ADAPTIVE REUSE

REPURPOSING A VACANT COLLEGE CAMPUS FOR NEW OCCUPANCY

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ARCH 772
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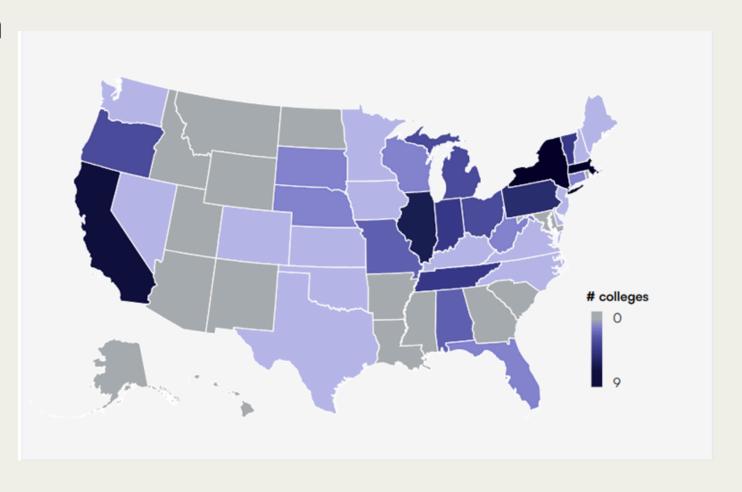


INTRODUCTION

Since 2016, over 91 private colleges have closed, merged with other schools, or announced plans of a closure or merger. This number roughly reflects the response to the COVID-19 pandemic, with students moving from in person to online and colleges not generating enough revenue to stay open.

Even before the pandemic, closures and mergers began rising due to

- pressures to lower tuition
- stagnating state funding
- a shrinking pool of high school graduates that has strained these institutions' bottom line and challenged their long-term viability



INTRODUCTION

This project specifically looks at a private, non-profit institution located in Aberdeen, SD that closed its doors in 2023: Presentation College. Through adaptive reuse, a solution to repurpose the vacant buildings on the 100-square-foot site allows for new function and occupancy to fill these spaces in an environmentally friendly way that adheres to the needs of Aberdeen and its cultural core.



BACKGROUND RESEARCH

ADAPTIVE REUSE

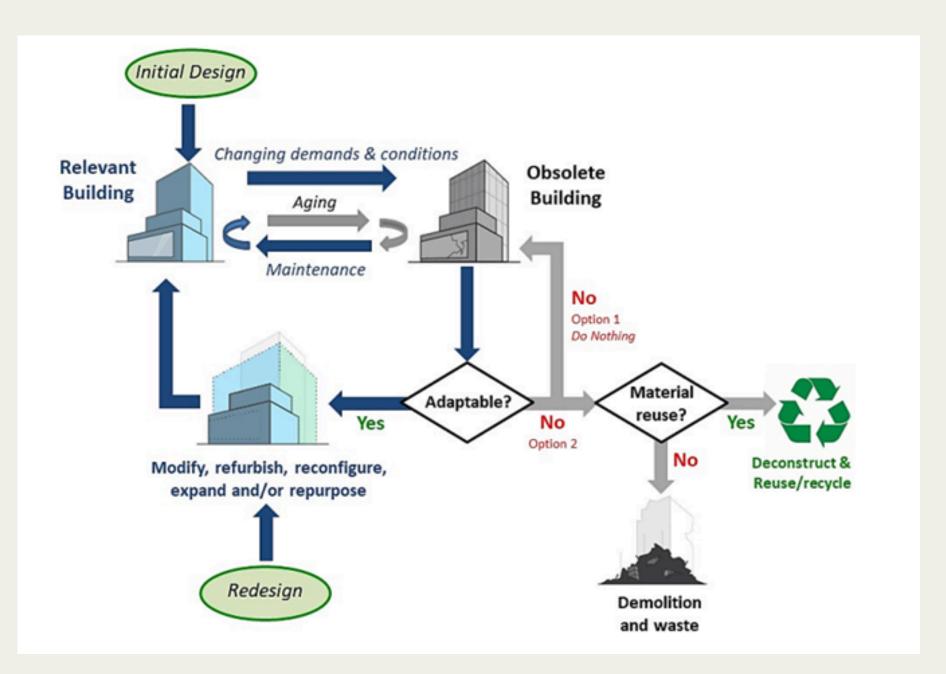
History of remodeling occurred through five stages:

- to add to
- to rebuild
- to contrast
- to construct narrative
- to create wholeness

Re-duce, re-use, re-cycle

Buildings are "variance-driven"

 No end in ecological communities, but rather oscillate in response to community needs and occupants of buildings



Rockow et al, 2018 Brand, p. 383, 1995 Stone, 2020

2022 GSR BUILDINGS REPORT AND CONSTRUCTION COSTS

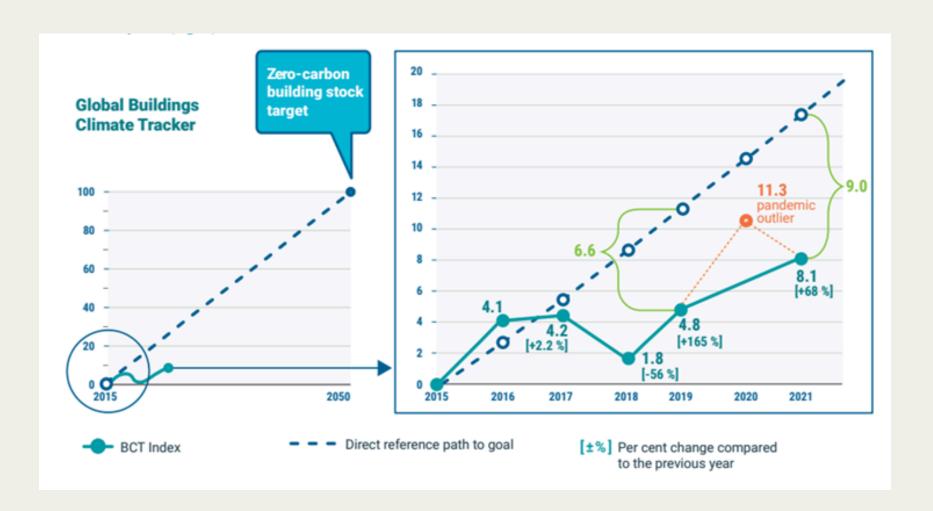
Energy consumption and CO2 emissions increased in 2021 above pre-pandemic levels

Building energy demands increased by four percent since 2020 with the reopening of workplaces and hybrid strategies remaining (largest in 10 years)

CO2 emissions from building operations at an all-time high

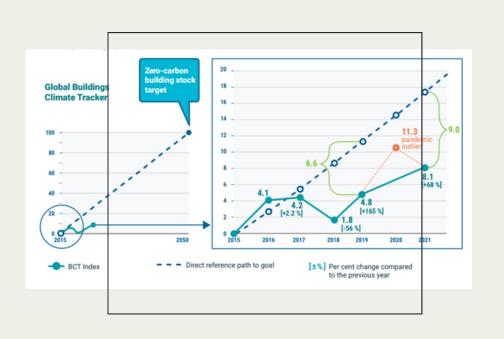
To get back on track:

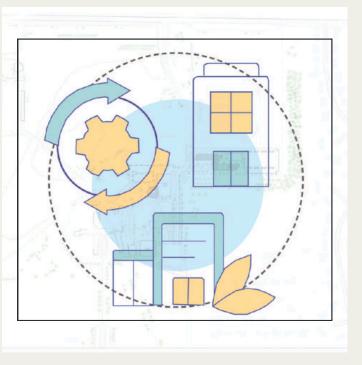
 improvement, rehabilitation, and recycling of existing building stock (buildings, materials)

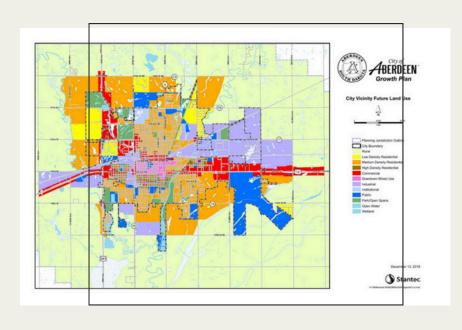


UN Environment, 2022

PROJECT GOALS









Reduce CO2 emissions and building energy consumption

Bring new occupancy and function back into vacant buildings

Develop strategies
that adhere to
Aberdeen's
comprehensive plan

Keep cultural memory intact

PROJECT OVERVIEW

PRESENTATION COLLEGE HISTORY

Previously owned by Presentation Sisters (originated from Dublin, Ireland)

Taught/started many elementary and high schools around South
 Dakota and began the Avera St. Luke's Hospital in Aberdeen before
 moving to Presentation Heights

Presentation College was founded in 1951 and became co-educational in 1968

- Became accredited in 1970 (private, non-profit)
- Developed a four-year nursing degree in 1990
- Offered programs in Health and Sciences, Nursing, and Social Sciences and Humanities

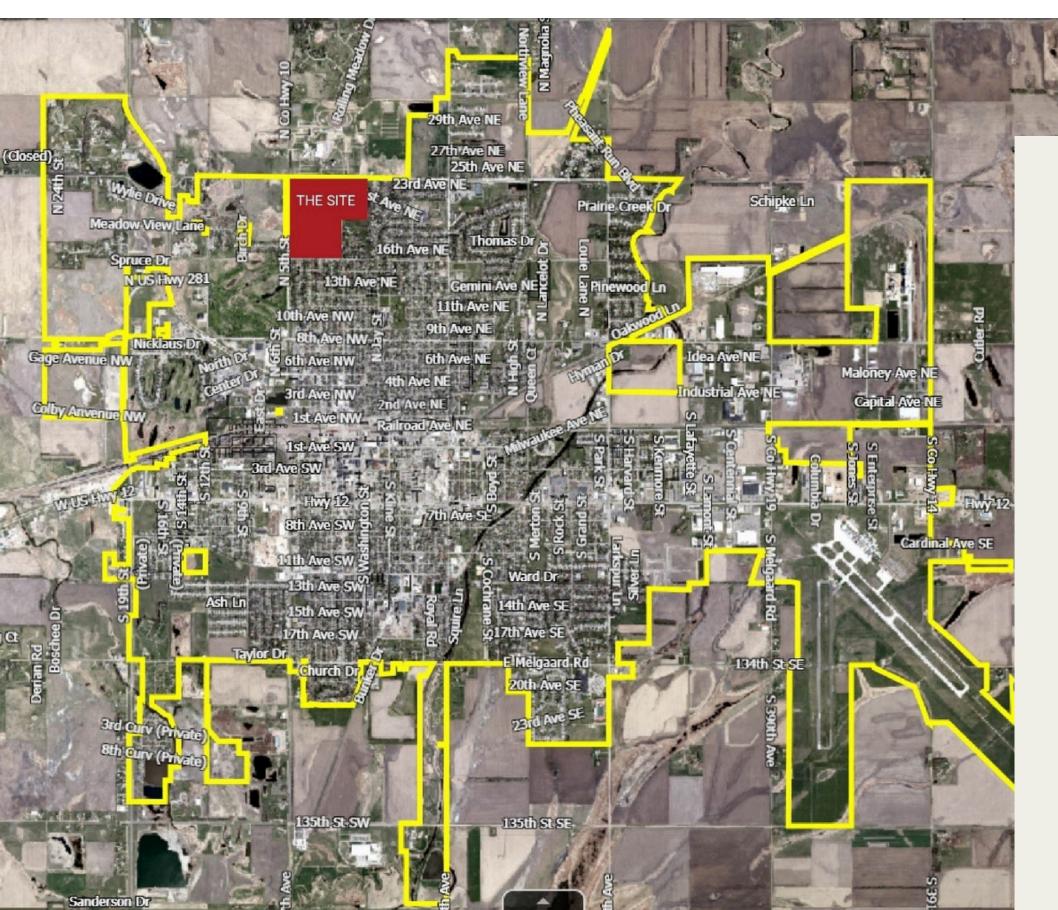
Athletics program began in 1995 and continued growing Opened a second location in Fairmount, Minnesota in 2003

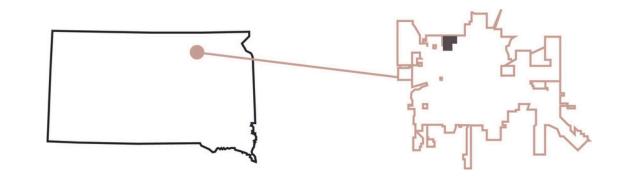
• Later closed in May of 2021

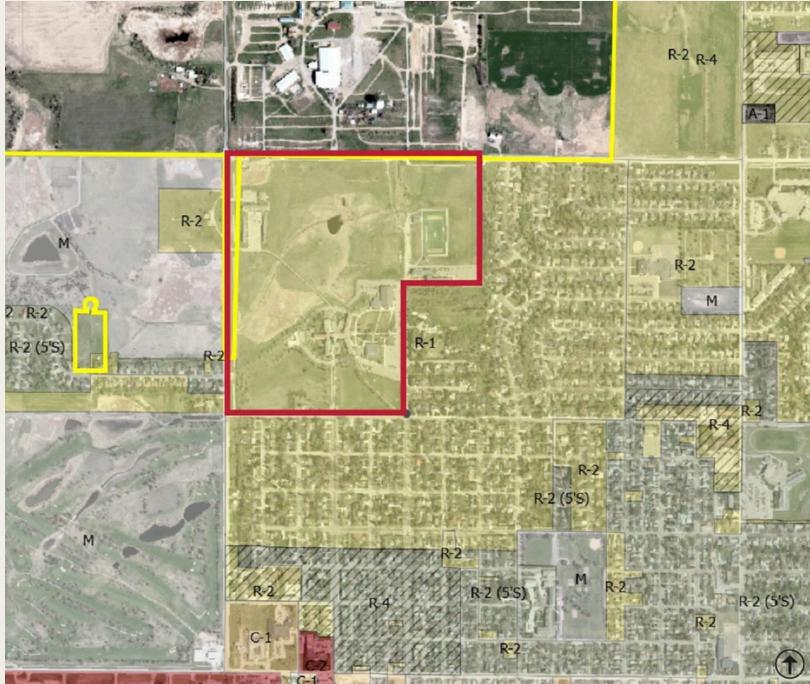
Aberdeen location closed in 2023



PROJECT LOCATION







CIRCULATION

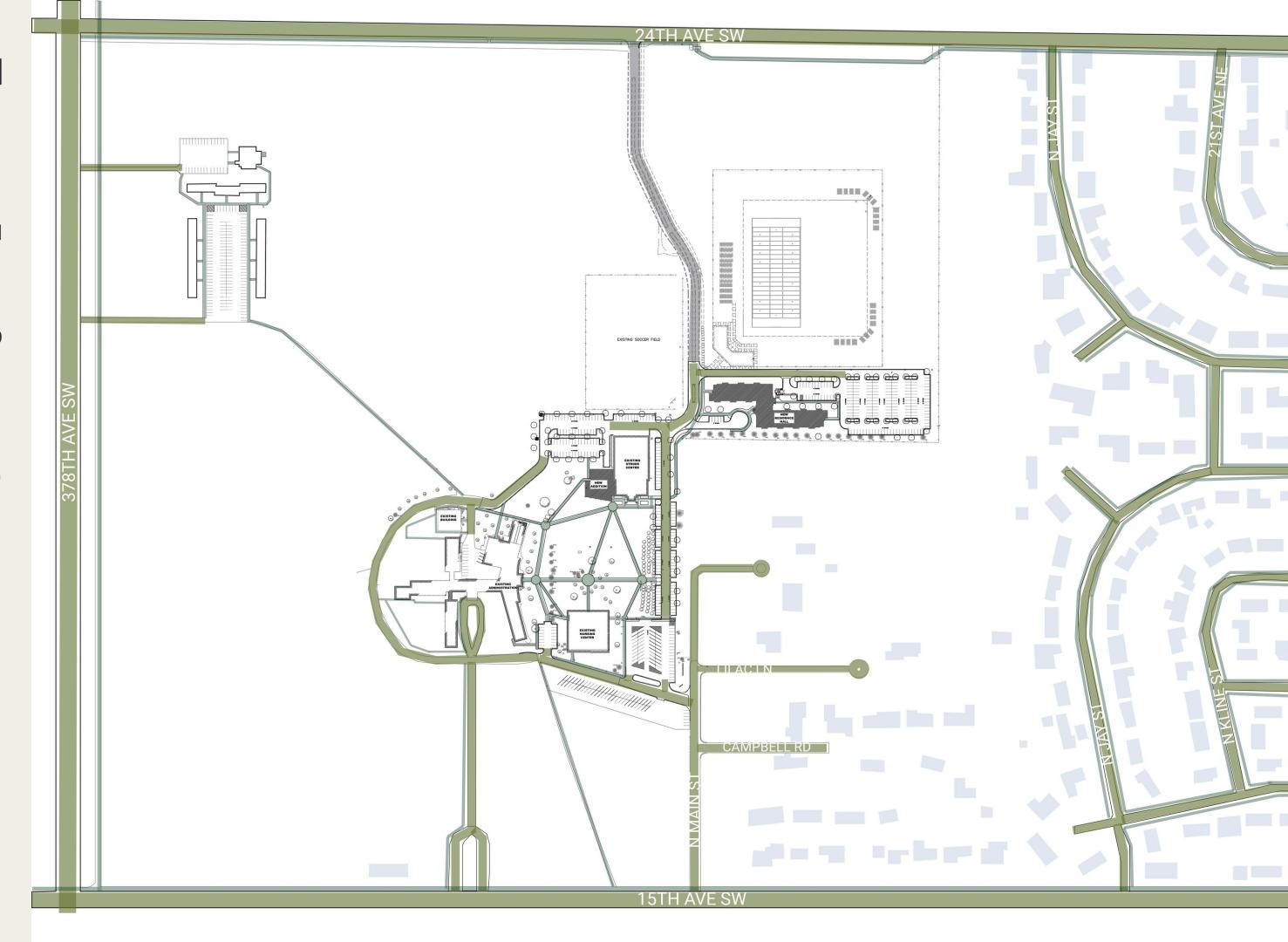
MAJOR ROADS: 15TH AVE SW, 24TH AVE SW, AND 378TH AVE SW

BROWN COUNTY FAIRGROUNDS TO NORTH

OPEN FIELDS
(MUNICIPAL/COUNTY/STATE ZONE)
TO THE WEST

RESIIDENTIAL TO THE EAST, SOUTH, AND PARTIALLY WEST

SITE LOCATED IN R-1 LOW DENSITY RESIDENTIAL ZONE





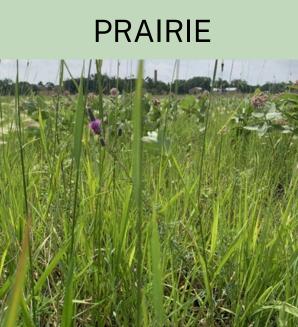






LEAD PLANT

PRAIRIE



CONEFLOWER

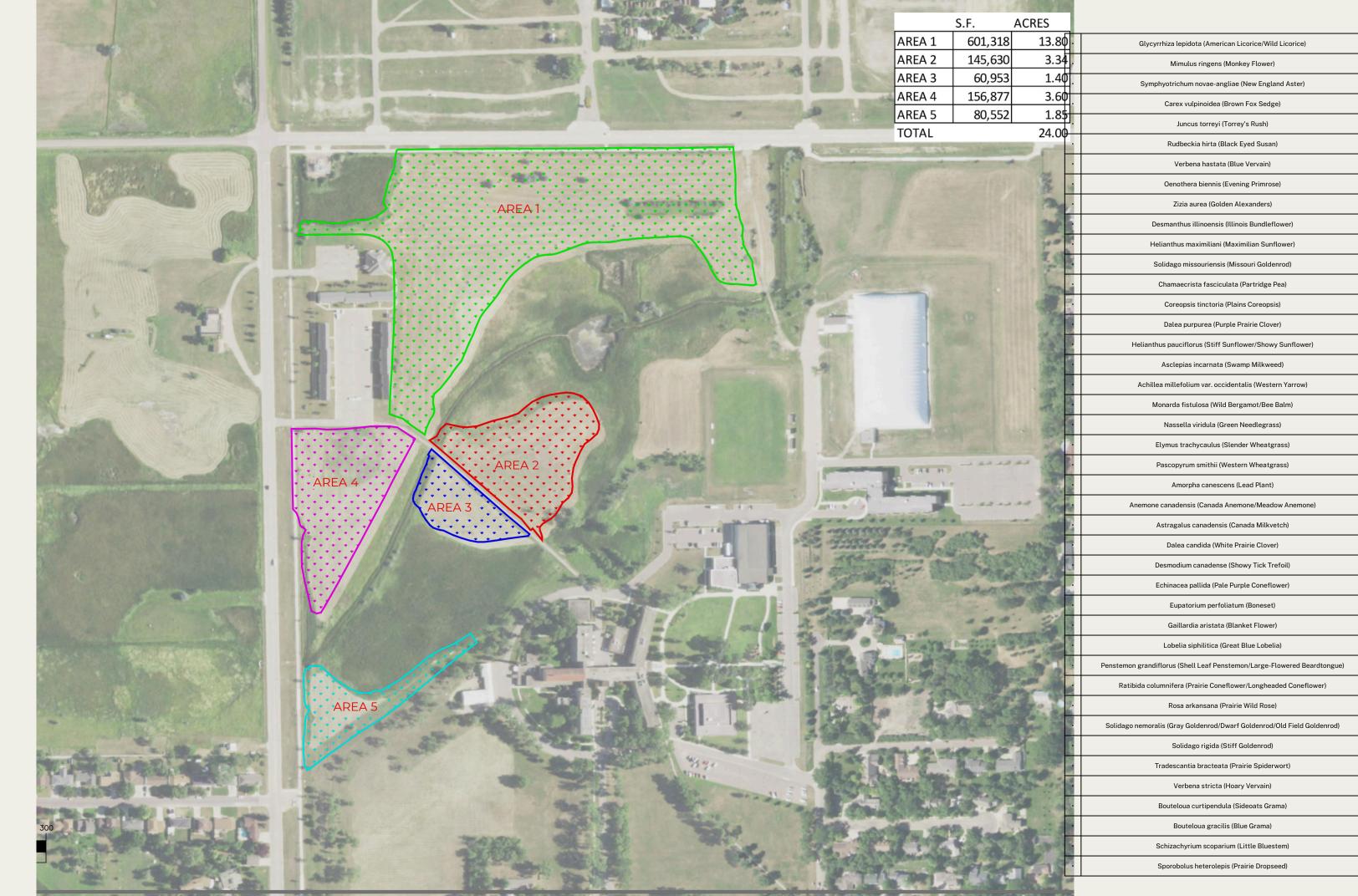
3 SEPARATE PLANTINGS:

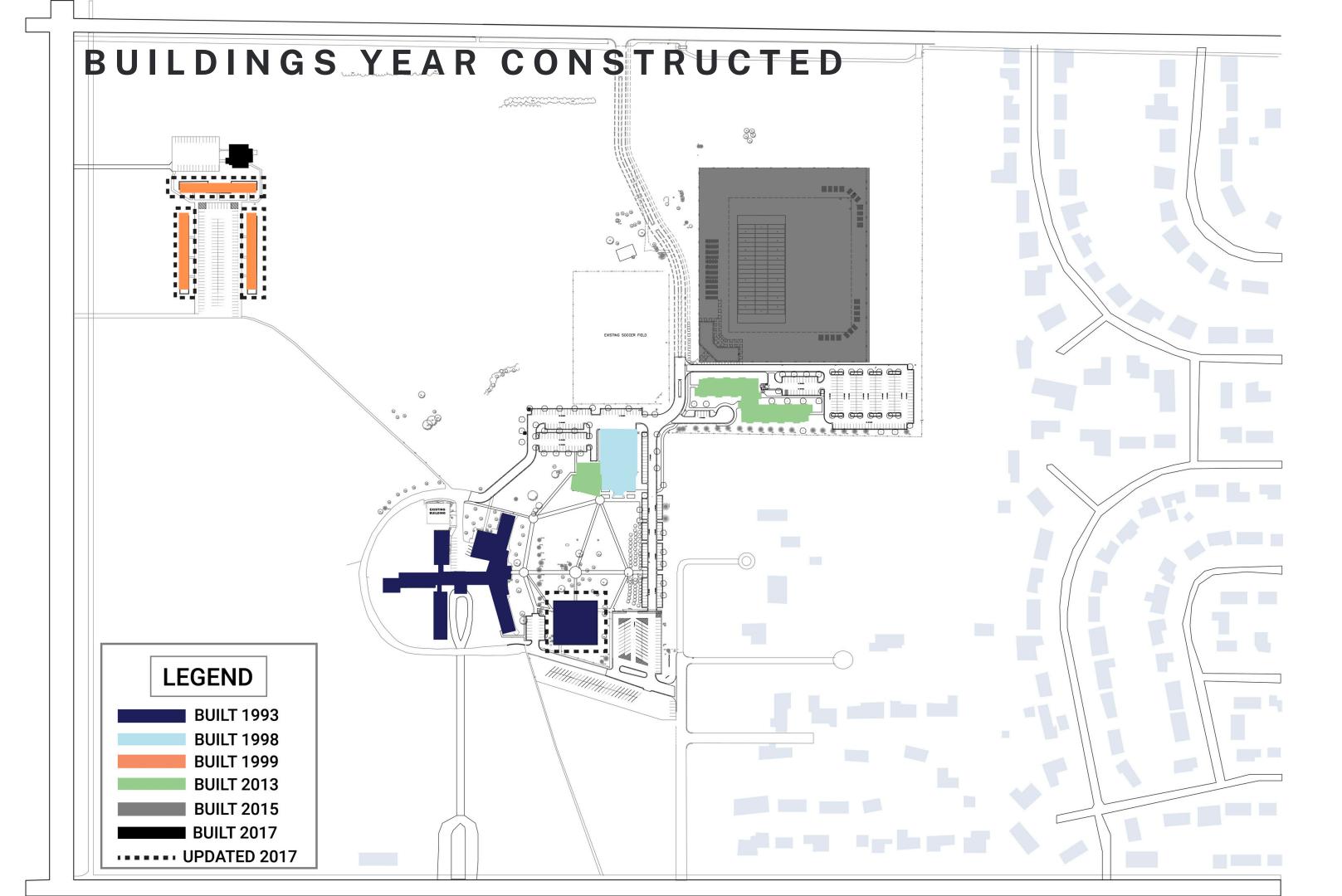
MAY 24TH, 2021

SEPTEMBER 16TH, 2021

FEBRUARY 14TH, 2022

PRESENTATION
SISTERS INSPIRED BY
POPE FRANCIS' BOOK
LAUDATO SI - CARING
FOR OUR COMMON
HOME. THE SISTERS
HIRED JARED HOHN
AND JAIME RISSE
(ECOLOGY
SPECIALISTS) TO
BEGIN THE
PRAIRIELAND
RESTORATION





SITE PHOTOS











SITE PHOTOS



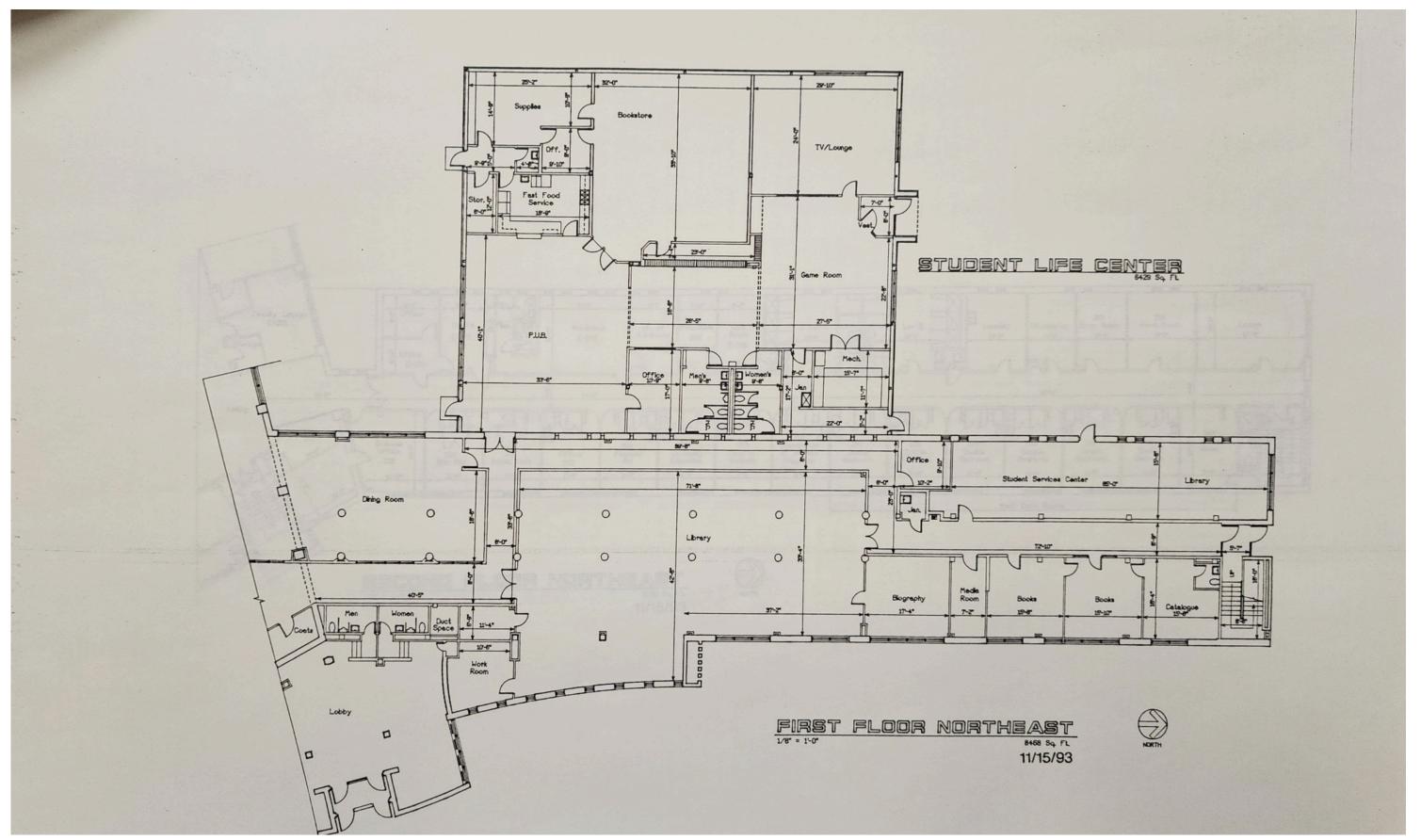




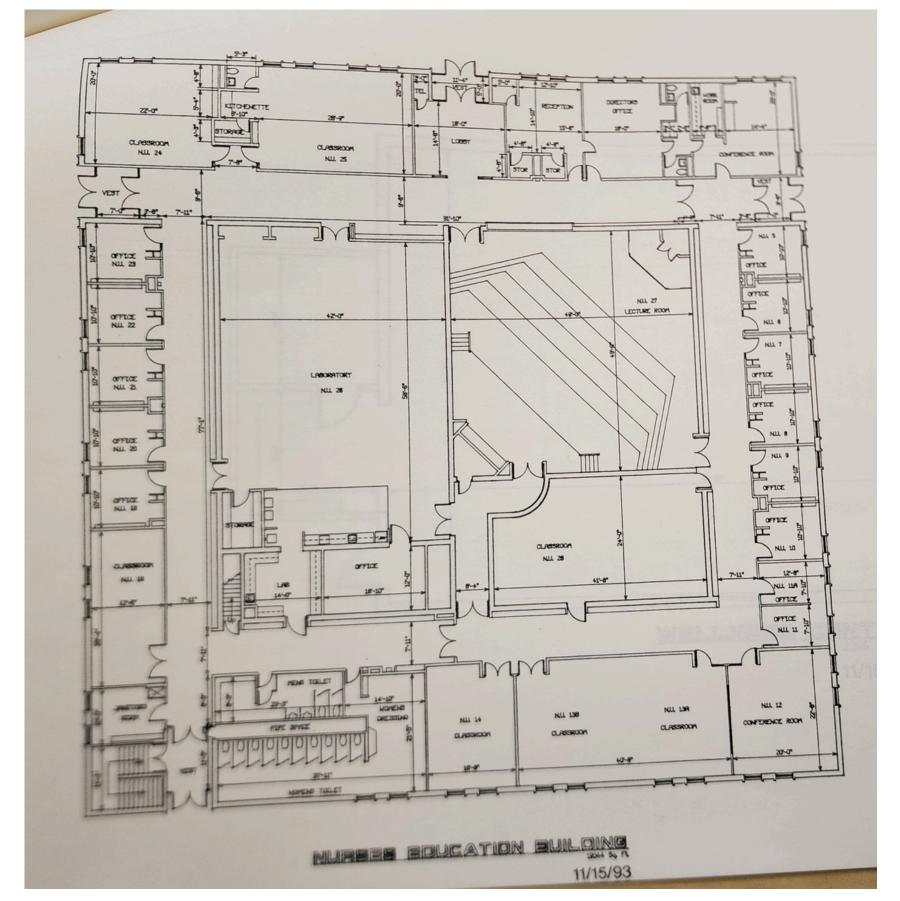


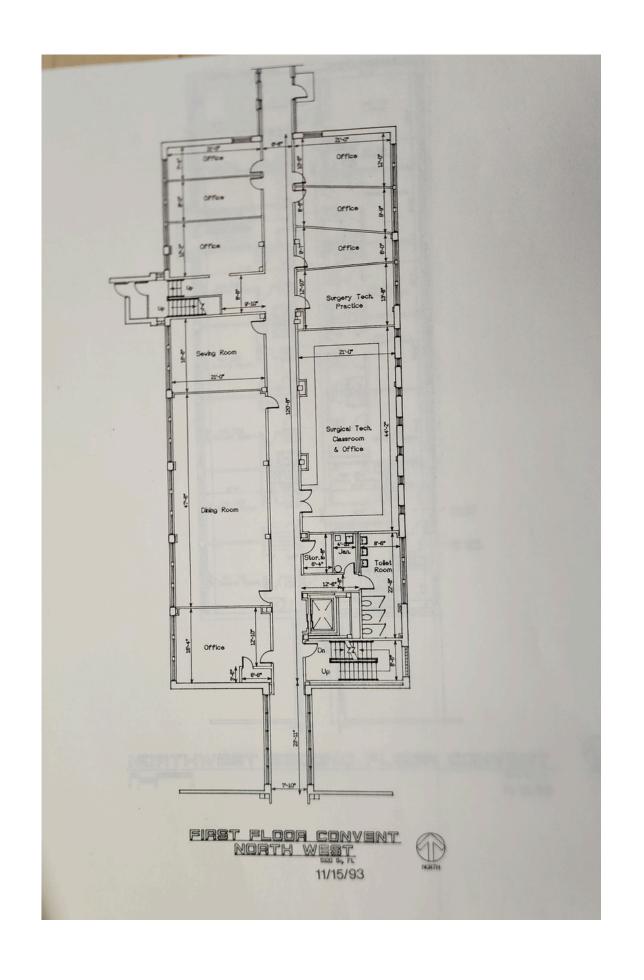


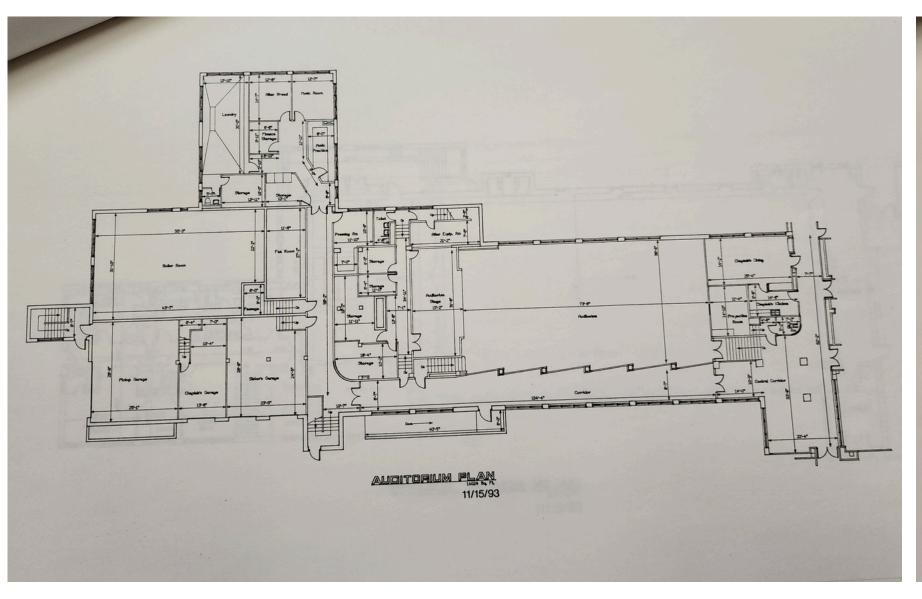


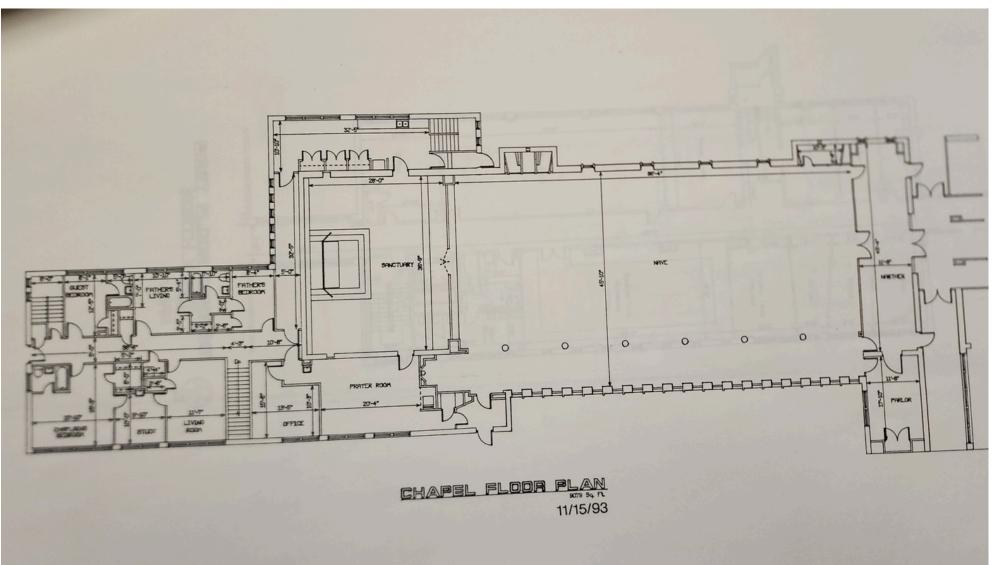


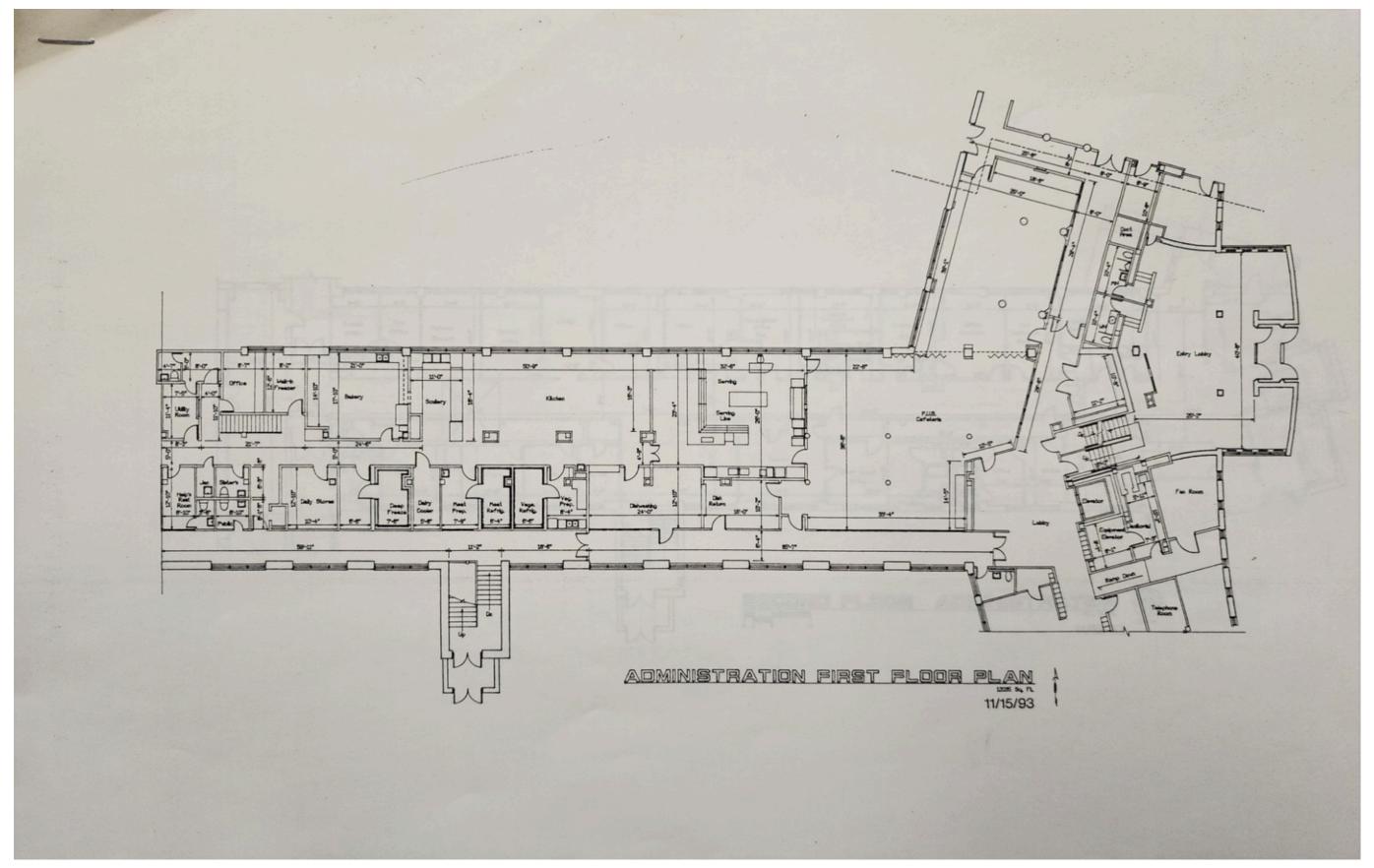
Student Life Center, Presentation College, 1993, Kathleen Daly





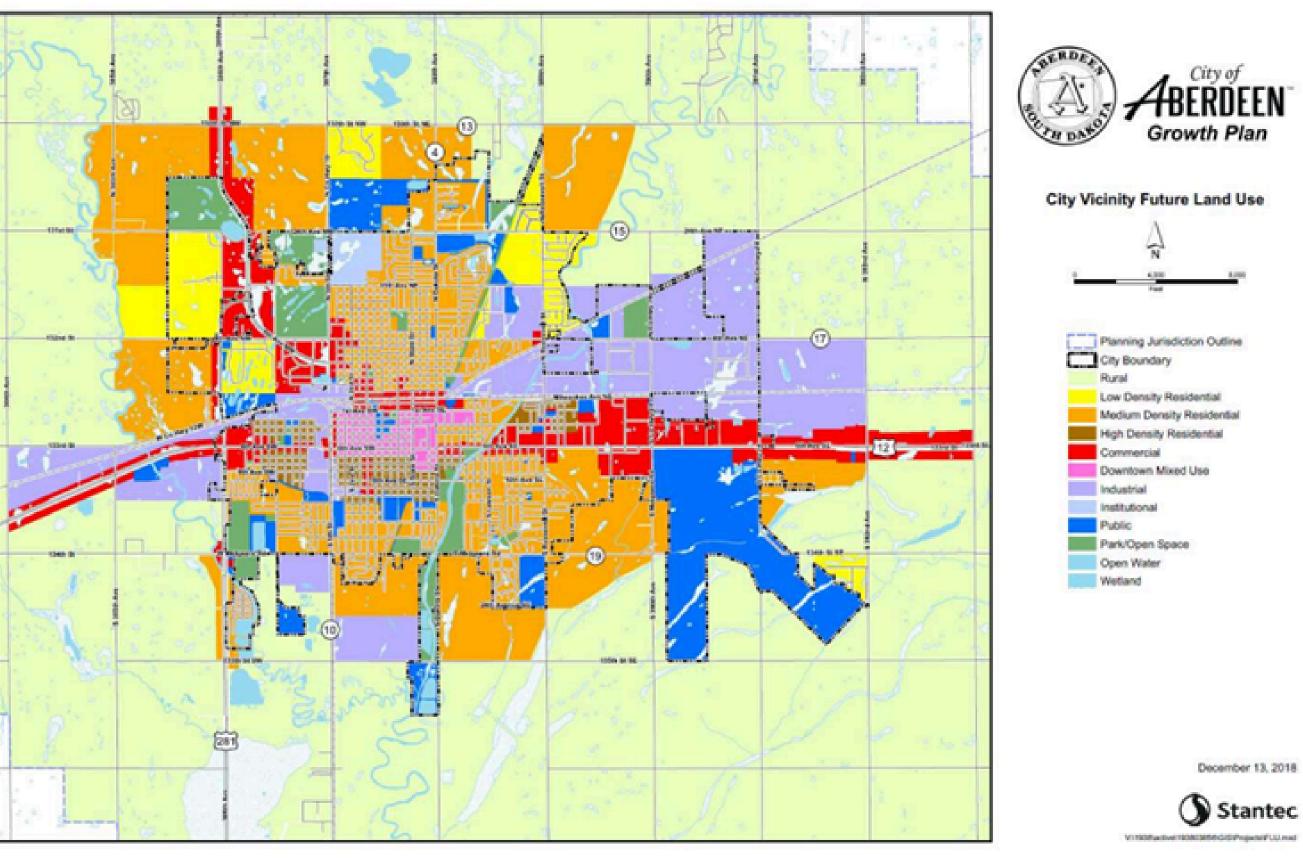






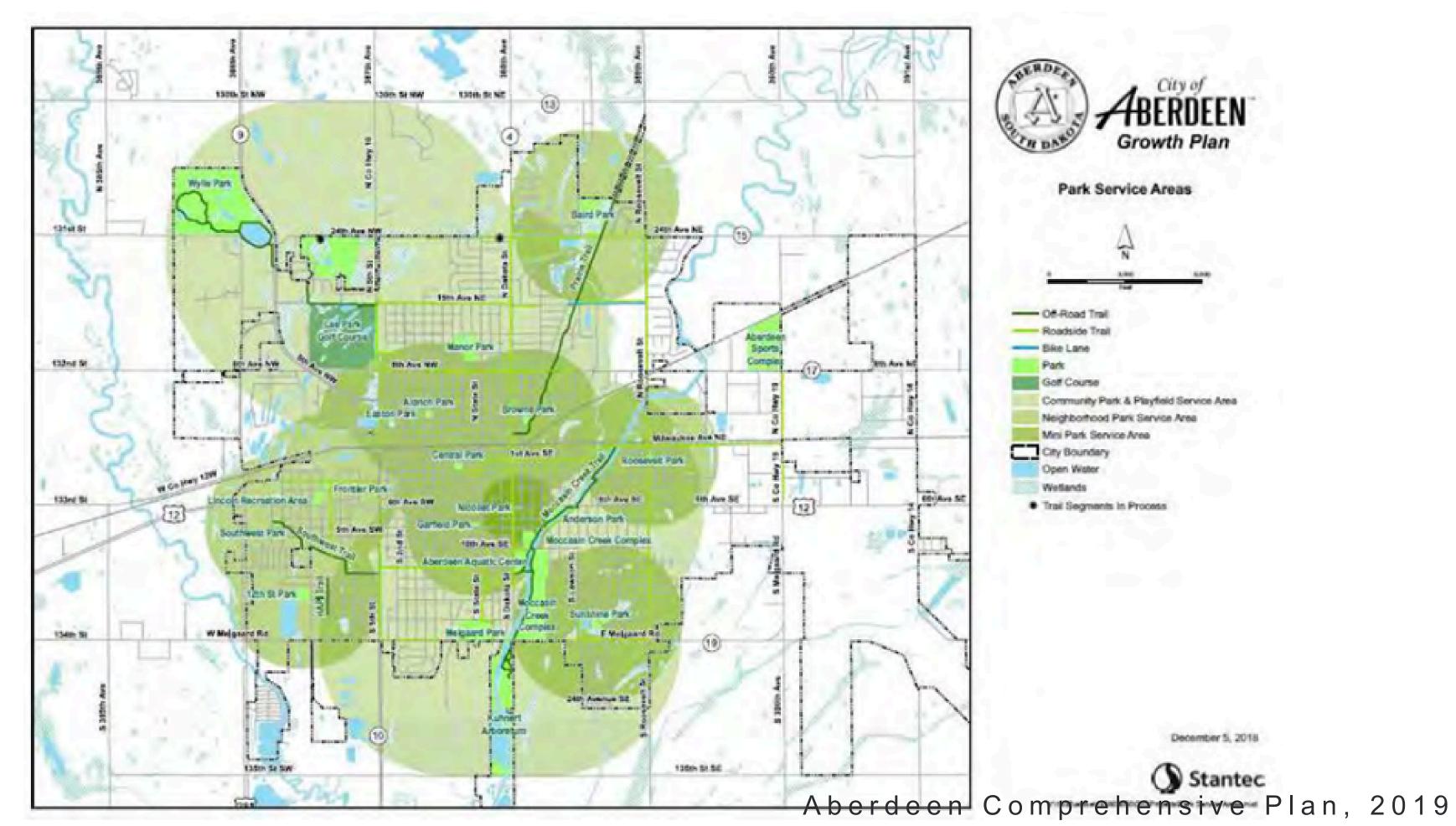
ABERDEEN COMPREHENSIVE PLAN 2050

FUTURE LAND USES - ABERDEEN 2045			
ı	Future Land Use Category	Acres Within City Limits	Acres Outside City Limits
	Rural	24	39,824
	Low Density Residential	705	424
	Medium Density Residential	2,340	3,783
	High Density Residential	291	0
	Commercial	1,069	597
	Downtown Mixed Use	190	0
	Industrial	1,487	1,763
	Institutional	149	0
	Park/Open Space	868	0
	Public	1,642	244
	Right-of-Way	1,541	1,265
	Open Water	289	969
	Total	10,595	48,867



Aberdeen Comprehensive Plan, 2019

ABERDEEN COMPREHENSIVE PLAN 2050



ABERDEEN COMPREHENSIVE PLAN 2050

LAND USE GOALS

- Stabilization of "tired" neighborhoods, rehabilitation and revitalization, and provision of quality, **affordable housing**
- Compatible future land use planning to prevent undesirable encroachment of neighborhoods and sensitive areas
- An attractive, highly livable community with a preserved small-town character and unique identity
- Policies, regulations, incentives, and processes that consistently represent the vision and desired character of the community

ECONOMIC GOALS

- Economic development program that facilitates business start-ups, fosters expansion of existing businesses, and attracts new employers that contribute positively to the tax base
- A highly qualified, skilled and educated labor force that meets the employment needs of local businesses

PROPOSED SOLUTION

PROGRAMMING AND OCCUPANCY

City purchased the Strode Activity Center, the Winter Dome, the soccer field, and a vacant lot to the north

Programming and recreational use (winter and spring months)

Northern State University, the other institution in Aberdeen, added a 4-year accredited nursing major to their programming

Aberdeen lacks a higher education technical school in the region

- Central High School offers voc-tech classes to their students
- A technical school in Aberdeen will attract local high school students and people around the area
 - Building trades, computer science, mechanical, electrical, and plumbing trades
- On-campus apartments

Affordable housing

Leasable commercial/office space

CASE STUDIES

AIB COLLEGE OF BUSINESS

Location: Des Moine, Iowa

Founded: 1921

14.5 acres

Private, non-profit baccalaureate college of business

Merged with University of Iowa in 2016 and later closed in 2018



Former Fenton Hall became 93 apartment units

Activity Center used for programming for seven months, while remaining five months open for residents of nearby apartment complexes

Three-acre vacant property purchased and turned into high-end townhomes





NASSON COLLEGE

Location: Springville, Maine

Founded: 1912

280 acres

Four-year accredited liberal arts college (private)

Went through many closings and re-openings, but officially closed in 1983

Student Activity Center repurposed into community center
Community health center opened in previous science building
Residential dorms turned into senior housing, apartments, and office spaces

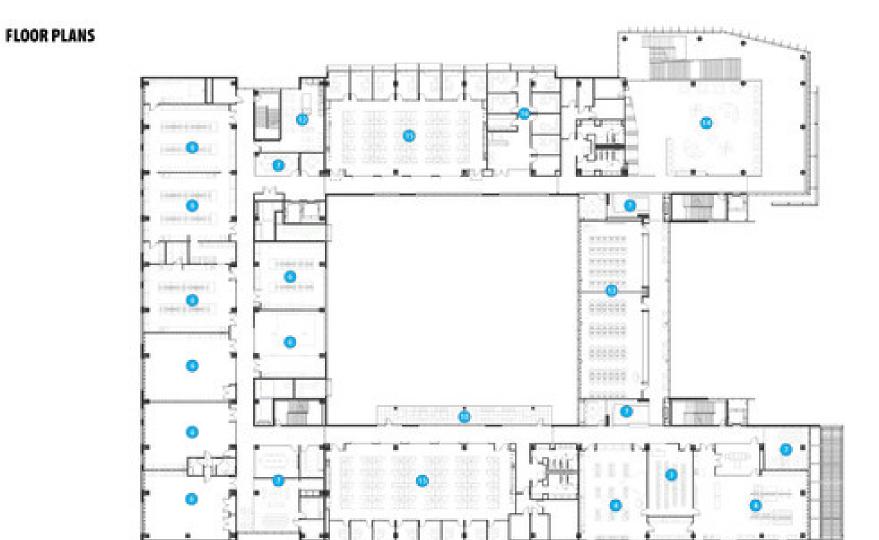






UNIVERSITY OFTEXAS AT DALLAS ENGINEERING AND COMPUTER SCIENCE WEST

FLOOR PLANS



LEVEL 01

1 COMMUNITY COMMONS

2 300-SEAT AUDITORIUM

3 CLASSROOMS

4 INSTRUCTIONAL LAB

5 PROJECT WORKSHOP

6 RESEARCH LAB

9 STUDENT PROJECT WORKROOM

7 STUDY/INTERACTION 10 EXTERIOR TERRACE 8 BUILDING SUPPORT

11 CAFÉ/COFFEE BAR 12 FACULTY / RESEARCHER SUPPORT 13 COMPUTER LAB 14 "BIRD'S NEST"

15 FACULTY / GA OFFICES

16 OFFICE SUITE 17 STUDENT LOUNGE 18 SHELL / FUTURE

LEVEL 02

1 COMMUNITY COMMONS 2 300-SEAT AUDITORIUM

3 CLASSROOMS

4 INSTRUCTIONAL LAB 5 PROJECTWORKSHOP

6 RESEARCH LAB

7 STUDY/INTERACTION # BUILDING SUPPORT

9 STUDENT PROJECT WORKROOM

10 EXTERIOR TERRACE

12 FACULTY / RESEARCHER SUPPORT

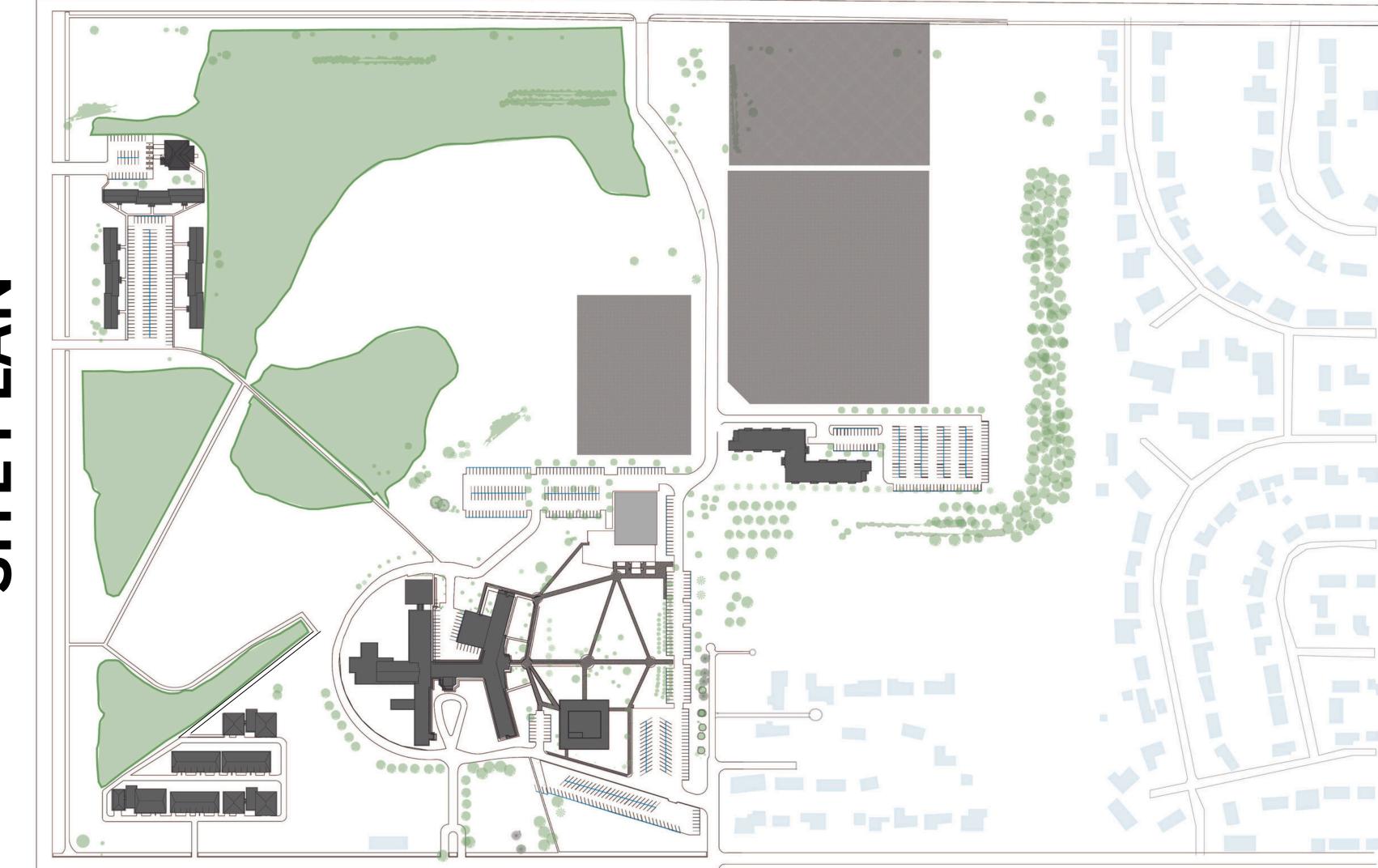
11 CAPE/COFFEE BAR

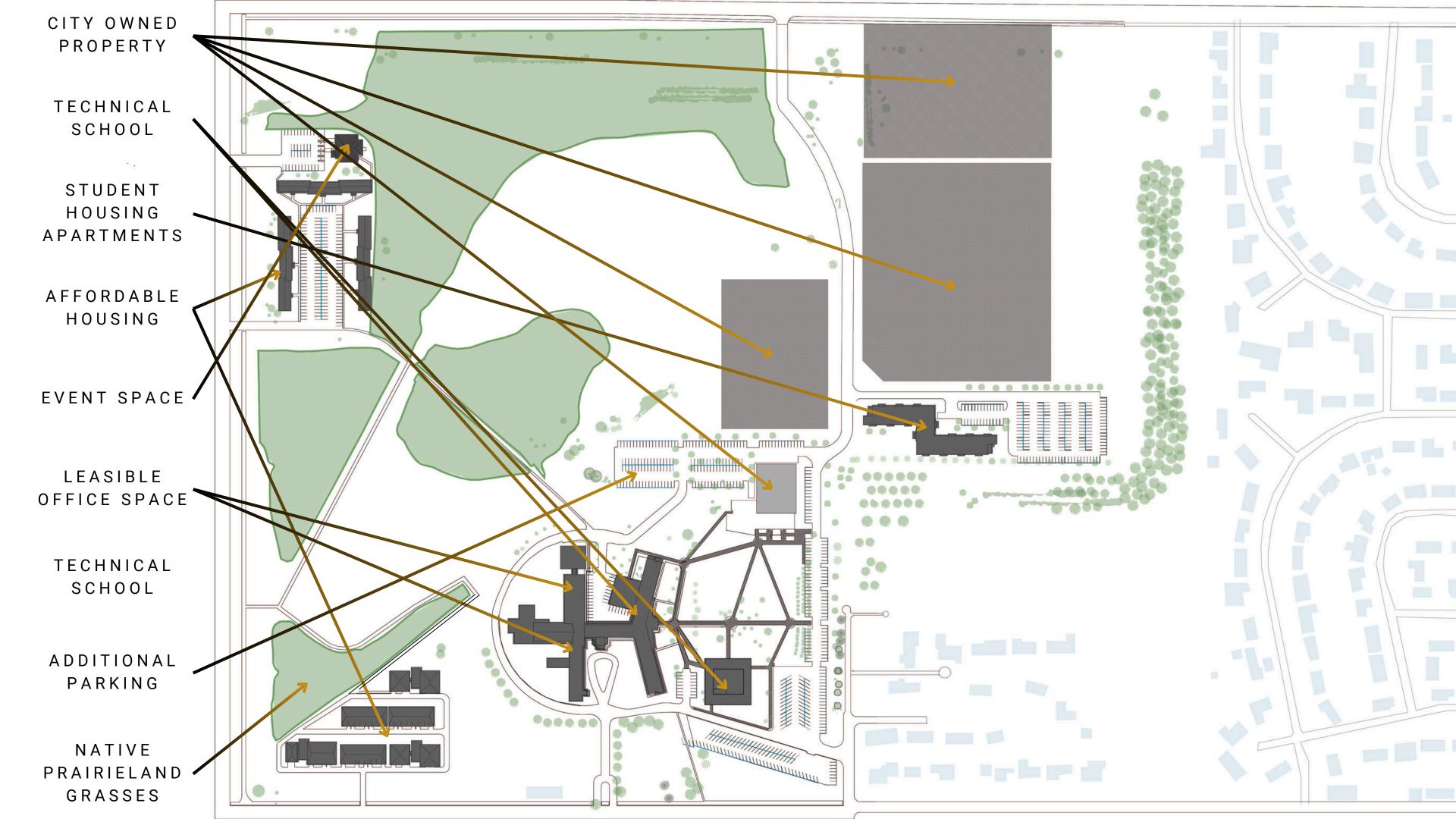
14 TERRO'S MEST? 15 FACULTY / GA OFFICES

13 COMPUTER LAB

16. OFFICE SUITE 17 STUDENT LOUNGE 18 SHELL/FUTURE

REUSEL ADAPTIVE Ш

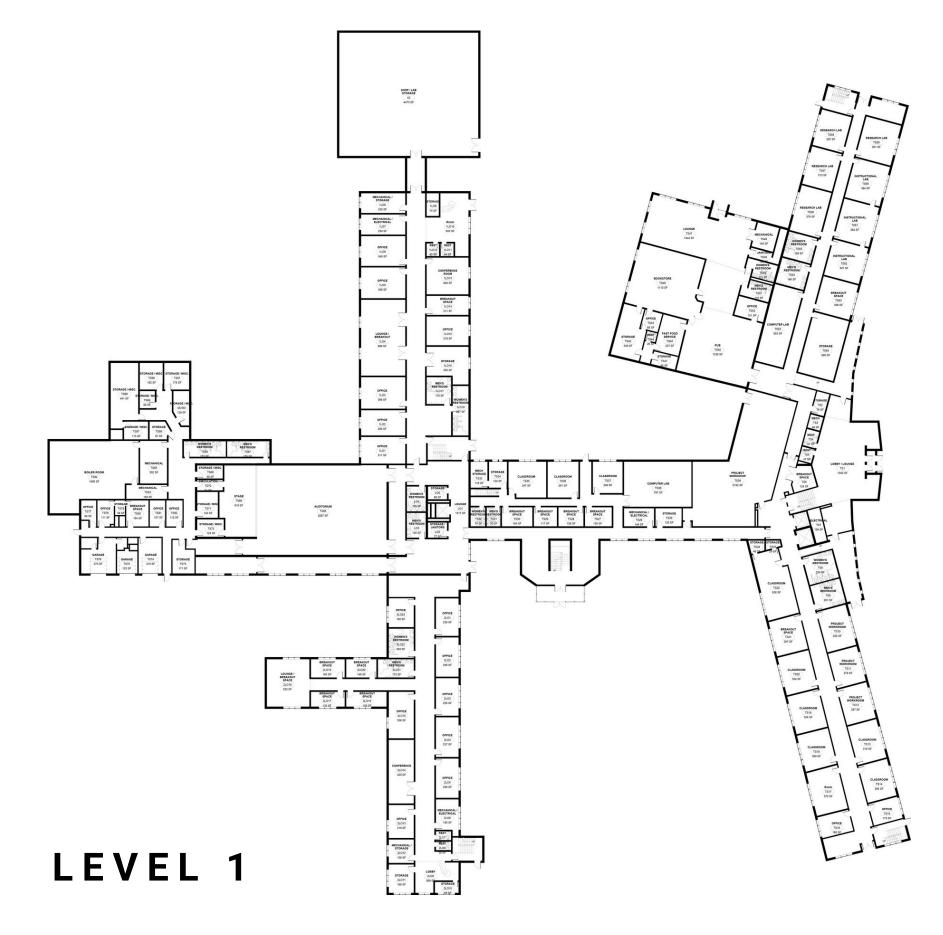


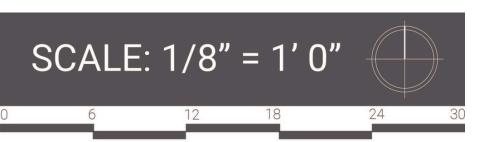


NORTHEAST TECHNICAL SCHOOL

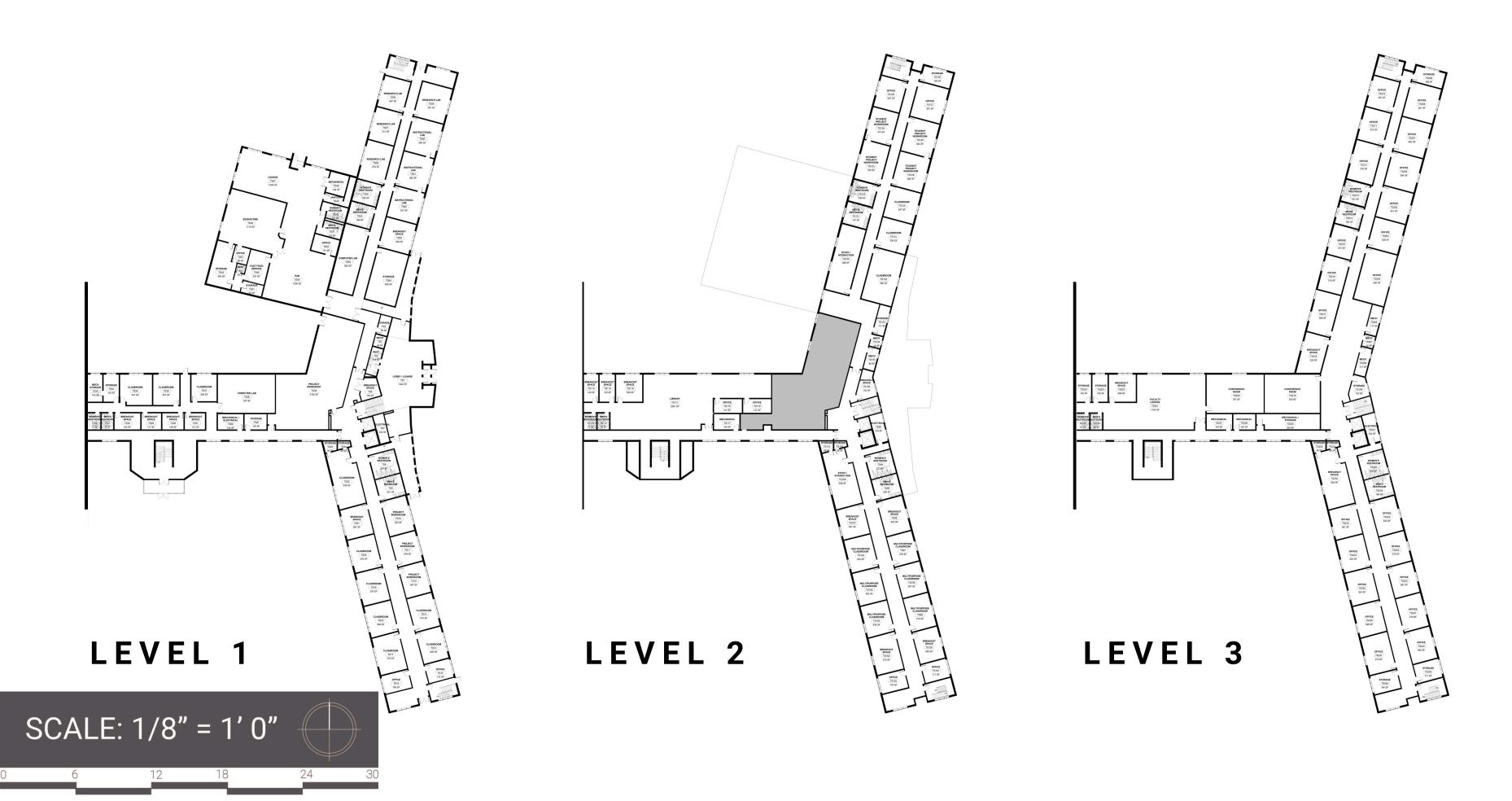


NORTHEAST TECHNICAL SCHOOL



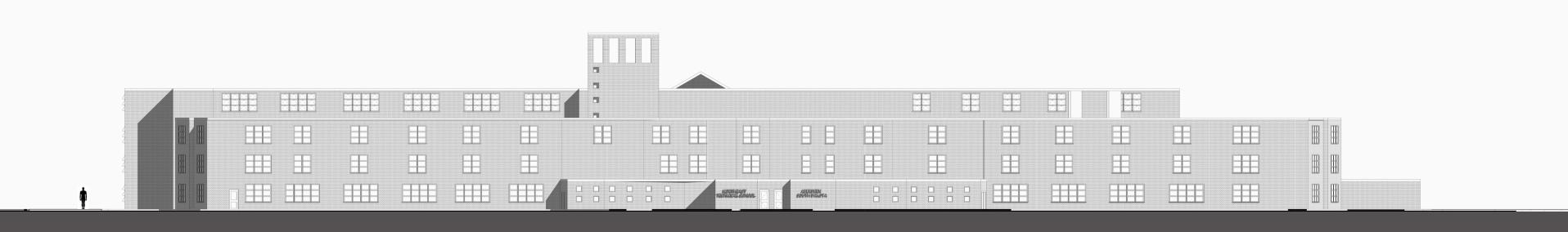


NORTHEAST TECHNICAL SCHOOL



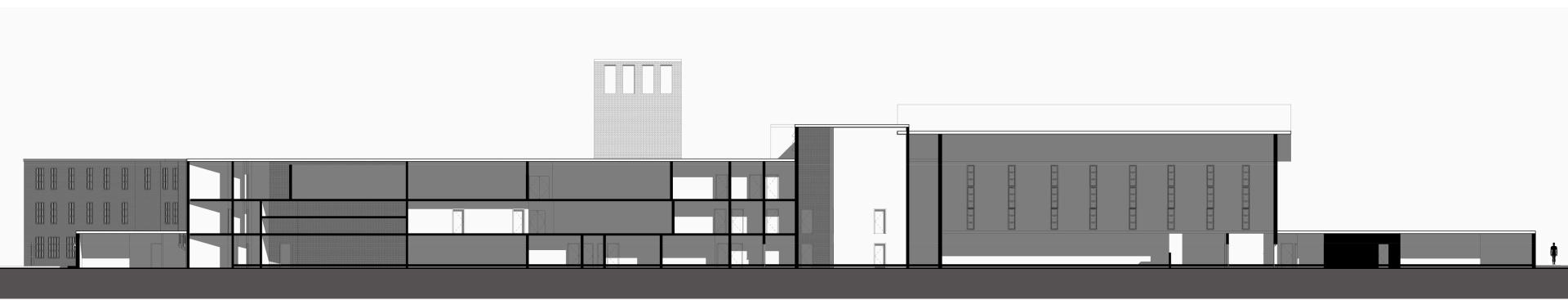


SOUTH ELEVATION

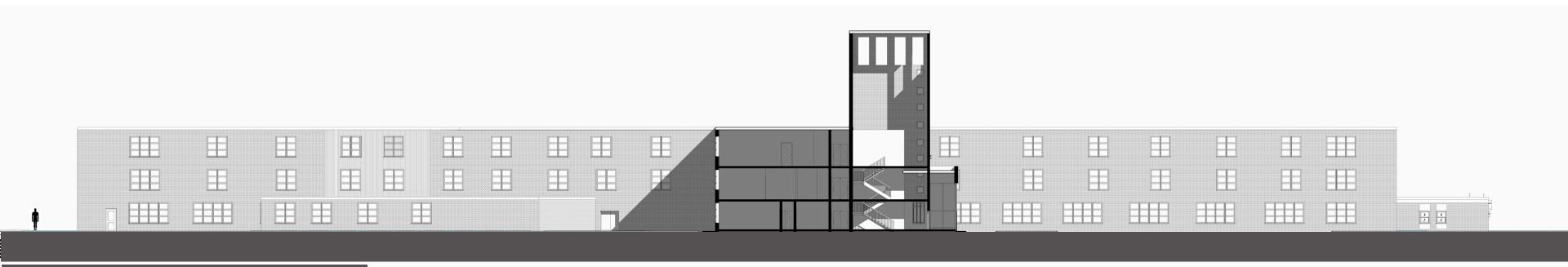


WEST ELEVATION

SCALE: 1/8" = 1'0"



NORTH SECTION



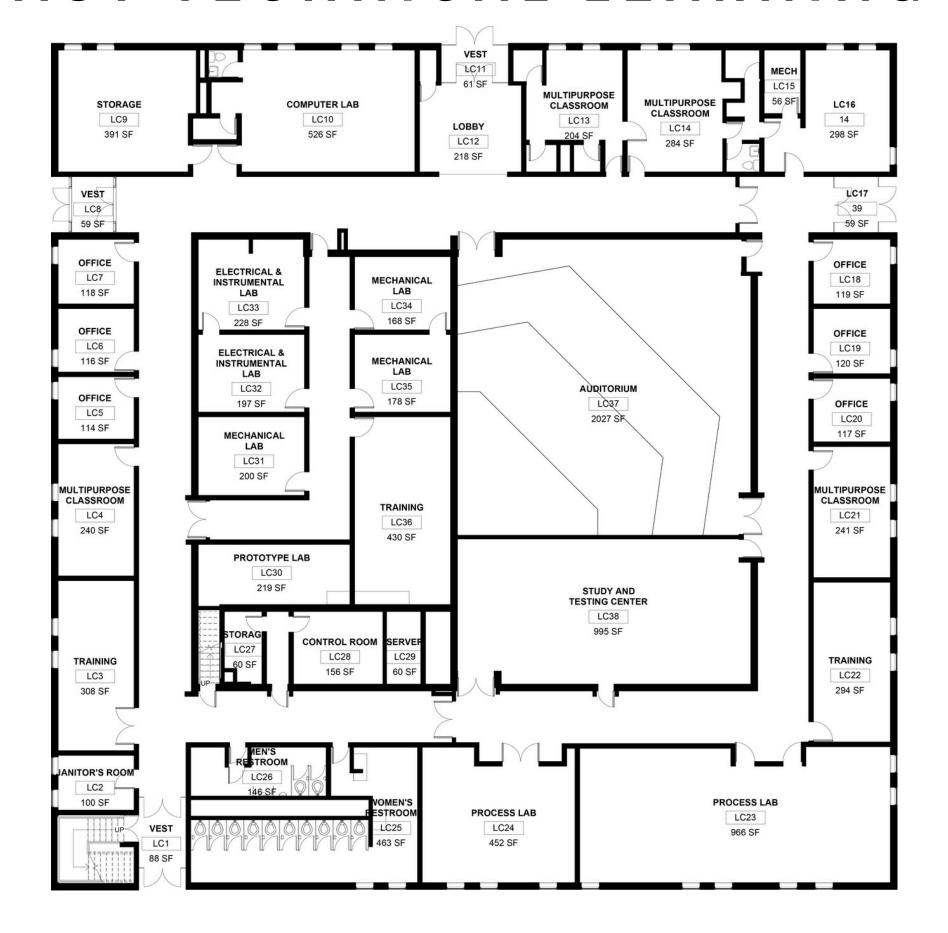
SCALE: 1/8" = 1'0"

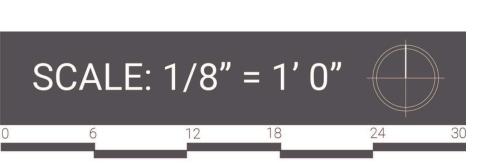
WEST SECTION

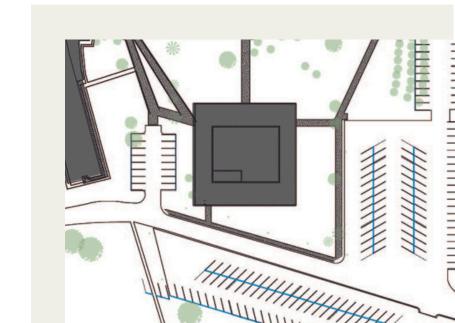


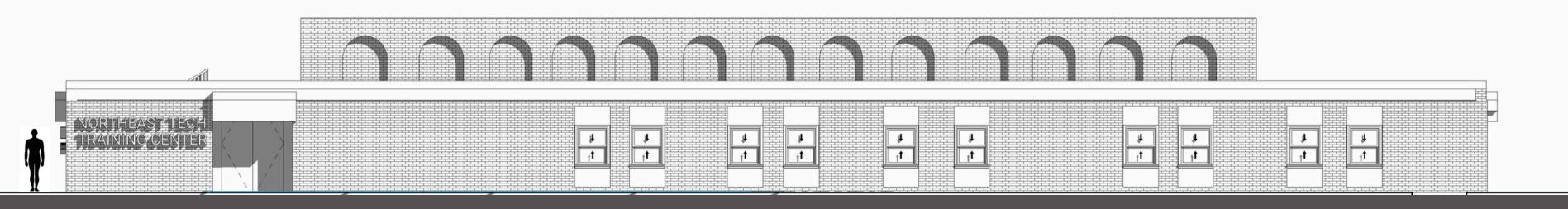


NORTHEAST TECHNICAL LEARNING CENTER

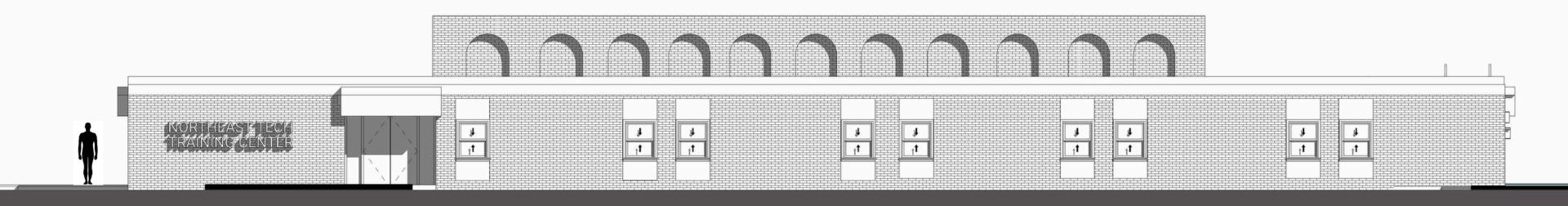








SOUTH ELEVATION



SCALE: 1/8" = 1'0"

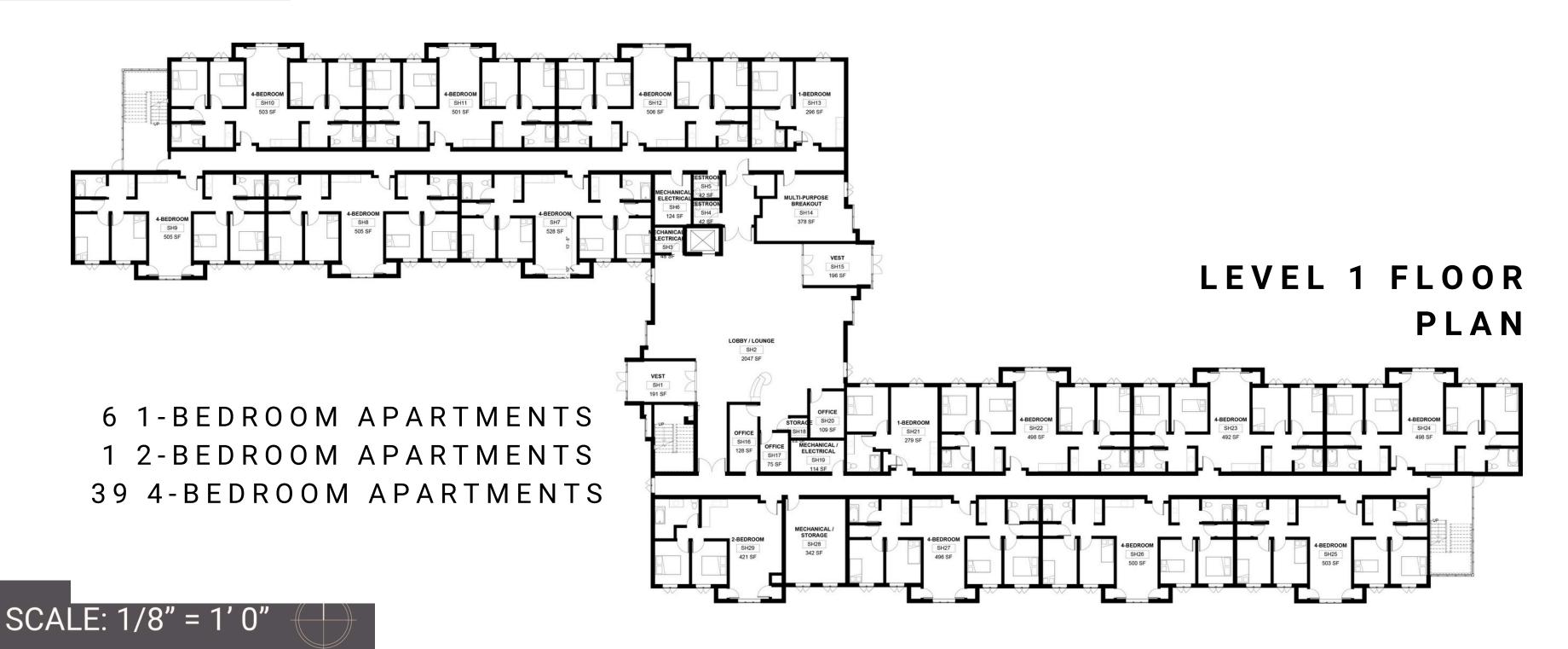
WEST ELEVATION

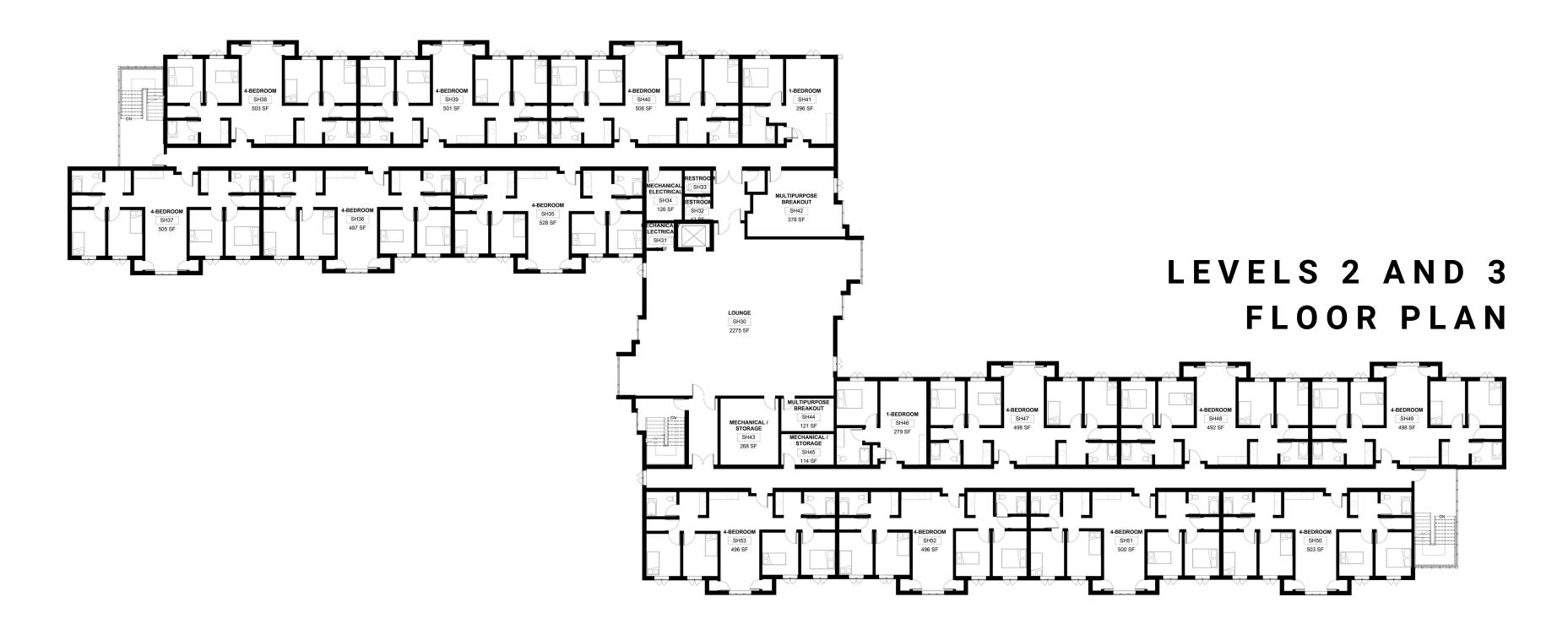
) 6 12 18 24 30

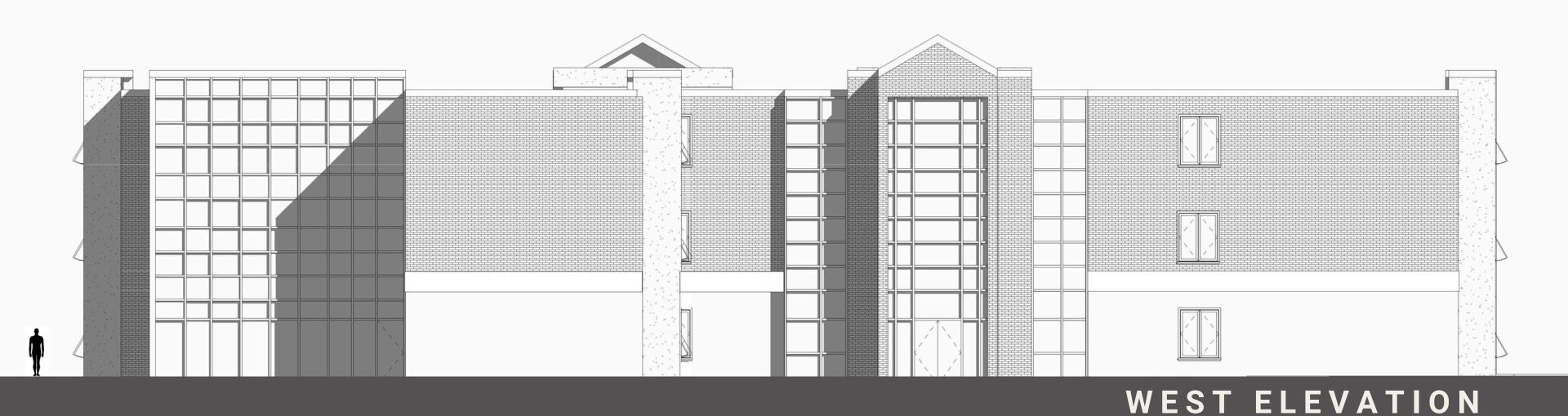




STUDENT HOUSING APARTMENTS







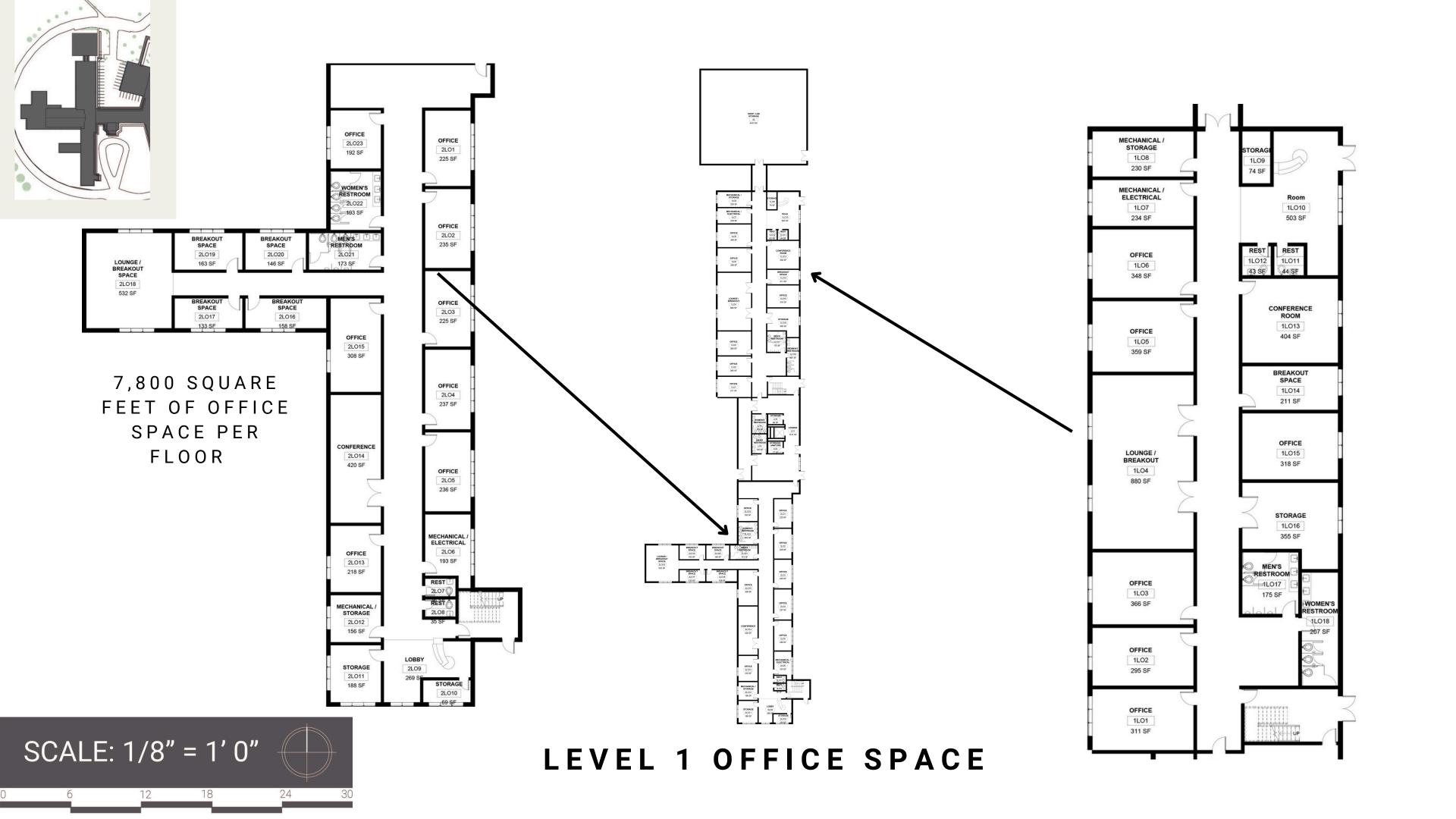


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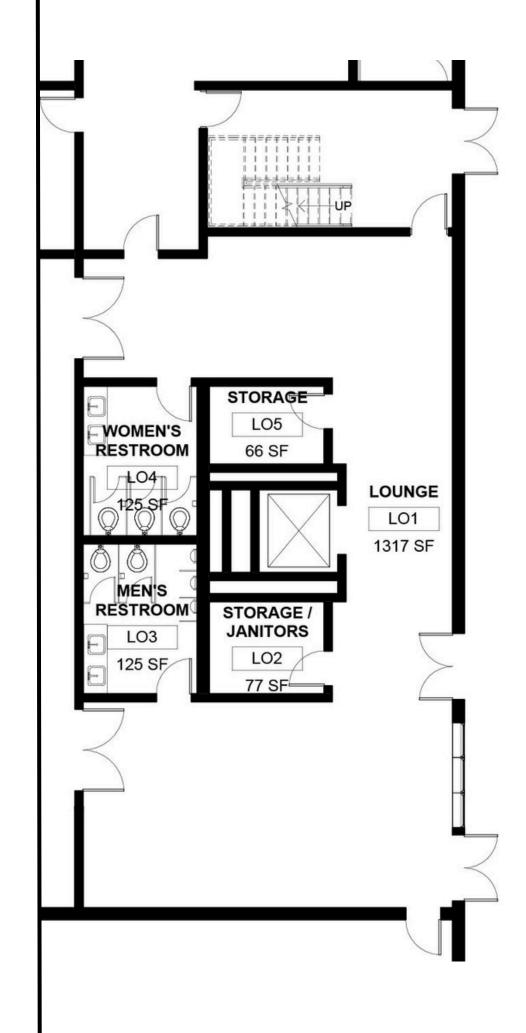
SOUTH ELEVATION

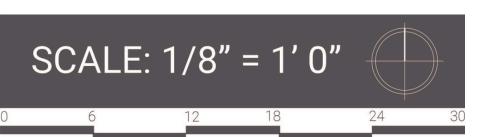
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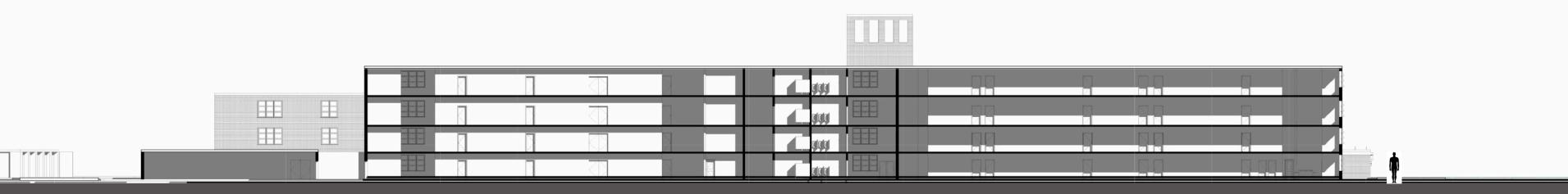
LEASABLE OFFICE SPACE



LEVEL1 CONNECTING LOUNGE SPACE





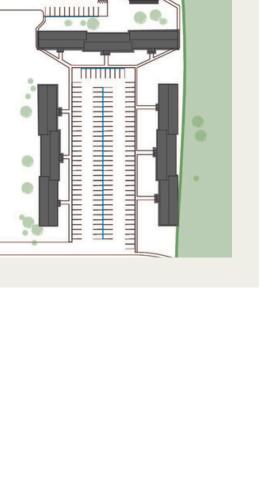


WEST SECTION

SCALE: 1/8" = 1'0"

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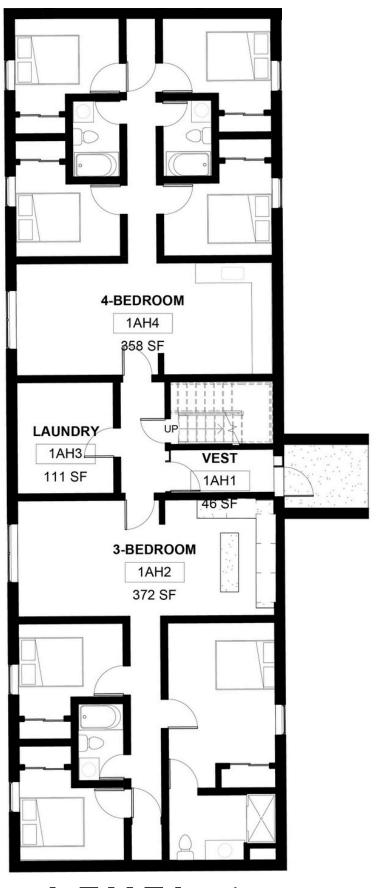
AFFORDABLE HOUSING

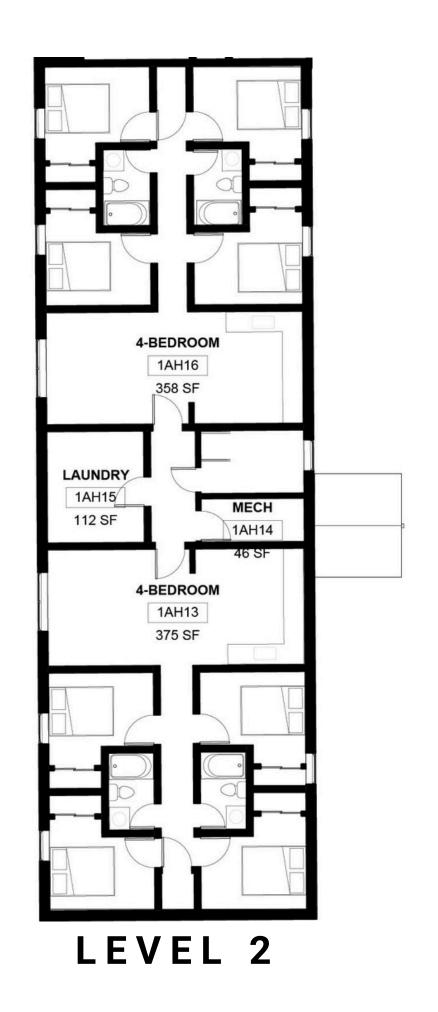












SCALE: 1/8" = 1'0"

6 12 18 24 30

LEVEL 1

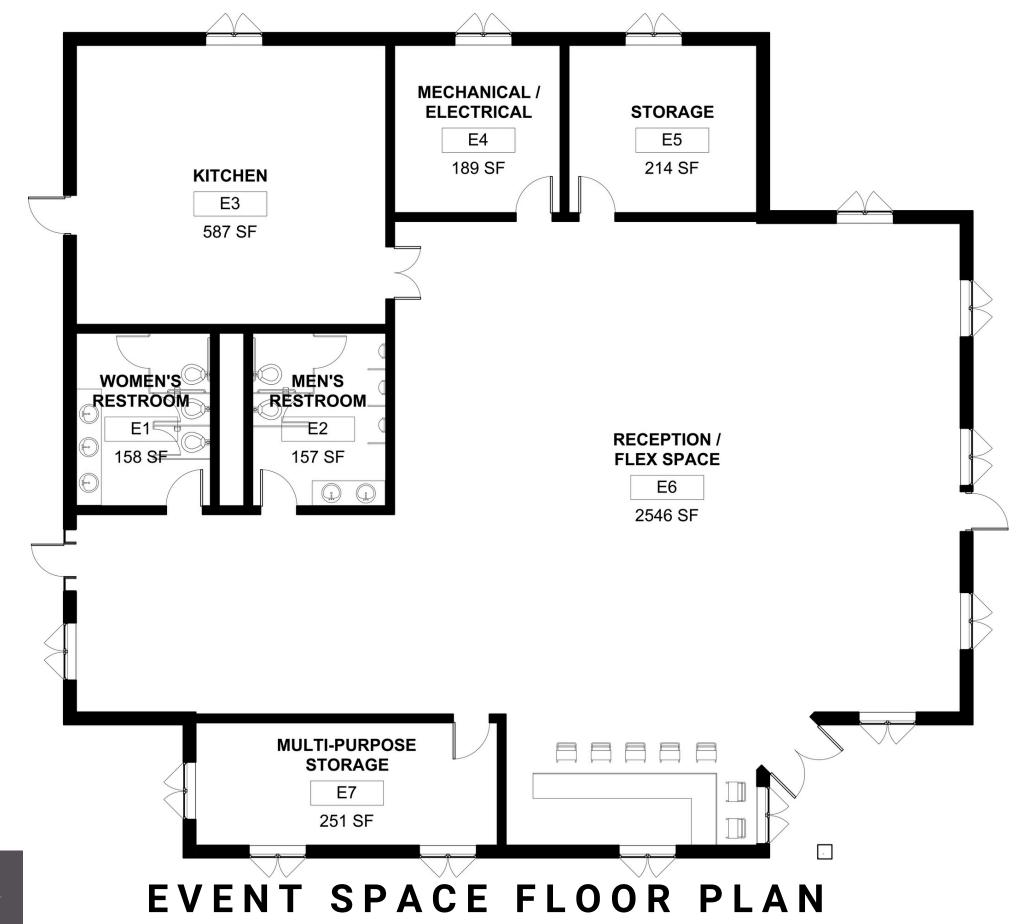


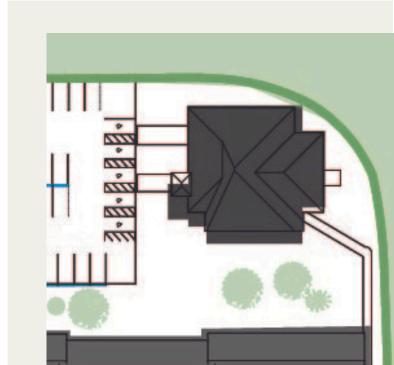
SOUTH ELEVATION



SCALE: 1/8" = 1'0"

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SCALE: 1/8" = 1'0"

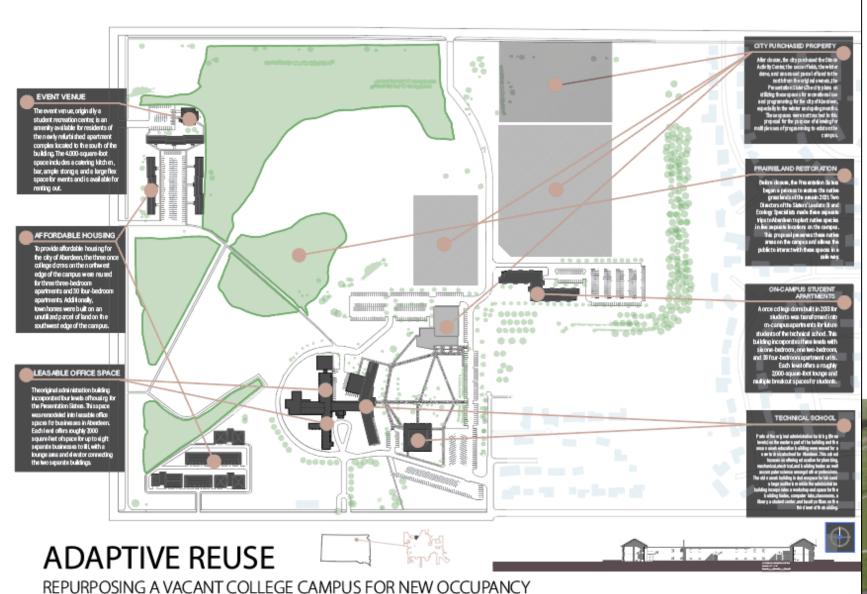
6 12 18 24 30





TOWNHOMES

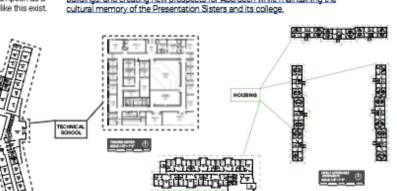




Adaptive reuse refers to a change in function to a building whose previous use has become obsolete. This process utilizes tools of reconstruction and enovation to modify the existing structure and spaces within to accommodate a new function for different occupants and needs while still preserving the overall integrity of the building. Redevelopment or renewal strategies are tion for centuries, though it has begun rapidly trending following the merged, or announced plans of closure or merger. This project proposes adaptive reuse as a solution for vacant college buildings and campuses to avoid an increase in CO2 emissions and building energy consumption as a result of demolition or new construction when vacant spaces like this exist.

LEASABLE OFFICE SPACE

This proposal focuses on a private, non-profit college in Aberdeen, South Dakota that closed its doors in the spring and summer semesters of 2023 called Presentation College. This institution was founded in 1951 and specialized in Health and Natural Sciences. Nursing, and Social Sciences and Humanities. Within the 100 square-foot campus and structures, a new techapplied to improve or add to existing building conditions to extend the lives of nical school that specializes in plumbing mechanical, electrical, and building these structures. This recycling technique has existed in design and construc-tion for centuries, though it has begun rapidly trending following the COVID-19 pandemic with many under- or un-utilized buildings and spaces left in its stead. Since 2016, over 91 higher education institutions have closed, once-student-dormitories-turned-apartments and a further addition of townhomes, and leasable office space in the existing structure to eliminate harmful emissions into the environment, provide new occupancy in the vacant buildings, and creating new prospects for Aberdeen while maintaining the cultural memory of the Presentation Sisters and its college.





TECHNICAL SCHOOL COMPUTER LAB





