be confirmed and documented through coordination with the City Fire Marshal's Office. The proposed UNM extension of Tucker Avenue into the site and turning south to Lomas is a logical corridor to loop public water lines through the site to provide domestic and fire protection to the proposed NMBSA and other future developments, as opposed to each building extending their own lines from the fronting streets, however, the site can develop in advance of those improvements and make independent connections to the lines in Lomas.

VEHICULAR ACCESS

The overall site is currently served by existing full access driveway connections to Lomas that are well positioned to continue to serve the overall site as it evolves and expands. Future UNM development north of the building site will include an Extension of Tucker Avenue that will provide improved access and circulation opportunities.

CODE AND REGULATORY CONSIDERATIONS

OWNERSHIP

The land at the NW corner of University and Lomas is owned outright by the Sandia Foundation and is being leased to the University of New Mexico on a 99 year lease that has 67 years remaining. This site currently has the vacant Gales Dealership that is being utilized by UNM who will be providing the land for development in a leasing agreement with the New Mexico Bioscience Authority. Demolition and clearing of the site will need to be undertaken by UNM.

PERMITTING JURISDICTION

Land leased by the University of New Mexico is considered to be outside the jurisdiction of the cities that the land falls within partially due to the University being a State Institution and partially due to the City of Albuquerque stating that they will not permit buildings for the University of New Mexico. The City has provided written notice that they defer permitting to the New Mexico Construction Industries Division (CID) serves as the permitting body for work done by all State Universities within the city limits. Permitting through CID will require stamped and sealed construction documents and project manual to include Architectural, Structural, Plumbing, Mechanical, Electrical, and Civil designs for new construction.

BUILDING CODE

The State of New Mexico has Adopted the following applicable codes for permitting with CID:

- 2021 New Mexico Commercial Building Code NMAC 14.7.2
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 - Adaptation of the UPC 2021
- 2021 New Mexico Mechanical Code NMAC 14.9.2
 - Adaptation of the UMC 2021
- 2020 New Mexico Electrical Code NMAC 14.10.4
 - Adaptation of the NEC 2020
- 2012 New Mexico Electrical Safety Code NMAC 14.10.5
 - Adaptation of the NESC 2012
- 2021 International Fire Code
- ANSI ICC+A117.1-2017

CLASSIFICATIONS

Occupancy – B (Business)

Construction Type – IIB

Building Height – 75' Maximum

Number of Stories – 4 Stories Maximum

Allowable Area – 69,000SF

Fire Protection – Equipped with Fire Sprinklers throughout

Elevator – 1 for 3 floors or less / 2 for 4 floors or more

Envelope –

Roof – R30 C.I.

Walls – R13+R7.5 C.I.

Floor – Slab on Grade

SPECIAL CONSIDERATIONS

The City of Albuquerque will be providing emergency responses for Fire and Medical incidents through Albuquerque Fire and Rescue. To ensure there is adequate site access, a Fire 1 Plan must be submitted to the Fire Marshall for coordination with site design for comment and approval.

Police Services will be shared between University of New Mexico Police and the Albuquerque Police Department with UNM taking priority over non-violent crimes.

The trash removal and recycling services will have to be negotiated with either the City of Albuquerque, The University of New Mexico, or Waste Management.

OPPORTUNITIES AND DEVELOPMENT CONSTRAINTS

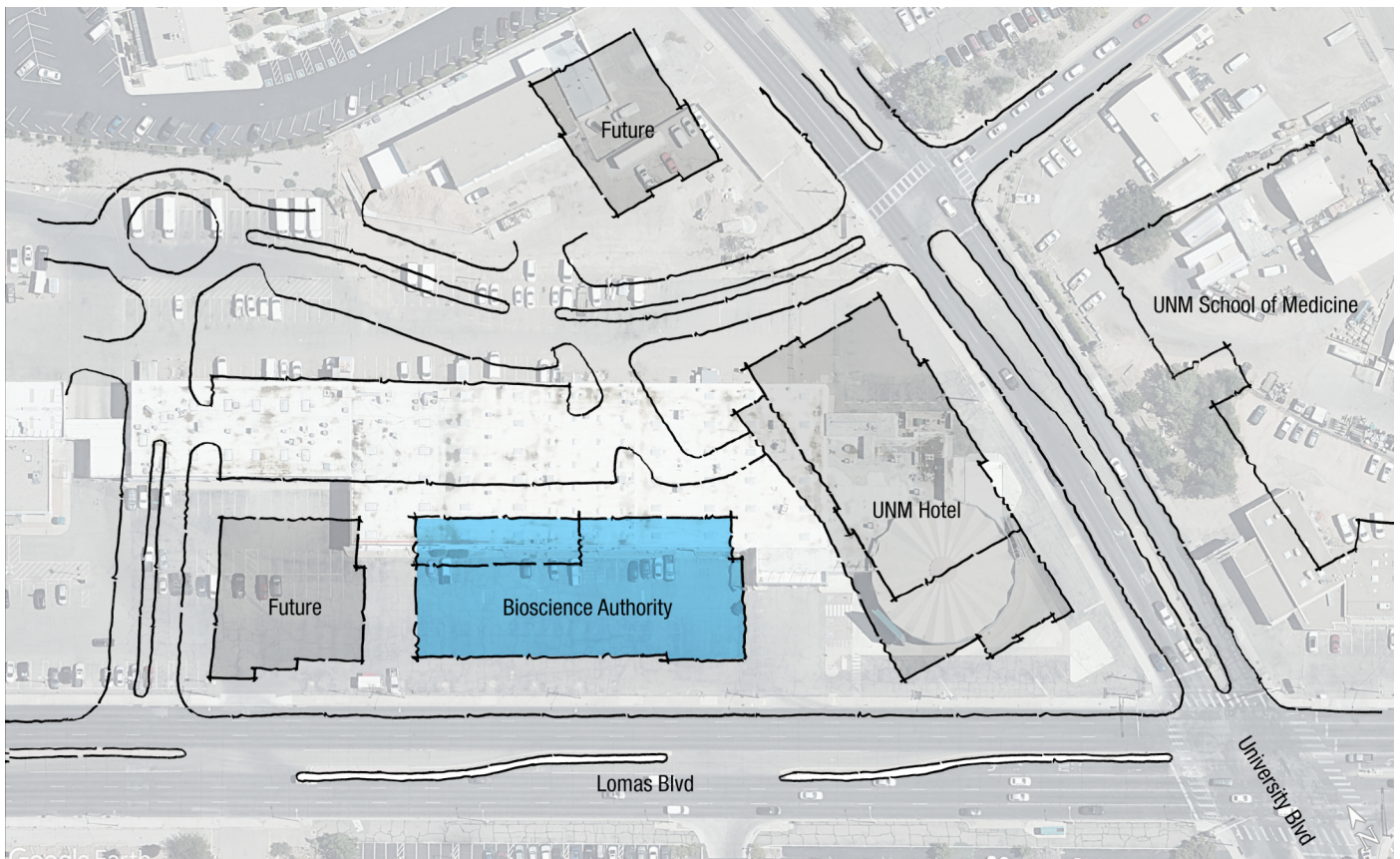
- The Lomas Corridor site offers strong alignment with the project's bioscience mission through direct adjacency to the UNM Medical District and the future School of Medicine.
- This location strengthens access to clinical, academic, research, and workforce partners that are critical to commercialization and tenant attraction.
- The site can support a more efficient laboratory planning diagram, larger floorplate, modular tenant suites, shared support spaces, and long-term phased expansion.
- Redevelopment of the existing car dealership site creates an opportunity to establish a purpose-built research identity along Lomas Boulevard.
- Key constraints include demolition, placemaking needs, active ground-floor frontage requirements, parking coordination, service access, and development dependent on adjacent development timelines.



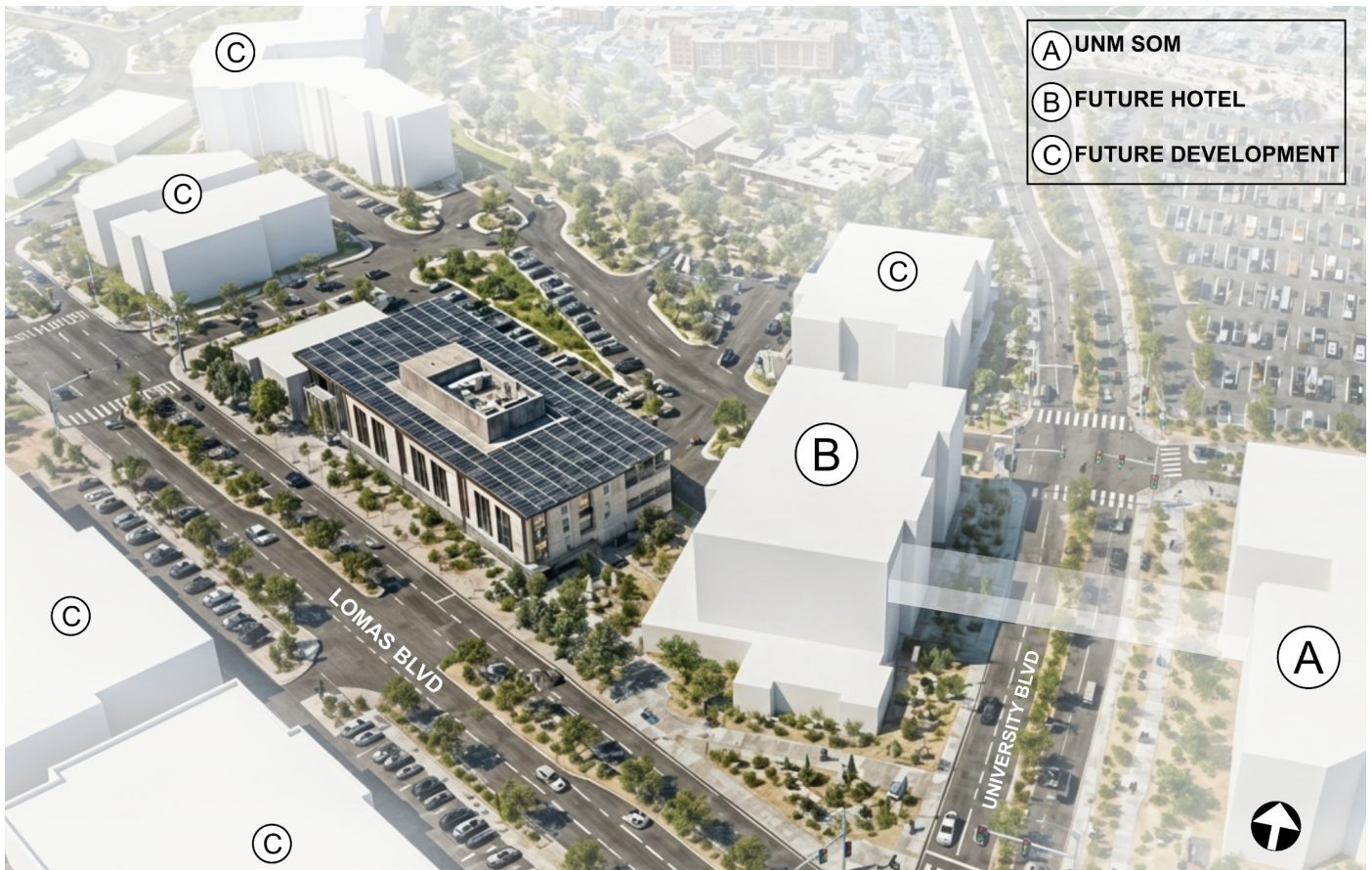
LOMAS CORRIDOR EXISTING CONDITION



LOMAS CORRIDOR EXISTING CONDITION



LOMAS CORRIDOR DEVELOPMENT MASTERPLAN CONCEPT SKETCH



LOMAS CORRIDOR DEVELOPMENT MASTERPLAN WITH CONCEPT AERIAL RENDERING

SITE COMPARISON

The location evaluation indicates that both sites offer meaningful advantages, but the Lomas Corridor site holds a modest overall advantage. Innovate ABQ performs well because of its existing innovation identity, visibility, and relationship to a broader downtown redevelopment environment. Its proximity to the UNM Lobo Rainforest Building, FUSE makerspace, planned open spaces, and future development parcels can help create an environment that supports entrepreneurship, public engagement, and cross-sector interaction. These characteristics align well with the project's goal of making the bioscience incubator a visible investment in New Mexico's innovation economy.

Innovate ABQ also benefits from access to major roadways and transit-oriented urban conditions. The site is bounded by Central Avenue, Broadway Boulevard, Tijeras Avenue, and the rail corridor, placing it in a location with strong regional visibility. However, the location also presents tradeoffs. Parking appears to be a more significant limitation, especially if the planned district parking structure or surrounding parking resources are not available in the right quantity or timing. For a laboratory incubator that may serve employees, visiting researchers, vendors, mentors, investors, and event attendees, convenient parking and service access are important to the daily user experience.

The Lomas Corridor site performs especially well in relation to academic, administrative, and research community access. Its adjacency to the Medical District and future UNM School of Medicine strengthens its relationship to clinical, academic, and research partners. This proximity is significant for an incubator intended to accelerate commercialization, support collaboration, and connect companies with talent pipelines, core research resources, and institutional expertise. For bioscience companies, location near researchers, clinicians, students, and potential collaborators can be as important as the building itself.

Compared with Innovate ABQ, Lomas Corridor appears to offer stronger proximity to existing research collaboration and core research facilities. This supports the larger project objective of anchoring a bioscience ecosystem around academic and medical assets. The site also has the potential to foster a focused innovation environment that is directly tied to biomedical research rather than a

more general entrepreneurial district. Its main location disadvantages are related to access, visibility, and parking when compared with the more urban and publicly recognizable Innovate ABQ setting. The evaluation matrix indicates Innovate ABQ scores better for roadway and transit access and parking proximity, while both sites score similarly for public visibility.

SUMMARY

Innovate ABQ offers a highly visible, urban innovation setting with strong public identity and good access to downtown networks. Its drawbacks are the limits of parking convenience, site constraints, and a somewhat less direct relationship to existing bioscience research assets. Lomas Corridor offers stronger alignment with the academic, medical, and research ecosystem that will likely drive tenant attraction and long-term collaboration. Its drawbacks are that it may need more intentional placemaking, identity-building, and access planning to achieve the same level of public visibility and innovation-district energy.

On balance, Lomas Corridor better supports the location criteria most directly tied to bioscience collaboration, while Innovate ABQ remains strongest as a civic and entrepreneurial destination.



INNOVATE ABQ RENDERED SITE PLAN WITH BASE PROGRAM SCENARIO



LOMAS CORRIDOR RENDERED SITE PLAN WITH BASE + FUTURE PROGRAM SCENARIO



FAT PIPE BUILDING EXISTING INTERIOR - ALBUQUERQUE, NM

CHAPTER 06

DEVELOPMENT SCENARIOS

SCENARIO A:

FAT PIPE RENOVATION / ADAPTIVE REUSE

The FatPipe Building, located on the historic Albuquerque High School campus east of downtown, was evaluated as a potential adaptive reuse option because of its proximity to Innovate ABQ, existing entrepreneurial activity, and perceived lower-cost renovation path. While the building offers structural robustness, daylight, and an appealing reuse opportunity, its limited size, existing configuration, and building systems would require substantial modification to meet the expectations of a modern multi-tenant wet and dry laboratory facility.

PROGRAM TEST FITS

The program test fit showed that FatPipe could accommodate only a limited portion of the desired incubator program, yielding approximately 7,653 assignable square feet, well below the minimum target. The layout would require compromises to lab adjacencies, tenant module sizing, shared support space, and circulation, and would not address the market gap identified through stakeholder engagement and benchmarking. Although reuse could reduce embodied carbon, delivery time, and initial cost, the available floor area would constrain right-sized wet labs, shared equipment, collaboration areas, and future growth.

ARCHITECTURE & INTERIORS

Architecturally, the building’s former library use provides generous ceiling heights, durable construction, and windows that could support open office, collaboration, and community-facing spaces. However, the two-story configuration, historic campus context, and limited footprint create challenges for accessibility, circulation, and laboratory planning. Renovation would need to reconcile the building’s existing character with wet lab requirements, including durable finishes, controlled access, service routing, and clear separation between public, shared, tenant, lab, and office functions.

LABORATORY PLANNING

From a laboratory planning standpoint, FatPipe can accommodate some lab functions, but only with concessions that reduce efficiency and flexibility. The structural grid, floorplate, and limited area make it difficult to organize modular lab suites, adjacent technician workstations, shared support rooms, and back-of-house functions in a scalable way. The building does not provide enough contiguous area to support the desired 1,000 to 1,500 square foot tenant suites, shared wet lab capacity, equipment rooms, and growth space needed by emerging bioscience companies.

7,653 ASF

59% LABS

6 WET LABS

(1) SMALL

(2) MED

(1) MED

(2) LG

363 SF LAB

584 SF LAB

900 SF LAB

1,065 SF LAB

10 OFFICES

(3) BUILDING MANAGEMENT

(7) 2 PEOPLE OFFICE

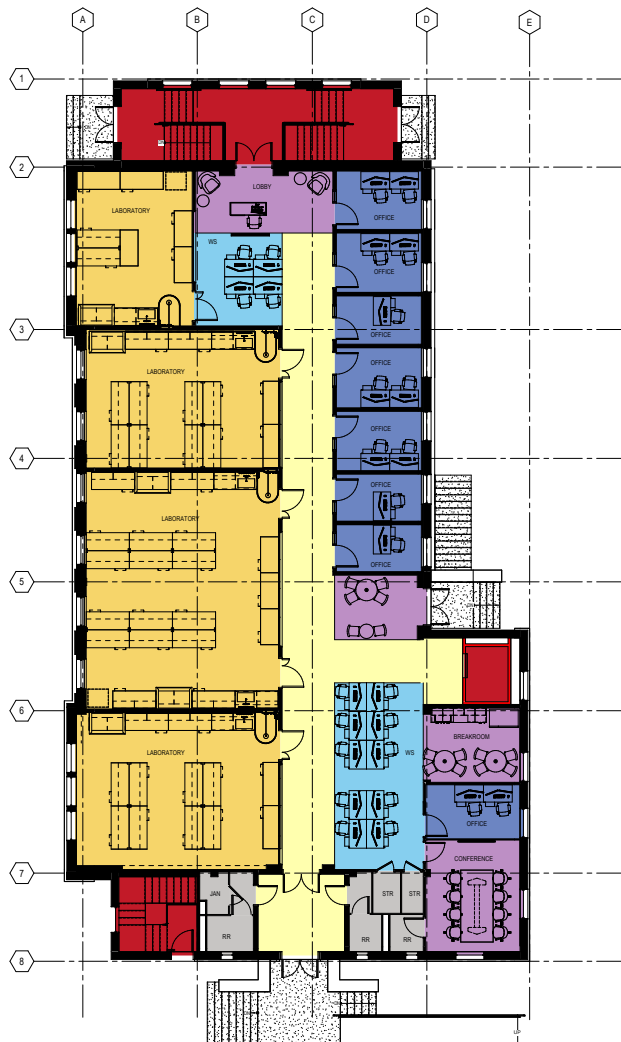
(1) 3 PEOPLE OFFICE

(24) OPEN WORKSTATIONS

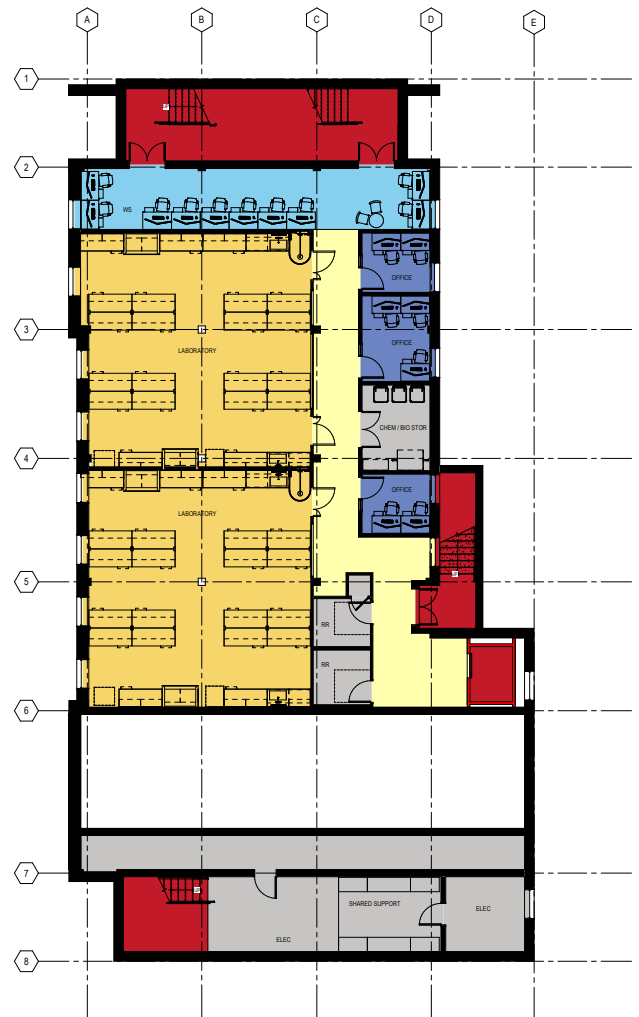
BUILDING SYSTEMS APPROACH

The existing building systems are a major constraint. Designed for library use, the mechanical, electrical, plumbing, and life safety systems were not configured for laboratory ventilation, exhaust, temperature control, emergency power, plumbing distribution, gas storage, or hazardous material handling. While the robust floor construction may support certain vibration-sensitive research uses, most major systems would require replacement or

substantial upgrades. Combined with limited program capacity and planning inefficiencies, the systems overhaul would reduce the cost advantage of reuse and make FatPipe less viable than purpose-built new construction for the incubator's long-term needs.



LEVEL 1
~6,650 GSF



BASEMENT
~6,650 GSF

SCENARIO B:

BASE SCENARIO

The Innovate ABQ site, located within the master-planned innovation district east of downtown, was evaluated as a potential new construction option due to its strong visibility, proximity to the UNM Lobo Rainforest Building and FUSE Makerspace, and alignment with Albuquerque’s entrepreneurial ecosystem. The proposed building site occupies a prominent corner parcel within the development, reinforcing the district’s identity as a hub for innovation, collaboration, and public engagement.

MASSING AND SITE CONCEPT

The site geometry constrains the building footprint to approximately 14,000 GSF, resulting in an L-shaped floorplate that responds to the triangular parcel and planned street alignments. The concept envisions a three-story structure that efficiently organizes program elements while addressing pedestrian access and adjacent street alignment. This massing approach balances site limitations with the need for clear circulation, ground level access and amenities, and functional laboratory planning.

ARCHITECTURE & INTERIORS

The ground floor is designed as a publicly accessible level featuring a welcoming entry lobby, flexible classroom with operable partitions, retail tenant space, and back of house laboratory and building support areas. Vertical circulation is supported by both a passenger and service elevator, providing efficient access to upper levels while separating public, tenant, and operational flows within a compact footprint.

LABORATORY PLANNING

The upper two levels follow an L-shaped layout organized around a centralized corridor that intermixes office suites, flexible labs of varying sizes, and collaboration spaces. This arrangement supports scalability for tenants at different growth stages while maintaining operational efficiency. Shared amenities include meeting rooms, informal collaboration zones, common breakrooms, along with access to outdoor balcony spaces for tenant use.

BUILDING SYSTEMS APPROACH

The mechanical system will consist of air-cooled chillers and boilers to condition the building. Laboratories will be provided with 100% outside air and exhausted either through general exhaust or fume hoods. High efficiency system options are described in detail in the mechanical engineering narrative.

Normal power is supplied to all spaces supporting the lighting, HVAC, plumbing, plug loads with the tenant needs not fully known, spare capacity is provided for the building. To provide redundancy in the event of an emergency, backup power is supplied by an on-site diesel generator. The electrical system distributes from Service Entry Station (SES) on the ground floor of the building and distributes to a electrical closet on the ground. One electrical closet per floor stacks vertically on levels 2 and 3 providing centralized and easily accessible power supply to tenant. A detailed explanation of the electrical system is described in the electrical narrative.

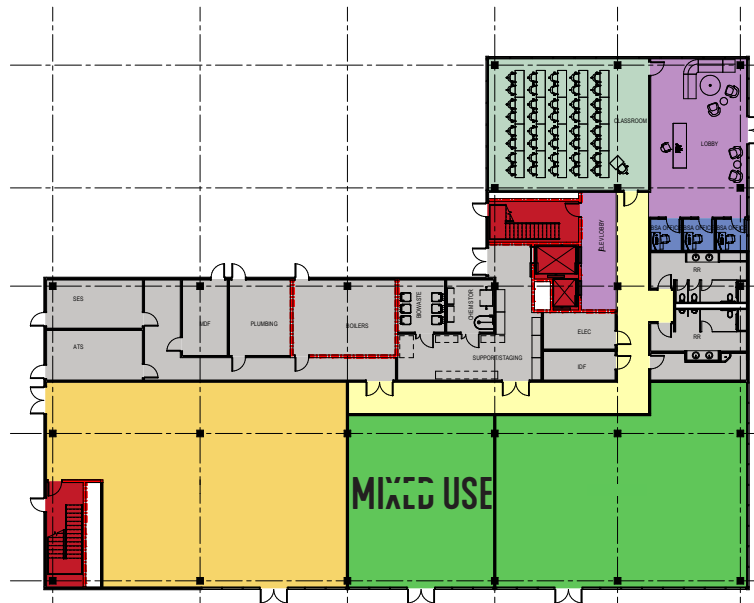
NMBSA BASE SCENARIO
17,714 ASF
52% LABS
15 WET LABS

(3) SMALL	242 SF LAB
(4) SMALL	363 SF LAB
(1) SHOWCASE	484 SF LAB
(3) MEDIUM	726 SF LAB
(4) LARGE	1,089 SF LAB

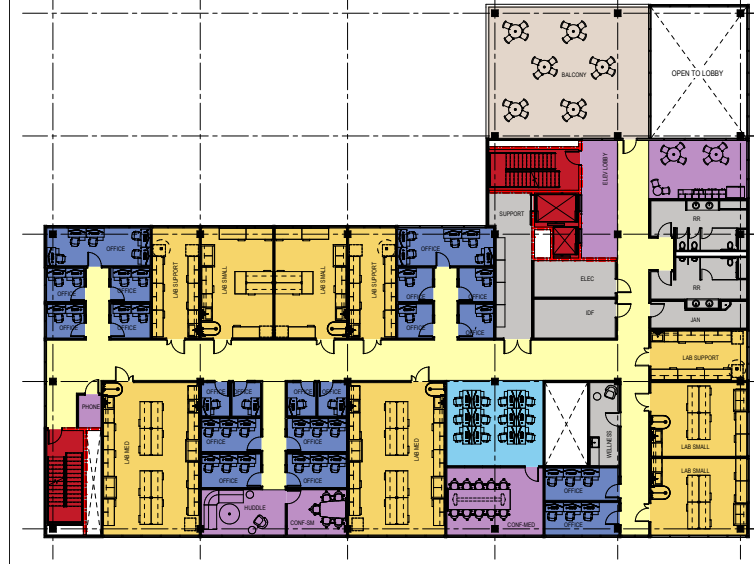
33 OFFICES + 12 WORKSTATIONS

(5) BUILDING MANAGEMENT
(10) SINGLE OFFICE
(8) 2 PERSON OFFICE
(6) 3 PERSON OFFICE
(4) 5 PERSON OFFICE
(12) OPEN WORKSTATIONS

LEVEL 1
~14,000 GSF



LEVEL 2
~12,800 GSF



LEVEL 3
~12,800 GSF



SCENARIO C:

BASE + FUTURE SCENARIO

The Lomas Corridor site is positioned adjacent to Albuquerque's Medical District and the future UNM School of Medicine, offering strong alignment with academic, clinical, and research partners. This location supports direct collaboration, access to shared resources, and proximity to talent pipelines. The site is well suited to anchor a bioscience-focused innovation environment tied to translational research and commercialization.

MASSING AND SITE CONCEPT

The Lomas Corridor site supports a more flexible and efficient building footprint compared to Innovate ABQ, allowing for a clear, rectangular massing strategy and larger floor plates. The concept envisions a 3 or more story structure organized for phased development, with an initial 25,000 GSF building and capacity for expansion toward a 40,000 GSF program total with expansion as tenant demand grows into an additional floor that would be empty shell initially.

ARCHITECTURE & INTERIORS

The building design emphasizes a balance between functional laboratory environments and collaborative, community-oriented spaces. The ground level includes retail space fronting Lomas Boulevard, a defined entry lobby, conferencing and training rooms, and lab and building support spaces. Upper levels provide a mix of labs, offices, and support spaces, with clear separation between public, shared, and secure tenant areas.

LABORATORY PLANNING

Laboratory planning prioritizes modularity, efficiency, and flexibility, using a standardized 11'x11' planning module to accommodate both office and lab layouts. Centralized support spaces and shared equipment reduce tenant costs while maintaining operational effectiveness. The large floorplate and "race-track" configuration of the circulation supports a range of tenant sizes, from early-stage startups to growing companies, with the ability to reconfigure suites and expand over time.

BUILDING SYSTEMS APPROACH

The mechanical system will consist of air-cooled chillers and boilers to condition the building. Laboratories will be provided with 100% outside air and exhausted either through general exhaust or fume hoods. High efficiency system options are described in detail in the mechanical engineering narrative.

Normal power is supplied to all spaces supporting the lighting, HVAC, plumbing, plug loads with the tenant needs not fully known, spare capacity is provided for the building. To provide redundancy in the event of an emergency, backup power is supplied by an on-site diesel generator. The electrical system distributes from Service Entry Station (SES) on the ground floor of the building and distributes to a electrical closet on the ground. One electrical closet per floor stacks vertically on levels 2 and 3 providing centralized and easily accessible power supply to tenant. A detailed explanation of the electrical system is described in the electrical narrative.

NMBSA BASE + FUTURE SCENARIO

30,906 ASF

51% LABS

24 WET LABS

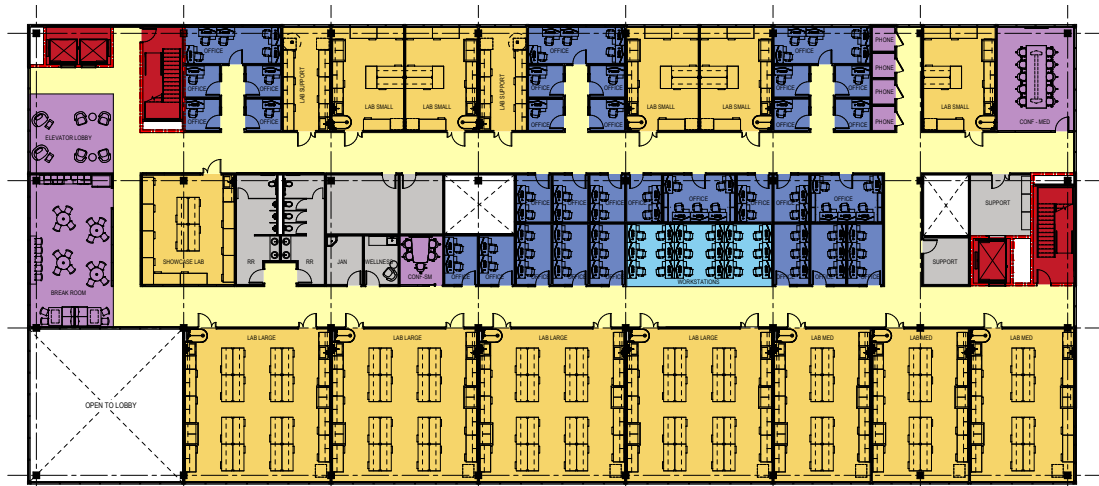
(3) SMALL	242 SF LAB
(7) SMALL	363 SF LAB
(1) SHOWCASE	484 SF LAB
(6) MED	726 SF LAB
(7) LARGE	1,089 SF LAB

49 OFFICES + 36 WS

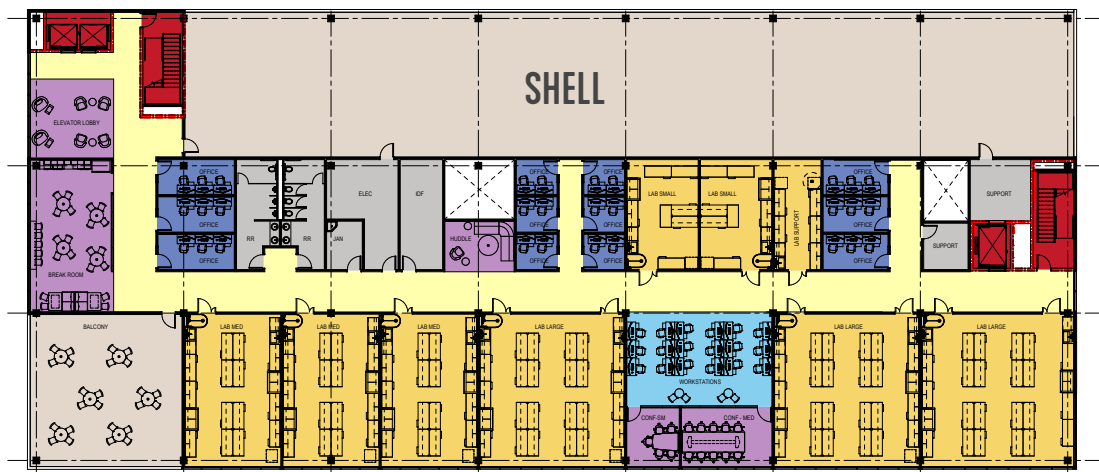
- (6) BUILDING MANAGEMENT
- (12) SINGLE OFFICE
- (14) 2PPL OFFICE
- (12) 3PPL OFFICE
- (5) 5PPL OFFICE
- (36) OPEN WORKSTATIONS



LEVEL 1
~24,300 GSF



LEVEL 2
~24,300 GSF



LEVEL 3
~16,500 GSF



JOHNSON COUNTY MEDICAL EXAMINER'S FACILITY - OLATHE, KS

CHAPTER 07

**BUILDING SYSTEMS & TECHNICAL
CONSIDERATION NARRATIVES**

LABORATORY INFRASTRUCTURE REQUIREMENTS

One of the primary goals of this project is the creation of functional laboratory environments to support the state's growing life sciences ecosystem both today and into the future. Care has been taken to develop a functional space list and laboratory capabilities that provide an appropriate amount of day one performance while not over-designing to maximize return on investment.

Adaptability is one of the most important components of a new laboratory building. A modular approach to space distribution strongly enhances assignment and re-assignment of space, while maintaining opportunities for an orderly approach to the laboratory configurations. In addition, the facility must be designed to embrace future changes in technology. Flexible distribution systems are also of paramount importance to more easily accommodate changes and additions to the services provided in each laboratory area. An adaptable facility is one that can be reorganized within a structured set of parameters without significant effort or cost. To maximize the possible range, the following issues affecting laboratory adaptability should be kept in mind:

- **MODULARITY**
Space Allocation on Similar/Incremental Basis
- **FLEXIBILITY**
Change Space Function and Size
- **ADAPTABILITY**
Add and/or Delete Functions in each Space
- **SERVICEABILITY**
Durable, Ease of Maintenance, Ease of Installation
- **EFFICIENCY**
Space Optimization, Space/Systems to Support Needs
- **INTERACTIVITY**
Promotes Communication among its Users
- **COST**
Use of Appropriate Systems Where Required

Service distribution within a facility greatly impacts flexibility. For a multi-storied facility, we are concerned with both the vertical as well as the horizontal distribution systems. The vertical systems bring the desired utilities to each floor from the

mechanical, electrical and/or telecommunication rooms. The horizontal distribution systems carry the utilities to the individual spaces. Laboratory flexibility also considers accessibility to these utility distribution systems.

Selection of a flexible casework system, combined with the prescribed building module and an adequate vertical and horizontal distribution, will help ensure a large degree of flexibility for all aspects of the laboratory. Fixed casework should be kept to a minimum and strategically located to minimize impact on future adaptability. Larger laboratory islands should utilize a shared frame movable bench system with vertical frame accommodating adjustable shelving and integrated electrical and plumbing services. These services should be connected to building systems via quick disconnects fed from ceiling services panels overhead.

Safety features will be provided in or accessible to each laboratory and are anticipated to meet OSHA and/or ANSI requirements for configuration, operation and location. Safety stations consisting of a deluge shower and eye/face wash shall be provided within 10 seconds or 55 feet travel distance from areas using chemicals. At the safety stations, the eye/face wash will operate independently of deluge shower. The height of eye/face wash basin, deluge shower pull ring and deluge shower head will meet ADA and ANSI requirements for reach ranges.



UC BERKELEY ENERGY BIOSCIENCES BUILDING - BERKELEY, CA

MECHANICAL AND PLUMBING SYSTEMS

The mechanical design narrative describes the systems to be provided for New Mexico Bioscience Authority building. The proposed systems are selected to balance first cost, energy efficiency, environmental responsibility, ability to scale, and maintenance. This flexible approach allows the building program to adapt to changes in requirements over the life of the building.

CODES AND STANDARDS

The latest version, or current adopted version, of the following codes and standards will be used as references in the mechanical design of the building. Note that not all applicable codes are listed.

- 2021 New Mexico Commercial Building Code with Local Amendments
- 2021 New Mexico Mechanical Code with Local Amendments
- 2021 New Mexico Plumbing Code with Local Amendments
- 2020 New Mexico Electrical Code with Local Amendments
- 2021 New Mexico Commercial Energy Conservation Code
- National Fire Protection Association (NFPA)
- American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Handbooks: ASHRAE 62.1 – 2019, ASHRAE 90.1 – 2019
- SMACNA HVAC Duct Construction Standards, Metal & Flexible
- American Society for Testing and Materials (ASTM)
- American National Standards Institute (ANSI)
- Occupational Safety and Health Administration (OSHA)
- Underwriters’ Laboratories (UL)

ENVIRONMENTAL DESIGN CONDITIONS

Site Location | Elevation:
Albuquerque, NM | 5,300 Feet Above Sea Level

Latitude | Longitude:
35.04 °North | 106.6 °West

OUTDOOR DESIGN TEMPERATURES (ASHRAE 99.6% / 0.4% DATA)

Winter Dry Bulb Humidity:	19 °F 5 Grains
Summer Dry Bulb Coincident Wet Bulb (Hot):	96 °F 60 °F
Summer Dry Bulb Coincident Wet Bulb (Peak Enthalpy):	80 °F 65 °F
Humid Dry Bulb Coincident Wet Bulb:	69 °F 64 °F
Air-Cooled Equipment:	105 °F

INDOOR DESIGN TEMPERATURES AND HUMIDITY

Winter | Summer Dry Bulb Temperature | Humidity (Office):
70 °F +/- 2 °F | 75 °F +/- 2 °F | 60% RH Max

Winter | Summer Dry Bulb Temperature | Humidity (Labs):
72 °F +/- 2 °F | 72 °F +/- 2 °F | 60% RH Max

Winter | Summer Dry Bulb Temperature | Humidity (Support):
65 °F +/- 2 °F | 80 °F +/- 2 °F | 60% RH Max

Winter | Summer Dry Bulb Temperature | Humidity (Telecom):
70 °F +/- 2 °F | 75 °F +/- 2 °F | 60% RH Max

Maximum Dew point Control (Office, Lab, and Support Areas):
55 °F
Note: Lab set points will be confirmed based on program needs.

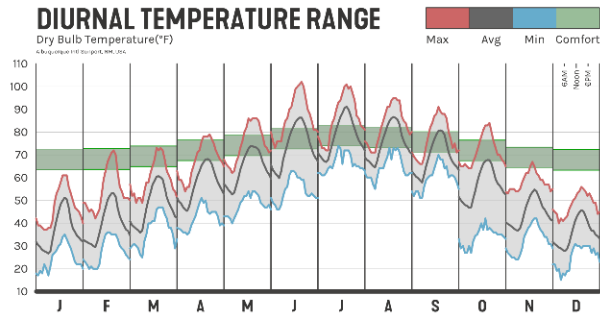
MINIMUM VENTILATION RATES

Office, Public, and Support Spaces:
As Determined per ASHRAE 62.1-2016

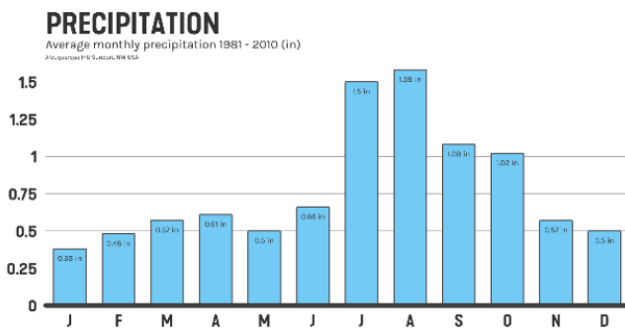
Laboratory and Laboratory Support Spaces:
6 ACH Occupied / 3 ACH Unoccupied or
12 ACH Occupied / 6 ACH Unoccupied Based on Laboratory Type

CLIMATE ANALYSIS AND SYSTEM OPERATING MODES

The site was analyzed using SmithGroup's Climate Analysis Tool and hourly weather data to inform both the local climate and potential operating modes for systems. This visual representation, from January through December over the course of the day, is then used to inform energy efficient system solutions.



DIURNAL (DAILY) TEMPERATURE RANGE AND DRY BULB TEMPERATURE FROM JANUARY (J) TO DECEMBER (D)

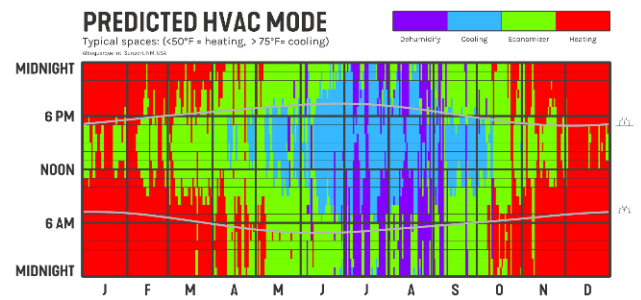
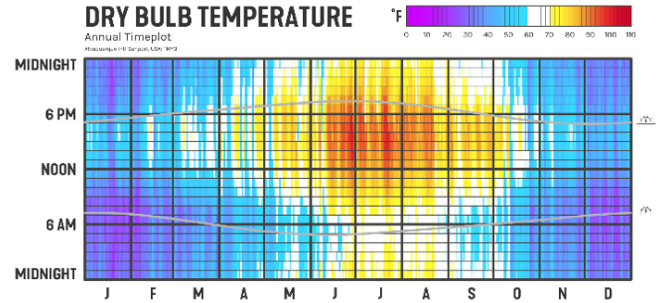


DIURNAL (DAILY) TEMPERATURE RANGE AND DRY BULB TEMPERATURE FROM JANUARY (J) TO DECEMBER (D)

The above Predicted HVAC Mode chart highlights that Albuquerque, New Mexico is a dry climate, with periods of dehumidification (purple) in a typical year limited to 10%. Mechanical cooling is needed 25% of the year (combined purple and blue) for central air-handling equipment.

Free cooling outside air economizer operation (green) is available for up to 37% of the year with building heating of outside air estimated at 38% of the year, though with a minimum 50% waste heat recovery system no supplemental heating is required under normal conditions. Given the facility supports laboratories with minimum ventilation rates, some heating will be required year-round for tempering of lab spaces. Heating loads are limited, with increased demands in winter.

The dry climate increases the daily temperature range, with the largest potential for temperature swings between February and April. Systems designs will need to be responsive to support these variations in outdoor conditions. Rainfall is limited and intermittent, with the driest month being June. Most thunderstorms in this location approach from the South and East and generally occur in the late



afternoon and evening. Morning breezes out of the East, with afternoon breezes to a lesser extent from the West. Cold winds are limited to 7% of the year and generally approach from the East.

BUILDING SUMMARY AND MECHANICAL SYSTEMS APPROACH

The feasibility study will consider two different program schemes including a 40,000 square foot building and a 67,000 square foot building that includes an approximately 5,000 square feet area on Level 1 that will either consist of retail space or laboratory space. The systems described below will be applicable to the Innovate ABQ site or the Lomas Corridor site. The central equipment noted below will be used to condition the building in either concept. The existing Fat Pipe building was considered but did not align well with the intended program as described elsewhere in this report.

A central air handling unit will be located on the roof and distribute ductwork to a shaft(s) with supply air duct, return air ducts and exhaust air ducts directed down through the building.

All spaces shall utilize single-duct variable-air-volume (VAV) systems with hydronic heating to provide space conditioning. Laboratory spaces utilized specialty air valves paired with exhaust valves and laboratory controllers to maintain space pressurization. Chilled beams will be explored for the laboratories that have a high sensible load. Fan coil units using building chilled and heating hot water are provided as required based on the program needs to support specialty programs.

A central laboratory exhaust system maintains separation from outside air sources and limit discharge air velocities to reduce fan energy. The design concept places the stacks at the top of the screen wall, approximately 10 feet above the roof. Discharge nozzles combined with dilution windbands ensure excellent dilution and an increased effective plume height. A runaround heat recovery system uses the energy in the laboratory exhaust to precondition outside air.

The duct distribution on each floor allows program elements to shift based on tenant needs. While laboratory exhaust is easier to access closer to the main shafts, the shaft locations limit the crossing of supply and exhaust duct mains on each floor.

BUILDING COOLING AND HEATING LOADS

A preliminary estimate for mechanical cooling and heating loads are as follows:

Base Scenario

- 120 tons of Cooling Load. Cooling loads are provided from a chilled water system.
- 1,500 MBH of Heating Load. Heating loads are provided by a heating hot water system with assumption that the laboratory energy recovery system does not provide any heating in the system.

Base + Future Scenario

- 200 tons of Cooling Load. Cooling loads are provided from a chilled water system.
- 3,000 MBH of Heating Load. Heating loads are provided by a heating hot water system with assumption that the laboratory energy recovery system does not provide any heating in the system.

CHILLED WATER SYSTEM

An air-cooled chilled water system is recommended due to the laboratory program, potential water shortage in the Southwest and the reduced maintenance compared to a water-cooled chilled water system. The chilled water system will be designed as a variable-primary system for energy efficiency. The chilled water pumps are sized at one per chiller with an additional stand-by pump for system redundancy. The chillers and pumps will be located on grade adjacent the building and will be

located in a new mechanical yard.

The chilled water system will be optimized for energy performance. Optimization sequences will reset the chilled water supply temperatures based on outside air conditions and building demand. Two-way control valves at each chiller to provide isolation when not in use. Two-way control valves at building cooling coils modulate to maintain their respective set points. Three-way valves or bypass control valves at remote building points ensure minimum flow is maintained for the chilled water pumps.

The chilled water system will consist of chillers, pumps, variable-frequency drives (VFDs) for all pumps, chilled water expansion tank, coalescing air separator, chilled water flow meter, make-up water station with reduced pressure backflow preventer, closed loop chemical treatment and glycol feeder. The system is expected to have 30% propylene glycol to protect against freezing. Preliminary equipment sizes and capacities are as follows:

Base Scenario:

- Two (2) 90-ton (net tonnage) air-cooled, scroll compressor chillers (one stand-by). Chillers are sized for approximately 75% of the total building load to provide partial redundancy in the event of a chiller failure. It is expected that the temperature and ventilation in the non-laboratory spaces will be setback during a chiller failure and laboratory spaces will be given high priority to maintain temperature and humidity. Each chiller shall be provided with variable speed high ambient condenser fans, single point power, and factory mounted controller with BMS interface. The chilled water system will be designed with a supply temperature of 44F and design temperature difference of 14F.
- Two (2) chilled water pumps (one stand-by), 165 GPM each. Vertical inline or end suction pumps with inverter-duty motors and a dedicated VFDs. Grouping allows operation of any pump with any chiller. All pumps utilize suction diffusers with inlet strainers, discharge check valves, isolation valves and pressure gauges.

Base + Future Scenario:

- Two (2) 150-ton (net tonnage) air-cooled, scroll compressor chillers (one stand-by). Chillers are sized for approximately 75% of the total building load to provide partial redundancy in the event of a chiller failure. It is expected that the temperature and ventilation in the non-laboratory spaces will be setback during a chiller failure and laboratory spaces will be given high priority to maintain temperature and humidity. Each chiller shall be provided with variable speed high ambient condenser fans, single point power, and factory mounted controller with BMS interface. The chilled water system will be designed with a supply temperature of 44F and design temperature difference of 14F.

- Two (2) chilled water pumps (one stand-by), 275 GPM each. Vertical inline or end suction pumps with inverter-duty motors and a dedicated VFDs. Grouping allows operation of any pump with any chiller. All pumps utilize suction diffusers with inlet strainers, discharge check valves, isolation valves and pressure gauges.

The chiller capacities listed above are the required net capacity and what is required after the summer ambient derating and altitude derating of the chillers is accounted for. It is expected that the nominal tonnage of the chillers will range from 100 tons to 175 tons.

Chilled water piping will be routed from the chillers to the AHU on the roof and any fan coils. Chilled water piping will be Schedule 40 steel iron for sizes 2-1/2" and larger and Type L copper for sizes 2" and smaller. All chilled water piping will be insulated with preformed mineral fiber pipe insulation. The insulation thickness shall comply with the International Energy Conservation Code. All outdoor piping will be provided with an aluminum jacket.

BUILDING HEATING SYSTEMS

A heating water system will be distributed throughout the building to support heating needs. Natural gas-fired, high-efficiency condensing boilers will be provided with heating hot water to the laboratory AHU and associated terminal units and fan coil units.

The heating hot water system will consist of boilers, pumps, variable-frequency drives (VFDs) for all pumps, expansion tank, coalescing air separator, heating hot water flow meter, make-up water station with reduced pressure backflow preventer, closed loop chemical treatment and glycol feeder. The system is expected to have 30% propylene glycol to protect against freezing. Preliminary equipment sizes and capacities are as follows:

Base Scenario:

- Two (2) 1,500 MBH boilers (one stand-by). Boilers are sized for 100% of the total building load to provide full redundancy in the event of a boiler failure. The heating hot water system will be designed with a supply temperature of 130°F and design temperature difference of 30°F.
- Two (2) heating hot water pumps (one stand-by), 110 GPM each. Vertical inline or end suction pumps with inverter-duty motors and a dedicated VFDs. Grouping allows operation of any pump with any boiler. All pumps utilize suction diffusers with inlet strainers, discharge check valves, isolation valves and pressure gauges.

Base + Future Scenario:

- Two (2) 3,000 MBH boilers (one stand-by). Boilers are sized for 100% of the total

building load to provide full redundancy in the event of a boiler failure. The heating hot water system will be designed with a supply temperature of 130°F and design temperature difference of 30°F.

- Two (2) heating hot water pumps (one stand-by), 225 GPM each. Vertical inline or end suction pumps with inverter-duty motors and a dedicated VFDs. Grouping allows operation of any pump with any boiler. All pumps utilize suction diffusers with inlet strainers, discharge check valves, isolation valves and pressure gauges.

The boilers and associated pumps and accessories will be located in the boiler room on Level 1. Two-way control valves at building AHU and terminal unit coils modulate to maintain their respective set points. Three-way valves or bypass control valves at remote building points ensure minimum flow is maintained for the heating hot water pumps. Combustion duct and exhaust flues will be routed from each boiler to the exterior of the building.

Heating hot water piping will be Schedule 40 steel iron for sizes 2-1/2" and larger and Type L copper for sizes 2" and smaller. All heating hot water piping will be insulated with preformed mineral fiber pipe insulation. The insulation thickness shall comply with the International Energy Conservation Code. All outdoor piping will be provided with an aluminum jacket.

SUPPLY AIR SYSTEMS

A new custom AHU will be provided for the building and be located on the roof. Supply air and return air ductwork will be distributed overhead to the entire building. The AHU will have a single point of connection. Preliminary estimates of air-handling unit sizing are as follows:

Base Scenario:

- One (1) 40,000 CFM AHU. The air-handling unit will be a recirculation unit based on the program spaces including laboratories, classrooms, retail and administration spaces. It is expected that this air-handling unit will serve VAV ducted systems.

Base + Future Scenario:

- One (1) 70,000 CFM AHU. The air-handling unit will be a recirculation unit based on the program spaces including laboratories, classrooms, retail and administration spaces. It is expected that this air-handling unit will serve VAV ducted systems.

The building air-handling unit will utilize outdoor construction and are designed for up to a 400 FPM face velocity to limit fan energy. The units are configured as follows:

- Mixing plenum.
- Return fan array section complete with inlet backdraft dampers (no system effect type),

piezo-ring type airflow measuring stations, and motor removal rail. Fans will utilize multiple VFD drives such that the loss of a single fan or VFD drive does not shut down the unit. Fans will be sized for the N-1 failed fan condition to provide full airflow in this condition.

- Airside economizer with modulating dampers.
- Dual stage MERV 8/14 side access filter section.
- Runaround heat recovery section with a stainless steel IAQ drain pan for coil cleaning.
- Future section for a humidifier with stainless steel liner and stainless steel IAQ drain pan for coil cleaning.
- Cooling coil section with a stainless steel IAQ drain pan for coil cleaning. Coil sizing assumes up to 100% outside air for operation on a design day with a failure mode.
- Supply fan array section complete with inlet backdraft dampers (no system effect type), piezo-ring type airflow measuring stations, and motor removal rail. Fans will utilize multiple VFD drives such that the loss of a single fan or VFD drive does not shut down the unit. Fans will be sized for the N-1 failed fan condition to provide full airflow in this condition.
- Top supply air connection with isolation damper.

Supply air from the air-handling unit will be distributed throughout the building via medium pressure ductwork to single duct variable air volume terminal units with heating hot water coils for non-laboratory spaces and critical environment terminal units with heating hot water coils for laboratory spaces.

Laboratory spaces will utilize low pressure drop critical environment air valves to maintain pressurization complete with true airflow feedback, linear control response, high accuracy, high turndown, and the ability to be mounted in any position. Supply and exhaust valves serving critical applications such as fume hoods will utilize high-speed operators. Supply valves will have a local heating coil with a fixed airflow offset maintains space pressurization relationships. LED pressure sensors (red/green) will monitor pressures into each laboratory to provide a record of room operation. Laboratory air distribution is assumed to be overhead supply air type given assumptions for minimum ventilation requirements.

Each laboratory and conference room will have a dedicated terminal unit(s). Separation of interior and exterior zones will be provided for optimum zone control. The perimeter zone will be considered fifteen (15) feet inside the perimeter wall. A single

terminal unit will serve a maximum of four private offices for interior areas and a maximum of three private offices for exterior areas. All conference rooms, huddle rooms and similar meeting spaces will be provided with a dedicated terminal unit. Supply diffusers will consist of sidewall diffusers or round plaque round diffusers for exposed areas, linear diffusers in hard lid areas and square plaque diffusers for the acoustical grid ceiling areas. Perforated square return diffusers will be used in all acoustical grid ceiling areas and linear diffusers will be used for return air in hard lid areas.

Outdoor air volume will be controlled by carbon dioxide sensors located throughout non-laboratory spaces the building to minimize the outside air while still maintaining a healthy building. Carbon dioxide sensors will be located in areas where the people density is above 25 people per 1,000 square feet and the space is more than 500 square feet.

The air distribution system will be constructed of G90 galvanized sheet metal, rectangular, round or oval ductwork per SMACNA standards. Ductwork in concealed areas shall be externally insulated with blanket, fiberglass ductwork. All insulation and liner shall meet R-8 installed value.

Supply air ductwork construction will be based on SMACNA 4" pressure and 2" pressure classifications for VAV systems. Four-inch pressure ductwork construction will be used from the air handling unit outlet to the terminal units and two-inch pressure ductwork construction will be used downstream of the terminal units and fan coil units. All exhaust ductwork construction will be based on SMACNA -6" pressure classification. Restroom, janitor, and non-laboratory exhaust will be combined where possible and exhausted outside of the building.

LABORATORY EXHAUST SYSTEM AND ENERGY RECOVERY SYSTEM

The laboratory exhaust system will serve all laboratories. The laboratory exhaust ducts will be designed to maximize the laboratory control zones. This will be determined through the design phase. The exhaust ducts are combined in a common laboratory exhaust main duct on the roof and connects to the laboratory exhaust recovery units (ERU). These units have sensible recovery coils to pre-condition outside air at the building air-handling units.

Exhaust sizing assumes that one exhaust recovery fan provides for N+1 redundancy. We do not anticipate a failure of the recovery coils in the unit but do know that they will need to be accessed periodically to change filters, clean coils, or perform regular inspections. A ducted bypass will be provided around the energy recovery unit so that maintenance and filter changes can occur. By having multiple fans, normal operation can

continue with a single fan failure and if maintenance needed at the recovery unit, this can be scheduled for a less demanding period when the entire recovery unit can be isolated.

The exhaust recovery units are configured as follows:

- Intake section with top duct opening and isolation damper.
- Single stage MERV 8 side access filter section.
- Runaround heat recovery coil section with full size stainless steel IAQ drain pan.
- Extended plenum with (2) side openings matching the fan inlet size and location.
- Utility set exhaust fans mounted on the roof next to the units with piezo-ring type airflow measuring station, inlet backdraft damper, and dedicated exhaust stack to above the top of the screen wall with a discharge nozzle. In lieu of bypass outside air to maintain a fixed discharge velocity, the exhaust fans will modulate together with fan staging to maintain minimum discharge velocities within an acceptable range.

Preliminary equipment sizes and capacities are as follows:

Base Scenario:

- One (1) 20,000 CFM ERU with two (2) 20,000 CFM laboratory exhaust fans (one stand-by). Exhaust fans are sized for 100% of the total building load to provide full redundancy in the event of a fan failure.

Base + Future Scenario:

- Two (2) 22,500 CFM ERUs with four (4) 15,000 CFM laboratory exhaust fans (one stand-by). Exhaust fans are sized for 100% of the total building load to provide full redundancy in the event of a fan failure.

The ERU(s) and exhaust fans will be located on the roof a minimum of 30' away from the AHU outside air intake. Laboratory exhaust fans will have a protective paint coating together with a zinc primer and will have variable frequency drives for capacity control. All laboratory exhaust ductwork will be stainless steel due to each laboratory having a minimum of one fume hood.

Exhaust valves will be pressure-independent venturi or other high-performance laboratory valves with direct airflow measurement type. Given the small size of the laboratories, operation for these systems may either be constant flow or variable flow based on maintaining air change rates in each of the laboratories.

Given the limited space on the roof and the locations of the air handling units, the energy recovery system will utilize a hydronic runaround system. The

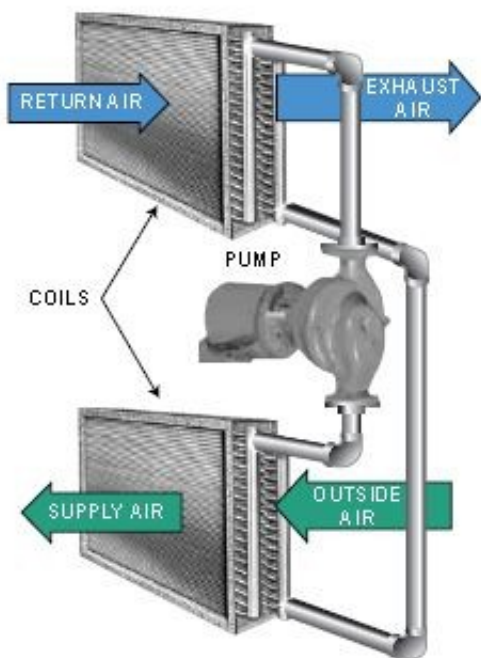
approach ensures no cross-contamination of exhaust and outside air streams, is expandable based on fit out of equipment, and allows for flexibility in the arrangement of equipment. Pumps circulate water in coils in the exhaust recovery units, then use this water to pre-condition outside air at the AHUs. Vertical inline or end suction pumps with inverter-duty motors and a dedicated VFD. All pumps utilize suction diffusers with inlet strainers, discharge check valves, isolation valves and pressure gauges. The energy recovery pumps will be located in an enclosed room on the roof or in the Boiler room on Level 1. The Boiler room will require the energy recovery piping to be routed from the roof to Level 1 and back to the roof.



UNIVERSITY OF ALASKA FAIRBANKS LIFE SCIENCES FACILITY - FAIRBANKS, AK



LABORATORY EXHAUST FANS



RUNAROUND ENERGY RECOVERY SYSTEM

HUMIDIFICATION

Central humidification for the building will not be provided. The building maximum relative humidity will be 60% and be controlled by the cooling system. A lower humidity limit will not be provided. The lower humidity limit will be dependent on the ambient temperature and humidity conditions. It is expected that the indoor relative humidity lower limit will be approximately 15%.

An add-alternate shall be included to provide central natural gas-fired steam humidifiers as noted below. The capacities listed below will maintain a 30% humidity level for the laboratories.

Base Scenario:

- Two (2) 500 lb/hr (one stand-by). Humidifiers are sized for 100% of the total building load to provide full redundancy in the event of a humidifier failure.

Base + Future Scenario:

- Two (3) 500 lb/hr (one stand-by). Humidifiers are sized for 100% of the total building load to provide full redundancy in the event of a humidifier failure.

The steam humidifiers will utilize sealed combustion with stainless steel heating sections and be piped directly to the AHU with stainless steel insulated tubing. To protect against scaling, the humidifiers will utilize softened water from the central building systems.

Steam humidification sections in the AHU will have stainless steel liner and drain pans and will be located downstream of the energy recovery and heating coils ahead of the chilled water coil. Dispersion grids will be insulated to minimize condensate while maximizing system effectiveness. Drain coolers will be provided to limit temperatures for the sanitary waste system.

ELECTRICAL ROOMS AND IDF ROOMS

Four-pipe horizontal fan coil units will be provided for each electrical room and MDF/IDF room. These will provide individual temperature control for each room and take advantage of the central systems will run 24/7/365. Spring hangers shall be provided for each fan coil unit.

RETAIL SPACES

The retail spaces will be shelled during the initial construction of the building. The retail spaces will be equipped with supply air and exhaust air in case they are used as laboratories. Chilled water and heating hot water piping will also be stubbed into each retail space for future flexibility on what mechanical system is provided for these spaces. Each of these concepts have the ability to be sub-metered. Programming in the BMS will be provided if the airside system is used and water sub-meters will be installed in the tenant improvement phase if chilled water and heating hot water are used.

GENERATOR EXHAUST

A diesel generator will be provided for the building. The generator will be located outside the building. It is not expected that ventilation or exhaust provisions will be needed from the mechanical system for the generator.

ENERGY MANAGEMENT AND CONTROL SYSTEMS

An electronic direct digital control system to monitor and control building HVAC, plumbing and electrical systems will be provided. It will consist of central processor, branch devices, equipment controllers, and required sensors and shall be integrated into the campus control system. The BMS shall communicate in native BACnet certified to ASHRAE 135. The system shall communicate over IP to allow remote access of the BMS system remotely via the internet. The direct digital control system will provide precise temperature control and include operational strategies to maximize the energy effectiveness and proper maintenance of the building systems.

Dedicated local lab controllers will be provided for individual laboratory zones and fume hoods. A central laboratory controller will consolidate the

local controllers in one location and allow for integration into the BAS. The configuration will allow for monitoring and set point adjustment. Local LED room pressure monitors will provide visual indication of negative space pressurization.

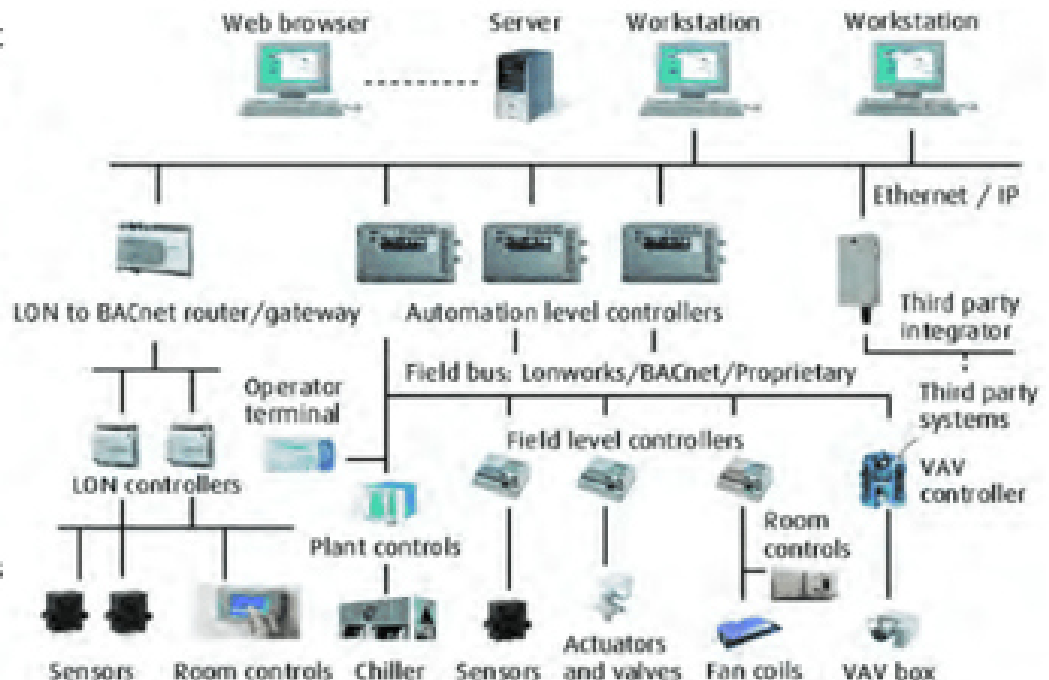
Electrical metering will also be provided to ensure optimum building performance. The items to be metered & trended include but are not limited to the following: electrical total energy use, mechanical energy use (through variable frequency drives and controllers), lighting energy use, building water use, and irrigation water use.

A historian will provide trending for laboratory zones, equipment, and storage areas to document and provide a record of the local environment in which the evidence was tested and stored.

Management Level

Automation Level

Field Devices Level



ENERGY MANAGEMENT AND CONTROL SYSTEMS DIAGRAM

ENERGY EFFICIENT ADD-ALTERNATES

The following items are alternate mechanical strategies to increase the energy performance of the building:

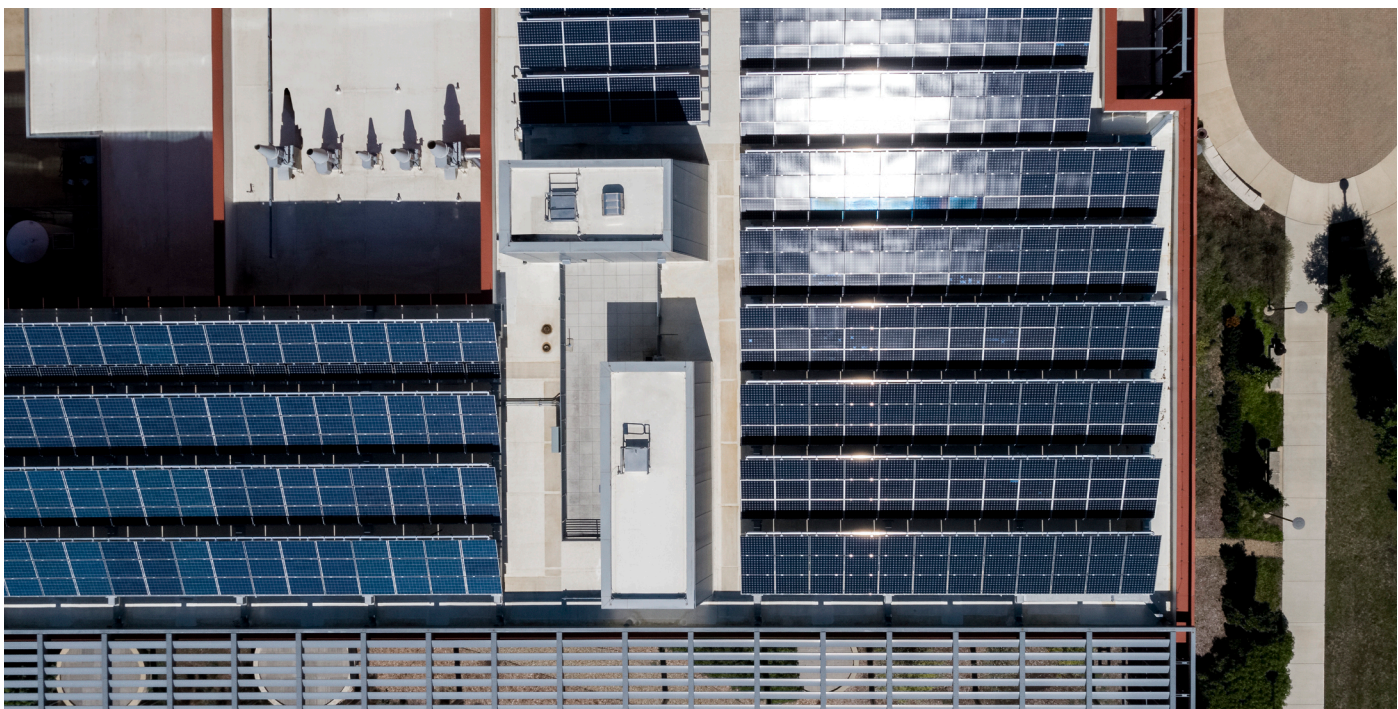
- Chilled beams will be provided for all office, conference and similar type of spaces. A dedicated chilled water system would be created for the chilled beam system. The building chilled water supply and return temperature would be blended to create an elevated chilled beam water system. There would be two (2) tertiary pumps located on each level that would distribute chilled beam chilled water to the chilled beams on each level. It is not anticipated that the laboratories will utilize chilled beams since these spaces will be driven by air change rates due to the fume hoods in the laboratories.
- Air-source heat pumps can be provided in lieu of the natural-gas fired boilers mentioned above. The pumps and heating hot water system components noted above in the Heating Hot Water System will remain the same. The heat pumps would be located on the roof of the building. Preliminary equipment sizes and capacities are as follows:

- **Base Scenario:**

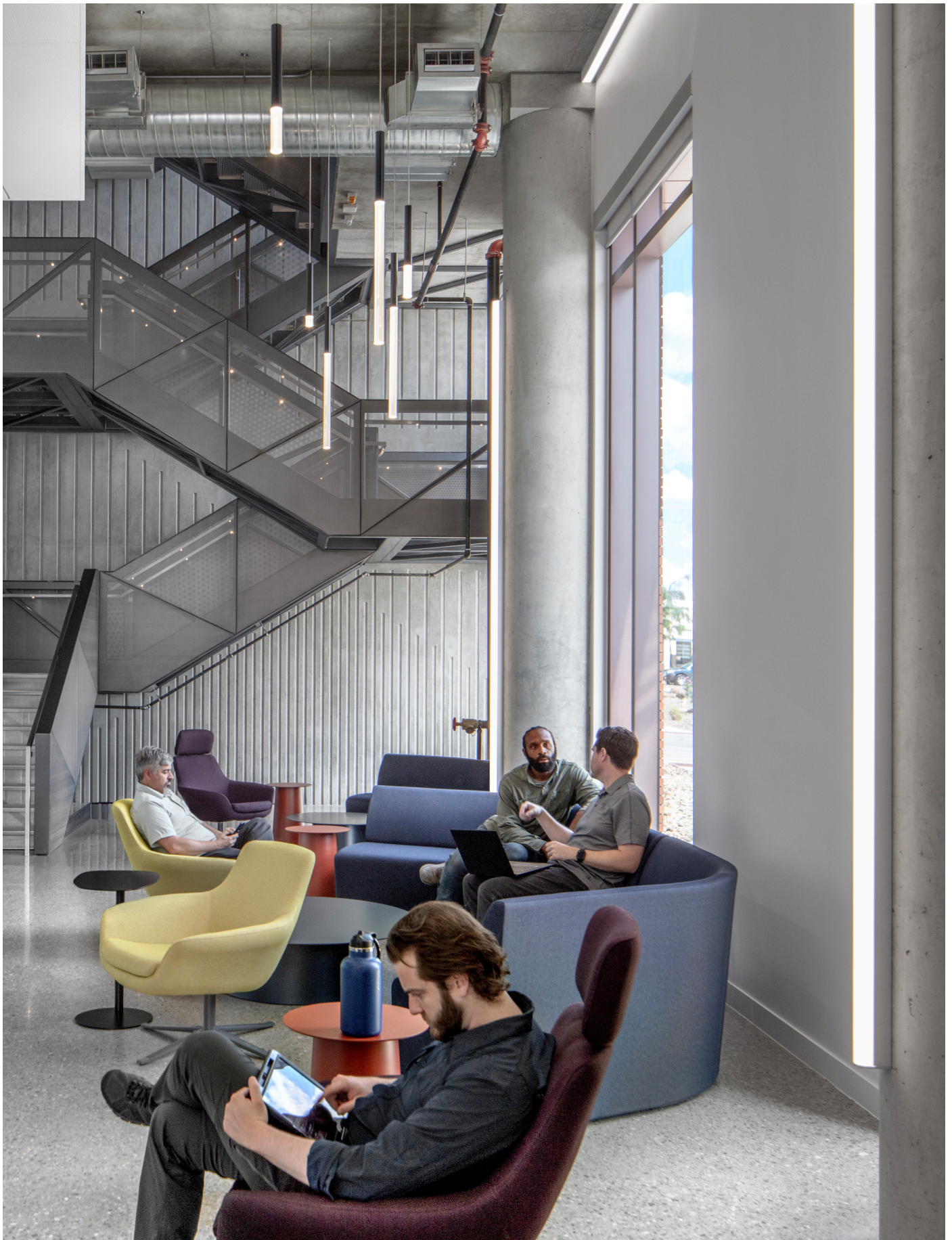
- Three (3) 1,250 MBH heat pumps (one stand-by). Heat pumps are sized for 100% of the total building load to provide full redundancy in the event of a heat pump failure.

- **Base + Future Scenario:**

- Four (4) 1,250 MBH heat pumps (one stand-by). Heat pumps are sized for 100% of the total building load to provide full redundancy in the event of a heat pump failure.
- The building at the Lomas Corridor site may have the opportunity to connect to a University of New Mexico central plant. Chilled water and heating hot water would be extended underground from the central plant to the new building location. The piping will be pre-insulated, direct buried piping. The new building will be decoupled from the UNM central plant by providing heat exchangers for both the chilled water system and heating hot water system. Each system shall be provided with N+1 redundant heat exchangers so there would be a total of four heat exchangers in the new building. These will each be sized for 100% capacity of the building. Vertical inline or end suction pumps will be provided next to the heat exchangers and provide the required pressure to provide chilled water and heating hot water to all coils in the new building.



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, ELECTRICAL AND COMPUTER ENGINEERING BUILDING



UNIVERSITY OF ARIZONA APPLIED RESEARCH BUILDING - TUSCON, AZ

ELECTRICAL SYSTEMS

The following electrical feasibility and design narrative will explore two options, Innovate ABQ and Lomas Corridor. A third site, Fat Pipe, was considered but did not align well with the intended program as described elsewhere in this report. Each site will consider two different program schemes including a 40,000 sqft program and a 67,000 sqft program that includes an additional 5000sqft of retail space as optional 5000sqft as retail or future lab space. This narrative will assume that future expansions will be capable of laboratory support.

The electrical report will describe the basic electrical work to be performed and materials to be provided for a new New Mexico Bioscience Authority Incubator laboratory building. The project will be provided with an electrical system that is cost effective, energy efficient, environmentally friendly, and easily maintainable. Design of the electrical systems should promote forward thinking in engineering and be flexible in design.

This design narrative assumes a Local Plant approach including Electrification. There are certain system efficiencies that will need to be explored in future iterations that involve water and power connections from the University of New Mexico Central Utility Plant. If any of these are incorporated the electrical system will be adjusted accordingly.

CODES AND STANDARDS

The latest version, or current adopted version, of the following codes and standards will be used as references in the electrical design of the building:



ELECTRICAL YARDS AT THE UNIVERSITY OF ARIZONA APPLIED RESEARCH BUILDING - TUSCON, AZ

State Codes

- New Mexico Boiler Code
- 2021 New Mexico Commercial Building Code
- 2020 New Mexico Electrical Code
- 2021 New Mexico Mechanical Code
- 2021 New Mexico Plumbing Code

City Codes

- 2024 Uniform Administrative Code
- Uniform Administrative Code Ordinance O-23 Enacted

Energy Codes

- 2021 New Mexico Commercial Energy Conservation Code

Project Standards

- The University of New Mexico Standards and Guidelines
- Integrated Campus Plan (ICP)
- 2021 National Fire Alarm and Signaling Code with Local Amendments
- FM Global Standards
- National Fire Protection Association (NFPA)
- Illuminating Engineering Society of North America (IESNA)
- American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Handbooks
- ASHRAE 90.1 – 2016 (To be confirmed during design)
- LEED v5 – Silver (to be confirmed during design)
- American Society for Testing and Materials (ASTM)
- American National Standards Institute (ANSI)
- Occupational Safety and Health Administration (OSHA)
- Underwriters' Laboratories (UL)

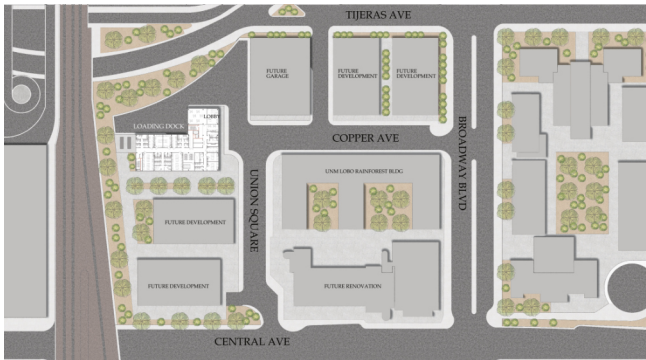
EXISTING SITE ELECTRICAL UTILITIES

The City of Albuquerque electrical utility is the Public Service Company of New Mexico (PNM). Currently both sites in consideration are not assumed to be connected to the University of New Mexico's Central Utility Plant (CUP) for power or HVAC. A future study is needed to review the CUP infrastructure upgrades needed to extend to either site.



LOMAS CORRIDOR SITE

Currently, Lomas Corridor is occupied by a former car dealership, and the University utilizes the building for fleet maintenance. The masterplan indicates a new hotel will replace the main portion of the car dealership. The full building is not considered for adaptive reuse and will require demolition of all existing electrical infrastructure. A new building utility will be required.



INNOVATE ABQ SITE

The Innovate ABQ Site is currently a parking lot. There are adjacent buildings (Fuse and Rainforest) that would maintain operation during construction. The parking lot would be demolished. A new utility will be required. The west lot line of the site is bounded by railroad tracks and either power or communication overhead utility lines.

SITE READY SCOPE

All existing conditions will require field survey verification to confirm that existing UG lines are not crossing through the lot in conflict with the proposed program. It is assumed that all new utility feeds will need to be routed underground.

No existing or new medium-voltage ductbanks will be allowed to be routed beneath the new building or future building footprints. It is anticipated that there are no current existing ductbanks and if any are discovered that they will be intercepted and re-routed.

NEW SITE ELECTRICAL UTILITIES

It is assumed that the ground level of the site is not in a floodplain.

It is intended that all site power will be fed from underground and utility drop poles will be coordinate on the site with the utility design. The new equipment shall be located in a mutually acceptable and secure location with limited and coordinated visibility in conjunction with the utility company.

It is expected that all new underground service laterals will be grouped together in a shared duct bank with no more than (10) 4" conduits. The new ductbank will feed across the site to a new pad mounted MV transformer. Trenching and backfill for all primary and secondary feeders will be provided by the contractor as well as primary and secondary ducts/duct banks, transformer pad, and secondary conductors.

The new pad mounted transformer is assumed to be provided by PNM and connected by the contractor. The MV transformer is assumed to be FM Approved, oil-filled, less-flammable type. The new MV transformer is to be rated by the utility, the footprint assumptions are detailed below.

POWER DISTRIBUTION

The SES board will be configured at 277/480-Volt, 3-phase, 4-wire with a utility meter cabinet, main breaker, ground-fault protection, and arc energy reduction devices. The SES board and building Distribution boards will include adjustable, LSIG breakers for the Main and Feeder breakers as a minimum. The SES will also be provided with a 3-pack minimum of retail maters and distribution, refer to the Retail Infrastructure section of this narrative for additional information. The SES board will distribute power throughout the site. Distribution boards will distribute power throughout the designated areas. The SES board will be located indoors in an electrical room on the ground level and/or above the 100 year flood plain. The main electrical room will also house distribution sections, dry-type step-down transformers, and panelboards. The voltage will be stepped down by transformers to 120/208-Volt, three-phase, four-wire to feed loads throughout the facility.

The SES boards will also include a building level meters that will integrate with the BMS system. This will be accomplished either as a physical or digital connection. Refer to the metering section of this report for more information.

It is assumed that a Fire Pump connection will not be required.

PV provisions including breaker space and service line up breakers are to be considered included in this projects scope.

Preliminary normal power load summaries are provided in the tables on the next page. This load summary assumes a self-sufficient HVAC building with a spare of 20%:

BASE SCENARIO

NORMAL POWER LOAD SUMMARY BY TYPE - 2026-0624 BASE BSA PROGRAM + RETAIL								
Space Type	SQFT	VA PER SQFT					Total	
		LTG	PWR	HVAC	Plumbing	MISC	VA	AMPS
Office	4,511	0.8	5	25	1	2	152,472	183.5
Laboratory	11,696	1	10	25	1	2	456,144	548.9
Collab	1,870	0.8	3	25	1	2	59,466	71.56
Class	1,089	0.8	3	25	1	2	34,630	41.67
Support	1,048	0.8	3	25	1	2	33,326	40.1
Retail	4,000	0.8	3	12	1	1	71,200	85.68
Other	14,841	0.8	3	12	1	1	264,170	317.9
Spare						20%	214,282	258
Building Total	39,055						1,285,690	1,547
							A @12.47kV	60
1500KVA TRANSFORMER								
1500A, 480/208V, 3P, 4W								

BASE + FUTURE SCENARIO

NORMAL POWER LOAD SUMMARY BY TYPE - 2026-0624 BASE BSA PROGRAM & FUTURE EXPANSION + RETAIL								
Space Type	SQFT	VA PER SQFT					Total	
		LTG	PWR	HVAC	Plumbing	MISC	VA	AMPS
Office	7,457	0.8	5	25	1	2	252,047	303
Laboratory	21,230	1	10	25	1	2	827,970	996
Collab	5,340	0.8	3	25	1	2	169,812	204
Class	1,089	0.8	3	25	1	2	34,630	42
Support	1,290	0.8	3	25	1	2	41,022	49
Retail	5,000	0.8	3	12	1	1	89,000	107
Other	25,378	0.8	3	12	1	1	451,728	544
Spare						20%	373,242	449
Building Total	66,784						2,239,451	2,695
							A @12.47kV	104
2500KVA TRANSFORMER								
3000A, 480/208V, 3P, 4W								

Stacked electrical rooms, approximately 10' x 15' will be provided on each floor. The electrical rooms will have separate 277/480-Volt panels for distribution to lighting and mechanical equipment as well as 120/208-Volt panelboards for distribution to receptacles and other miscellaneous loads. Each laboratory zone shall be provided with a flush mounted 120/208-Volt panelboard with corresponding transformers located in a centralized location. Transformers located remote from the panelboard that is being served will be provided with a local fused disconnect as required. With approval from the University, flush mounted panelboards will be provided adjacent to the laboratory spaces. All branch circuit power panelboards will be a single section with 84-ckt minimum until noted otherwise in the documents.

In order to limit outages during shell fit outs the electrical room distribution panels for normal and stand-by power will be installed Day-1 with a Main Breaker. Feeder breakers will then be installed during the time of the shell design. This creates parameters of the future shell design, but helps limit the extent of outages that will occur in the future (a known issue at existing buildings with a busway riser).

Refer to the Mechanical Narrative for the HVAC system summary. The electrical connections to mechanical equipment will be provided with individual disconnects mounted local to the equipment. With few exceptions, mechanical equipment will be connected to the 277/480-Volt distribution system. Any equipment located outside will be provided with weatherproof disconnects and will be provided with a weatherproof GFCI receptacle and Wet-Listed, In-Use covers within 25 feet of the unit.

If occupancy sensing is required or recommended by the mechanical system during energy analysis, then the lighting occupancy sensors shall also tie into the BMS system in order to control VAV and FCU output during occupied and unoccupied modes. The occupancy sensors would be networked to a central panel and a single terminal would be integrated into the BMS system. This integration is to utilize the lighting occupancy sensors as much as possible and not provide VAV-only occupancy sensors if it can be avoided. This is to be priced as a separate and isolated line item.

LED lighting will be served from 277-Volt circuits. Refer to the Lighting Section of this narrative for more information.

RETAIL INFRASTRUCTURE

The final quantity of retail meter packs will be confirmed in future design but it should be estimated to provide a 3-pack of retail meters in line

with the building service meter. It is assumed that the tenant will have a separate utility bill.

The retail space shall be provided spare pathways to the main breaker in the SES room. The retail space is assumed to be a cold shell with all infrastructures provided by the tenant.

Alternative pricing to be provided to incorporate a single utility meter and owner operated sub-meters for each space.

This scope does not include tenant design.

GENERAL DEVICE INFRASTRUCTURE

It is assumed that the energy compliance will be met under ASHRAE and requires switched receptacles with automatic control will be provided in the following locations: Private Offices and Open Offices as required. Control will be accomplished with lighting system occupancy sensors and time of day control as appropriate for the space.

Power for plug loads will be distributed throughout the facility with wall receptacles, above counter receptacles, and above counter surface raceway in appropriate locations. Systems furniture will be powered from the wall or floor as required. General branch circuit will be designed with a maximum of six general use duplex convenience receptacles on one 20-amp circuit. Additional special dedicated receptacles will be provided for equipment, refrigerators, disposals, vending machines, microwaves, copiers, etc. where required. Specialty equipment heights will be coordinated with the equipment and all associated devices shall be at the same height.

Systems furniture will be powered from the wall or floor as required. Similar to office receptacles, if switched receptacles are required then the 50% switched receptacle requirement would apply to modular furniture. Implantation of the owner standards will be met as much as possible, or a new standard for switched systems furniture can be developed with the owner. The receptacles can be switching by occupancy, relay panel, or a coordination of both based on the performance requirements of the space.

Floorboxes (Wiremold, or equal) will be provided in the Conference, Lobby, Operations Center, and other appropriate locations. They will be distributed through the space to provide flexible layouts. At a minimum (2) duplex receptacles will be provided in each floorbox. There will be approximately (1) floorbox for every (6) Conference Room seats plus (1) lectern floorbox. The floorboxes will be shared with AV and IT and include devices as defined by the AV and IT narrative. AV and IT pathways will be provided in the electrical scope of the project.

Combination USB receptacles will be provided strategically in public waiting areas and all charging stations for ease of use for visitors.

LABORATORY DEVICE INFRASTRUCTURE

Flexibility for power requirements in laboratories shall be accomplished by providing receptacles mounted in Ceiling Service Panels, in surface raceways, and in walls at intervals appropriate for the quantity of equipment in the space. Dedicated circuits, special receptacles, and hardwired connections will be installed for laboratory equipment according to manufacturer's instructions. To provide for the Intellectual Property security required by private industry research, business patents, and federal research private securable data frameworks are often required within each individual lab. It is recommended that the data rack is provided with a lockable cage. Technology and data rack space will be provided in each lab space with dedicated 208V/20A/1PH receptacles on standby power.

CLASSROOM DEVICE INFRASTRUCTURE

Floorboxes (Wiremold, or equal) will be provided in Classroom, Conference, Lobby, and other spaces as appropriate. They will be distributed throughout the space to provide flexible layouts. At a minimum (2) duplex receptacles will be provided in each floorbox. There will be approximately (1) floorbox for every (6) seats plus (1) lectern floorbox. The floorboxes will be shared with AV and IT and include devices as defined by the AV and IT narrative. AV and IT pathways will be provided in the electrical scope of the project.

METERING

A building level meter will be provided integral to the SES boards and routed back to the master BMS system. The metering system shall have the capability of reading KWH, Max kW Demand, KVA, KVARs, Volts, Current, THD Voltage, THD current frequency and power factor in the same system.

Sub-meters will be provided to provide the total for the following systems: HVAC, Interior Lighting, Exterior Lighting, Receptacle circuits.

Additional metering will be provided as required for code and LEED compliance.

BACKUP EMERGENCY POWER

The emergency system will provide the required life safety branch (NEC 700), legally required branch (NEC 701), and a series of optional standby branch systems (NEC 702).

A preliminary generator load summary is provided in the tables on the next page.

GENERATORS

A single diesel generator on the ground floor will serve the NEC 700 and 702 loads.

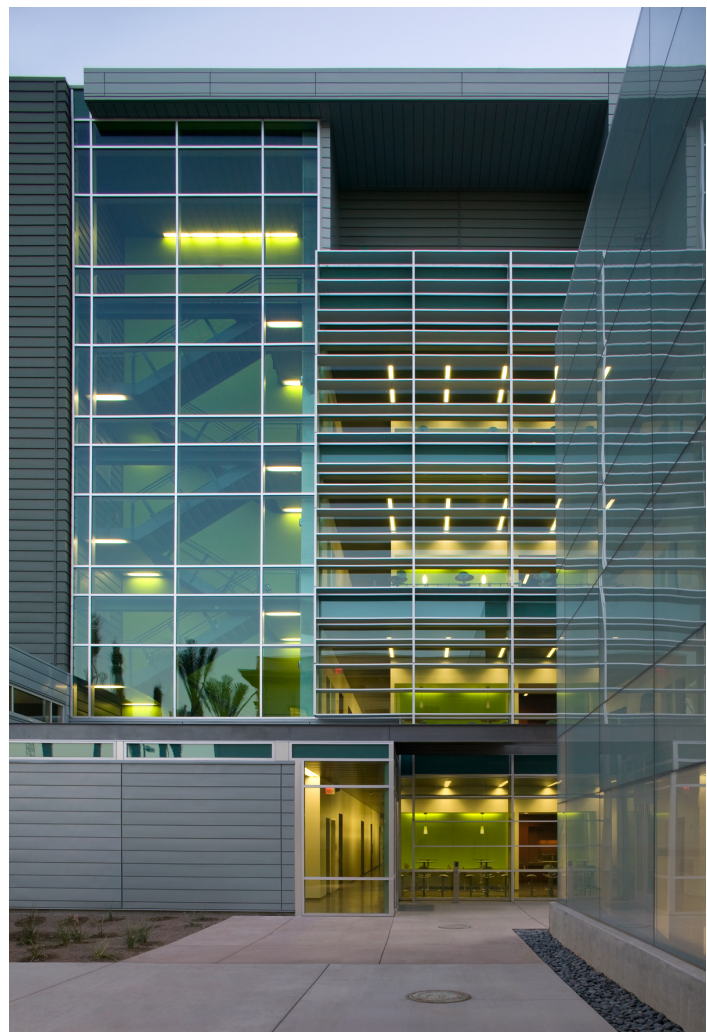
FUEL TYPES

A Full **Diesel** system is the basis-of-design for a **minimum of 8hrs.**

Diesel fuel is required for the generators serving life safety and legally required loads. Generators with this fuel type will be located on the ground. Diesel generators have a faster start-up time.

Natural gas generators may require more maintenance than diesel generators, and they are typically larger. However natural gas pipelines may simplify re-fueling. The fuel can be less expensive and is cleaner burning for an indefinite runtime.

A natural gas generator will be slightly larger than a similarly rated diesel generator. The specific manufacturers and fuel tank sizes will affect the dimensions.



ARIZONA BIOMEDICAL COLLABORATIVE BUILDING - PHOENIX, AZ

BASE SCENARIO

EMERGENCY POWER LOAD SUMMARY BY TYPE - 2026-0624 BASE BSA PROGRAM + RETAIL								
Space Type	SQFT	VA PER SQFT					Total	
		LTG	PWR	HVAC	Plumbing	MISC	VA	AMPS
Office	4,511	0.5	1.0	12.5	0.5	0.0	65,410	78.71
Laboratory	11,696	0.5	1.0	12.5	0.5	0.0	169,592	204.1
Collab	1,870	0.5	0.0	0.0	0.0	0.0	935	1.125
Class	1,089	0.5	0.0	0.0	0.0	0.0	545	0.655
Support	1,048	0.5	1.0	12.5	0.5	0.0	15,196	18.29
Retail	4,000	0.5	0.0	0.0	0.0	0.0	2,000	2.407
Other	14,841	0.5	0.0	0.0	0.0	0.0	7,421	8.93
Spare						20%	52,220	63
Building Total	39,055						313,317 A @12.47kV	377 15
350KW/437KVA, 480V/277, 3P,4W GENERATOR								
600A, 480/208V, 3P, 4W								
ATS 1=LS, ATS 2=MECH, ATS 3=OS								

BASE + FUTURE SCENARIO

EMERGENCY POWER LOAD SUMMARY BY TYPE - 2026-0624 BASE BSA PROGRAM & FUTURE EXPANSION + RETAIL								
Space Type	SQFT	VA PER SQFT					Total	
		LTG	PWR	HVAC	Plumbing	MISC	VA	AMPS
Office	7,457	0.5	1.0	12.5	0.5	0.0	108,127	130
Laboratory	21,230	0.5	1.0	12.5	0.5	0.0	307,835	370
Collab	5,340	0.5	0.0	0.0	0.0	0.0	2,670	3
Class	1,089	0.5	0.0	0.0	0.0	0.0	545	1
Support	1,290	0.5	1.0	12.5	0.5	0.0	18,705	23
Retail	5,000	0.5	0.0	0.0	0.0	0.0	2,500	3
Other	25,378	0.5	0.0	0.0	0.0	0.0	12,689	15
Spare						20%	90,614	109
Building Total	66,784						543,684 A @12.47kV	654 25
600kW, 480V/277, 3P,4W GENERATOR								
800A, 480/208V, 3P, 4W								
ATS 1=LS, ATS 2=MECH, ATS 3=OS								

SYSTEM COVERAGE

The generator system is to cover the following:

NEC 700: Life Safety Systems including Egress and Fire Alarm.

NEC 701: Legally required systems are not anticipated for this building.

NEC 702: Stand-by systems in organized priorities including: Laboratory Refrigerator and partial HVAC support.

TRANSFER SWITCHES

The emergency and stand-by systems shall consist of a series of priority ranking automatic transfer switches (ATS). The ATS units shall transfer in rank of priority and in reference to legal and owner defined parameters. An ATS room will be provided to house the transfer switches, a generator switchboard, a load management system, and other electrical equipment. This equipment will provide generator-backed power to transformers and panelboards distributed throughout the building.

The project should assume at a minimum (3) transfer switches with the exact ratings to be determined in future phases.

TEMPORARY GENERATOR CONNECTION

A code-required generator docking station will be provided where a portable generator can be parked and connected when a permanent diesel generator is down or needs maintenance.

ALTERNATIVE OPTIONS

ALTERNATE PRICING 1

If the building utilizes emergency battery-packs then alternatively, then natural gas stand-by generators can serve the optional standby branches of power.

Additionally, optional stand-by only generators do not required a generator docking station for maintenance, but it would be highly recommended.

ALTERNATE PRICING 2

As an alternate, the electrical system at either shall be priced as an N+1 service with a Main-Tie-Main configuration, with automatic tie and kirk-key interlock. The second fully rated service line and transformer shall be assumed to be paid for in full by the Owner and installed in compliance with the Electrical Utility, PNM. Additionally, the electrical SES room shall increase in length to allow for the service to be a single line-up. This configuration allows for complete redundancy of the electrical system.

UNINTERRUPTIBLE POWER SUPPLY – LOCALIZED

Uninterruptible Power Supply (UPS) units will be provided by the owner or equipment manufacturer local to the device or equipment requiring a non-interrupted power source. This will be a non-centralized system.

POWER QUALITY

CAMPUS

It is assumed that the building is not currently connecting to the University campus system.

BUILDING

Surge protective devices (SPD's) will be installed at the SES and downstream at the distribution panelboards. Panelboards feeding sensitive laboratory equipment will also be protected by SPD at the distribution board level.

EQUIPMENT

If a Localized UPS is required it would be provided with the equipment, located in the equipment space.

Refrigerator monitoring is a wireless connection with equipment provided by owner.

GROUNDING

BUILDING

The electrical power distribution system will be provided with a "single-point ground system" that will be made available in all telecommunication rooms and laboratory corridors for signal ground referencing purposes. Interconnection of the service ground, system neutral, and equipment grounded conductors will be made within the service equipment.

The ground bus at the main service equipment will be connected to a concrete-encased grounding electrode, building water piping system, building gas piping system, building perimeter ground ring, and through concrete to building steel. Each electrical and telecommunication room will be provided with a ground buss bar.

All transformers will have the neutral of the separately derived system bonded to building steel (through concrete), the nearest metal water pipe, and the transformer enclosure. An insulated ground conductor will run back to the supply equipment in the same raceway as the phase conductors.

An insulated equipment grounding conductor will be installed with feeders and branch circuits. Metal raceways, boxes, equipment, receptacles, and light fixtures will be bonded to the equipment grounding system.

LIGHTNING PROTECTION

Lightning protection is to be part of this project. A lightning protection system shall be installed that meets the requirements of the NEC and NFPA 780. UL Master Labeling is not to be included unless specifically requested by UA for this building. Lightning protection calculations shall be specific to the site location and function of the building.

Lightning protection will be a deferred submittal and specified as a NFPA 780 and UL listed and tested system for the building.

Earth electrodes and down conductors will be provided through the structure. Down conductors will be routed through the concrete columns and bonded to any building steel.

This system shall include air terminals and conductor downleads as required. Downleads will be coordinated with the façade of the building.

A counterpoise ground system will be provided.

Ground rods will be copper clad steel or stainless steel and will be inter-connected with copper grounding conductors.

LIGHTING DESIGN

INTERIOR LIGHTING:

All interior lighting fixtures are to be LED, with the general design conforming to Owner requirements and IESNA guidelines. The specifics of design are to be developed further with Interiors post program.

Lighting levels at desk or tables tops shall be:

- Hallways: 25 foot-candles average maintained foot-candles
- Public areas: 30 foot-candles average maintained foot-candles.
- Offices: 50 foot-candles average maintained foot-candles.
- Reading rooms: 50 foot-candles average maintained foot-candles.
- Classrooms: 50 foot-candles average maintained foot-candles.
- Laboratories: 70 foot-candles average maintained foot-candles.
- Machine Shops/Workshop: 100 foot-candles average maintained foot-candles.
- Minimum lighting standards shall be defined as average maintained foot-candles (within the range of -10% to +25%) over the life of the lamps,

Wherever possible lighting fixtures will be selected as linear type in increments of 1 foot. Accessibility of

fixtures for maintenance or future replacement shall be prioritized. Lighting levels shall be targeted according to the tasks to be completed in each space. Fixtures shall have a minimum CRI of 85 with a color temperature of 4000K. No fixtures smaller than 4" may be installed in hard lid ceilings. Each light fixture selected by the design team shall have equals available from at least 3 lighting manufacturers.

EXTERIOR LIGHTING:

All exterior lighting fixtures are to be LED, with the general design conforming to Dark Sky requirements and IESNA guidelines. The specifics of design are to be developed further and coordinated with Landscape post program.

In selecting and designing the layout of exterior lighting fixtures, the Design team shall consider safety, continuity with surrounding areas, accessibility of fixtures for maintenance, illumination of key architectural features, and the availability of equals from at least 3 lighting manufacturers.

EMERGENCY AND EXIT LIGHTS

The emergency lights will be provided along the paths of egress in accordance with the life safety code (NFPA 101). The emergency lights shall provide average illumination of 1 foot candle (10 lux) along the path of egress and 10 foot candles (100 lux) at all new stair treads.

Emergency and exit lighting will utilize the life safety branch of the generator system.

Emergency Classroom and Conference Room lighting shall be located so that lighting is radiating away from the projection screens or other light sensitive presentation areas.

LIGHTING CONTROL

Lighting controls shall be provided as required by IECC. This will include at a minimum 0-10V Dimming throughout all occupied spaces, Daylight Harvesting when adjacent to glazing, and Open Office zones in 600sqft increments. Additionally, where options for design are available the area is to adhere to the local amendments.

SUSTAINABILITY INITIATIVES

Electrical sustainability initiatives will be pursued in compliance with code, best practice, project goals, and forward thinking. Additional initiatives of substantial cost will be reviewed with the owner. Examples of additional initiative may include extending the metering system, providing PV provisions, and electric vehicle stations.

It is assumed that LEED Silver compliance is a requirement of this project. Future Sustainable Design Narrative will be provided for credit pursuit details.

SPECIAL SYSTEMS

Special systems requirements will include fire alarm system and infrastructure. Infrastructure for telephone, data (cable tray, conduit, back-boxes), security (card access, intrusion and close circuit television (CCTV) systems), audio/visual, paging, CATV, and building management systems. Infrastructure will include all conduit, pull string, and boxes required to support the applicable systems.

The basis of design shall include conduit in-wall to accessible ceiling with j-hooks to cable tray to for all normal special systems. All conduit shall be 1" minimum.

Elevator landings shall be provided with flush mounted VoIP PoE two-way communication call stations (talk-a-phone, or equal) with reporting as required.

The facility fire alarm system will be a deferred submittal and specified as an intelligent microprocessor-based, voice-evacuation fire alarm system complete with individually addressable alarm and initiating devices. Approved manufacturer will be required to provide a complete and coordinated design signed by an approved Fire Alarm engineer and will be approved by the Authority Having Jurisdiction (AHJ) prior to procurement.

The manufacturer will be required to provide a complete and coordinated design signed by an approved Fire Alarm engineer and will be approved by the Authority Having Jurisdiction (AHJ) prior to procurement.

Include a Fire Alarm Control Panel, Fire Alarm Annunciator Panel, manual pull stations, automatic fire detectors, speakers, clear and amber strobes, combination speaker/strobes, and remote-control devices. Use closed loop initiating device circuits with individual zone supervision, individual indicating appliance circuit supervision, and incoming and standby power supervision.

The fire alarm system will monitor manual pull stations (double action with sounder at all floor and ground level exits), smoke detectors, water flow and tamper switches, air-handling equipment, elevator status, air bleeders, fire pump status, chemical injection systems, and miscellaneous supervisory devices; and will be zoned per device. The Fire Alarm system shall provide coordinated supply side duct detectors on all AHU and fan coil units when required. Provide independent supervision for opens of the air handling on/off/auto switch control output wiring and grounding. Provide sprinkler supervisory initiation device circuits for connection of all sprinkler valve tamper switches to perform the Supervisory Service Operation.

The fire alarm system will have battery back-up in the central control panel.

The fire alarm system will report back to the Security Office and interface with the security system and elevator.

The all open high-bay spaces are to be analyzed and provided Photoelectric Projected Beam Detectors as required.

The fire alarm system will include Emergency Responder Radio Coverage in compliance with the AHJ and IFC. At a minimum a study with preliminary testing shall be implemented with a coordinated design that is approved by the AHJ. All exceptions and alternates shall be provided as a narrative and not pursued until approved by the AHJ in writing. All underground pathways shall be coordinated and provided with the Emergency Responder Radio system.

All doors normally held open by door control devices shall release upon AC power failure.

VoIP PoE two-way communication at each elevator landing shall be integrated and monitored with the Fire Alarm system.

The fire alarm system shall provide an connection to the generator controls to monitor if the generator is running or has a fault. The Fire Alarm system shall also provide a connection to the ATS units to monitor the position.

A Mass Notification system is not currently included in this project scope.

All fire alarm wiring will be installed in conduit. Fire alarm system junction-boxes and conduit shall be pre-finished, red color. Each device shall be identified with circuit information on vinyl label. Each junction box shall be labeled with circuit information.

Clean Agent systems are not currently in this project scope but is to be coordinated if specified by the Fire Sprinkler design.

The design shall include a 25% spare capacity for future use.

COMMUNICATION SYSTEMS

A complete system from outlets to backboards and between backboards shall be provided. To provide for the Intellectual Property security required by private industry research, business patents, and federal research private securable data frameworks are often required within each individual lab. Provide dedicated 1" conduit to the nearest IDF room for IP rack per lab. Conduit shall be maintained to IDF room for security.

Every telephone/data outlet shall be furnished as a double gang wall box, single gang plaster ring and conduit to accessible ceiling. Conduit shall be 1" minimum.

A cable tray system will be provided in the scope of this project. Cable tray will be in the corridors to transition data cables to data zones from the MDF/IDF rooms. It is assumed that the cable tray will be limited to communications only. J-hooks shall be provided by the cabling contractor.

The basis of design shall include conduit in-wall to accessible ceiling with j-hooks to cable tray to for all normal telephone and data systems.

CARD READER AND SECURITY SYSTEMS

A conduit system shall be installed as part of this project. The basis of design shall include conduit in-wall to accessible ceiling with j-hooks to the associated closet to for all normal card and security systems.

AUDIO/VISUAL AND PAGING SYSTEMS

A conduit system shall be installed as part of this project. The basis of design shall include conduit in-wall to accessible ceiling with j-hooks to the associated closet to for all normal AV and Paging systems.

EARLY PROCUREMENT

It is assumed that this project is pursuing Early Procurement or Premature procurement, It provides the Owner the opportunity to optimize lead time and mitigate scheduling and/or cost issues. The risk of utilizing Early Procurement is the inherent possibility that design characteristics may adjust or change. The Design project team will do their best to control this risk but potential issues include, and are not limited to, changes in capacity ratings, changes in configurations, under-estimated fault and arc-flash calculations, and inability to physically fit equipment in the designated areas.

The following systems are being considered.

- Electrical MV Equipment
- Electrical Service Equipment
- Electrical Distribution Equipment
- Electrical Low Voltage Distribution Equipment
- Coordination, Arc-Flash, and Short Circuit Studies

DESIGN AND SPECIFICATION CLARIFICATIONS

It is the current intent until indicated otherwise that all standards shall comply with the University of New Mexico building and construction standards.

Follow all University specifications for General Specifications and Materials.

POST OCCUPANCY

Prior to project close-out, the final one-line diagrams will be plotted and laminated for posting in the Service Entrance Section Room and ATS Room.

An energy report based on the final meter installation is recommended 6-months and 12-months after occupancy.

VALUE OPPORTUNITIES

Often there are value engineering opportunities proposed to create opportunities for economic efficiencies. Below is a list of common value opportunity for the Owner to consider. None of the items in this request are approved until directed by the Owner.

- Utilizing MC cable in wall to final devices. Home-run wiring shall be in conduit.
- Utilizing aluminum conductors for wiring equal to and above 100 Amps. Mechanical and plumbing equipment connections shall maintain copper.
- Utilizing aluminum transformer coils instead of copper
- Utilizing mud-rings for low voltage cabling in lieu of conduit in wall to accessible ceiling
- Integrating the Paging system with the Fire Alarm system.

All value requests shall comply to the local code and AHJ requirements.

As the project develops, site and local value engineering opportunities will be explored to optimize the system design. All value requests shall be provided as a separate line item in the estimate for the Owner to make an informed decision.



CONNECT LABS AT AGGIE SQUARE - SACRAMENTO, CA

SUSTAINABILITY AND ENERGY CONSIDERATIONS

Sustainability for this project is less about checking boxes and more about creating a practical, high-performing building that reflects both the University of New Mexico's values and the realities of operating energy-intensive lab space. From the outset, the goal is to balance demanding laboratory systems with long-term efficiency, durability, and occupant well-being.

At the Lomas Corridor site, one of the most meaningful opportunities is the potential connection to UNM's campus chilled water system. Leveraging this existing infrastructure could significantly reduce on-site mechanical equipment, improve energy efficiency, and provide more stable long-term operating costs. It also aligns the facility with broader campus-scale energy strategies rather than treating it as a standalone building.

Whether or not this project pursues LEED accreditation, best practices should be kept in mind, particularly around energy performance, water use, and materials. Given Albuquerque's high desert climate, passive strategies—such as solar control, building orientation, and a well-insulated envelope—will play an important role in reducing cooling loads. High-efficiency HVAC systems designed specifically for lab environments will be critical, especially in managing ventilation rates and energy recovery utilization.

Another set of standards that would be appropriate to reference are the WELL Building Standards to support the people working inside it every day. Access to daylight, clear circulation, indoor air quality, and comfortable shared spaces all contribute to a healthier and more productive research environment. These are not add-ons, but core design drivers.

Beyond the building itself, there is an opportunity to develop a more resilient landscape frontage along Lomas Boulevard. Thoughtful use of native and drought-tolerant plantings, shaded pedestrian zones, and stormwater management strategies can reduce water demand while improving the public experience. This frontage can help tie the project into the broader campus and medical district, reinforcing both sustainability and the unique bioscience mission of the building.

Together, these strategies position the facility as a responsible long-term investment—efficient to operate, supportive of its users, and grounded in the environmental realities of New Mexico.



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, ELECTRICAL AND COMPUTER ENGINEERING BUILDING



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, ELECTRICAL AND COMPUTER ENGINEERING BUILDING



GATEWAY COMMUNITY COLLEGE CENTER FOR ENTREPRENEURIAL INNOVATION - PHOENIX, AZ



CONNECT LABS AT AGGIE SQUARE - SACRAMENTO, CA

CHAPTER 08

COST ANALYSIS AND FINANCIAL CONSIDERATIONS

COST MODELING METHODOLOGY

Cost modeling is based on comparable projects, regional construction costs, and program requirements. Estimates include hard costs, soft costs, contingencies, and escalation. Renovation costs are generally lower initially but may include hidden costs related to upgrades and inefficiencies in the planning and implementation. New construction can have higher upfront capital cost but improved life cycle performance and more effectively achieve the goals of the facility.

The cost of a bioscience research facility is typically higher than that of many other state-developed and state-maintained facilities. Laboratories are high-performance environments that require close control of temperature, air changes, humidity, and ventilation to support researcher safety and protect the integrity of experiments and samples. These requirements demand robust mechanical, electrical, and plumbing systems that can meet performance expectations while managing long-term energy use, reliability, redundancy, and resilience.

Laboratory finishes and infrastructure also contribute to higher costs. Chemicals, precursors, and cleaning agents used in bioscience research can

be harsh on interior finishes, so durable materials such as epoxy counter-tops and flooring, cleanable walls and ceilings, and corrosion-resistant piping or ductwork may be required in appropriate areas. Fume hoods are another significant cost driver; they provide a safe environment for researchers handling chemicals and conducting experiments, but they also require dedicated exhaust and single-pass air systems that increase the size and complexity of air-conditioning and exhaust equipment.

In addition to direct construction costs, the estimate includes indirect costs such as escalation. Escalation accounts for the cumulative effect of annual construction inflation between today's dollars and the midpoint of construction, when many major building components are expected to be purchased. While the Federal Reserve targets average inflation of approximately 2% across consumer goods, construction inflation has been substantially higher in recent years, often ranging from approximately 6% to 7% annually depending on region and market conditions. Although future escalation cannot be predicted with complete certainty, this estimate assumes a more typical forward-looking inflation environment and applies a cumulative escalation factor of 22% over the projected four-year period to the midpoint of construction.



GATEWAY CENTER FOR ENTREPRENEURIAL INNOVATION - PHOENIX, AZ



CONNECT LABS @ 850 PBC - PHOENIX, AZ



UNIVERSITY OF PENNSYLVANIA NEURAL AND BEHAVIORAL SCIENCES BUILDING - PHILADELPHIA, PA

ORDER-OF-MAGNITUDE COST ESTIMATE INNOVATE ABQ

3-STORY FULL BUILD OUT @ 39,800 SF

This is the minimum amount of space that would be required by the Bioscience Authority to start a facility that can be the next step for start-ups in New Mexico. Based on demand that we have seen during this study, this building would be fully occupied from the onset with excess demand still remaining. A future expansion or additional building would be necessary to provide the space to continue to recruit incubator research to the State.

Uniformat Cost Model				
Project / Component: NM Bioscience Authority Innovate Site - 3 Stories				
Location: Innovate ABQ				
7/31/2026				
Basis Gross Building Area		39800	SF	
Section	Sub	Description	\$ / SF	Totals
			Unit Cost	Amount
Construction Systems and Assemblies				
Element A	Substructure		\$40.00	\$1,592,000
A10	Foundations		\$40.00	\$1,592,000
		A1010 Standard Foundations	\$28.00	\$1,114,400
		A1020 Special Other Foundations		\$0
		A1030 Slab on Grade	\$16.88	\$672,000
A20	Below Grade & Basement Construction		\$0.00	\$0
		A2010 Basement Excavation		\$0
		A2020 Basement Walls		\$0
Element B	Shells		\$119.60	\$5,025,280
B10	Superstructure		\$44.16	\$1,757,700
		B1010 Floor Construction	\$31.50	\$1,253,700
		B1020 Roof Construction	\$12.66	\$504,000
B20	Exterior Enclosures		\$70.10	\$2,789,980
		B2010 Exterior Walls	\$43.23	\$1,720,554
		B2020 Exterior Windows	\$24.38	\$970,324
		B2030 Exterior Doors	\$2.50	\$99,500
B30	Roofing		\$12.00	\$477,600
		B3010 Roof coverings	\$12.00	\$477,600
Element C	Interiors		\$111.00	\$4,417,800
C10	Interior Construction		\$70.00	\$2,786,000
		C1010 Partitions	\$36.00	\$1,432,800
		C1020 Interior Doors	\$14.00	\$557,200
		C1030 Fittings, Casework & Specialties	\$20.00	\$796,000
C20	Stairs		\$11.00	\$437,800
		C2010 Stair Construction	\$11.00	\$437,800
		C2020 Stair Finishes		
C30	Interior Finishes		\$30.00	\$1,194,000
		C3010 Special Wall Finishes	\$1.50	\$59,700
		C3020 Floor Finishes	\$12.00	\$477,600
		C3030 ceiling Finishes	\$16.50	\$656,700
Element D	Services		\$187.59	\$7,466,082
D10	Conveying		\$8.60	\$342,280
		D1010 Elevators, Lifts & Hoists	\$8.60	\$342,280
		D1020 Special Conveying Systems		\$0
D20	Plumbing		\$43.32	\$1,724,136
		D2010 Plumbing Fixtures	\$20.40	\$811,920
		D2020 Domestic Water Distribution	\$7.80	\$310,440

Section	Sub	Description	\$ / SF	-	Totals
			Unit Cost		Amount
		D2030 Sanitary Waste	\$9.84		\$391,632
		D2040 Rain Water Drainage	\$2.88		\$114,624
		D2090 Other Plumbing Systems	\$2.40		\$95,520
D30		Heating Ventilation and Air Conditioning (HVAC)	\$76.00		\$3,024,800
		D3010 Energy Supply	\$0.00		\$0
		D3020 Heat Generating Systems	\$0.00		\$0
		D3030 Cooling Generating Systems	\$0.00		\$0
		D3040 HVAC Distribution	\$0.00		\$0
		D3050 Terminal and packaged Units	\$0.00		\$0
		D3060 HVAC Instrumentation and Controls	\$0.00		\$0
		D3070 Testing Adjusting and Balancing	\$0.00		\$0
		D3090 Other Special HVAC Systems and Equipment	\$0.00		\$0
D40		Fire protection	\$7.50		\$298,500
		D4010 Sprinklers	\$7.50		\$298,500
		D4020 Standpipes			\$0
		D4030 Fire Protection Specialties			\$0
		D4090 Other Fire Protection Systems			\$0
<i>Mechanical Systems subtotal</i>			<i>\$126.82</i>		<i>\$5,047,436</i>
D50		Electrical	\$53.00		\$2,109,400
		D5010 Electrical Service and Distribution	\$15.00		\$597,000
		D5020 Lighting and Branch Wiring	\$22.00		\$875,600
		D5030 Communications and Security	\$16.00		\$636,800
		D5090 Other Electrical Systems			\$0
Element E		Equipment and Furnishings	\$30.00		\$1,194,000
E10		Equipment	\$30.00		\$1,194,000
E20		Furnishings			\$0
Element F		Special Construction and Demolition			\$0
F10		Special Construction			\$0
F20		Selective Demolition	\$0.00		\$0
Element G		Building Sitework	\$19.06		\$758,588
G10		Site Preparation	\$2.49		\$99,102
G20		Site Improvement	\$9.60		\$382,080
G30		Site Civil 1 Mechanical Utilities	\$4.73		\$188,254
G40		Site Electrical Utilities	\$2.23		\$88,754
G90		Other Site Construction			\$0
TOTAL DIRECT COST			\$514.74		\$20,486,784
Element Z		General Conditions & Contingency			
Z10		General Requirements, Insurance, Bonds & Fees General Requirements			
		General Requirements	14%		\$2,868,150
		GC Overhead & Profit	5%		\$1,024,339
		Bonds & Insurance	2.50%		\$512,170
		Subtotal	\$110.67		\$4,404,659
TOTAL DIRECT COST + GENERAL CONDITIONS			\$625.41		\$24,891,443
Z20		Contingency / Design			
		Contingency / Design	20%		\$4,097,357
		Escalation	22%		\$4,507,092
		Subtotal	\$216.19		\$8,604,449
TOTAL ESTIMATED CONSTRUCTION COST			\$841.61		\$33,495,892
SOFT COSTS		Soft Cost (IT, AV, Security, Furniture, Equipment, Owner Contingency, NMGR, Design Fee, and Engineering Fee)			
			25%		\$8,373,973
TOTAL ESTIMATED SOFT COST			1052.00665		\$41,869,864.80
Z30		Taxes New Mexico Gross Receipts Tax	8%		\$3,192,577
TOTAL ESTIMATED CONSTRUCTION COST			\$1,132.22		\$45,062,441.99

ORDER-OF-MAGNITUDE COST ESTIMATE INNOVATE ABQ

4-STORY BUILD OUT @ 52,600 SF

Based on the development of the 3-story building on this site with the duplication of the third floor to create a 4-story building. This building size and the number of labs that it can facilitate is much more in line with the demands for incubator space required by the BSA. This would allow for the use of the 4th floor from the onset of construction completion.

Uniformat Cost Model				
Project / Component: NM Bioscience Authority Innovate Site - 4 Stories				
Location: Innovate ABQ				
Date: 7/31/2026				
Basis Gross Building Area			52600 SF	
Section	Sub	Description	\$ / SF	Totals
			Unit Cost	Amount
Construction Systems and Assemblies				
Element A	Substructure		\$40.00	\$2,104,000
A10	Foundations		\$40.00	\$2,104,000
		A1010 Standard Foundations	\$28.00	\$1,472,800
		A1020 Special Other Foundations		\$0
		A1030 Slab on Grade	\$12.00	\$631,200
A20	Below Grade & Basement Construction		\$0.00	\$0
		A2010 Basement Excavation		\$0
		A2020 Basement Walls		\$0
Element B	Shells		\$119.60	\$6,321,560
B10	Superstructure		\$41.08	\$2,160,900
		B1010 Floor Construction	\$31.50	\$1,656,900
		B1020 Roof Construction	\$9.58	\$504,000
B20	Exterior Enclosures		\$70.10	\$3,687,260
		B2010 Exterior Walls	\$43.23	\$2,273,898
		B2020 Exterior Windows	\$24.38	\$1,282,388
		B2030 Exterior Doors	\$2.50	\$131,500
B30	Roofing		\$9.00	\$473,400
		B3010 Roof coverings	\$9.00	\$473,400
Element C	Interiors		\$112.05	\$5,893,830
C10	Interior Construction		\$70.00	\$3,682,000
		C1010 Partitions	\$36.00	\$1,893,600
		C1020 Interior Doors	\$14.00	\$736,400
		C1030 Fittings, Casework & Specialties	\$20.00	\$1,052,000
C20	Stairs		\$12.05	\$633,830
		C2010 Stair Construction	\$12.05	\$633,830
		C2020 Stair Finishes		
C30	Interior Finishes		\$30.00	\$1,578,000
		C3010 Special Wall Finishes	\$1.50	\$78,900
		C3020 Floor Finishes	\$12.00	\$631,200
		C3030 ceiling Finishes	\$16.50	\$867,900
Element D	Services		\$187.59	\$9,867,234
D10	Conveying		\$7.77	\$408,702
		D1010 Elevators, Lifts & Hoists	\$7.77	\$408,702
		D1020 Special Conveying Systems		\$0
D20	Plumbing		\$43.32	\$2,278,632
		D2010 Plumbing Fixtures	\$20.40	\$1,073,040
		D2020 Domestic Water Distribution	\$7.80	\$410,280

Section	Sub	Description	\$ / SF	-	Totals
			Unit Cost	Amount	
	D2030	Sanitary Waste	\$9.84		\$517,584
	D2040	Rain Water Drainage	\$2.88		\$151,488
	D2090	Other Plumbing Systems	\$2.40		\$126,240
D30		Heating Ventilation and Air Conditioning (HVAC)	\$76.00		\$3,997,600
	D3010	Energy Supply	\$0.00		\$0
	D3020	Heat Generating Systems	\$0.00		\$0
	D3030	Cooling Generating Systems	\$0.00		\$0
	D3040	HVAC Distribution	\$0.00		\$0
	D3050	Terminal and packaged Units	\$0.00		\$0
	D3060	HVAC Instrumentation and Controls	\$0.00		\$0
	D3070	Testing Adjusting and Balancing	\$0.00		\$0
	D3090	Other Special HVAC Systems and Equipment	\$0.00		\$0
D40		Fire protection	\$7.50		\$394,500
	D4010	Sprinklers	\$7.50		\$394,500
	D4020	Standpipes			\$0
	D4030	Fire Protection Specialties			\$0
	D4090	Other Fire Protection Systems			\$0
<i>Mechanical Systems subtotal</i>			\$126.82		\$6,670,732
D50		Electrical	\$53.00		\$2,787,800
	D5010	Electrical Service and Distribution	\$15.00		\$789,000
	D5020	Lighting and Branch Wiring	\$22.00		\$1,157,200
	D5030	Communications and Security	\$16.00		\$841,600
	D5090	Other Electrical Systems			\$0
Element E		Equipment and Furnishings	\$30.00		\$1,578,000
E10		Equipment	\$30.00		\$1,578,000
E20		Furnishings			\$0
Element F		Special Construction and Demolition			\$0
F10		Special Construction			\$0
F20		Selective Demolition	\$0.00		\$0
Element G		Building Sitework	\$19.06		\$1,002,556
G10		Site Preparation	\$2.49		\$130,974
G20		Site Improvement	\$9.60		\$504,960
G30		Site Civil 1 Mechanical Utilities	\$4.73		\$248,798
G40		Site Electrical Utilities	\$2.23		\$117,298
G90		Other Site Construction			\$0
TOTAL DIRECT COST			\$508.88		\$26,767,180
Element Z		General Conditions & Contingency			
Z10		General Requirements, Insurance, Bonds & Fees			
		General Requirements	14%		\$3,747,405
		GC Overhead & Profit	5%		\$1,338,359
		Bonds & Insurance	2.50%		\$669,180
		Subtotal	\$109.41		\$5,754,944
TOTAL DIRECT COST + GENERAL CONDITIONS			\$618.29		\$32,522,124
Z20		Contingency / Design			
		Soft Cost (IT, AV, Security, Furniture, Equipment, Owner Contingency)	20%		\$5,353,436
		Contingency / Design	20%		\$5,353,436
		Escalation	22%		\$5,888,780
		Subtotal	\$315.51		\$16,595,651.60
TOTAL ESTIMATED COST			\$933.80		\$49,117,775
Z30		Taxes New Mexico Gross Receipts Tax	7.63%		\$3,745,230
TOTAL ESTIMATED COST INCLUDING NMGR			\$1,005.00		\$52,863,005.67

ORDER-OF-MAGNITUDE COST ESTIMATE INNOVATE ABQ

4-STORY W/ SHELL @ 52,600 SF

Based on the development of the 3-story building on this site with the duplication of the third floor to create a 4-story building. This building size is much more in line with the demand for incubator space but does not build out all of the spaces in the initial construction. The 4th floor would be built out in the future by either the BSA or Tenants. This cost model demonstrates the lowest cost per square foot.

Unifomat Cost Model				
Project / Component: NM Bioscience Authority Innovate Site - 4 Stories, 4th Floor Shell				
Location: Innovate ABQ		12800 Shell		
7/31/2026		39800 Full Build Out		
Basis Gross Building Area		52600 Total SF		
Section	Sub	Description	\$ / SF	Totals
			Unit Cost	Amount
Construction Systems and Assemblies				
Element A	Substructure		\$40.00	\$2,104,000
A10	Foundations		\$40.00	\$2,104,000
		A1010 Standard Foundations	\$28.00	\$1,472,800
		A1020 Special Other Foundations		\$0
		A1030 Slab on Grade	\$12.00	\$631,200
A20	Below Grade & Basement Construction		\$0.00	\$0
		A2010 Basement Excavation		\$0
		A2020 Basement Walls		\$0
Element B	Shells		\$119.60	\$6,321,560
B10	Superstructure		\$41	\$2,160,900
		B1010 Floor Construction	\$31.50	\$1,656,900
		B1020 Roof Construction	\$9.58	\$504,000
B20	Exterior Enclosures		\$70.10	\$3,687,260
		B2010 Exterior Walls	\$43.23	\$2,273,898
		B2020 Exterior Windows	\$24.38	\$1,282,388
		B2030 Exterior Doors	\$2.50	\$131,500
B30	Roofing		\$9.00	\$473,400
		B3010 Roof coverings	\$9.00	\$473,400
Element C	Interiors		\$112.05	\$4,459,590
C10	Interior Construction		\$70.00	\$2,786,000
		C1010 Partitions	\$36.00	\$1,432,800
		C1020 Interior Doors	\$14.00	\$557,200
		C1030 Fittings, Casework & Specialties	\$20.00	\$796,000
C20	Stairs		\$12.05	\$479,590
		C2010 Stair Construction	\$12.05	\$479,590
		C2020 Stair Finishes		
C30	Interior Finishes		\$30.00	\$1,194,000
		C3010 Special Wall Finishes	\$1.50	\$59,700
		C3020 Floor Finishes	\$12.00	\$477,600
		C3030 ceiling Finishes	\$16.50	\$656,700
Element D	Services		\$187.59	\$8,827,874
D10	Conveying		\$7.77	\$408,702
		D1010 Elevators, Lifts & Hoists	\$7.77	\$408,702
		D1020 Special Conveying Systems		\$0
D20	Plumbing		\$43.32	\$1,917,672
		D2010 Plumbing Fixtures	\$20.40	\$811,920
		D2020 Domestic Water Distribution	\$7.80	\$310,440
		D2030 Sanitary Waste	\$9.84	\$517,584

Section	Sub	Description	\$ / SF	-	Totals
			Unit Cost	Amount	
	D2040	Rain Water Drainage	\$2.88		\$151,488
	D2090	Other Plumbing Systems	\$2.40		\$126,240
D30		Heating Ventilation and Air Conditioning (HVAC)	\$76.00		\$3,997,600
	D3010	Energy Supply	\$0.00		\$0
	D3020	Heat Generating Systems	\$0.00		\$0
	D3030	Cooling Generating Systems	\$0.00		\$0
	D3040	HVAC Distribution	\$0.00		\$0
	D3050	Terminal and packaged Units	\$0.00		\$0
	D3060	HVAC Instrumentation and Controls	\$0.00		\$0
	D3070	Testing Adjusting and Balancing	\$0.00		\$0
	D3090	Other Special HVAC Systems and Equipment	\$0.00		\$0
D40		Fire protection	\$7.50		\$394,500
	D4010	Sprinklers	\$7.50		\$394,500
	D4020	Standpipes			\$0
	D4030	Fire Protection Specialties			\$0
	D4090	Other Fire Protection Systems			\$0
<i>Mechanical Systems subtotal</i>			\$126.82		\$6,309,772
D50		Electrical	\$53.00		\$2,109,400
	D5010	Electrical Service and Distribution	\$15.00		\$789,000
	D5020	Lighting and Branch Wiring	\$22.00		\$875,600
	D5030	Communications and Security	\$16.00		\$636,800
	D5090	Other Electrical Systems			\$0
Element E		Equipment and Furnishings	\$30.00		\$1,194,000
E10		Equipment	\$30.00		\$1,194,000
E20		Furnishings			\$0
Element F		Special Construction and Demolition			\$0
F10		Special Construction			\$0
F20		Selective Demolition	\$0.00		\$0
Element G		Building Sitework	\$19.06		\$1,002,556
G10		Site Preparation	\$2.49		\$130,974
G20		Site Improvement	\$9.60		\$504,960
G30		Site Civil 1 Mechanical Utilities	\$4.73		\$248,798
G40		Site Electrical Utilities	\$2.23		\$117,298
G90		Other Site Construction			\$0
TOTAL DIRECT COST			\$454.55		\$23,909,580
Element Z		General Conditions & Contingency			
Z10		General Requirements, Insurance, Bonds & Fees			
		General Requirements	14%		\$3,347,341
		GC Overhead & Profit	5%		\$1,195,479
		Bonds & Insurance	2.50%		\$597,740
		Subtotal	\$97.73		\$5,140,560
Subtotal - Direct Cost + General Conditions			\$552.28		\$29,050,140
Z20		Contingency / Design			
		Soft Cost (IT, AV, Security, Furniture, Equipment, Owner Contingency)	20%		\$4,781,916
		Contingency / Design	20%		\$4,781,916
		Escalation	22%		\$5,260,108
		Subtotal	\$281.82		\$14,823,940
TOTAL ESTIMATED COST			\$834.11		\$43,874,079
Z30		Taxes New Mexico Gross Receipts Tax			
			7.63%		\$3,345,399
TOTAL ESTIMATED COST INCLUDING NMGR			\$897.71		\$47,219,478

ORDER-OF-MAGNITUDE COST ESTIMATE

LOMAS CORRIDOR

3-STORY FULL BUILD OUT @ 65,100 SF

This amount of space would be required by the Bioscience Authority to start a facility that can be the next step for start-ups in New Mexico. Based on demand that we have seen during this study, this building would be fully occupied from the onset and provide the quantity and variety in size of lab for a diverse tenant mix.

Uniformat Cost Model				
Project / Component: NM Bioscience Authority Lomas Site - 3 Stories				
Location: Lomas and University				
Date: 7/31/2026				
Basis Gross Building Area			65100	Total SF
Section	Sub	Description	\$ / SF	Totals
			Unit Cost	Amount
Construction Systems and Assemblies				
Element A	Substructure		\$40.00	\$2,604,000
A10	Foundations		\$40.00	\$2,604,000
		A1 010 Standard Foundations	\$28.00	\$1,822,800
		A1 020 Special Other Foundations		\$0
		A1030 Slab on Grade	\$12.00	\$781,200
A20	Below Grade & Basement Construction		\$0.00	\$0
		A2010 Basement Excavation		\$0
		A2020 Basement Walls		\$0
Element B	Shells		\$121.78	\$7,732,578
B10	Superstructure		\$40	\$2,604,000
		B1010 Floor Construction	\$28.00	\$1,822,800
		B1020 Roof Construction	\$12.00	\$781,200
B20	Exterior Enclosures		\$69.78	\$4,542,678
		B2010 Exterior Walls	\$43.23	\$2,814,273
		B2020 Exterior Windows	\$24.38	\$1,587,138
		B2030 Exterior Doors	\$2.50	\$162,750
B30	Roofing		\$9.00	\$585,900
		B3010 Roof coverings	\$9.00	\$585,900
Element C	Interiors		\$107.00	\$6,965,700
C10	Interior Construction		\$70.00	\$4,557,000
		C1010 Partitions	\$36.00	\$2,343,600
		C1020 Interior Doors	\$14.00	\$911,400
		C1030 Fittings, Casework & Specialties	\$20.00	\$1,302,000
C20	Stairs		\$7.00	\$455,700
		C2010 Stair Construction	\$7.00	\$455,700
		C2020 Stair Finishes		
C30	Interior Finishes		\$30.00	\$1,953,000
		C3010 Special Wall Finishes	\$1.50	\$97,650
		C3020 Floor Finishes	\$12.00	\$781,200
		C3030 ceiling Finishes	\$16.50	\$1,074,150
Element D	Services		\$187.59	\$12,065,634
D10	Conveying		\$5.52	\$359,352
		D1010 Elevators, Lifts & Hoists	\$5.52	\$359,352
		D1020 Special Conveying Systems		\$0
D20	Plumbing		\$43.32	\$2,820,132
		D2010 Plumbing Fixtures	\$20.40	\$1,328,040
		D2020 Domestic Water Distribution	\$7.80	\$507,780

Section	Sub	Description	\$ / SF	-	Totals
			Unit Cost	Amount	
	D2030	Sanitary Waste	\$9.84		\$640,584
	D2040	Rain Water Drainage	\$2.88		\$187,488
	D2090	Other Plumbing Systems	\$2.40		\$156,240
D30		Heating Ventilation and Air Conditioning (HVAC)	\$76.00		\$4,947,600
	D3010	Energy Supply	\$0.00		\$0
	D3020	Heat Generating Systems	\$0.00		\$0
	D3030	Cooling Generating Systems	\$0.00		\$0
	D3040	HVAC Distribution	\$0.00		\$0
	D3050	Terminal and packaged Units	\$0.00		\$0
	D3060	HVAC Instrumentation and Controls	\$0.00		\$0
	D3070	Testing Adjusting and Balancing	\$0.00		\$0
	D3090	Other Special HVAC Systems and Equipment	\$0.00		\$0
D40		Fire protection	\$7.50		\$488,250
	D4010	Sprinklers	\$7.50		\$488,250
	D4020	Standpipes			\$0
	D4030	Fire Protection Specialties			\$0
	D4090	Other Fire Protection Systems			\$0
<i>Mechanical Systems subtotal</i>			\$126.82		\$8,255,982
D50		Electrical	\$53.00		\$3,450,300
	D5010	Electrical Service and Distribution	\$15.00		\$976,500
	D5020	Lighting and Branch Wiring	\$22.00		\$1,432,200
	D5030	Communications and Security	\$16.00		\$1,041,600
	D5090	Other Electrical Systems			\$0
Element E		Equipment and Furnishings	\$30.00		\$1,953,000
E10		Equipment	\$30.00		\$1,953,000
E20		Furnishings			\$0
Element F		Special Construction and Demolition			\$0
F10		Special Construction			\$0
F20		Selective Demolition	\$0.00		\$0
Element G		Building Sitework	\$14.39		\$937,000
G10		Site Preparation	\$2.14		\$139,400
G20		Site Improvement	\$8.26		\$537,600
G30		Site Civil 1 Mechanical Utilities	\$2.07		\$135,000
G40		Site Electrical Utilities	\$1.92		\$125,000
G90		Other Site Construction			\$0
TOTAL DIRECT COST			\$495.51		\$32,257,912
Element Z		General Conditions & Contingency			
Z10		General Requirements, Insurance, Bonds & Fees General Requirements			
		General Requirements	14%		\$4,516,108
		GC Overhead & Profit	5%		\$1,612,896
		Bonds & Insurance	2.50%		\$806,448
		Subtotal	\$106.54		\$6,935,451
Subtotal - Direct Cost + General Conditions			\$602.05		\$39,193,363
Z20		Contingency / Design			
		Soft Cost (IT, AV, Security, Furniture, Equipment, Owner Contingency)	20%		\$6,451,582
		Contingency / Design	20%		\$6,451,582
		Escalation	22%		\$7,096,741
		Subtotal	\$307.22		\$19,999,905
TOTAL ESTIMATED COST			\$909.27		\$59,193,269
Z30	Taxes	New Mexico Gross Receipts Tax			
			7.63%		\$4,513,487
TOTAL ESTIMATED COST INCLUDING NMGR			\$978.60		\$63,706,755

ORDER-OF-MAGNITUDE COST ESTIMATE

LOMAS CORRIDOR

3-STORY W/ SHELL @ 65,100 SF

This amount of space would be above the required space needed by the Bioscience Authority to start a facility and provide the next step for start-ups in New Mexico. Based on demand that we have seen during this study, this building would be fully occupied from the onset and provide the quantity and variety in size of lab for a diverse tenant mix. This building would also be able to accommodate the future influx in incubator needs through the future completion of the shell space. The cost per square foot on this building is the second lowest evaluated.

Uniformat Cost Model				
Project / Component: NM Bioscience Authority Lomas Site - 3 Stories				
Location: Lomas and University				
Date: 7/31/2026				
Basis Gross Building Area			65100 Total SF	
Section	Sub	Description	\$ / SF	Totals
			Unit Cost	Amount
Construction Systems and Assemblies				
Element A	Substructure		\$40.00	\$2,604,000
A10	Foundations		\$40.00	\$2,604,000
		A1010 Standard Foundations	\$28.00	\$1,822,800
		A1020 Special Other Foundations		\$0
		A1030 Slab on Grade	\$12.00	\$781,200
A20	Below Grade & Basement Construction		\$0.00	\$0
		A2010 Basement Excavation		\$0
		A2020 Basement Walls		\$0
Element B	Shells		\$121.78	\$7,732,578
B10	Superstructure		\$40	\$2,604,000
		B1010 Floor Construction	\$28.00	\$1,822,800
		B1020 Roof Construction	\$12.00	\$781,200
B20	Exterior Enclosures		\$69.78	\$4,542,678
		B2010 Exterior Walls	\$43.23	\$2,814,273
		B2020 Exterior Windows	\$24.38	\$1,587,138
		B2030 Exterior Doors	\$2.50	\$162,750
B30	Roofing		\$9.00	\$585,900
		B3010 Roof coverings	\$9.00	\$585,900
Element C	Interiors		\$107.00	\$6,965,700
C10	Interior Construction		\$70.00	\$4,557,000
		C1010 Partitions	\$36.00	\$2,343,600
		C1020 Interior Doors	\$14.00	\$911,400
		C1030 Fittings, Casework & Specialties	\$20.00	\$1,302,000
C20	Stairs		\$7.00	\$455,700
		C2010 Stair Construction	\$7.00	\$455,700
		C2020 Stair Finishes		
C30	Interior Finishes		\$30.00	\$1,953,000
		C3010 Special Wall Finishes	\$1.50	\$97,650
		C3020 Floor Finishes	\$12.00	\$781,200
		C3030 ceiling Finishes	\$16.50	\$1,074,150
Element D	Services		\$187.59	\$12,065,634
D10	Conveying		\$5.52	\$359,352
		D1010 Elevators, Lifts & Hoists	\$5.52	\$359,352
		D1020 Special Conveying Systems		\$0

Section	Sub	Description	\$ / SF	-	Totals
			Unit Cost		Amount
D20	Plumbing		\$43.32		\$2,820,132
	D2010	Plumbing Fixtures	\$20.40		\$1,328,040
	D2020	Domestic Water Distribution	\$7.80		\$507,780
	D2030	Sanitary Waste	\$9.84		\$640,584
	D2040	Rain Water Drainage	\$2.88		\$187,488
	D2090	Other Plumbing Systems	\$2.40		\$156,240
D30	Heating Ventilation and Air Conditioning (HVAC)		\$76.00		\$4,947,600
	D3010	Energy Supply	\$0.00		\$0
	D3020	Heat Generating Systems	\$0.00		\$0
	D3030	Cooling Generating Systems	\$0.00		\$0
	D3040	HVAC Distribution	\$0.00		\$0
	D3050	Terminal and packaged Units	\$0.00		\$0
	D3060	HVAC Instrumentation and Controls	\$0.00		\$0
	D3070	Testing Adjusting and Balancing	\$0.00		\$0
	D3090	Other Special HVAC Systems and Equipment	\$0.00		\$0
D40	Fire protection		\$7.50		\$488,250
	D4010	Sprinklers	\$7.50		\$488,250
	D4020	Standpipes			\$0
	D4030	Fire Protection Specialties			\$0
	D4090	Other Fire Protection Systems			\$0
<i>Mechanical Systems subtotal</i>			\$126.82		\$8,255,982
D50	Electrical		\$53.00		\$3,450,300
	D5010	Electrical Service and Distribution	\$15.00		\$976,500
	D5020	Lighting and Branch Wiring	\$22.00		\$1,432,200
	D5030	Communications and Security	\$16.00		\$1,041,600
	D5090	Other Electrical Systems			\$0
Element E	Equipment and Furnishings		\$30.00		\$1,953,000
E10	Equipment		\$30.00		\$1,953,000
E20	Furnishings				\$0
Element F	Special Construction and Demolition				\$0
F10	Special Construction				\$0
F20	Selective Demolition		\$0.00		\$0
Element G	Building Sitework		\$14.39		\$937,000
G10	Site Preparation		\$2.14		\$139,400
G20	Site Improvement		\$8.26		\$537,600
G30	Site Civil 1 Mechanical Utilities		\$2.07		\$135,000
G40	Site Electrical Utilities		\$1.92		\$125,000
G90	Other Site Construction				\$0
TOTAL DIRECT COST			\$495.51		\$32,257,912
Element Z	General Conditions & Contingency				
Z10	General Requirements, Insurance, Bonds & Fees	General Requirements			
		General Requirements	14%		\$4,516,108
		GC Overhead & Profit	5%		\$1,612,896
		Bonds & Insurance	2.50%		\$806,448
		Subtotal	\$106.54		\$6,935,451
Subtotal - Direct Cost + General Conditions			\$602.05		\$39,193,363
Z20	Contingency / Design				
		Soft Cost (IT, AV, Security, Furniture, Equipment, Owner Contingency)	20%		\$6,451,582
		Contingency / Design	20%		\$6,451,582
		Escalation	22%		\$7,096,741
		Subtotal	\$307.22		\$19,999,905
TOTAL ESTIMATED COST			\$909.27		\$59,193,269
Z30	Taxes	New Mexico Gross Receipts Tax			
			7.63%		\$4,513,487
TOTAL ESTIMATED COST INCLUDING NMGR			\$978.60		\$63,706,755



OLD DOMINION UNIVERSITY NEW SCIENCES BUILDING

CHAPTER 09

COMPARATIVE EVALUATION

SITE EVALUATION CRITERIA

To objectively compare the Innovate ABQ and Lomas Corridor sites, the team used a site selection matrix to evaluate both options against consistent criteria. The criteria were developed based on best practices in research facility design and construction, the specific needs of the program identified by NMBSA stakeholders, and each site's potential impact on overall development cost. Based on the matrix results, the Lomas Corridor site scored higher overall and was selected as the recommended site to advance. The criteria for comparing the two sites were discussed in detail and agreed to with NMBSA during the first workshop. The scoring and weighting of the program and location criteria were done by NMBSA while the site infrastructure and cost criteria were scored by the civil engineer and the cost consultant.

PROGRAM REQUIREMENTS

From a program requirements perspective, both Innovate ABQ and the Lomas Corridor site can support the intent of a bioscience incubator, but they do so with different strengths. Innovate ABQ benefits from being embedded in an established innovation-oriented environment with existing institutional visibility and a development framework that already anticipates mixed-use, entrepreneurial activity. This setting supports the mission of creating a visible, collaborative destination for early-stage companies, investors, mentors, and academic partners. It also offers the potential to position the incubator as part of a broader district identity rather than as a stand-alone laboratory building.

The primary program challenge for Innovate ABQ is the constrained site geometry. The triangular development parcel and surrounding planned streets and paseo spaces influence the building footprint, which may limit the efficiency of laboratory planning and the ease of organizing repetitive tenant modules. While the site can accommodate a purpose-built facility, the resulting layout may require more careful planning to maintain clear lab-to-support relationships, efficient circulation, and a logical separation between public, shared, and tenant areas. Expansion potential may also be more dependent on the larger master plan and the availability of adjacent development capacity.

LOCATION

The Lomas Corridor site scores more strongly against the program requirements in the evaluation matrix, particularly for laboratory layout efficiency, flexibility, expansion capacity, and the ability to support multi-tenancy or shell space for future growth. These qualities are important for a facility intended to serve companies at different stages of development, from small startups needing shared resources to more mature tenants requiring dedicated suites. The site is better suited to a clear, efficient planning diagram that can accommodate an initial 25,000 SF first phase while preserving the ability to expand toward a larger 40,000 SF concept as demand grows.

A key advantage of Lomas Corridor is its ability to support the operational logic of a multi-tenant laboratory incubator: modular wet and dry labs, shared support spaces, administrative areas, collaboration zones, and potential shell space can be organized with greater long-term adaptability with a larger typical floorplate. This is consistent with the project's emphasis on startup growth, tenant turnover, and the need for flexible space that can be reconfigured as companies scale. The initial 25,000 GSF phase would need to be planned carefully so that future expansion does not compromise early functionality or create disruptions to operations.

Overall, Innovate ABQ offers a strong innovation-district context and public-facing identity, while Lomas Corridor offers a stronger fit for the physical and operational requirements of the proposed program. The sites proximity to the Medical District and future school of medicine provides excellent adjacency to shared research infrastructure and amenities. It is also anticipated that there will be more opportunities for engagement with private industry through events hosted on campus.

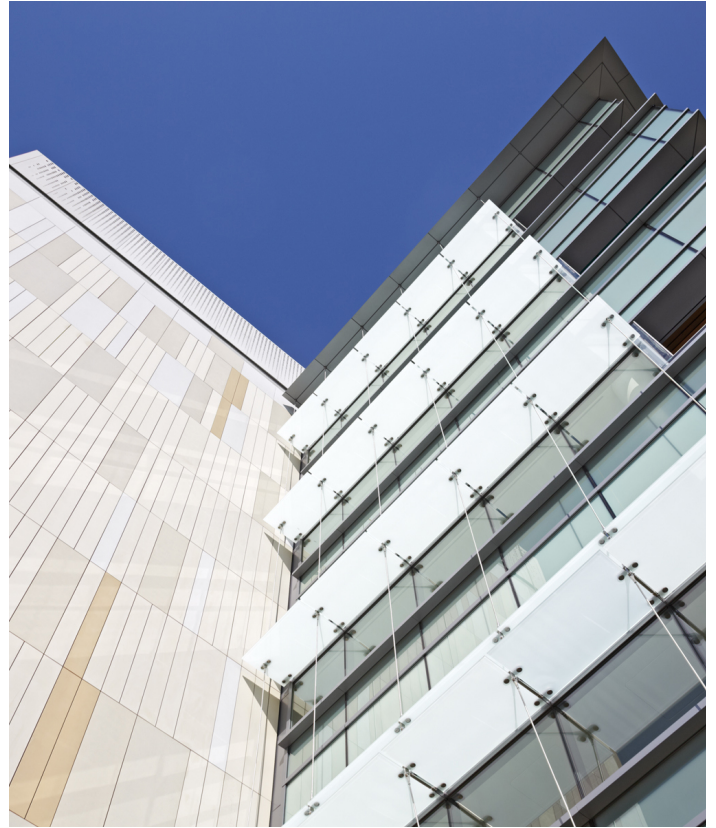
SITE INFRASTRUCTURE

Both sites scored similarly for access to major utilities, including gas, power, telecom/fiber, domestic water, fire protection water, sanitary sewer, and stormwater infrastructure; however, available capacity has not yet been confirmed. Both sites also appear to provide adequate fire department apparatus access. Existing fire hydrants are located near each site, although both sites are expected to require additional hydrant extensions into the development area.

The Lomas Corridor site scored higher than the Innovate ABQ site with respect to the extent of required reconfiguration of existing site infrastructure. Lomas Boulevard carries the major utilities needed to serve the project, allowing for more efficient utility taps and shorter extensions into the site. By contrast, the Innovate ABQ site would likely require longer utility extensions to reach the proposed building area. In addition, because the Lomas Corridor site occupies an existing building pad, it is already generally graded for redevelopment. The Innovate ABQ site is currently an existing parking lot with grades that accommodate sheet flow of stormwater across the planned building pad; as a result, the project would likely require more extensive regrading and repaving of adjacent parking areas to support the new facility.

COST IMPACTS

From a cost/sf perspective the Lomas Corridor site scored slightly higher, meaning it was most cost-effective or cheaper. Both sites encounter different variables affecting schedule including both demolition and relocation but scored consistently from a scheduled move-in and make-ready standpoint. The Lomas Corridor site also scored higher on site utilities and ongoing land costs. Overall the Lomas Corridor site scored significantly higher from a cost standpoint.



UC BERKELEY ENERGY BIOSCIENCES BUILDING



ARIZONA STATE UNIVERSITY INTERDISCIPLINARY SCIENCE AND TECHNOLOGY BUILDING 12 - MESA, AZ

SITE SELECTION MATRIX

2 = Yes/Very True/Agree

1 = Somewhat Yes/Somewhat True/Somewhat Agree

0 = No/Not True/Don't Agree

			Weighted Score			
		Innovate ABQ	Lomas Corridor	Weight (1-3)	Innovate ABQ	Lomas Corridor
A	Program Requirements					
	Optimal Program Distribution					
A.1	Laboratory Layout Efficiency	1.5	2	3	4.5	6
A.2	Laboratory Layout Flexibility - allows growth for start-up to scale	1	1.75	3	3	5.25
A.3	Access i.e. Back-of-house Loading Service Corridor and stair and elevator access	1.75	1.75	3	5.25	5.25
A.4	Natural Daylight and quality of workspace	2	2	2	4	4
A.5	Expansion - area to enlarge footprint or ability to add additional floors	1.5	2	2	3	4
A.6	Multi-tenancy and/or shell space for expansion of programs	1.5	2	2	3	4
				15	22.75	28.5
B	Location					
	Academic, Administrative, Research Community Access					
B.1	Proximity to Existing Research Collaboration	1	2	3	3	6
B.2	Proximity to Existing Core Research Facilities	1	2	3	3	6
B.3	Site has good access to transit and main roadways	2	1.25	3	6	3.75
B.4	Site will be in close proximity to parking structure or surface lot	2	0.75	2	4	1.5
B.5	Site offers good visibility to public for visibility of state investment and to recruit research	1.75	1.75	3	5.25	5.25
B.6	Fosters creation of an innovation district not stand-alone research	1.75	2	1	1.75	2
				15	23	24.5
C	Building Systems			Subtotal	45.75	53
	Broadcasting Requirements, Utilities, Water, Technology					
C.1	Plumbing and Electrical Capacity & Availability	2	2	1	2	2
C.2	Telecom/fiber is within the vicinity (6 strands min. 100g bandwidth)	1.5	2	1	1.5	2
C.3	Site does not require major reconfiguration of existing utilities	1.25	0.5	1	1.25	0.5
C.4	Site provides low vibration levels (dB)	0	0.5	1	0	0.5
C.5	Site provides low noise levels (dB)	0.75	1	1	0.75	1
				5	5.5	6
D	Cost Impacts					
	Site Development Costs, 3 most cost effective - 0 most expensive					
D.1	Cost / asf	2.5	3	1	2.5	3
D.2	Shortest Schedule for Move-in	2	2	1	2	2
D.3	Utility Costs	1.5	2.5	1	1.5	2.5
D.4	Ongoing Costs i.e. land / building lease payments	2	2.25	1	2	2.25
D.5	Make Ready costs of Demolition / Relocation	3	3	1	3	3
				5	11	12.75

E	Proximate Infrastructure					
	Utilities, Water, Technology					
E.1	Gas is within the vicinity (capacity unknown)	2	2	1	2	2
E.2	Power is within the vicinity (capacity unknown)	2	2	1	2	2
E.3	Telecom/fiber is within the vicinity (capacity unknown)	2	2	1	2	2
E.4	Domestic water is within the vicinity (capacity unknown)	2	2	1	2	2
E.5	Water for fire protection is within the vicinity (capacity unknown)	2	2	1	2	2
E.6	Sanitary sewer is within the vicinity (capacity unknown)	2	2	1	2	2
E.7	Site has proper drainage and adequate area for ponding	0	2	1	0	2
E.8	Site has storm water management within the vicinity	2	2	1	2	2
E.9	Site has existing fire hydrants within the vicinity	1	1	1	1	1
E.10	Site has adequate Fire Department access	2	2	1	2	2
E.11	Site does not require major reconfiguration of existing utilities	1	2	1	1	2
				11	18	21

Totals

A	Program Requirements			15	22.75	28.5
B	Location			15	23	24.5
C	Building Systems			5	5.5	6
D	Cost Impacts			5	11	12.75
E	Proximate Infrastructure				18	21
					80.25	92.75
				Innovate ABQ	Lomas Corridor	



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN, ELECTRICAL AND COMPUTER ENGINEERING BUILDING



CONCEPTUAL BUILDING RENDERING

CHAPTER 10

IMPLEMENTATION STRATEGY

INTRODUCTION

The Bioscience Authority Incubator Space will be a catalyst for regional economic growth by supporting the formation, development, and commercialization of bioscience start-up companies. The incubator will provide affordable laboratory space, entrepreneurial support, access to capital, workforce development programs, and connections to research institutions.

The NMBSA will be owner and operator of a new mixed use building, blending their needs for incubator space with the desires of the Land Leasee with ground floor retail. Building operations will be managed by NMBSA, with staffing and operating costs determined by the facility’s operational requirements.

The operating cost model below provides a framework for the NMBSA to understand the cost implications of building ownership compared to the

potential revenue stream. The square footages are based on only the portions of the building that the NMBSA will be occupying with the tenant space on the ground floor excluding from this exercise.

The development of the facility is designed to accelerate startup formation, increase high-wage job creation, attract private investment, and strengthen the New Mexico bioscience ecosystem. The national bioscience industry generates over \$3.2 trillion in economic output, supports more than 10 million jobs, and pays average wages exceeding \$132,000 annually and this Incubator Facility will position New Mexico to capture a larger share of this rapidly growing market.

OPERATIONAL COST MODELS

INNOVATE ABQ SITE - 3-STORIES

NMBSA SF	BUILDING MANAGEMENT	OPERATION COST @ \$12/SF	NMBSA RENT @ \$20/SF	TENANT RENT @ \$75/SF	DIFFERENCE
39,800 SF	(\$100,000)	(\$480,000)	\$350,000	\$400,000	(\$170,000)

INNOVATE ABQ SITE - 4-STORIES

NMBSA SF	BUILDING MANAGEMENT	OPERATION COST @ \$12/SF	NMBSA RENT @ \$20/SF	TENANT RENT @ \$75/SF	DIFFERENCE
52,600 SF	(\$150,000)	(\$624,000)	\$393,750	\$400,000	(\$19,750)

LOMAS CORRIDOR SITE - 3-STORIES

NMBSA SF	BUILDING MANAGEMENT	OPERATION COST @ \$12/SF	NMBSA RENT @ \$20/SF	TENANT RENT @ \$75/SF	DIFFERENCE
65,100 SF	(\$200,000)	(\$804,000)	\$450,000	\$720,000	(\$166,000)

PROJECT DELIVERY CONSIDERATIONS

There are 3 project delivery methods that are practical for this project and its development; Construction Manager at Risk (CMAR), Fast Track, and Traditional Design, Bid, Build.

1. Construction Manager at Risk (CMAR)

Using the CMAR method, an owner hires a design team (Architect) and a Construction Manager (CM)/General Contractor early in the process. The CM provides preconstruction services such as cost estimating, constructability reviews, scheduling, and risk analysis during design. Then acting as the general contractor, they deliver the project at a Guaranteed Maximum Price (GMP).

Advantages: Early contractor involvement improves planning and constructability, provides better cost control through continuous estimating during design, accelerates delivery, and facilitates collaboration between the owner, designer, and contractor at an early stage.

Disadvantages: This process requires significant owner involvement during design, and the CMAR selection process can be more complex than traditional bidding.

Best Suited For: This process is best for projects with complex site conditions, significant stakeholder interests, or a need for early cost certainty and risk management.

2. Fast Track

Fast Track is a delivery approach rather than a specific contract type. Design and construction phases overlap, allowing construction to begin early.

Advantages: This process provides the shortest overall project schedule, which allows early site work and procurement to begin before final design completion. This can be useful when project completion deadlines are critical.

Disadvantages: The disadvantages include increased risk of design revisions during construction, requires strong coordination among all parties.

Best Suited For: This process is best suited for projects with urgent schedules, regulatory or funding deadlines where completing the project quickly is the primary objective.

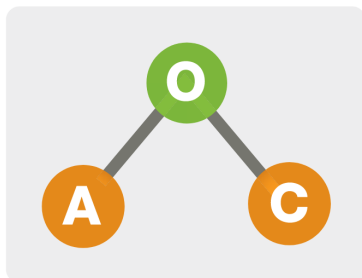
3. Traditional Design-Bid-Build (DBB)

Design-Bid-Build is the most common and traditional project delivery method. The owner and design team complete the design, solicit competitive bids from contractors, and finally awards construction to the lowest responsive and responsible bidder.

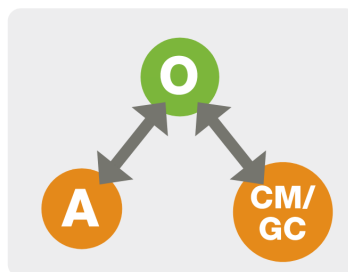
Advantages: This process is a well-understood and widely accepted procurement method, which creates competitive bidding that can result in lower initial construction costs.

Disadvantages: This process has the longest overall project duration because phases occur sequentially, with the contractor involvement occurring only after design is complete. There is less flexibility to make changes without schedule or cost impacts.

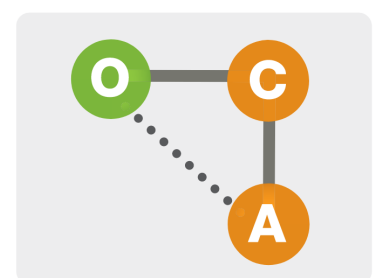
Best Suited For: This process is best for projects with well-defined scopes, sufficient schedule flexibility, and a desire for competitive bidding and clearly defined contractual roles.



DESIGN / BID / BUILD



CMAR



DESIGN-BUILD

● OWNER

● ARCHITECT / CONTRACTOR

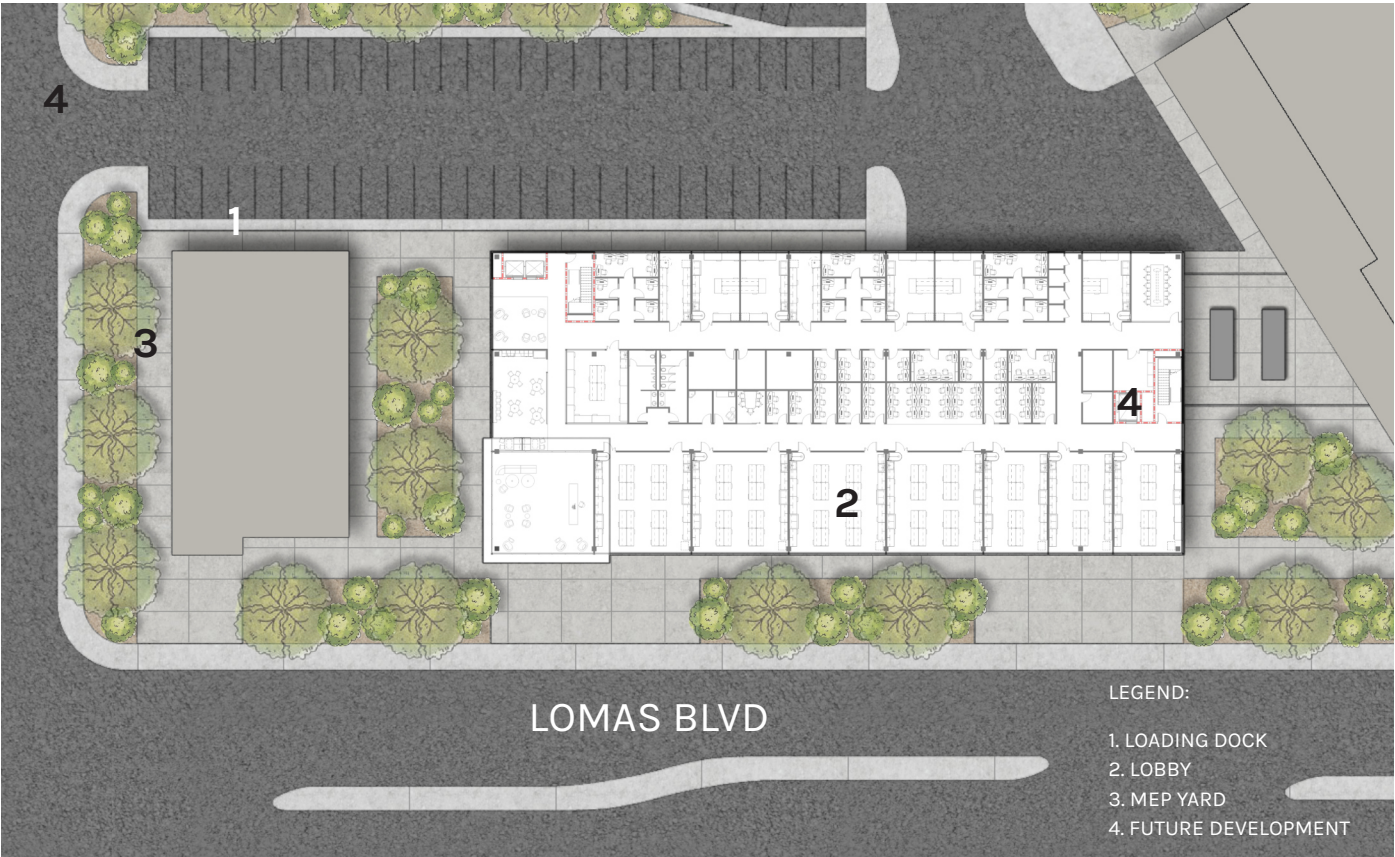
RECOMMENDED APPROACH

The recommended approach is to proceed with planning and design for new construction on the Lomas Corridor site, while exploring interim solutions if near-term demand requires. Project delivery may involve other partners, institutional agreements or public-private partnership models. Early engagement with an experienced incubator operator is critical to help develop a tailored operational model with refined annual operating budgets. Phasing strategies should align with demand, allowing incremental expansion. Operational planning must address tenant recruitment, shared services, and facility management. Coordination with economic development agencies and funding partners will be essential.

CMAR is the recommended Project Delivery Method. Labs are a complex construction typology and often favor CMAR because the early contractor involvement helps coordinate complex laboratory

systems and manages the significant risks associated with specialized research facility requirements.

The CMAR delivery method provides the benefit of early contractor engagement, allowing their expertise to inform project planning and design decisions from the outset to ensure constructability. Cost estimating throughout the design phase helps maintain budget alignment and improve cost predictability of construction. CMAR is a collaborative approach that reduces the potential for change orders and unforeseen costs during construction. In some cases, early work packages can be delivered to allow for design and construction activities to happen concurrently, shortening the overall project schedule. Overall, the CMAR delivery method requires strong coordination between the Owner, Architect, and Contractor throughout project development to provide a building that meets the owners needs and budget.



LOMAS CORRIDOR RENDERED PLAN

PHASING & OPERATIONAL CONSIDERATIONS

The development of the Bioscience Authority Incubator has the opportunity to scale over time through either future expansion or the inclusion of shell space within the original building footprint. The main consideration around future development is the continuity of building operations.

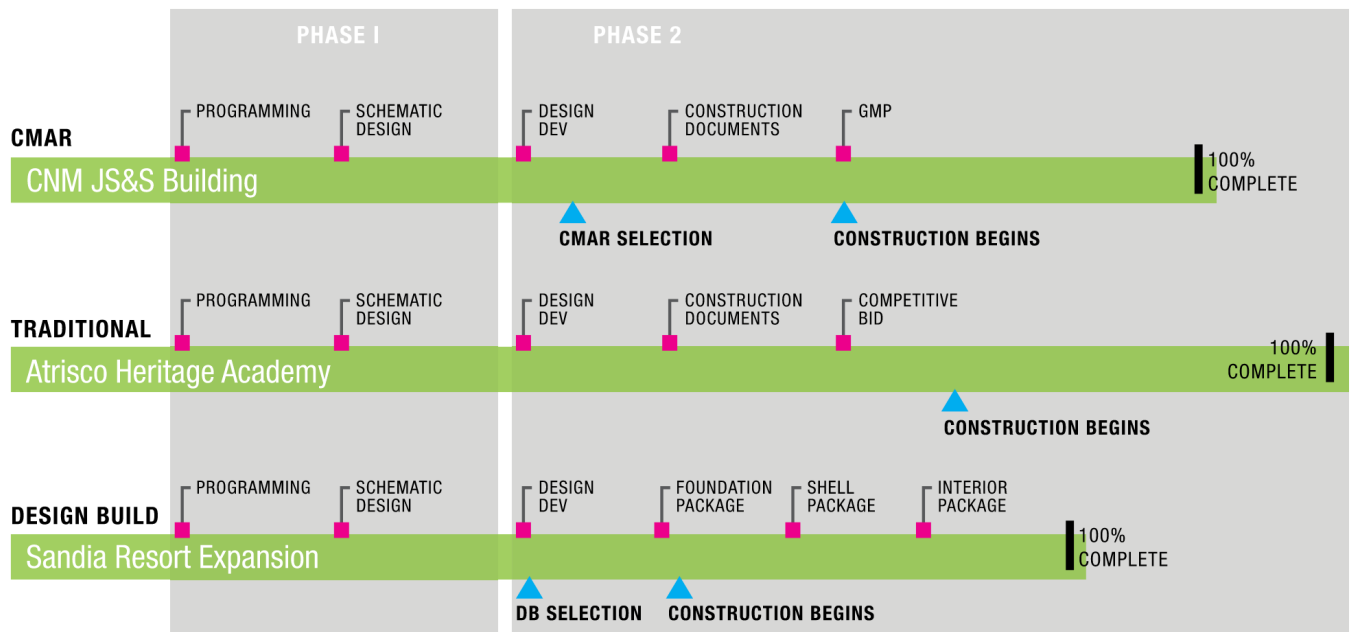
Future additions to this facility will need to have minimal impact on the operations of the existing building and the tenants. This would include minimizing disruption to normal facility functions, including building access, parking, pedestrian circulation, emergency routes, and vehicle traffic. Work may need to be phased to maintain access to the facility while peak occupancy periods should also be considered when scheduling work and coordinating phasing. Lastly, future additions may be restricted by the sites selected due to future and existing buildings.

The shell space approach to future expansion allows for less impact to the overall building operations as compared to a future building addition. The proposed method is to have shell space on the upper most floor. This provides a flexible and cost-effective solution for accommodating future growth while minimizing disruptions to occupants, operations, and site activities. By including shell space within the original building footprint, the structure, building envelope, vertical circulation, and major

utility infrastructure can be designed and sized to support future occupancy from the outset which reduces the need for site modifications and utility relocation.

Services to Provide

- Business Acceleration
- Startup Support
- Business Planning
- Regulatory Strategy
- IP Protection
- Licensing Guidance
- Entrepreneur Coaching
- Executive Mentorship
- Product Development Guidance
- Market Strategy
- Technology Commercialization
- Funding Assistance
- Early-Stage Capital
- Investor Connections



PHASING AND PROJECT DELIVERY RELATIONSHIP DIAGRAM WITH COMPARABLE PROJECTS

Funding Facility Operations Strategy

Federal Sources: State Sources and Private Sources

Tenant Revenue: Service Fees (Equipment usage, Training programs), Public Funding (Sponsorships, Corporate memberships, Industry partnerships) and State Allocated Budget.

Public-Private Partnership Model: Public Sector, Academic Institutions, Industry Partners, Funding Partners

Implementation Timeline

Year 1 - Planning & Development

- Feasibility Study, Site Selection, Funding Commitments, and Partnership Agreements.

Milestones for Success:

- Secure facility and Raise capital

Year 2-3 - Facility Launch

- Renovation / Construction Complete, Equipment Installed, Recruitment of First Tenants

Milestones for Success:

- Open incubator and Recruit 5-10 companies

Years 3-5 - Growth Phase

- Expand Tenant Base, Develop Accelerator Programs, and Launch Investor Network

Target Outcomes

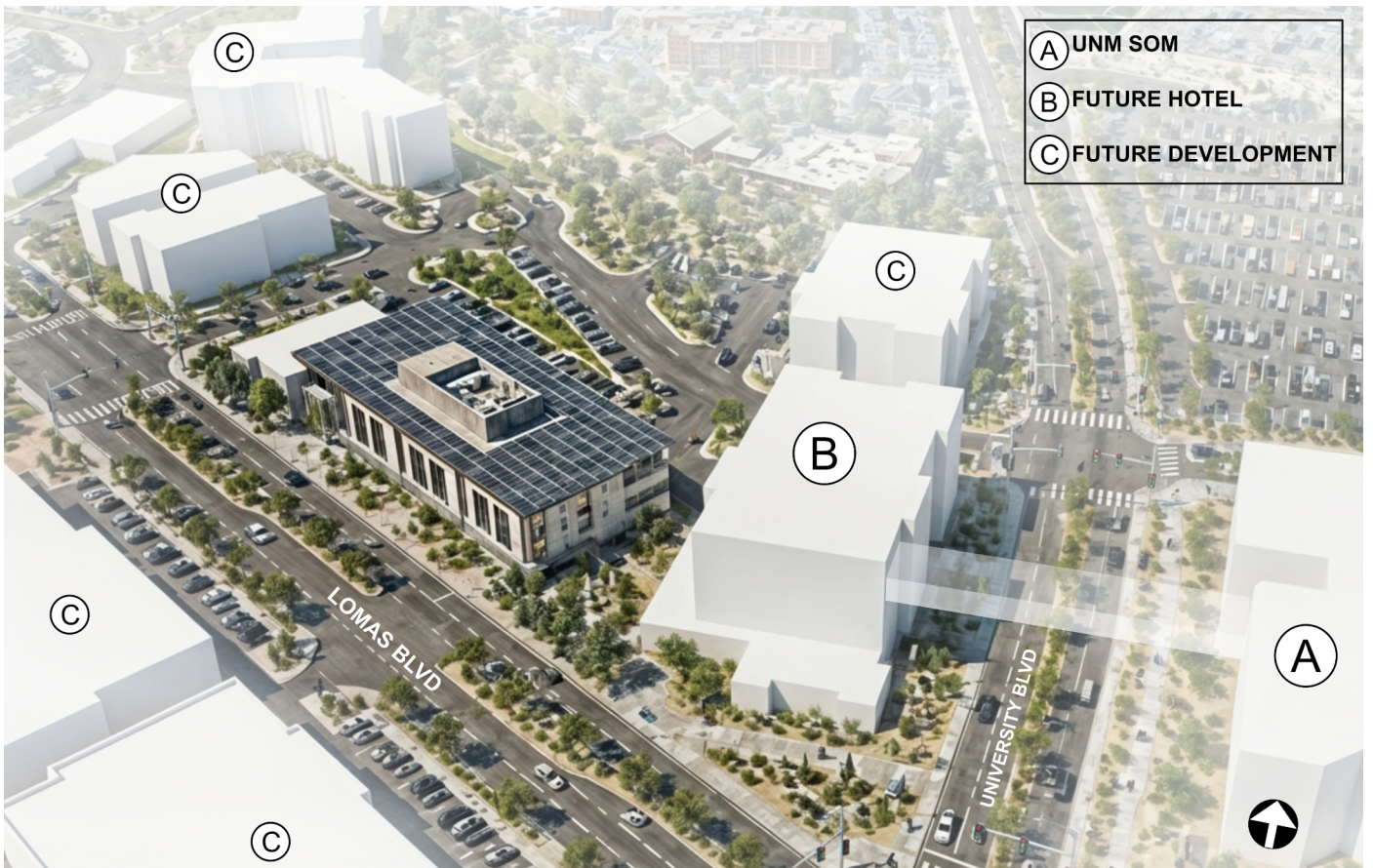
- 15 - 25 Companies Served
- 50+ Direct Jobs Created
- \$50M+ Capital Raised

Expected Regional Impact (5-Year Outlook)

- 40 - 50 Direct Jobs Created
- 150 - 300 Indirect Jobs Created
- \$50M - \$100M Capital Raised
- 25 - 50 New Patents
- 10 - 20 University Licenses Executed



CONCEPTUAL BUILDING RENDERING



LOMAS CORRIDOR DEVELOPMENT MASTERPLAN WITH CONCEPT AERIAL RENDERING



UC BERKELEY ENERGY BIOSCIENCES BUILDING

CHAPTER 11

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

This study confirms that Albuquerque is well-positioned to support a bioscience incubator that addresses a clear and persistent infrastructure gap within the state's life sciences ecosystem. Market analysis, stakeholder engagement, and benchmarking all point to strong unmet demand for flexible, right-sized laboratory environments that can support early-stage companies as they transition toward commercialization. Existing facilities are limited in both scale and functionality, reinforcing the need for a purpose-built solution that integrates research, business support, and community in a research environment that protects the ownership and commercialization of intellectual property.

Equally important, the project aligns closely with broader economic development goals outlined in the NM GrowBio framework, including talent retention, industry clustering, and strengthening ties between research institutions and private industry. Albuquerque's concentration of academic, clinical, and entrepreneurial resources—anchored by the University of New Mexico—creates a strong foundation for long-term success. The proposed incubator is not simply a real estate investment, but a strategic platform to advance innovation, support startups, and retain high-value companies within the state.

PREFERRED SITE AND DEVELOPMENT STRATEGY

Based on the comparative evaluation, the Lomas Corridor site is the preferred location for development. Its proximity to the Medical District and UNM provides direct access to research partnerships, shared resources, and workforce pipelines that are critical for bioscience tenants. The recommended approach is a phased, new construction strategy, beginning with a right-sized initial building that can be expanded into over time as demand grows, ensuring both flexibility and long-term viability.

PATH FORWARD

The immediate next step is securing state-level approvals to advance the project into design and implementation. As a statewide initiative, the facility while located in Albuquerque should operate as shared state-wide infrastructure that supports bioscience growth across New Mexico. Establishing

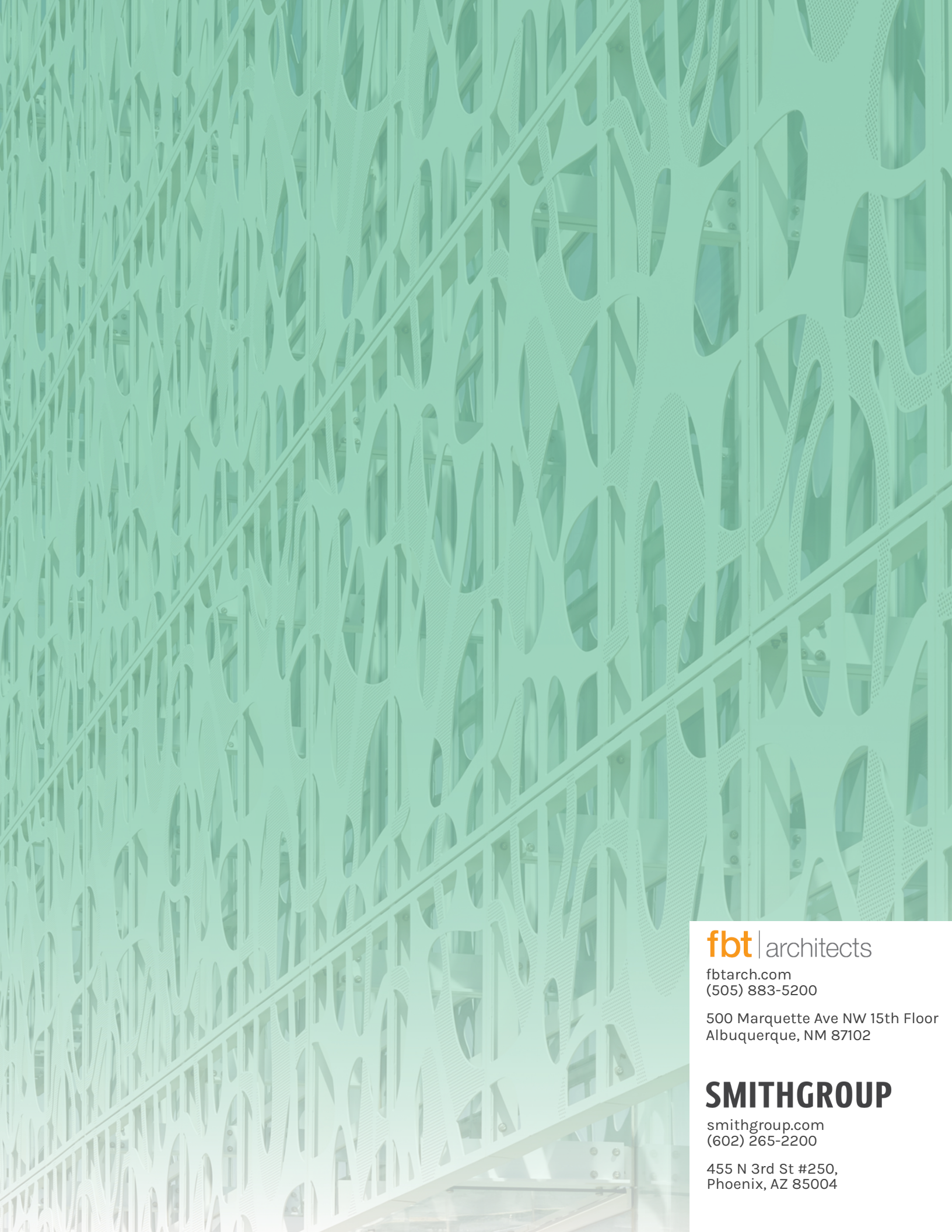
alignment among state agencies and other partners will be critical to move the project forward and enable long-term success.

CONCLUSION

The Bioscience Incubator will serve as a foundational economic development asset that bridges research, entrepreneurship, workforce development, and commercialization. By providing wet-lab infrastructure, business support services, capital access, and strategic partnerships, the incubator can become the centerpiece of a regional bioscience cluster and a long-term driver of economic growth in New Mexico.



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