



**2017
NORTHEAST COMMUNITY COLLEGE
MASTER SITE AND FACILITIES PLAN**

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PRESIDENT'S FOREWORD



Northeast Community College is built upon a strong foundation—both literally and figuratively. From a modest start with four buildings in 1973 to 30 state-of-the-art facilities on approximately 760 acres on the main campus in Norfolk as well as three extended campuses and two regional offices today, Northeast Community College is meeting the educational needs of our students and providing the current and future workforce for our 20-county service area.

We often hear far and wide just how impressed visitors and students are with our amazing facilities and the beautiful environment. The commitment to personal care of our facilities reflects the deep commitment of our employees for students to learn and to be successful in life. We now have an opportunity to enhance what we already have and, in turn, create a unique college experience for our students.

During the 2016 calendar year, faculty, staff and students spent considerable time discussing how we can improve the buildings and grounds to most effectively deliver essential programs and services. Northeast is always focused on its Vision 2020 strategic plan and the four overarching strategic goals, student success, student access, preparing a globally competitive workforce and maximizing and developing our resources. As the college community began the master facilities and site planning process, all participants were reminded to consider how best to achieve these goals through the lens of the master facilities plan.

Northeast Community College's Master Site and Facilities Plan will serve as a road map as the College prepares existing and future facilities to enhance the teaching and learning environment. It will play an integral role in the comprehensive, integrated planning and resource allocation process.

This year-long process of developing a new Master Site and Facilities Plan has been an endurance test for those most closely involved, but this time and talent investment will serve as an invaluable resource which will yield the best results for the future of Northeast Community College.

In closing, I am especially appreciative of the leadership team who worked diligently to create the facilities master blueprint, which addresses one significant part of Northeast Community College's long term comprehensive plan.

A handwritten signature in black ink that reads "Michael R. Chipps". The signature is fluid and cursive, with the first name being the most prominent.

Michael R. Chipps, Ph.D.
President
Northeast Community College

EXECUTIVE SUMMARY

PURPOSE OF THE MSFP

The purpose of the *2017 Northeast Community College Master Site and Facilities Plan* (MSFP) is to provide the College with a collection of background information, an analysis of key issues, and a list of potential projects for implementation over the next decade. The MSFP lays out a framework for the future that supports *Vision 2020*, the College's comprehensive strategic plan, by identifying facility and site projects that can contribute to achieving the strategic goals of student success, student access, providing a globally competitive workforce, and maximizing resources. The MSFP was conceived in workshops with College stakeholders over a 13-month period, combined with a thorough analysis of current conditions and future programming and service delivery models to support teaching and learning by the Northeast leadership team. The process has incorporated an extensive, data-driven analysis of space use and needs, academic goals, assessment of existing campus structures and infrastructure, and consideration for existing campus planning efforts. The result is a plan designed to advance the defined strategic goals of the College and to encourage development of efficient, safe, and vibrant college campuses in an orderly and well thought out process.

OVERVIEW OF RECOMMENDATIONS

The MSFP summarizes the Northeast planning team's observations, analysis and recommendations in seven distinct areas:

1. Utilization and Space Needs
2. Building and Facility Conditions
3. Land Use and Function
4. Circulation and Parking
5. Aesthetics, Open Space, and Landscape
6. Utilities and Infrastructure
7. Environmental Sustainability

The plan provides recommendations for new construction, renovation, demolition and improvement of existing structures, new athletic fields, parking, landscaping, pedestrian corridors, and utilities. In addition to the main campus in Norfolk, the MSFP also includes the review of Northeast's extended campus locations.

MSFP CONCEPT

The MSFP concept, illustrated in Chapter 3 (*Figures 12-14*), proposes a vision for Northeast Community College that can be implemented over the next 10 years as funding becomes available. The College proposes to revisit this plan with updated considerations in five years, at the mid-point of the plan.

OUR MISSION:

Northeast Community College is dedicated to the success of students and the region it serves.

1. INTRODUCTION

HISTORICAL OVERVIEW

Northeast Junior College was established as part of the Norfolk Public School System in September 1928. The College was closed for a short time but reopened its doors in September 1942. The relationship with the public school system would last until 1968. In August 1965, Nebraska state legislation created a technical college in the 14 county area surrounding Norfolk. In June 1967, the College began holding classes in temporary facilities. By 1971, Northeast Nebraska Technical Community College opened at the present location on Benjamin Avenue, beginning the creation of a comprehensive campus.

In 1975 Northeast (a liberal arts college) and Northeast Nebraska Technical Community College (a vocational technical college) merged and the name was changed to Northeast Technical Community College to reflect the merging of the two separate colleges in a 20-county service area. In 1991 the College's name was officially changed to Northeast Community College (Northeast) by the Legislature.

Northeast Community College expanded educational delivery with the opening of an education center in O'Neill in 1998 and a regional office in West Point in 1998. The West Point regional office added leased space in 2008 to accommodate state of the art classrooms, computer labs, and science labs. In 2015 a new education center was constructed and opened in O'Neill. In the fall of 2005 the South Sioux City education center was opened. Northeast also constructed a new College Center in 2011. This shared-use facility was opened in partnership with Wayne State College and hosts programs from each institution. The South Sioux City campus also hosts an Industrial Training Facility.

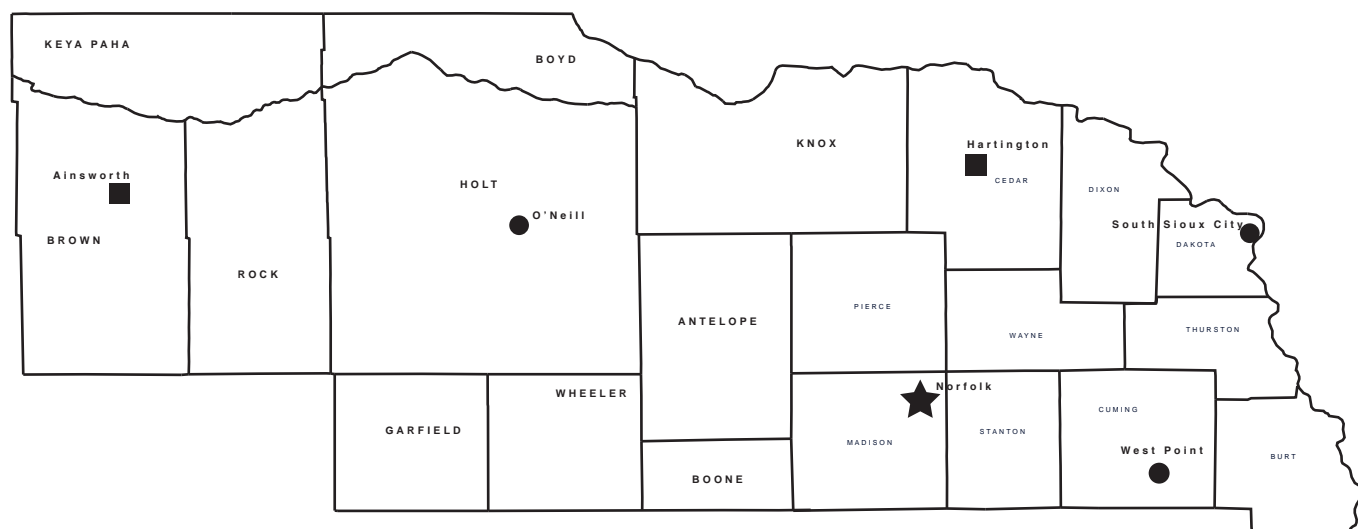


Top: Dr. Cox and faculty outside newly constructed Student Center, 1984.

Bottom: Instructor Tod Johnson and students, ca. 1985

The College continues to develop new and innovative programs to meet the needs of the community and businesses in its 20 county service area. As evidence of a commitment to excellence, Northeast Community College was named one of the nation's top 120 community colleges by the Aspen Institute's College Excellence Program in 2011. The College received the honor again in 2012. In the fall of 2016, the College was named as an Aspen Top 10 Finalist for 2017. In 2013, Northeast Community College was in the American Association of Community College's top four for "exemplary partnership with industry," and the Northeast Board of Governors was named to America's top list for "exemplary governance" in 2014.

Northeast has received ongoing accreditation from the Higher Learning Commission with the most recent reaffirmation of accreditation in 2013-2014. Accreditation by the Higher Learning Commission indicates that Northeast has been carefully evaluated and found to meet standards agreed upon by qualified educators.



★ Main Campus ● Extended Campus Locations ■ Regional Office Locations

The College's 20-county service area, encompassing five districts and including approximately 160,000 residents.

DESCRIPTION OF NORFOLK MAIN CAMPUS AND COLLEGE FACILITIES

CAMPUS DESCRIPTION

The Northeast Community College campus in Norfolk consists of 208 acres on the main campus and an additional 566 acres of college farm space.

The Norfolk campus features 30 buildings on the northeast edge of Norfolk. The 208-acre main campus (*Figure 01*) is accessed via Benjamin Avenue, a four-lane street at the south of campus, or via Victory Road, a two-lane paved rural section road at the east edge. The campus is bounded by the North Fork of the Elkhorn River and an existing railroad right-of-way at the west, agricultural and industrial properties to the north and east, and a mix of agriculture and growing residential south across Benjamin Avenue.

The campus has grown to encompass the majority of the southwest quadrant of the property. The campus has been developed on a 45-degree diagonal on the property, giving the campus a unique presence from the adjacent streets. The diagonal layout generally follows the existing topography of the site, creating a stepped arrangement of development as the site rises to the northeast. A portion of the land at the north and east side of the main campus serves as valued agricultural land, utilized for academic instruction. This agriculturally focused property exceed 500 acres of crop and pasture land, allowing the College to support current farm operation as a self-sustaining educational operation and to embrace precision agriculture management systems within the campus (*Figure 02*).



Northeast Community College Norfolk Campus, 2015.

NORFOLK CAMPUS

AGRICULTURE AND ALLIED HEALTH

This 42,704 gross square foot (GSF) building was constructed in 1992 and expanded in 2001. The building provides classroom, office and laboratory spaces. Course offerings in this building include veterinary technician, agriculture, biology and sciences, horticulture, physical therapy and assorted general academic courses.



APARTMENT A AND APARTMENT B

Apartments A and B are 2-story, wood-framed buildings which serve as residential apartments. Apartment A was constructed in 1983 and Apartment B was constructed in 1985. Each building has 8,164 GSF.



APPLIED TECHNOLOGY

This 77,680 GSF single story building was constructed in 2015. The building serves as a classroom, office, and laboratory building for the majority of the College's applied technology offerings.



ARLO E. WIRTH

Constructed in multiple phases, this 21,587 GSF structure was built in 1974 as one of the first buildings on campus with additions in 1982 and 2002. The building was originally constructed for the utility line and electricians programs and is now currently providing temporary accommodation for wind/renewable energy, allied health, and paramedic programs.



BUILDING CONSTRUCTION

Built in 1971, Building Construction is a pre-engineered, slab on grade, single story building with 7,333 GSF. The building is currently used for temporary storage of vehicles.



BURKHARDT HALL

This three story residence hall was constructed in 2004 and totals 43,195 GSF. The building provides 36 suites, each with two bedrooms, a shared bath and living room.



CHUCK M. POHLMAN AGRICULTURE COMPLEX

The Ag Complex is a 48,523 GSF single story pre-engineered metal structure constructed in 2004 which provides instructional space for the agriculture program, a large arena style exhibition space and office space.



COLLEGE WELCOME CENTER

Constructed in 2009, the College Welcome Center is a single story 42,556 GSF brick structure which serves as an office, student support and administration.



F. DON MACLAY

This single story building was constructed in 1971 and totals 49,014 GSF. Maclay is home to various instructional programs including graphic design, business, accounting, media arts and drafting. The building, constructed as part of the initial phase of campus construction, is also home to administrative offices, support functions, and the College data center.



DIESEL TECHNOLOGY

Constructed in 1995, this 25,215 GSF building is home to the Northeast Community College's diesel programs. The building is a single story, slab on grade pre-engineered metal building.



HAWKS POINT

The 29,691 GSF one-story Hawks Point structure is one of two new buildings opened in fall 2016. The building houses the new main central dining facility for campus as well as containing offices for Residence Life staff and student meetings, recreation and computer lab spaces.



J. PAUL AND ELEANOR MCINTOSH COLLEGE OF NURSING

Recently constructed in 2010, this 46,027 GSF structure is home to the Northeast nursing program along with dedicated space for the University of Nebraska Medical Center. This very visible building provides classroom, office and laboratory space.



KENNETH J. ECHTENKAMP

Renovated in 2013, this 11,191 GSF building houses classroom space for information technology offerings. Originally constructed in 1974, this building is part of the initial phase of the campus development.



LAW AND PUBLIC SAFETY TRAINING LAB

This 1,162 GSF residential structure was purchased in 2015 by Northeast. The small house, located at 811 East Benjamin Avenue, is the lab for the law and public safety related programs, including criminal justice, allied health, and paramedic/emergency medical technician training.



LIBRARY RESOURCE CENTER

This building serves as a library resource center and houses the Service Center as well as support staff offices. A single story building constructed in 1972 as part of the initial phase of campus development, the center has 8,161 GSF.



LIFELONG LEARNING CENTER

Constructed in 1997, this single story building totals 43,856 GSF. The center provides classroom, lab, office, general use and support spaces. Administrative support offices, leased office space, and large meeting spaces are a significant component of this building.



MAINTENANCE

This single story, pre-engineered building totaling 9,600 GSF, was constructed in 1981 as the College's maintenance shop and related offices. Vacated after the new Physical Plant was constructed, the building currently is a temporary space for the precision agriculture programs.



PATH HALL

The 62,811 GSF Path Hall, opened in 2016, is the newest residence hall on the Northeast campus. The 200 bed residence hall contains a mixture of two- and four-bedroom semi-private suites and is connected to Hawks Point.



PHYSICAL PLANT

Constructed in 2015, this single story structure is home to the physical support operations for College. The 39,608 GSF building hosts offices, meeting space, shop space, motor pool and shipping/receiving activities.



ROBERT P. COX ACTIVITIES CENTER

The Cox Activities Center was constructed in 1979 as one of the first facilities on the Northeast campus with a significant addition in 2005. The combined structures total 62,073 GSF and host the College's competition gymnasium, theater, music, broadcasting, audio recording, speech, health/physical education/recreation and intercollegiate athletic programs along with supporting offices.



SCIENCE

Constructed in 1978, this single-story, 8,161 GSF building is home to classrooms, labs and offices supporting math, science, biology, physics, chemistry, and general academic offerings.



SIMON HALL

A student residence hall constructed in 1972 with an addition added in 1992, this three story building totals 36,967 GSF and accommodates 141 beds.



STUDENT CENTER

Constructed in 1984 with an addition added in 2000, the student center is 28,747 GSF on two levels. The building has served historically as a dining facility, grill and snack bar, office, retail, and activity space. The opening of Hawks Point and Path Hall in the fall of 2016 provided new space for dining which was then relocated from the Student Center.



SURPLUS STORAGE

The building is a one story, pre-engineered metal building constructed in 1980 with 5,041 GSF. This building is currently used for campus surplus storage.



UTILITY LINE/TRUCK DRIVING

This single story pre-engineered metal building totaling 43,386 GSF was constructed in 2007. Located east of the main Norfolk campus, the building hosts utility line and truck driving programs.



VETERINARY CLINIC/FARM OPERATIONS

These original structures were acquired in the purchase of the farm property from the State of Nebraska. The buildings have 21,955 GSF and support veterinary technology clinic, surgery and patient care facilities as well as classrooms, offices and laboratory space for agriculture.



WELLER

The Weller building consists of multiple additions totaling 69,477 GSF. Originally constructed in 1971 as part of the initial phase of campus development, additions were made in 1972, 1973 and 1981. This structure accommodates welding, automotive technology, auto body repair, art, social sciences, education, and a variety of other academic offerings.



NEW PROPERTIES

The College has purchased four residential lots along East Benjamin Avenue.

901 East Benjamin Avenue, with 1,524 GSF is currently being leased back to previous owner. There is currently no building name or future purpose.



903 East Benjamin Avenue, at 1,152 GSF, is currently being used by the Director of Residence Life as living quarters. The building has no official name.



905 East Benjamin Avenue has 1,713 GSF and is currently not being used. There is currently no building name or future purpose.



SOUTH SIOUX CITY EXTENDED CAMPUS

CAMPUS DESCRIPTION

The South Sioux City extended campus consists of approximately 57.3 acres (*Figure 03*), located on the western edge of the city. The campus features two buildings, one of which is co-owned with Wayne State College. The co-owned portion of the site is approximately 18.7 acres. The other building owned by Northeast is located on approximately 1.2 acres of the site. This leaves approximately 37.4 acres of the campus for future development.

The campus is accessed via Highway 77. Golf Road, a two-lane paved rural section road at the west and north edges, and College Way, a three-lane paved urban section street at the south edge, also provide access to the campus. A prominent retail area of South Sioux City is located to the south of the campus and includes Walmart and a variety of fast food restaurants.

The campus topography is generally flat in nature. A drainage channel is located on the east and north edges of the campus. This drainage channel has an area of conservation easement around it that prevents any development in this area. A bike trail traverses the site along this drainage channel providing pedestrian connection to the City's trail network.

COLLEGE CENTER

The College Center is an extended campus structure located in South Sioux City. Constructed in 2010, this 44,117 GSF structure hosts classrooms, laboratories, offices, student service functions, and a small bookstore. Use and ownership of this facility is shared with Wayne State College.



INDUSTRIAL TRAINING

Also at the South Sioux City Extended Campus is an industrial training center operated solely by Northeast. Constructed in 2010, this single story pre-engineered metal structure totals 6,027 GSF and hosts classrooms, lab and office space to accommodate the Northeast welding program.



WEST POINT EXTENDED CAMPUS

Extended campus programs at West Point are accommodated in space leased in the Donald E. Nielsen Community Center. The community center, built in 2008, is located one block from the central business district and county fairgrounds. The building's 8,301 GSF provide general classroom, labs and office space for the extended campus programs.



O'NEILL EXTENDED CAMPUS

CAMPUS DESCRIPTION

The O'Neill extended campus consists of approximately 6.9 acres (*Figure 04*), located in the southeast portion of the city. The campus features one building located in the northeast portion of the site, leaving room on the western portion of the campus for future development.

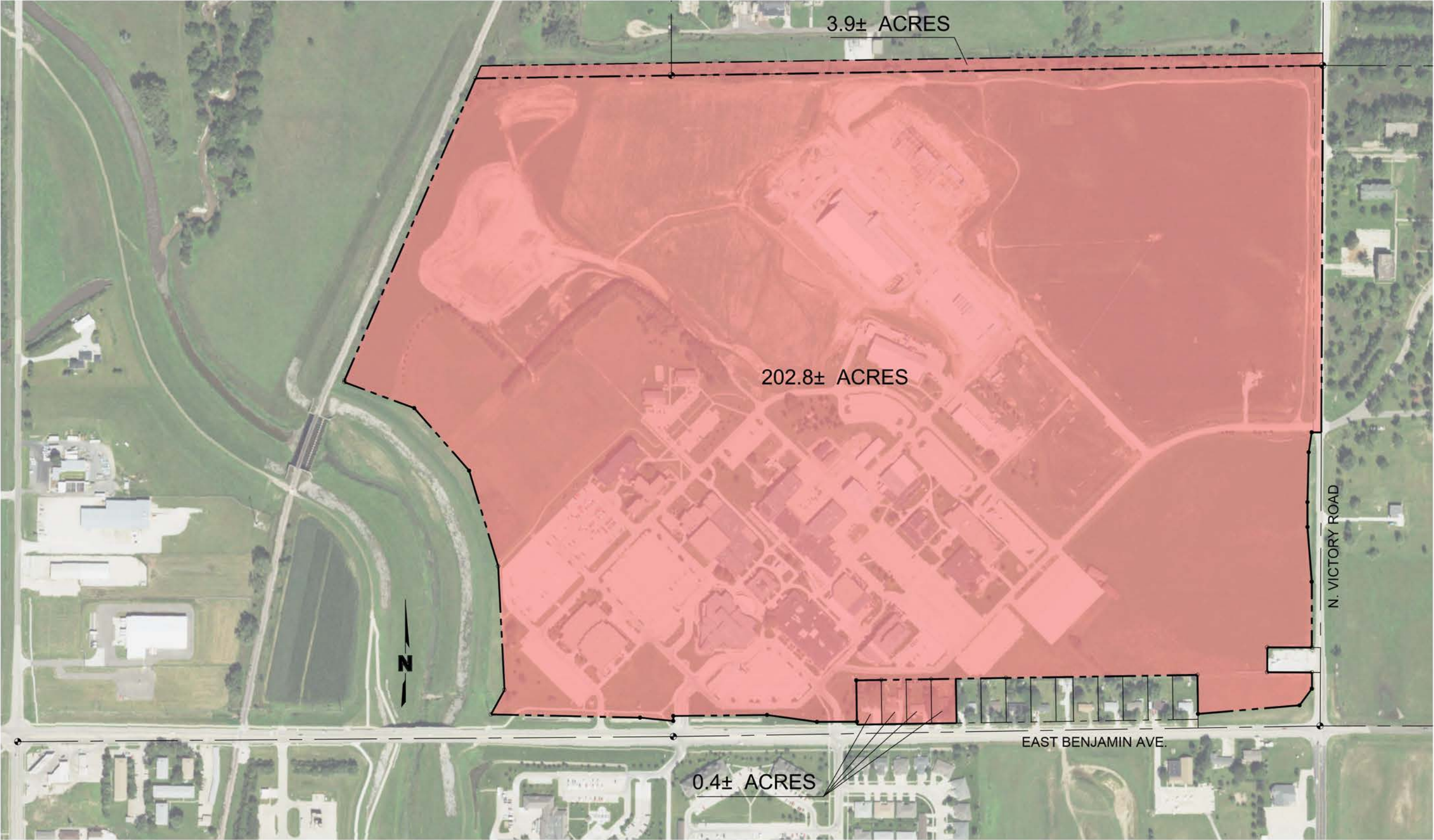
The campus is accessed from Highway 20, a three-lane paved rural section highway. The campus also has an access from Sale Barn Road, a two-lane paved rural section road that does connect to Highway 20. The campus is located in a light industrial and retail area of the City with a bank to the south and an agriculture facility to the north.

The campus topography is generally flat in nature. A drainage swale is located along an existing railroad track that bounds the site on the south edge. A drainage ditch is also located along Highway 20 along the northeast edge of campus.

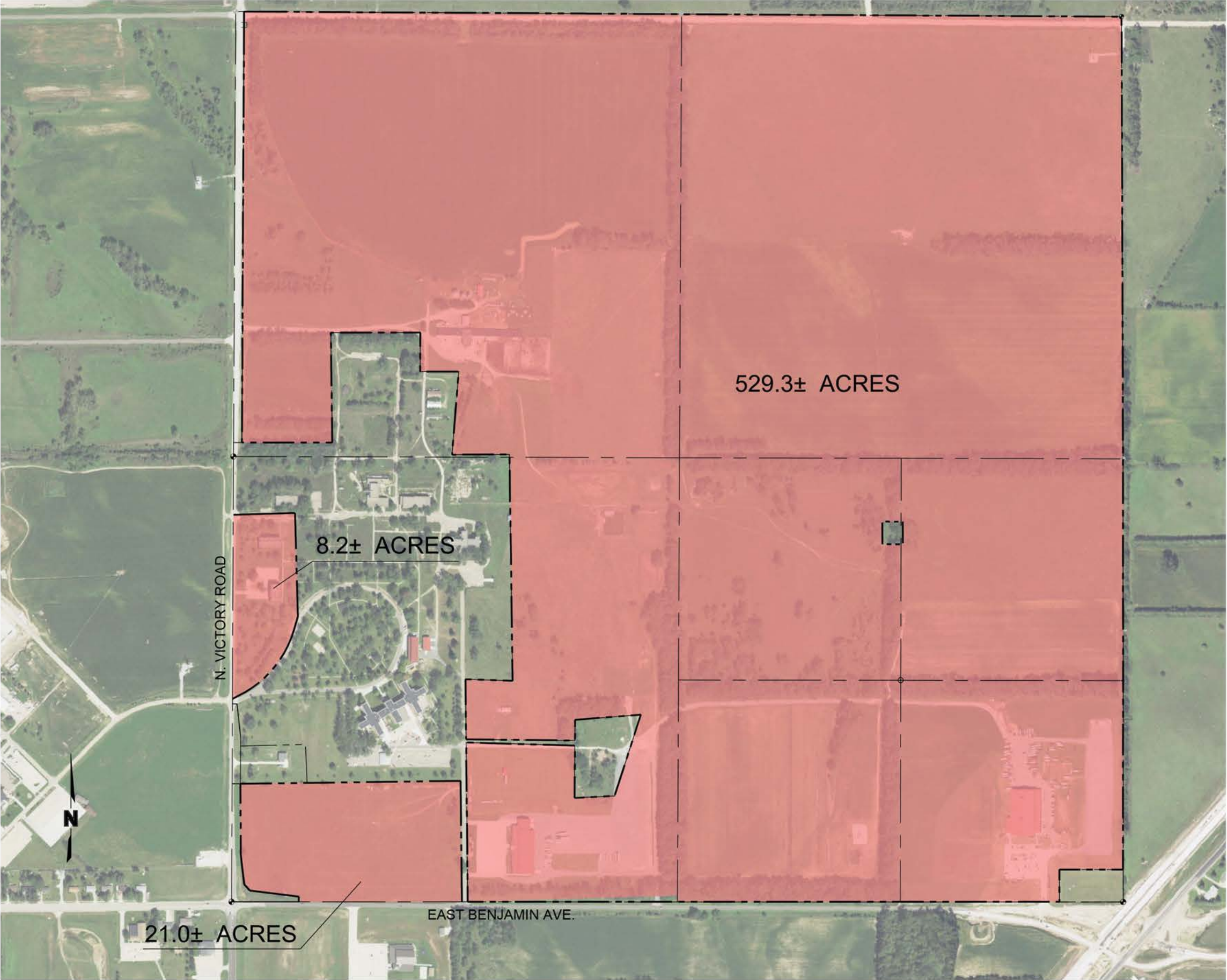
EXTENDED CAMPUS BUILDING

This recently constructed building was opened in 2015 and totals 15,314 GSF. This extended campus structure includes general purpose classrooms, labs and support space including space for welding and other business and industry offerings.

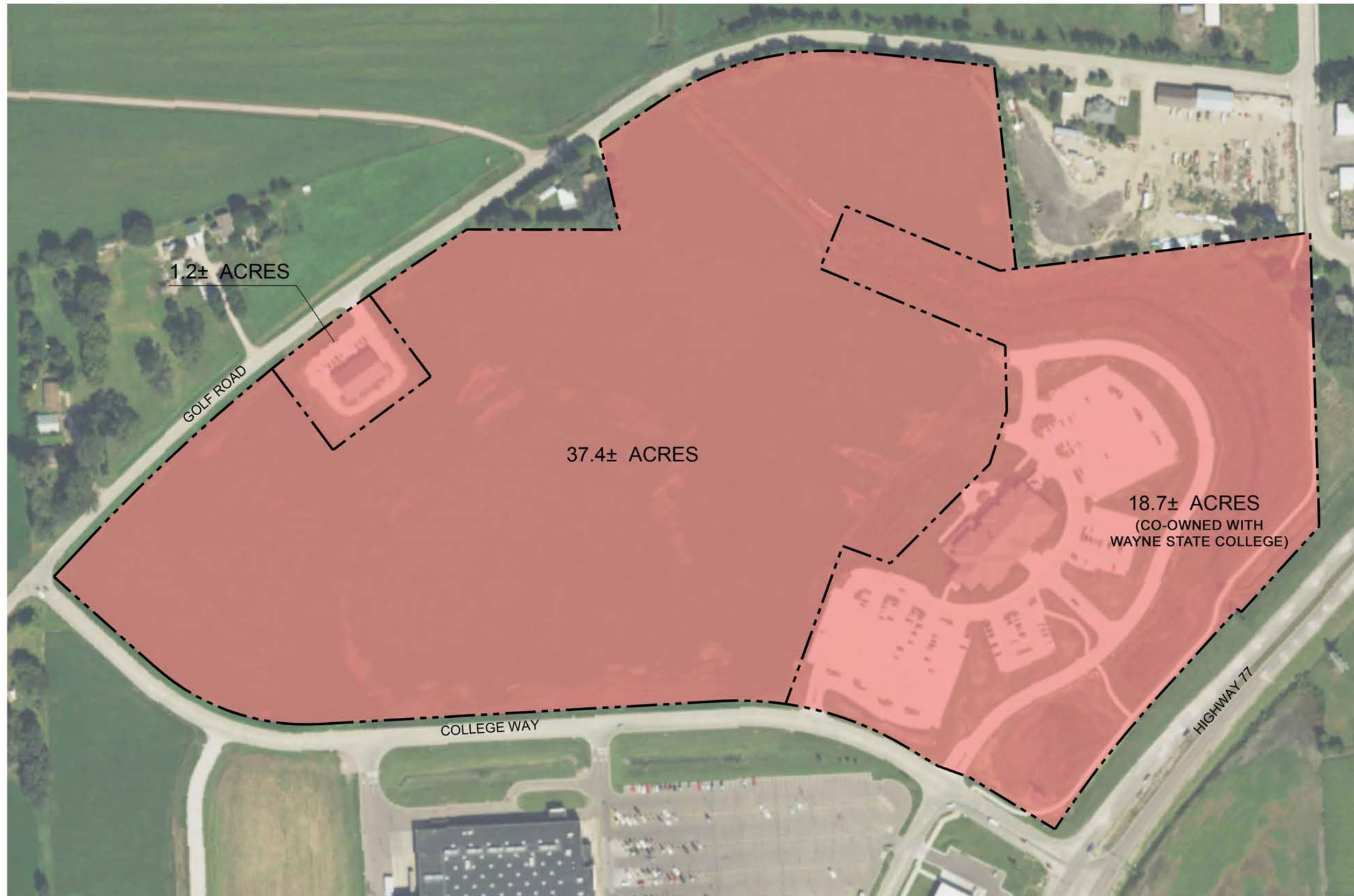




NORFOLK MAIN CAMPUS
SECTION 14



NORFOLK MAIN CAMPUS
EASTERN PORTION
SECTION 13



SOUTH SIOUX CITY

EXTENDED CAMPUS



O'NEILL
EXTENDED CAMPUS

PURPOSE, GOAL AND OBJECTIVES AND MASTER PLAN PROCESS

The development of the *Northeast Master Site and Facilities Plan* (MSFP) was a direct outgrowth of the strategic vision, mission and goals of the institution. For that reason, the plan has strongly relied on guidance from Vision 2020 planning previously completed by the College.

The purpose of a campus master plan is multifaceted. It creates context and establishes historical benchmarks by which progress and change can be gauged over time. It provides background, analysis and recommendations for problem-solving and under-taking projects through documentations of campus needs, estimated costs, potential funding sources, and implementation considerations. The process of developing the master plan vision with campus stakeholders builds consensus and generates excitement that is beneficial for retention of faculty and leader-ship, recruitment of students, and the securing of support from alumni, the Board of Governors, potential donors and the community at large. The *Northeast Master Site and Facilities Plan* helps assure that the broadest range of ideas and possibilities are explored. It also increases the likelihood that the resulting campus will be as efficient, ordered and attractive as possible. Finally, and perhaps most important, the *Northeast Master Site and Facilities Plan* develops and articulates a shared vision for what the campus can be. It creates a tangible statement of hope for the future.

The purpose of a Campus Master Plan is to create a guiding document for realizing campus improvements over a period of time.

CAMPUS MASTER SITE AND FACILITIES PLAN GOALS

The *Northeast Master Site and Facilities Plan* is intended to support *Vision 2020*, the comprehensive plan for 2015-2020, adopted by the Northeast Board of Governors in July of 2015. The four strategic goals of *Vision 2020* include:

- A. Increase student success
- B. Increase student access
- C. Provide a globally competitive workforce
- D. Develop and maximize resources

In addition to helping the College maximize its resources, developing the MSFP is seen as a way to assist the College in achieving *Vision 2020* goals by:

- Identifying instructional and support service delivery models designed to increase student success;
- Increasing opportunities for student access through expanded programming and physical spaces designed to engage students and increase enrollments;
- Providing classroom and laboratory spaces designed to meet instructional needs for optimum student learning in preparing a globally competitive workforce;
- And improving the College's facilities and outdoor spaces to maximize resource utilization, efficiencies, and technology capabilities.

MASTER PLAN SCOPE

Scope for this planning effort was defined early in the process by the MSFP planning team who wanted to use a comprehensive, data driven process that examined facility utilization and space needs, future programming and service delivery models, land use, building and infrastructure condition, open space and circulation systems, landscape and sustainable design. The year-long process was broken into specific tasks arranged in an orderly and methodical process.

PLANNING INTEGRATION

The development of the *Northeast Master Site and Facilities Plan* should be a direct outgrowth of the strategic vision, mission and goals of the institution. For that reason, the plan has strongly relied on guidance from Vision 2020 planning previously completed by the College and an in depth review of the “Utilization and Space Needs Analysis Study” completed in cooperation with Northeast faculty, staff and administration and Dr. Frank Markley of Paulien and Associates.

PLANNING ASSUMPTIONS

Planning assumptions for this document are based on a ten-year period from Fall 2015 through Fall 2025. The Strategic Enrollment Management Team at Northeast developed the enrollment planning assumptions, initially, as a five-year document titled *2015-2020 Strategic Enrollment Goals*. Those goals were used to project enrollment through the 2025 target year for the MSFP. Other information utilized that informed the planning process included:

- *Strategic Plan, 2010-2015*, revised July 2014
- Northeast Community College Mission, Vision and Values Statement
- *Academic Programs Plan 2015-2020*, December 2014
- Master Facilities Planning Key Decisions
- *Athletic Program Plan, 2015-2020*
- *Ag and Water Center for Excellence Master Plan, 2015*
- *Technology Infrastructure Master Plan, 2017*

MASTER PLANNING PROCESS

Stakeholder involvement was critical to the master plan development process. It included on-going engagement and re-engagement of the campus through extensive use of administrative led focus groups utilizing participant surveys, “Chat with Chipps” sessions and many campus planning meetings that engaged students, faculty and administration.

The Northeast MSFP process began on December 8, 2015 and was completed March 9, 2017. The highly participatory process involved five steps:

Step 1. Project Orientation (goal setting)

Step 2. Data Gathering and Issues Analysis (facility assessments, space utilization analysis and establishment of campus standards)

Step 3. Needs Identification and Project Recommendations (stakeholder input, project identification)

Step 4. Master Plan Concept Alternatives (campus planning charrettes)

Step 5. Final Master Plan Development (final concept, final draft)

The process was designed to draw input from a diverse cross-section of campus constituents and stakeholders. Over 46 focus groups



PHASE ONE:
Project Orientation



PHASE TWO:
Data Gathering & Issue Analysis



PHASE THREE:
Needs & Project Recommendations



PHASE FOUR:
Master Plan Concept Alternatives



PHASE FIVE:
Final Master Plan Preparation



were engaged early in the process. These sessions included multiple meetings including the campus planning team, President's Cabinet, the Administrative staff, faculty, staff, and students.

Consultants made initial visits to campus on December 8 and 16, 2015, February 22–24, 2016 for site inspections, and March 7–9, 2016 to perform a building condition survey.

Master planning workshop visits included March 21–22, April 20, May 23, June 17, August 8–10, October 27, and December 7, 2016. Additional visits to the campus included consultant presentations to the Board of Governors on November 10 and college-wide “Chat with Chipps” sessions on November 21, 2016. Final presentation to the Board of Governors was provided on March 9, 2017.

The recommendations offered in this *2017 Northeast Master Site and Facilities Plan* are based on the review of relevant background data and reports, stakeholder input, assessment of existing conditions, and a shared exploration of ideas and strategies to meet campus needs. In the next step of implementation, additional investigation and detailed programming will be necessary to confirm the feasibility, desirability and estimated costs of individual projects. This document does not attempt to provide a prioritized list of projects or a proposed implementation schedule. Rather, the recommendations summarized here will allow Northeast to implement projects and strategies with flexibility, as they see fit, and within the parameters that exist at a given point in time.

Northeast Community College's Master Site and Facilities Plan will serve as a road map as the College prepares existing and future facilities to enhance the teaching and learning environment. It will play an integral role in the comprehensive, integrated planning and resource allocation process.

Michael R. Chipps, Ph.D.
President

1. INTRODUCTION



2016 Campus Planning Workshops, engaging a wide cross-section of stakeholders.

OUR VISION:

Northeast Community College is recognized as a premier educational leader and partner, with student completion and success being our highest priority. We broaden our students' cultural awareness and global competitiveness, while providing academic programs that help our students meet the needs of our region's workforce.

2. ANALYSIS, OBSERVATIONS AND RECOMMENDATIONS

UTILIZATION AND SPACE NEEDS

ANALYSIS/OBSERVATION

As part of the development of the *Northeast Master Site and Facilities Plan*, an extensive analysis of utilization and space needs including future recommendations was provided by Dr. Frank Markley of Paulien and Associates, developed in conjunction with Northeast faculty, staff and administration. The document is entitled *Northeast Community College Utilization and Space Needs Analysis Study*, dated September 2016, and is on file at Northeast. Activities included in Dr. Markley's study involved:

- **Project Initiation and Data Gathering** was targeted to define facility utilization and space needs, and to develop an inventory of existing facilities and spaces identified and coded by national standards.
- **Occupational Gap Analysis Review and Work Sessions** were intended to understand the relationship between occupational demand and opportunities for existing programs, program realignment and new programmatic offerings.
- **Space Needs Analysis Work Sessions** provided a broad base of collaboration for review of the utilization and space needs analysis with discussion of specific needs of each unit relative to growth and to future changes, including staffing impact.
- **Facilities Utilization Analysis** included classroom and teaching laboratory analysis to consider the most effective use of space.
- **Space Needs Analysis** considered space needs for the Norfolk campus and South Sioux City extended campus to determine relative space needs along with an in-depth review of course offerings, future academic delivery methodologies, campus growth, and planning goals. This process also included the development of campus wide guidelines for space needs and standards for future reference and space assignment.
- **Identification of Surplus/Deficit Space Needs** were considered through the Master Site and Facilities Plan target year of 2025.



J. Paul and Eleanor McIntosh College of Nursing

ASSUMPTIONS

One *Vision 2020* strategic goal is to increase student access, with the objective of increasing enrollments 10%, or 320 FTE, by 2020. As an enrollment projection for 2025 was difficult to calculate due to uncertainty in occupational projections and other external factors, the 320 FTE was also used for the ten-year planning projection.

To accomplish this goal, Northeast will need to not only enroll more students but retain them at higher rates. At a current retention rate of 69%, Northeast will have to enroll 420 new FTE students to meet the goal of 320 FTE by 2020. In addition, with the population decline expected in Northeast's service region, they will need to take into consideration enrollment goals that will allow for an increase of 720 FTE between retention and recruitment efforts over the next five years, which should allow the College to reach the 10% enrollment increase by 2020.

MASTER PLAN ENROLLMENT AND STAFFING ASSUMPTIONS

FALL SEMESTER	FALL 2015 ACTUAL		FALL 2025 ESTIMATES		NUMERICAL CHANGE	
	NORFOLK	SOUTH SIOUX CITY	NORFOLK	SOUTH SIOUX CITY	NORFOLK	SOUTH SIOUX CITY
On-Campus Headcount *	2,807	436	3,172	487	365	51
On-Campus FTE *	2,120	255	2,410	285	290	30
FTE / Headcount Ratio	.76	.58	.76	.58	—	—
Full Time Faculty	113	7	134	9	21	2
Full Time Admin and Staff	221	12	236	14	15	2
Total Full-Time Employees	334	19	370	23	36	4
Adjunct Faculty	122	44	145	54	23	10
Part-Time Staff	33	3	35	4	2	1
Total Part-Time Employees	155	47	180	58	25	11
Ratio: Student FTE/Faculty	19	36	18	32	—	—
Ratio: PT/FT Faculty	1.08	6.29	1.08	6.00	—	—

Term FTE = Credit Hours/15 Per CCPE Definitions

** Fall 2015 On-Campus Headcount and FTE, as reported in the CCPE 2015 Supplemental Data Report*

Based on FTE projections, the consultant projected growth in staff positions by employee classification for the ten-year planning period based on responses from work sessions with college participants. The staffing analysis is delineated in the preceding table. This projection was validated at a high level by Northeast administration based on strategic goals. The only purpose of projecting the number of staff for this study is to quantify the number of offices and office service space needed to accommodate potential new employees for use in future facility programming efforts.

Adjunct faculty were projected to increase by 18.9% over the planning period, as some growth in FTE will be from online courses. A 22.7% growth rate was calculated for the South Sioux City Extended Campus.

Additionally, *Vision 2020* goals have been a considered influence on space needs and have been a key factor in the development of space considerations. The relationship of goals to space needs are summarized below:

INCREASE STUDENT SUCCESS:

Engagement, retention, completion, under-prepared students

- Space needs address study and collaborative areas, maker-spaces and active learning classrooms to maximize academic achievement and success as well as to provide private faculty office spaces for increased engagement

INCREASE STUDENT ACCESS:

Increase enrollment, alternative delivery

- Increase Interactive Television classrooms, space for potential new programs

PROVIDE A GLOBALLY COMPETITIVE WORKFORCE:

Centers for Excellence, 21st Century Jobs

- Center for enterprise training, program Centers of Excellence, new programs

DEVELOP AND MAXIMIZE RESOURCES:

Integrated planning, maximize financial resources

- Future efficiencies in tighter space guidelines, space needs from vision and goals

RECOMMENDATIONS

The space needs have been arranged into “Space Categories” for the purpose of comparison. Cumulatively, space needs for the target year of 2025 show deficits in 14 of 15 space categories at the Norfolk campus and 9 of 11 categories at the

South Sioux City Extended Campus. The tables provided below help to understand how enrollment, new programs, changes in academic delivery methodology and student expectations will influence space needs in the next decade:

CAMPUS-WIDE SPACE NEEDS ANALYSIS • TARGET YEAR NORTHEAST COMMUNITY COLLEGE • NORFOLK

SPACE CATEGORY	PLAN HORIZON			
	EXISTING ASF	GUIDELINE ASF	SURPLUS/ (DEFICIT)	% SURPLUS/ (DEFICIT)
Academic Space				
Classroom and Service	41,918	40,739	1,179	3%
Teaching Laboratories and Service	174,855	184,266	(9,411)	(5%)
Open Laboratories and Service	15,874	22,895	(7,021)	(44%)
Offices and Service	61,555	63,675	(2,120)	(3%)
Student Success Laboratories	1,678	3,240	(1,562)	(93%)
<i>Academic Space Subtotal</i>	<i>295,880</i>	<i>314,815</i>	<i>(18,935)</i>	<i>(6%)</i>
Academic Support Space				
Social / Study and Service	2,804	3,910	(1,106)	(39%)
Library / Learning Commons	7,214	11,066	(3,852)	(53%)
PE, Recreation and Athletics	23,727	34,460	(10,733)	(45%)
Meeting and Service	16,967	17,882	(915)	(5%)
Assembly and Exhibit	4,806	8,564	(3,758)	(78%)
Central Computer	3,538	4,338	(800)	(23%)
Physical Plant	32,240	34,901	(2,661)	(8%)
Supplemental Instruction	2,012	3,013	(1,001)	(50%)
<i>Academic Support Space Subtotal</i>	<i>93,308</i>	<i>118,134</i>	<i>(24,826)</i>	<i>(27%)</i>
Other Space				
Student Center	35,663	38,064	(2,401)	(7%)
Health Care Facilities	240	482	(242)	(101%)
<i>Other Space Subtotal</i>	<i>35,903</i>	<i>38,546</i>	<i>(2,643)</i>	<i>(7%)</i>
Campus Total	425,091	471,495	(46,404)	(11%)
<i>Residence Life</i>	<i>62,531</i>			
<i>Inactive / Conversion Space</i>	<i>45,413</i>			
<i>UNMC Nursing Space</i>	<i>8,416</i>			
<i>Ag Arena / Farm</i>	<i>110,935</i>			
<i>Outside Organizations</i>	<i>12,067</i>			

ASF = Assignable Square Feet

CAMPUS-WIDE SPACE NEEDS ANALYSIS • TARGET YEAR

NORTHEAST COMMUNITY COLLEGE • SOUTH SIOUX CITY EXTENDED CAMPUS

SPACE CATEGORY	EXISTING ASF	FALL 2015 <i>Student FTE = 255 Staff Headcount = 19</i>			PLAN HORIZON <i>Student FTE = 285 Staff Headcount = 23</i>		
		GUIDELINE ASF	SURPLUS/ (DEFICIT)	% SURPLUS/ (DEFICIT)	GUIDELINE ASF	SURPLUS/ (DEFICIT)	% SURPLUS/ (DEFICIT)
Academic Space							
Classroom and Service	8,361	6,627	1,734	21%	7,128	1,233	15%
Teaching Laboratories and Service	10,049	8,268	1,781	18%	15,387	(5,338)	(53%)
Open Laboratories and Service	252	765	(513)	(204%)	2,066	(1,814)	(720%)
Offices and Service	6,743	6,018	725	11%	7,743	(1,000)	(15%)
Student Success Laboratories	229	344	(115)	(50%)	385	(156)	(68%)
<i>Academic Space Subtotal</i>	<u>25,643</u>	<u>22,022</u>	<u>3,612</u>	<u>14%</u>	<u>32,709</u>	<u>(7,075)</u>	<u>(28%)</u>
Academic Support Space							
Social / Study and Service	500	600	(100)	(20%)	600	(100)	(20%)
Library / Learning Commons	959	1,354	(395)	(41%)	1,496	(537)	(56%)
Meeting and Service	3,007	3,007	0	0%	3,007	0	0%
Central Computer	156	510	(354)	(227%)	513	(357)	(229%)
Physical Plant	633	1,245	(612)	(97%)	1,590	(957)	(151%)
<i>Academic Support Space Subtotal</i>	<u>5,255</u>	<u>6,716</u>	<u>(1,461)</u>	<u>(28%)</u>	<u>7,206</u>	<u>(1,951)</u>	<u>(37%)</u>
Other Space							
Student Center	610	1,275	(665)	(109%)	1,425	(815)	(134%)
<i>Other Space Subtotal</i>	<u>610</u>	<u>1,275</u>	<u>(665)</u>	<u>(109%)</u>	<u>1,425</u>	<u>(815)</u>	<u>(134%)</u>
Campus Total	31,499	30,013	1,486	5%	41,340	(9,841)	(31%)
<i>Outside Organizations</i>	254						

ASF = Assignable Square Feet

Other new space needs have been identified through a question and answer process including survey, interview and table top planning sessions. Ten key questions were identified by Paulien and Associates which became “Key Decision” responses by the College. Those decisions were realized through a collaborative process including input from the College administrative team, the faculty, students, and consulting team and have influenced space recommendations identified later in this chapter. As indicated earlier in this section, many of the influencing needs have been quantitative and those projections become linear. Other considerations are qualitative and rely on the anticipated needs of the region, academic delivery methods and anticipated student expectation. Compelling demands which have influenced the need for additional space include:

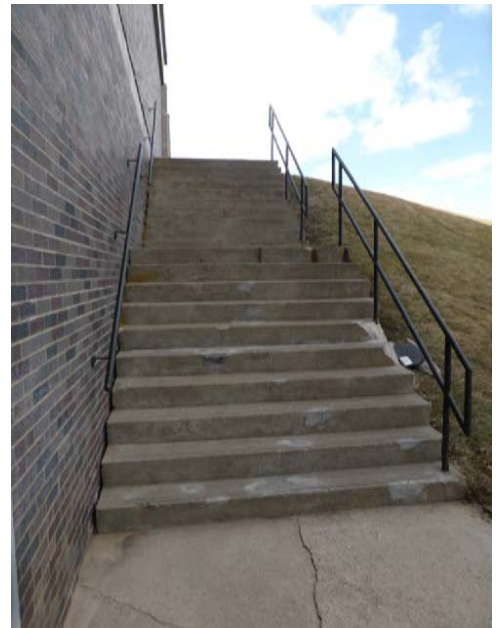
- Enrollment Growth
- New Programs
- Advising and Academic Support Needs
- Collaborative Learning and Social Spaces
- Improved Service Center and Library Spaces
- Classroom Needs Based on a Target of 60% Active Learning Space, 20% ITV Space and 20% Traditional Classroom Space
- Provision of Space for Innovation and Maker Spaces
- Improved/Consistent Faculty Office Space
- Adequate Space for Adjunct Faculty
- Athletic, HPER and Student Recreational Activities

BUILDING AND FACILITY CONDITIONS

ANALYSIS AND OBSERVATIONS – NORFOLK CAMPUS

As noted previously in the project goals, the master plan process was to be comprehensive in nature and driven by a rigorous process of investigation, including an understanding of the condition of the existing campus facilities. An approach was developed to produce this information by assessing the building conditions using a process of gathering information on the facilities, through on-site physical inspections and existing plans analysis. At the outset of the process, an interdisciplinary team of architects; structural engineers; landscape architects; mechanical, electrical and civil engineers; and Northeast facilities maintenance staff were assembled. Detailed focus group meetings and interviews with key maintenance staff most familiar with buildings were held to review service and replacement records and to better understand existing systems conditions. The architectural/engineer team then inspected each building and graded the condition of each building system. Based upon these detailed inspections, the planning team along with facilities staff defined the exact needs and priorities required for upgrading the systems of each facility.

At the conclusion of the process, detailed condition assessment summaries for each of the facilities were prepared as well as “Facility Report Cards” which will assist Northeast in developing capital improvement schedules and funding projects. The final document, entitled *Northeast Community College Building Condition Assessment* dated January 2017 (a separate document on file at Northeast), contains a summary discussion of each building site, the exterior building envelope, structural assessment, interior finishes and furnishings, accessibility/building code and life safety issues, and mechanical and electrical building systems.



Top: View of courtyard from Simon Hall.

Bottom: A campus-wide building and site condition analysis revealed key maintenance concerns. Here, stairs leading up to Weller show cracking and subsequent repairs made over time.

RANKING CRITERIA AND MATRIX

To assist in the evaluation of the buildings and their various systems, the design team developed several tools to support them while in the field and during post fieldwork analysis. A building “report card” was designed to allow the team to evaluate each building system and its subcomponents including structural systems, exterior closure, interior construction, conveying systems, mechanical, electrical, accessibility and code compliance. Each system was graded using a 100 point ranking system that related to whether the system was excellent, good, fair or poor. Building ranking criteria and point system utilized the following criteria:

BUILDING RANKING CRITERIA

General Condition	POOR	FAIR	GOOD	EXCELLENT
Required Actions	Removal/Extensive Renovation	Major Renovation	Minor Renovation	Satisfactory
Ranking	0-49	50-69	70-89	90-100

AN ELEMENT IS EVALUATED AS **EXCELLENT** WHEN:

- The element/system is essentially new or recently installed/renovated, intact, structurally sound and performing its intended purpose
- There are very few cosmetic imperfections
- The element needs no repair and only routine maintenance

AN ELEMENT IS EVALUATED AS **GOOD** WHEN:

- The element is intact, structurally sound and performing its intended purpose
- There are few cosmetic imperfections
- The element/system needs minor repair or routine maintenance

AN ELEMENT IS EVALUATED AS **FAIR** WHEN:

- There are early signs of wear, failure or deterioration, though the element/system is generally structurally sound and performing its intended purpose
- There is failure of a subcomponent of the element
- Replacement of up to 35-40% of the element or replacement of a defective subcomponent is required

AN ELEMENT IS EVALUATED AS **POOR** WHEN:

- The element/system is no longer performing its intended purpose
- An element/system is missing or has failed
- Deterioration or damage affect more than 40% of the element and cannot be adjusted or repaired

Each building was graded using this condition and point system. System values are adjusted by building category based upon relative value inherent in building type. Each of the building grades is a summary of system grades. An example of the building report card for Agriculture and Allied Health follows to show the level of detail and methodology of developing the total building score.

Northeast MSFP

Building Condition Report Card-Multilevel Structure

Campus: Norfolk	Building Name:	Agriculture & Allied Health	
Date: 6.13.2016	Area:	GSF	42,290
Prepared by: Mdaily/Dworth		NASF	39,137
	Floors:	Two	
	Date Constructed:	1992, 2001	
	Building Category:	Laboratory	

System	Subsystem			System	
Subsystem	Value	Grade	Score	Value	Score
Structure			91.25	14%	12.78
Foundations	15.0%	85	12.75		
Below-grade Walls	30.0%	90	27.00		
Slab-on-grade	25.0%	90	22.50		
Floor Structure	10.0%	90	9.00		
Roof Structure	20.0%	100	20.00		
Exterior Enclosure			54.50	10%	5.45
Walls	42.0%	57	23.94		
Windows	13.0%	68	8.84		
Doors/ Storefront	12.0%	71	8.52		
Roofing	33.0%	40	13.20		
Interior Construction			77.20	22%	16.98
Partitions	37.0%	75	27.75		
Doors	5.0%	80	4.00		
Fittings/Millwork	3.0%	80	2.40		
Stairs	1.0%	75	0.75		
Wall Finishes	18.0%	75	13.50		
Floor Finishes	18.0%	85	15.30		
Ceiling Finishes	18.0%	75	13.50		
Conveying Systems	100.0%	95	95.00	1%	0.95
Mechanical			64.63	37%	23.91
HVAC	43.0%	61	26.23		
Temperature Controls	12.0%	100	12.00		
Plumbing	40.0%	56	22.40		
Fire Protection	5.0%	80	4.00		
Electrical			32.10	12%	3.85
Lighting & Controls	30.0%	15	4.50		
Service & Distribution	30.0%	42	12.60		
Fire Alarm	20.0%	40	8.00		
IT Systems	20.0%	35	7.00		
Accessibility			73.05	2%	1.46
Parking & Exterior Route	5.0%	95	4.75		
Interior Vertical Accessibility	22.0%	50	11.00		
Doors & Hardware	15.0%	92	13.80		
Restrooms, Lockers & Showers	50.0%	75	37.50		
Special Services	8.0%	75	6.00		
Code Compliance			79.65	2%	1.59
Exiting & Exit Pathway	30.0%	50	15.00		
Vertical Separations	30.0%	93	27.90		
Area Separations	25.0%	93	23.25		
Special Systems	15.0%	90	13.50		
Building Grade					66.98

Sample Report Card for Agriculture and Allied Health Building

RANKING SUMMARY

The following Building Condition Summary matrix contains the final report card scores for all buildings inspected during the master plan process. The matrix is organized from best (or highest scoring) to lowest or the building in the poorest condition. Seven buildings were ranked as “Excellent” condition, five were found to be in “Good” condition, nine were in “Fair” condition, and eight were in “Poor” condition. The following campus site plan illustrates and keys-in the building condition score/ranking by campus location. Please note that the recently dedicated Hawks Point and Path Hall were not inspected as they were opened after the building inspections were completed. The newly acquired Law and Public Safety Training Lab was also not inspected as it was purchased and put into use after the inspections had been completed.

NORTHEAST BUILDING CONDITION SUMMARY

NORFOLK CAMPUS		SCORE
Physical Plant		96.44
Applied Technology		96.28
Kenneth J. Echtenkamp		91.24
J. Paul and Eleanor McIntosh College of Nursing		90.84
College Welcome Center		85.81
Utility Line/Truck Driving		77.64
Lifelong Learning Center		71.00
Chuck M. Pohlman Agriculture Complex		70.95
Agriculture and Allied Health		66.98
Library Resource Center		66.54
Burkhardt Hall		64.09
Simon Hall		62.11
Student Center		60.40
Science		60.26
Diesel		59.89
Robert P. Cox Activities Center		56.59
F. Don Maclay		50.12
Weller		49.96
Surplus Storage		49.16
Arlo E. Wirth		47.72
Apartment B		47.26
Apartment A		46.83
Maintenance		46.63
Building Construction		45.33
Veterinary Clinic/Farm Operations		39.05
EXTENDED CAMPUSES		
O'Neill		97.90
West Point - Donald E. Nielsen		95.14
South Sioux City - College Center		92.20
South Sioux City - Industrial Training		78.38

COLOR KEY

	EXCELLENT		FAIR
	GOOD		POOR

The Northeast Norfolk campus building condition site maps (*Figures 05 and 06*) are interesting and reveal that the buildings that were part of the original or initial phase of construction of Northeast Community College are those with systems in the poorest of conditions. Of course the most recently constructed are in the best condition.

The following is a brief summary of observations and an analysis of the information extracted from the *Building Condition Analysis*. The discussion is organized around building system. Please refer to the final report for a building-by-building summary of the inspection team's observations, each building's report card and detailed analysis and assessment of each building system.

STRUCTURAL ASSESSMENT

The majority of the buildings inspected found that the structural systems were in good to excellent condition. The only exception was the Veterinary Clinic where a deteriorated concrete frame was observed. The buildings on campus have a variety of structural systems utilizing concrete foundations, steel and concrete frames and steel framed roofing systems. Little to any differential settlement was observed. The original buildings from the initial phase of campus construction were found to be in good condition. They were constructed utilizing very good materials, including concrete and steel frames with concrete masonry wall systems that are durable and performed well for over 46 years. These buildings are structurally sound and are well suited for retrofits, remodeling and adapting to new configurations.

EXTERIOR ASSESSMENT

The exteriors of the buildings on the Northeast Norfolk campus generally have walls composed of brick masonry with stone or concrete masonry detailing. A standard dark iron-spot blend of brick is used somewhat uniformly throughout campus. Many of the newer structures have pre-finished metal panel details while several of the newer larger technical facilities have used pre-engineered steel clad buildings with some brick masonry accents. The brick masonry buildings have generally performed well and are in good condition. Deferred maintenance includes tuck-pointing, some masonry expansion joint failure, soffit system failures and hail damage to metal panels.

Low slope roofing systems are composed of ballasted or fully adhered ethylene propylene diene terpolymer (EPDM) membranes while sloped roofs are typically pre-finished steel. The roofing systems are in a variety of conditions with extensive recent hail damage observed. The College is in the process of reroofing and repairing much of this damage as of this writing. Many of the older EPDM roofs are at the



The roof of the Student Center was recently damaged by hail causing significant depressions in roof membrane.

end of the useful lives and are in poor condition.

The window systems found on the campus buildings are typically aluminum or steel frames, both thermally and non-thermally rated. Glazing systems typically use thermal glazing but there are some instances in older industrial buildings where glazing is still single pane glass. Conditions range from excellent on newer structures to poor where sealant failure and rusting frames were observed.

Exterior doors utilized on campus range from hollow metal and standard aluminum storefront systems with steel and aluminum overhead doors. The conditions observed, much like the window systems, range from excellent on the newer facilities to poor on the older buildings. Damage or deterioration noted included rusted frames and doors, especially at the originally constructed buildings such as Weller, to damage caused by vehicles at heavily used buildings such as Diesel.

INTERIOR ASSESSMENT

Building interior partition and wall systems are typical of institutional buildings predominately concrete masonry units (CMU) or gypsum board covered metal studs. These systems are typically in good condition. Some locations were observed where paint is worn or deteriorated and some isolated areas of cracks in the CMU. A few buildings contain natural finish honed CMU walls which are very durable and take very low maintenance.

Carpeted floors are widely used in public, academic and office areas. Older sheet goods are typically worn where newer facilities and newly renovated buildings are fitted with carpet tile systems that are in good condition. Some specialty floors were noted including seamless epoxy based systems where some delamination and deterioration was found. Traditional quarry tiles and newer monolithic tiles are also found in lobbies and kitchen areas. These systems are long lived and generally performing well with a few isolated cracks associated with slab shrinkage or localized settlement. Vinyl tile and sheet vinyl goods are widely utilized in class labs where heavy

usage and dirty conditions are experienced. Older tiles have become brittle and are in fair condition. Specialty floors such as the maple competition floor at Cox are old and thin, having been refinished many times, and in need of replacement. Concrete floors both sealed and unsealed are found in many of the technical labs and are in a variety of conditions. Many of the older slabs are in good condition while some of the newer floors have experienced advanced cracking and shrinkage.

There is widespread use of acoustical ceiling tiles (ACT) both 2' x 2' and 2' x 4' throughout the campus. Some concealed spline tile systems found in the Library Resource Center that restrict access and are in poor condition. The ACT systems are in varying conditions depending upon location and interior environment. Other ceiling systems and finishes include simple saver insulation panels at metal buildings, sprayed on ceiling coatings and exposed wood decking at the Library Resource Center.

Standard interior door and frame systems on campus are painted hollow metal frames and sidelights with solid core doors-both painted and stained wood and painted steel. There are a very few plastic laminate covered doors in some of the original 1970s buildings. Doors and frames were found to be in a variety of conditions again depending upon location and usage. Unprotected wood doors were damaged by movable equipment and furnishings and rust was found at many steel door/frame locations.

MECHANICAL ASSESSMENT

The majority of plumbing systems are original to the buildings, recently remodeled or newly built buildings are the exception. Older piping and building plumbing fixtures have experienced deterioration over the years due to age and the local water quality (high levels of water hardness). Many domestic water heaters have been recently replaced as a result of the water hardness as well. Newer campus buildings are equipped with whole building water softener systems to combat this issue.

Building HVAC systems vary widely throughout

the campus. Approximately eight buildings are provided with heating and cooling from the campus energy loop. The two pipe energy loop consists of chillers, cooling towers, boilers and pumps located in the basement of Weller. The energy loop is at capacity and no new buildings are connected to it. Other building systems range from furnaces to built-up air-handling units with stand-alone boiler/chiller systems. In general, equipment has been well maintained resulting in service life to be extended beyond industry expectations. Select systems are well beyond their useful life and in some instances serve new space functions. Replacement of these systems is recommended.

A majority of the building HVAC systems are controlled by a campus wide direct digital control system. Several of the buildings have an antiquated version of the system and are in need of replacement. A few buildings are controlled by stand-alone controls with no campus wide connection.

Older buildings on campus are not protected by fire suppression systems. All newer buildings are protected.

ELECTRICAL ASSESSMENT

Building electrical systems are in good repair considering the age of the systems. However, much of the building distribution equipment has reached the end of its useful life. Factors influencing system life cycle concerns include: circuit breakers operating improperly, outdated technology such as fuses, or manufacturers who no longer support equipment of older vintages.

Lighting within buildings is primarily fluorescent, with a mix of T12 and T8 technologies. All T12 lighting should be replaced as soon as possible due to the Federal Government mandating the end of manufacture of lamps and ballasts. T8 technology is serviceable but should be replaced as part of major renovations with LED to provide increased

efficiency and better lighting quality.

Fire alarm systems throughout campus are in good repair, however many systems of older technology exist. It is recommended that older conventional zone type panels are replaced.

CODE/ADA ASSESSMENT

As part of the condition assessment building codes and accessibility issues were also investigated. In general, buildings were constructed according to accessibility and code requirements that were applicable at the time they were designed and constructed. Based on the age of some of the facilities, the current standards for accessible design as well as current building codes did not exist or have been amended and therefore the buildings are not compliant based on today's current codes and standards. It is required that the design team incorporate ADA guidelines as well as the current building codes in all designs as well as investigate improving all ADA accessibility and building code deficiencies in existing facilities where renovations/additions are being considered.

The typical items identified include non-compliant wire glass used in doors/frames in corridors or rated walls. Storage rooms were sometimes not fire rated and fire separations between classrooms and shop/labs were deficient. The lack of vertical fire separations between floors were also noted as well as some non-code compliant stairs on both the interior and exterior. ADA assessment revealed that there are some areas on campus where there are issues with exterior accessible routes from parking to buildings, problems with non-ADA compliant stairs and exterior routes or ramps were too steep. At building interiors, accessibility problems noted typically dealt with lack of an elevator, non-compliant door hardware, improper side clearance at door openings, vestibule depth, grab bar size and location and a few isolated program areas that were not in accessible locations.

RECOMMENDATIONS

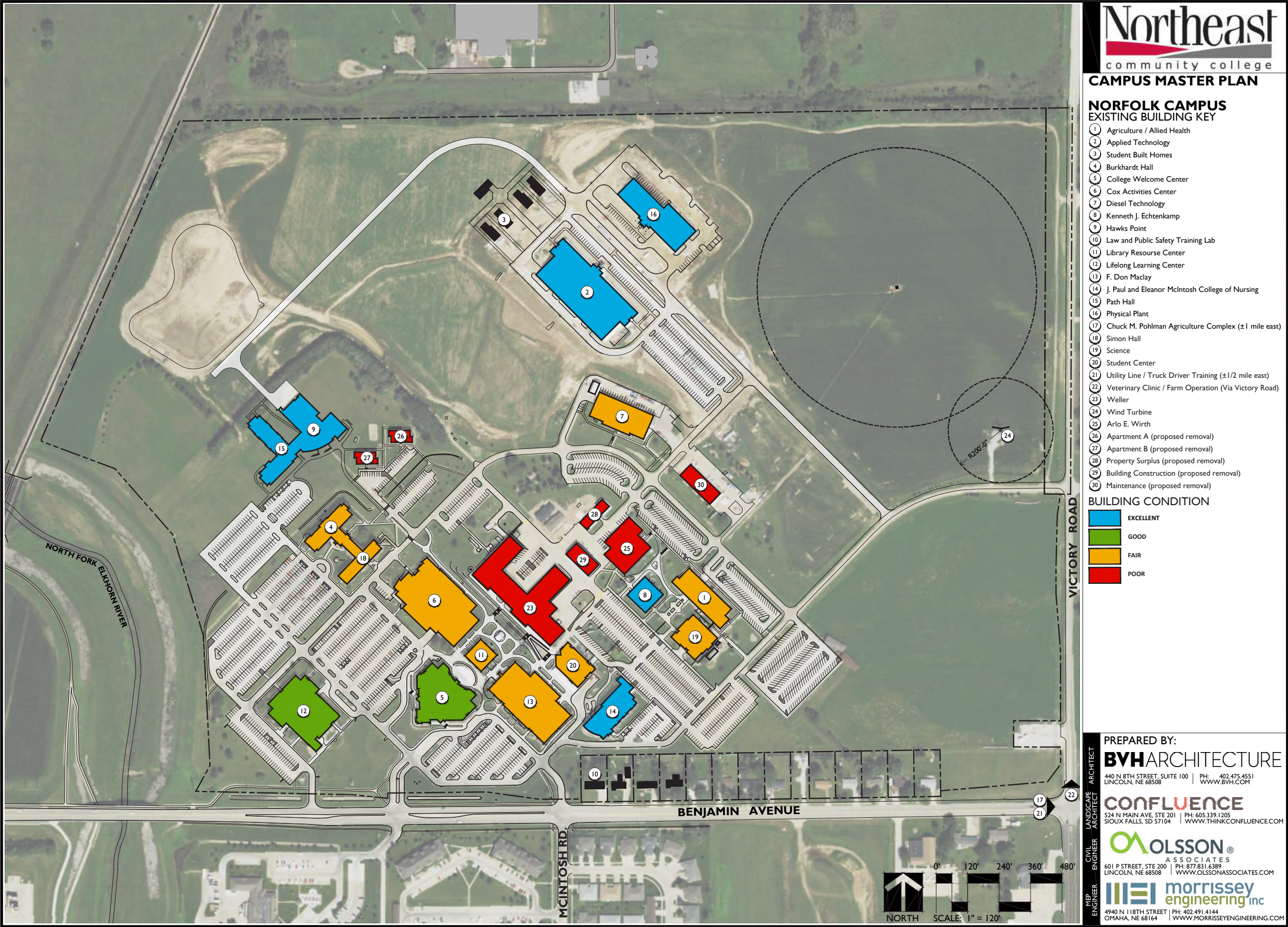
As Northeast looks to implement and correct deferred maintenance to their Norfolk facilities, those buildings and systems ranked in the poor category should be addressed in a timely fashion. Also as major building renovations and space reallocations are planned and designed the Building Condition Analysis report can be a guide to help incorporate those deferred maintenance items or code deficiencies into the overall program plan. Those buildings where renovation cost exceeds building value should be removed and replaced with facilities that can accommodate their current functions.

Specific recommendations to consider in the planning horizon include the following for the Norfolk campus:

- Remove Maintenance and Surplus buildings as soon as replacement structures are constructed.
- Remove Building Construction as soon as its temporary usage is completed.
- Remove Apartment A and B as soon as replacement housing is constructed to replace current bed count.
- Remove metal building additions to Arlo E. Wirth as these are in poor condition and do not lend themselves to cost effective rehab or reconfiguration.
- Remove Vet Clinic/Farm Operations entirely when Ag and Water Center for Excellence is constructed.



Extensive structural deterioration has led to the recommendation to eventually remove the Veterinarian and Farm Operations buildings.



NORFOLK CAMPUS BUILDING CONDITION SITE MAP / FIGURE 05



NORFOLK AWCE BUILDING CONDITION SITE MAP / FIGURE 06

LAND USE AND FUNCTION

ANALYSIS AND OBSERVATIONS — NORFOLK CAMPUS

The present organization of land use at Northeast follows a logical pattern with several clear functional zones established. The 208-acre main campus generally consists of five zones—Academic, Administration, Financial and Student Services, Housing, Student Services, and Campus Support (*Figure 07*). The core of campus is generally surrounded by agricultural land to the north and east that is currently utilized for academic instruction.

The Academic functions of the campus are generally grouped within the campus core. Over the years, facilities in the campus core have changed programmatic use, but have largely remained academic in nature. These buildings have been developed with parking positioned nearby, providing easy access for commuter students. Even though these buildings are generally in close proximity to each other, separation by parking lots, campus drives and topography has resulted in a feeling of separation between some buildings or groups of buildings on campus.

The Administrative/Financial/Student Services zone on campus consists of the College Welcome Center, Maclay, the Student Center, Hawks Point and one of the newly purchased residences on Benjamin Avenue. The Welcome Center building is highly visible from Benjamin Avenue, is accessed by an identifiable main entrance to campus, and connects well to the academic core.

The Student Housing zone in the northwest is an area of recent campus expansion. Consideration for the continued development of housing in this area of campus should be evaluated including expansion of parking, outdoor recreation space, and pedestrian trails providing linkages to the remainder of campus. Developing outdoor amenities adjacent to campus housing will help to reinforce a sense of community on campus.

The Student Services zone at Northeast was a point of significant discussion during the master plan process. Various student services on campus are currently provided in the Student Center, the College Welcome Center, and in the newly constructed Hawks Point. The master plan team worked to find an appropriate distribution of student services on campus that effectively serves both the commuter students as well as the growing population of on-campus student residents.

Campus support services for the Norfolk campus is primarily located in the newly constructed Physical Plant building located in the northern portion of campus. The location of the building serves the main campus well. Being adjacent to the new loop road allows quick access throughout campus. Open land adjacent to the Physical Plant provides space for future expansion.

The addition of a sixth functional zone, Recreation/Athletics, is anticipated in the near future in order to meet the needs of the growing student population.

ANALYSIS AND OBSERVATIONS — EXTENDED CAMPUS LOCATIONS

SOUTH SIOUX CITY EXTENDED CAMPUS

The two buildings at the South Sioux City Extended Campus are split across the east and west end of the approximately 57-acre campus, separated by agriculture land in between. The original master plan for the site calls for the development of a series of academic buildings surrounding a pedestrian core, with parking and vehicular circulation at the perimeter. This master plan process verified Northeast's desire to continue with that track for development for the South Sioux City Extended Campus as facility expansion needs arise.

O'NEILL EXTENDED CAMPUS

The O'Neill Extended Campus consists of a single building located on 6.9 acres of property located along Highway 20 on the southeast edge of O'Neill. This site has the potential for additional building development at the northwest corner of the site.

WEST POINT EXTENDED CAMPUS

The West Point Extended Campus is located adjacent to the Donald E. Nielsen Community Center in downtown West Point, Nebraska.

LAND USE RECOMMENDATIONS

The following recommendations are general in nature. As projects are being planned and programmed, these recommendations should be incorporated to consistently improve the image and character of each campus.

- Related or complementary academic disciplines should be located near each other, wherever possible. *(Norfolk, South Sioux City)*
- Facility expansion needs should be addressed with construction of new buildings generally located within the existing related functional zone, or with the renovation of an existing building within those zones. *(Norfolk, South Sioux City)*
- The expansion of facilities or parking into agricultural land should be carefully evaluated, with consideration given to the replacement of agricultural production land as required to support the academic programs. *(Norfolk, South Sioux City)*
- The value of open space on campus should be considered as it relates to campus environment and identity. *(Norfolk, South Sioux City)*



Top: College Center, South Sioux City Extended Campus.

Center: O'Neill Extended Campus.

Bottom: West Point Extended Campus.



NORFOLK CAMPUS BUILDING USE SITE MAP / FIGURE 07

CIRCULATION AND PARKING

ANALYSIS AND OBSERVATIONS — NORFOLK CAMPUS

VEHICULAR CIRCULATION

There are three vehicular connections along the southern edge of campus at Benjamin Avenue (*Figure 08*). The western-most entry provides access to the Lifelong Learning Center parking lot. This entrance is a right-in-right-out only condition on to Benjamin Avenue, with limited space for stacking of exiting vehicles. The middle (main) entrance provides a direct connection to the loop road and the College Welcome Center parking lot. This entry is divided by a landscaped median that makes it identifiable as a main entry to campus. The third entrance from Benjamin Avenue aligns with McIntosh Road to the south, but also has limited stacking for exiting vehicles, causing congestion in traffic during peak usage times. The spacing of the connections from Benjamin Avenue does not maximize the flow of traffic in and out of campus. Discussions with the City of Norfolk indicate that any future access on to Benjamin Avenue would likely need to align with the extension of West Meadow Ridge Road in the developing neighborhood to the south.

One vehicular connection exists from Victory Road at the eastern edge of campus. This entrance is currently sufficient, but as the plans for the new Technology Applied Research Park are developed, an improved connection across Victory Road may be desired.

The campus is generally organized with vehicular circulation and parking at the perimeter, with a central core of campus facilities. A new loop road has been constructed at the perimeter of campus. This road currently terminates on the western edge of campus, but plans are being developed to complete the loop and extend it to the main campus entrance at Benjamin Avenue.

PARKING

Northeast Norfolk Campus currently has 2,605 parking spaces on campus. While campus parking is generally adequate, available parking near the academic zone does see a higher demand during peak instructional times.

PARKING LOT LOCATION	TOTAL STALLS	REGULAR STALLS	ADA STALLS	MOTOR CYCLE	RESERVED STALLS
Ag and Allied Health - East Lot	87	87	0	0	0
Ag and Allied Health - East Lot Expansion	92	92	0	0	0
Ag and Allied Health - North Lot	78	76	2	0	0
Apartments A & B - East Lots	70	68	2	0	0
Applied Technology - North & East Lots	187	181	6	0	0
Arlo E. Wirth - North Lot	94	90	4	0	0
Burkhardt Hall / Simon Hall - South Lot	169	163	6	0	0
Chuck M. Pohlman Agriculture Complex - South Lot	104	100	4	0	0
Diesel Technology - South Lot	85	85	0	0	0
F. Don Maclay - South Lot	185	170	9	4	2
Hawks Point / Path Hall - South Lots	187	181	6	0	0
J. Paul & Eleanor McIntosh College of Nursing - East Lot	44	40	4	0	0
Kenneth J. Echtenkamp - South Lot	161	158	3	0	0
Lifelong Learning Center - South Lot	97	93	4	0	0
Lifelong Learning Center - West Lot	188	188	0	0	0
Maintenance (Old)	17	17	0	0	0
Physical Plant	47	45	2	0	0
Robert P. Cox Activities Center - South Lot	289	281	8	0	0
Science - East Lot	104	104	0	0	0
Science - South Lot	110	101	9	0	0
Utility Line / Truck Driving	130	126	4	0	0
Weller - West Lot	52	51	1	0	0
Weller - Deadline Lot	28	27	1	0	0
Totals	2,605	2,526	75	4	2

SERVICE AND DELIVERIES

Service vehicles are required at various buildings throughout campus. The Physical Plant building is the main hub for campus service vehicles and they utilize the new loop road to access other areas of campus.

Deliveries are required at various building throughout campus. Loading docks are located at the Physical Plant, Diesel Technology, Surplus Storage, Cox Activities Center, and Hawks Point. Deliveries are also common at the Student Center. Trucks using the loading dock at Diesel Technology currently block the roadway connecting the new loop road to the parking lots in this area. Plans are being developed to relocate this loading dock to an improved location.

ACCESSIBILITY

The campus must be accessible to all individuals who visit. Planning for accessibility must consider such factors as topography, human demands for convenience and accommodations, mandated requirements, and environmental impact.

PEDESTRIAN CIRCULATION

Historically, pedestrian walkways on campus have been built primarily as a functional utility, connecting parking to buildings. This served Northeast well for many years, but now with the campus expanded to 30 buildings, conditions exist where vehicular traffic and parking conflicts with pedestrians traveling between buildings. The master plan addresses these conflict areas, in several cases suggesting the relocation of parking, elimination of drives, and the conversion of these spaces to pedestrian-oriented plazas or green space.

The addition of the pedestrian walkway and Paradise Courtyard in 2013 provided a tremendous example of the value of quality outdoor space. Spaces such as this on a campus encourage pedestrian activity and student interaction, and provide the College with a unique identity, demonstrating the College's value for quality and a well-rounded student experience.



Typical outdoor wayfinding signage found on the Norfolk Main Campus.

BICYCLE AND TRAIL CONNECTIONS

The City of Norfolk's bike trail system runs on top of the levy of the adjacent North Fork of the Elkhorn River. Access to this trail provides a valuable recreation amenity to the student residents of the campus. Expanding the walks and trails on campus to better accommodate bike traffic and other recreational use will enhance the quality of this experience for all members of the campus community.

WAYFINDING

Northeast Community College has recently implemented a comprehensive network of campus-wide wayfinding signage including monument signs, building signage, vehicular and pedestrian signage, and campus directories and maps. This network of signage is effective in clearly directing visitors throughout campus.



Accessible walkways and common areas like the Paradise Courtyard provide attractive and functional solutions to pedestrian traffic.

ANALYSIS AND OBSERVATIONS — EXTENDED CAMPUS LOCATIONS

SOUTH SIOUX CITY EXTENDED CAMPUS

The South Sioux City Extended Campus has approximately 372 parking stalls on site. The College Center has a convenient access to the nearby city bike trail but the Industrial Training building is accessible only by vehicle. The two buildings currently lack a pedestrian linkage to each other.

O'NEILL EXTENDED CAMPUS

The O'Neill Extended Campus has 92 parking stalls on site. The campus is accessed by vehicle via Highway 20.

WEST POINT EXTENDED CAMPUS

The West Point Extended Campus has approximately 183 parking stalls on site, shared with the adjacent Community Center. The campus's downtown location makes it a walkable destination within the City of West Point.

CIRCULATION AND PARKING RECOMMENDATIONS







The following recommendations are general in nature. As projects are being planned and programmed, these recommendations should be incorporated to consistently improve the image and character of each campus.

- Continue to develop high-quality pedestrian corridors linking parking, buildings and other outdoor destinations on campus. *(Norfolk, South Sioux City)*
- Limit vehicular circulation and parking in the campus core to maintenance vehicles and service access. *(Norfolk, South Sioux City)*
- Provide and enhance effective routes for campus access and access to primary building entries. *(Norfolk)*
- Improve bicycle access and circulation on campus and connect to the city's bicycle trail system if possible. *(Norfolk)*
- Avoid the use of steps, where possible, when transitioning grades on campus. *(All Campuses)*
- Locate new parking at the perimeter of the campus core. *(Norfolk, South Sioux City)*
- Where possible, provide parking in locations where it can serve multiple facilities and uses. *(Norfolk, South Sioux City)*
- As the campus expands, the wayfinding network should be expanded or modified to reflect the changing campus. *(Norfolk, South Sioux City)*

NORFOLK CAMPUS
EXISTING BUILDING KEY

- 1 Agriculture / Allied Health
- 2 Applied Technology
- 3 Student Built Homes
- 4 Burkhardt Hall
- 5 College Welcome Center
- 6 Cox Activities Center
- 7 Diesel Technology
- 8 Kenneth J. Echtenkamp
- 9 Hawks Point
- 10 Law and Public Safety Training Lab
- 11 Library Resource Center
- 12 Lifelong Learning Center
- 13 F. Don Maclay
- 14 J. Paul and Eleanor McIntosh College of Nursing
- 15 Path Hall
- 16 Physical Plant
- 17 Chuck M. Pohlman Agriculture Complex (± 1 mile east)
- 18 Simon Hall
- 19 Science
- 20 Student Center
- 21 Utility Line / Truck Driver Training (± 1/2 mile east)
- 22 Veterinary Clinic / Farm Operation (Via Victory Road)
- 23 Weller
- 24 Wind Turbine
- 25 Arlo E. Wirth (proposed removal of metal building addt.)
- 26 Apartment A (proposed removal)
- 27 Apartment B (proposed removal)
- 28 Property Surplus (proposed removal)
- 29 Building Construction (proposed removal)
- 30 Maintenance (proposed removal)

CIRCULATION AND PARKING

-
-  MAJOR VEHICULAR TRAFFIC
 MINOR VEHICULAR TRAFFIC
 PEDESTRIAN TRAFFIC
 PEDESTRIAN / VEHICULAR CONFLICT AREAS
 SERVICE AREAS
 PARKING LOTS

PREPARED BY:

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AESTHETICS, OPEN SPACE AND LANDSCAPE

Northeast's image is linked to its physical environment. The buildings, open space and landscape have a significant impact on overall visitor experience, ideally conveying a sense of quality, safety and a commitment to education and student development. The campus can be experienced in multiple ways including traditional vehicles, bicycle, and by walking. Campus views should be considered for all means of access and from multiple sight angles to influence development of the physical environment for positive impact on the visual experience of the end user.



Ample open space, clear lines of sight and beautiful landscaping, as seen outside the Student Center, help bring value to the campus for both students and visitors.

AESTHETICS, OPEN SPACE AND LANDSCAPE — NORFOLK CAMPUS

CAMPUS EDGES AND ENTRIES

The Norfolk Campus (*Figures 09 and 10*) has two street frontages that provide visibility and access: Benjamin Avenue at the south and Victory Road at the east. A portion of the frontage along Benjamin Avenue is obscured by a row of private residential properties and an electrical substation. The College has acquired four residences along this frontage that provide an opportunity to evaluate options for improving campus visibility and vehicular circulation and connections at this location.

OPEN SPACE

Open space exists in various scales and functions throughout campus. The landscaped open space along the pedestrian walkway in the core of campus provides a significant enhancement to the visitor experience. The well-maintained lawns and agriculture land at the edge of campus convey a sense of quality and commitment to education to the passing traffic. With the development of additional residence halls on campus, it will be important to develop open space near these buildings that support outdoor activities and recreation and foster a complete sense of a community experience.

TOPOGRAPHY

Topography has had a considerable impact on the development of campus and has helped shape its current aesthetic. This elevation change creates interesting views and vantage points of campus from both the perimeter and from within. The topography also separates the campus into multiple levels of circulation. These conditions have been strongly considered in the evaluation of the campus and are reflected in the solutions suggested in the final master plan.

LANDSCAPE

The landscape on campus generally consists of turf grass lawns, tree groupings located in the open spaces, and higher intensity of landscape treatments appropriately occurring at campus entries, building entries, and along the high-use pedestrian corridors. These high intensity landscapes consist of a diverse mix of shrubs, perennials, and ornamental grasses. They provide a dynamic aesthetic component to the campus that evolves with the changing seasons.

PUBLIC ART

Outdoor public art occurs primarily along the pedestrian corridors on the interior of campus. Public art, when appropriately selected and placed, enhances the campus aesthetic and visitor experience.

UTILITY INFLUENCES

Overhead power lines and existing storm drainage corridors have had a visible influence on the overall campus aesthetic. The projects proposed in the master plan should be coordinated with infrastructure improvements to reduce the physical and visual impact of utilities on campus. Also, consideration for the removal and relocation of power transmission lines should be planned.

AESTHETICS, OPEN SPACE AND LANDSCAPE — EXTENDED CAMPUS LOCATIONS

SOUTH SIOUX CITY EXTENDED CAMPUS

The College Center site of the South Sioux City Extended Campus demonstrates an alternative approach to storm water management. Infiltration basins, vegetated with native plantings, collect runoff from the campus parking lots and slow the release of storm water into the adjacent natural drainage way. This naturalized landscape aesthetic is continued around the building in a more formalized arrangement of native grasses, perennials, and boulder outcroppings mimicking natural formations.

The addition of a shade element(s), either canopy trees or structure, to the patio at the back of the College Center will make this space more inviting for use.

O'NEILL EXTENDED CAMPUS

The O'Neill Extended Campus has been developed with parking, setbacks, and landscape consistent with the neighboring businesses along the corridor. The landscape plantings are focused near the building and at the monument sign in an effort to present well to the passing traffic.

WEST POINT EXTENDED CAMPUS

The West Point Extended Campus building and parking is located tight to the intersection of North Mill Street and West Washington Street with limited landscape buffer. There is a sizable open lawn behind the facility and the City's Neligh Park is across the road to the west.

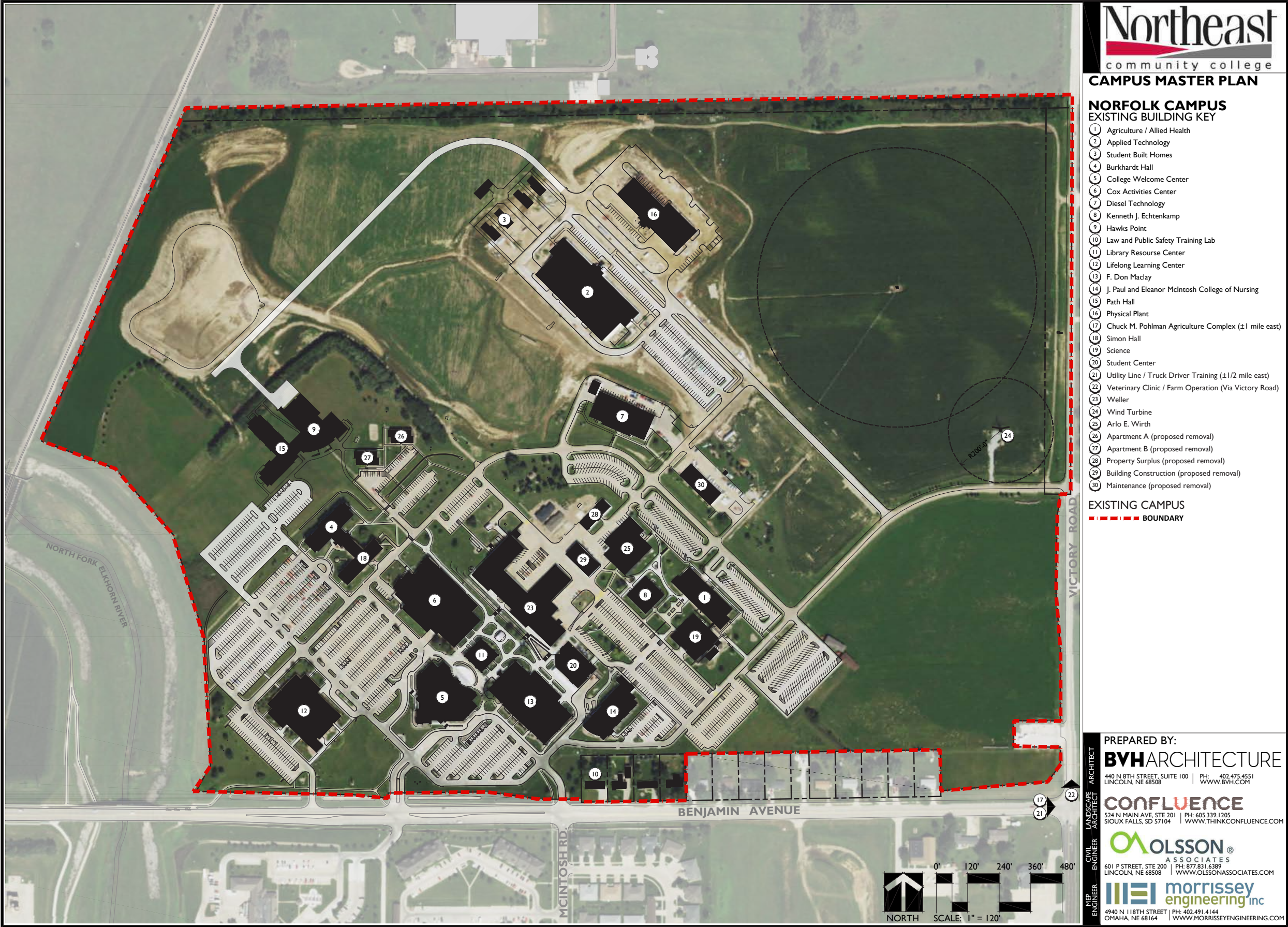
AESTHETICS, OPEN SPACE AND LANDSCAPE RECOMMENDATIONS

The following recommendations are applicable for each campus location and are general in nature. As projects are being planned and programmed, these recommendations should be incorporated to consistently improve the image and character of each campus.

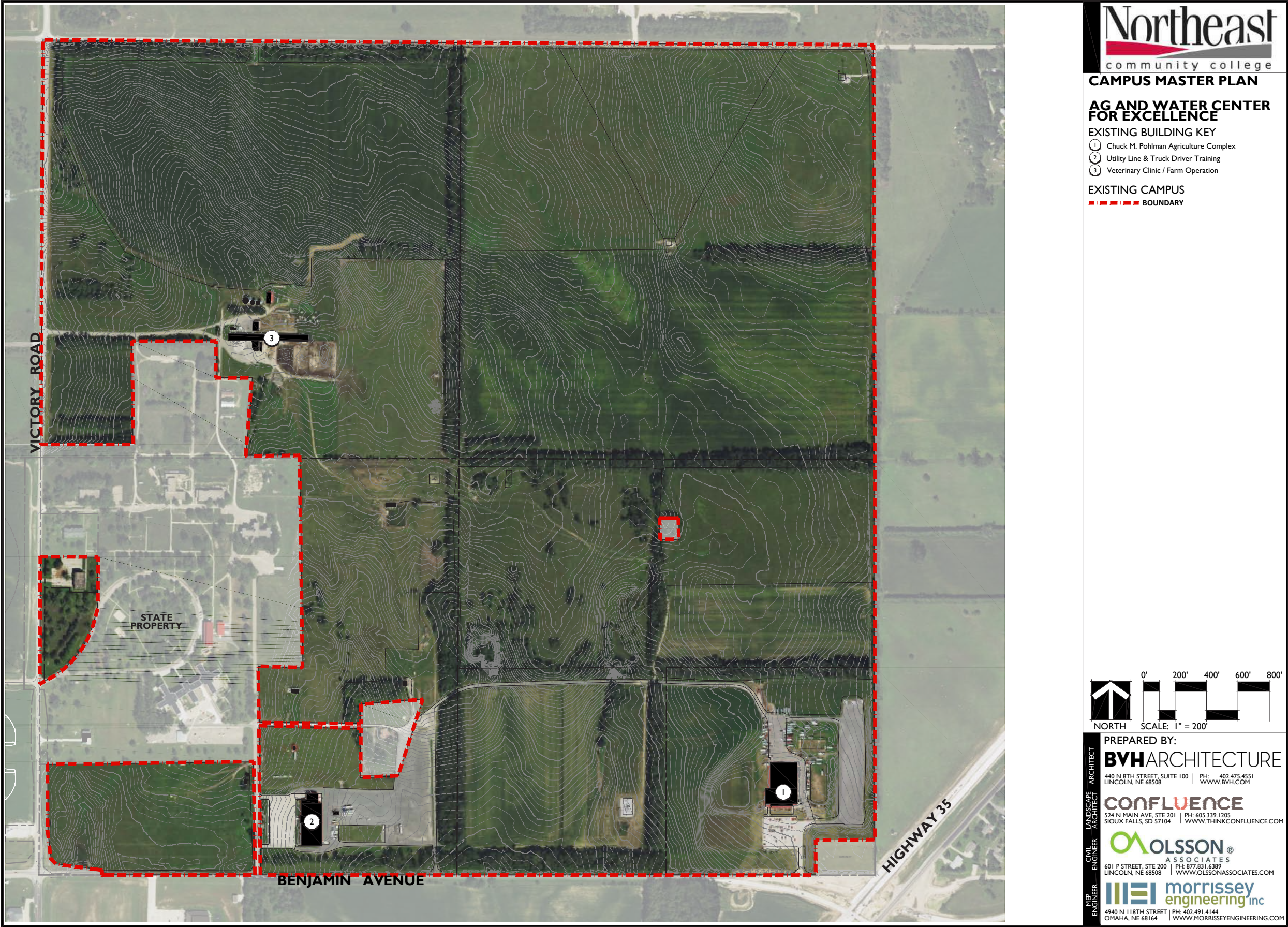
- Continue the development of high quality outdoor spaces that support both curricular and extracurricular activities.
- Maintain cohesiveness of building materials, landscape treatments and site furnishings.
- Develop built and planted landscapes that are maintainable and lasting.
- Invest in iconic campus features that enhance the identity of Northeast.
- Expand tree plantings to the campus boulevards and parking lots.
- Locate plantings to serve a specific function or aesthetic purpose such as defining open spaces, highlighting entrances, limiting or directing views, or buffering of elements to improve the quality of pedestrian open space.
- Screen service areas, storage yards, and trash containers from surrounding views, ideally with masonry walls in lieu of vegetation.



The metal sculpture outside the F. Don Maclay building is indicative of public art on campus.



NORFOLK CAMPUS EXISTING BOUNDARY SITE MAP / FIGURE 09



NORFOLK AWCE CAMPUS EXISTING BOUNDARY SITE MAP / FIGURE 10

UTILITIES / INFRASTRUCTURE

The analysis and recommendations regarding utilities (*Figure 11*) are based on site evaluation observations and information provided by the College.

ANALYSIS AND OBSERVATIONS - NORFOLK CAMPUS

ELECTRICAL DISTRIBUTION

The medium voltage electrical distribution system throughout campus is owned by the College. The main loop serves most of campus, and a newer loop has been established to feed Applied Technology and Physical Plant. Older parts of the loop are 100 Amp direct bury aluminum conductors, which are at capacity. New portions of the loop are 200 Amp aluminum conductors in PVC conduit, which provides protection from damage. The old direct bury portions of the loop should be replaced whenever possible during construction projects. All new loop work is done per Nebraska Public Power District standards. The College also receives a minimal amount of power from the demonstration wind turbine located on the main campus.

FIBER

A separate study, titled *Technology Infrastructure Master Plan*, details necessary improvements to the campus fiber system.

SITE LIGHTING

Site lighting throughout main parts of campus was upgraded during the shade structure and pedestrian walkway project. Areas with older pedestrian lighting, the square top hat style, should be upgraded to match the new campus standard whenever possible during construction projects. All new lighting should be LED.

CHILLED WATER AND HEATING HOT WATER

The main Norfolk campus has a two pipe energy loop system providing heating/cooling for approximately eight buildings: Weller, Student Center, F. Don Maclay, Robert P. Cox Activities Center (partially), Burkhardt Hall, Simon Hall, Apartment A (coupled to water source heat pumps), and Apartment B (coupled to water source heat pumps). The energy loop has an approximate capacity of 350 tons cooling and 6,400 MBH heating. The primary equipment (primary chiller, back-up chiller, cooling tower, boiler, pumps, etc.) is located in the basement of Weller. The energy loop can only provide heating or cooling to the campus and is manually cycled through seasonal

changeovers in the spring and fall. The inability of the energy loop to provide simultaneous cooling and heating causes thermal comfort issues for occupants of several buildings during unseasonable weather conditions. The energy loop does not have any spare capacity and new campus buildings are no longer connected to it.

DOMESTIC WATER

The City of Norfolk supplies the Norfolk main campus with domestic water. The City has a 12-inch water main that is located in the western part of campus. The campus distribution system taps into this water main in various locations. This water main connects to the City distribution system along Benjamin Avenue. There is also a 20-inch City water main located along the eastern portion of campus along Victory Road.

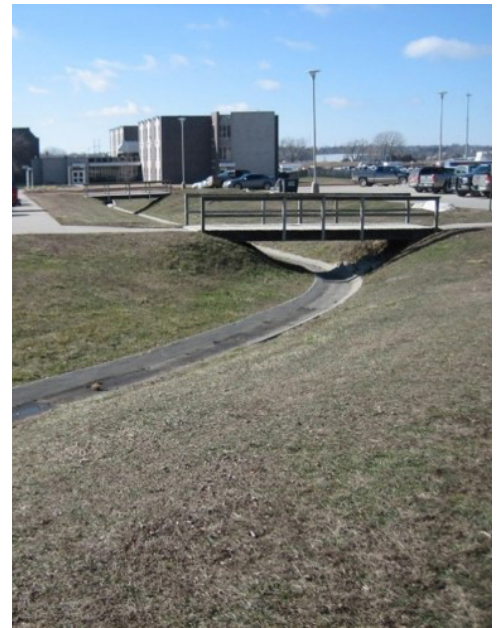
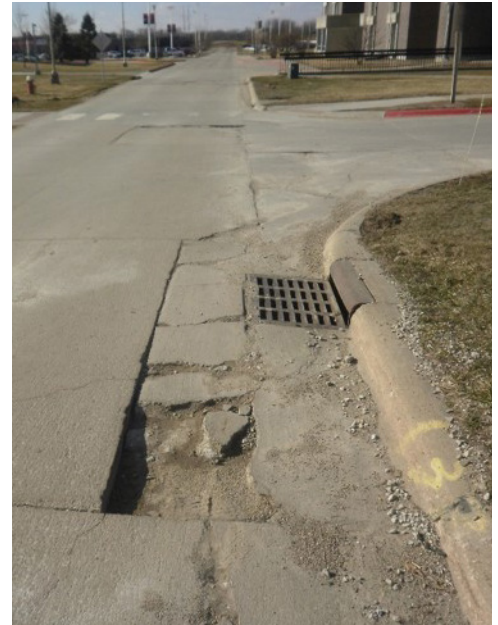
There is a need for more looping of water mains to create redundancy throughout the system. There is also a need to improve water pressure in the northern portion of campus. A water model of the existing distribution system should be completed to determine potential needs for looping or booster pumps to provide sufficient pressure to undeveloped areas in the northern portion of campus.

Utility Line/Truck Driving and Chuck M. Pohlman Agriculture Complex are supplied with domestic water from a City of Norfolk 12-inch water main along Benjamin Avenue. This water main was installed by Northeast when these buildings were constructed.

STORM WATER MANAGEMENT

A master drainage analysis, entitled *Master Drainage Plan Analysis, Northeast Community College*, was completed by Olsson Associates on March 12, 2013 for the western portion of the Norfolk main campus. The analysis reviewed the existing conditions of the entire campus, the impacts of future development, and provided recommendations for improvement. More detail is included in the report itself. One recommendation from the report included the need for storm water detention. A detention cell was recently constructed to collect and manage runoff from the northern portion of campus. There is still one drainage area that needs to be connected to this detention cell.

Much of the existing loop road is a rural pavement section that doesn't include curbs and includes ditches to convey storm water runoff. The new loop road is an urban pavement section that includes curbs to convey storm water runoff to inlets and storm sewer infrastructure. Future loop road extensions and improvements should



Top: Excessive damage to roadways at main storm runoff points have been observed on the Norfolk Main Campus.

Bottom: A typical storm water channel, with footbridge to accommodate pedestrian traffic.

utilize an urban section and storm sewer infrastructure improvements to convey storm water runoff.

The City of Norfolk has a Municipal Separate Storm Sewer System (MS4) that has specific requirements related to storm water management. The City has a storm water management plan and ordinances that must be followed for all future development. These requirements continue to change and evolve. A recent addition involves post construction storm water management which requires best management practices and storm water treatment facilities to prevent or reduce the discharge of pollutants after construction is complete.

SANITARY SEWER

The Norfolk main campus sanitary sewer collection system is connected to the City of Norfolk system. The City of Norfolk has an existing 12-inch sanitary sewer main located adjacent to a 12-inch water main in the western part of campus. The campus collection system connects to this existing sewer main in various locations.

The sanitary sewer system is in need of additional manholes and cleanouts to provide access to enhance maintenance capabilities. This should be reviewed as improvements are completed in areas to add this capability at the same time.

Utility Line/Truck Driving connects to an existing 12-inch sewer. The State of Nebraska owns this sewer which runs south across Benjamin Avenue and connects into the collection system in the City of Norfolk residential development to the south. The City agreed to maintain that section of sewer even though the State owns it.

Chuck M. Pohlman Agriculture Complex connects to an existing 8-inch City sewer main near the intersection of Benjamin Avenue and Highway 35. A pump station will be required for additional buildings that may be developed as part of the Ag and Water Center for Excellence Plan.

NATURAL GAS

The main Norfolk campus is served by a master natural gas service (one billing meter) with an underground piping distribution system to all buildings. Some newer buildings are individually metered to allow the College to track individual building consumption. The current natural gas system is adequate for the existing and future building on campus.

GEOTHERMAL HEATING/COOLING

The Applied Technology building currently has a small geothermal system for instruction purposes only. It connects to unitary equipment in a large lab space. It does not provide any comfort cooling/heating to the building.

ANALYSIS AND OBSERVATIONS – EXTENDED CAMPUS LOCATIONS

SOUTH SIOUX CITY EXTENDED CAMPUS

The City of South Sioux City supplies the South Sioux City Extended Campus with domestic water. Existing water mains along Golf Road and College Way provide sufficient opportunity to supply domestic water to additional buildings that may be constructed in the future. Sanitary sewer is also connected to the City collection system. The College Center connects to the City system near the front entrance to the campus. Industrial Training building connects to a 10-inch gravity sewer that was extended to the building. This sanitary sewer can serve future development near the Industrial Training building. Development near the College Center will require a sanitary sewer extension.

The South Sioux City Extended Campus has a simple storm water management system with limited storm sewer infrastructure. The downspouts of the College Center are connected to an underdrain system that conveys storm water underground and away from the building. The downspouts at Industrial Training currently outlet at the ground surface and storm water flows across the sidewalk. The parking lots surface drain to the outside edges and flumes convey the storm water into engineered swales. The drain piping of the engineered swales connects to storm sewer piping and is conveyed to an adjacent ditch. The City of South Sioux City is a MS4.

O'NEILL EXTENDED CAMPUS

The City of O'Neill supplies the O'Neill Extended Campus with domestic water. An 8-inch water main connects to the existing City water main located along the highway that fronts the building. This 8-inch water main can be extended to the back portion of campus to serve future development on this extended campus. Sanitary sewer is also connected to the City collection system. An 8-inch gravity sewer is located along the western side of campus and connects to the City system on the south side of campus. This sanitary sewer can serve future development on campus.

The O'Neill Extended Campus has a simple storm water management system with limited storm sewer infrastructure. The downspouts are connected to an underdrain system that takes the storm water underground and away from the building. The parking lots surface drain to the outside edges and storm water is conveyed to ditches and swales by means of flumes.

UTILITY/INFRASTRUCTURE RECOMMENDATIONS

NORFOLK CAMPUS

- Extend sanitary to the east side of Victory Road to serve needs of future Technology Applied Research Park.
- Make a water connection to City water main along Victory Road to boost pressure.
- Install storm sewer piping in areas of campus with ditch drainage.
- Connect downspouts to underground storm sewer infrastructure to Simon Hall, Burkhardt Hall, Agriculture and Allied Health, Science, and Arlo E. Wirth.

SOUTH SIOUX CITY EXTENDED CAMPUS

- Redirect downspout drainage away from sidewalks at Industrial Training on the South Sioux City Extended Campus.

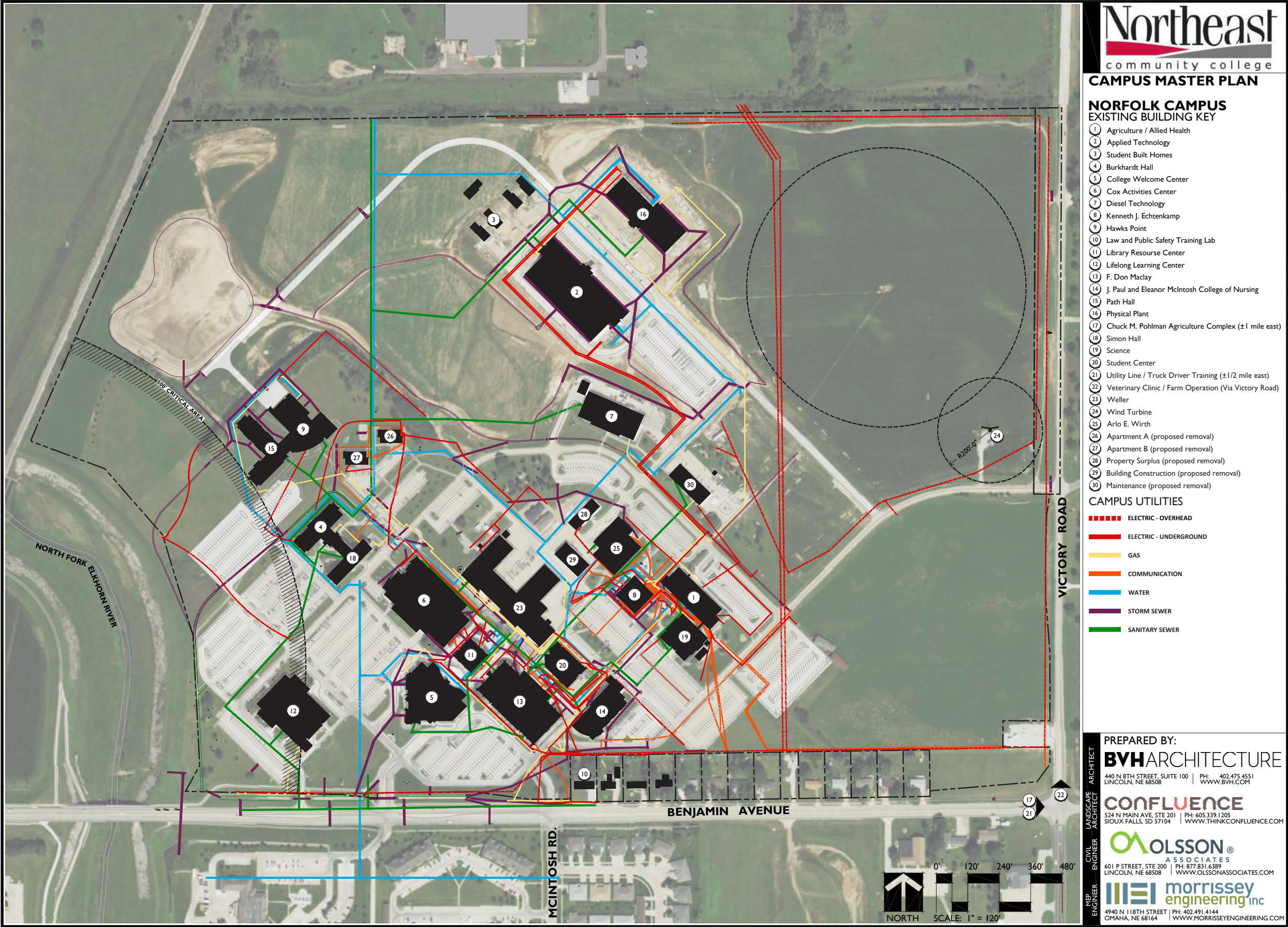
O'NEILL EXTENDED CAMPUS

- No recommended improvements at this time for the O'Neill Extended Campus.





Biology students at the Norfolk Main Campus study indigenous insect species and the effects they can have on the environment.



NORFOLK CAMPUS UTILITIES SITE MAP / FIGURE 11

ENVIRONMENTAL / SUSTAINABILITY

ANALYSIS AND OBSERVATIONS

The *Master Site and Facilities Plan* views sustainability as a holistic endeavor. A whole-systems approach should be taken which focuses on the interaction between systems rather than the individual strategy or part. Thinking in terms of relationships, connectedness and context in the creation of thoughtful, human-centered, high performance projects, future planning consideration should be given to energy, water, ecology, health/wellness, and operations/maintenance.

By implementing and showcasing best sustainable practices, Northeast can assume a valuable educational, economical, and leadership role in the regional community. This starts at the administrative level: facilities, maintenance, custodial, purchasing, strategic planning and policies. It involves setting design standards and policies for things like energy usage, design, established energy efficiency standards and measuring results, exploring use of alternative energy sources, encouraging reuse and recycling of materials, managing hazardous materials, building reuse and repurposing, purchasing local sourcing and more. Many of these practices are already being developed, such as the building design standards in place at Northeast, and some have been integrated into the academic curriculum of the institution. By exposing faculty, staff, students, parents, and the entire community to the importance of sustainability practices, the College's impact extends beyond the campus and the present generation.

RECOMMENDATIONS

Northeast should consider developing a campus-wide Sustainability Plan which can address energy, water, ecology, health/wellness, and operations/maintenance.

The plan would assist staff and administration with decisions regarding the management of resources, selection of materials, allocation of funding and purchase of supplies. It would also include a component for educating the student body regarding sustainability. Finally, a Sustainability Plan can provide students with the vocabulary and knowledge for civic discourse and continuing education beyond the classroom.

GOALS AND PRIORITIES

Building upon many of the energy saving recommendations contained in the *Guidelines for Facility Design*, developed in parallel to this master plan, Northeast should identify which focus areas outside of new facility design will have the greatest impact on campus and set goals in those areas. Each year additional goals can be set to broaden the areas of focus, including:

- Increasing energy independence
- Reducing carbon impact
- Improving air quality and reducing pollution
- Increasing reuse/recycling of materials
- Enhancing public health, fitness, and nutrition
- Reducing fuel consumption for transportation
- Enhancing parks and open space
- Reducing water use and increasing water quality
- Promoting building reuse and repurposing



The Chemistry program offers students hands-on experience with data-driven research.



Northeast's Precision Agriculture program gives students a deeper understanding of the relationship between agriculture and our natural resources.

VISION 2020 GOALS:

1. Increase Student Success
2. Increase Student Access
3. Provide a Globally
Competitive Workforce
4. Develop and Maximize
Resources

3. MASTER PLAN CONCEPTS

PREFERRED MASTER PLAN CONCEPTS

The following section contains a summary of the *2017 Master Site and Facilities Plan*, as approved by the MSFP Management Team for the Norfolk campus and the South Sioux City Extended Campus, contains the following areas of emphasis.

NORFOLK CAMPUS

The master plan concept is rooted in four areas of emphasis that include: development of a Ring Road, Perimeter Parking, Pedestrian Connections and Campus Zones:

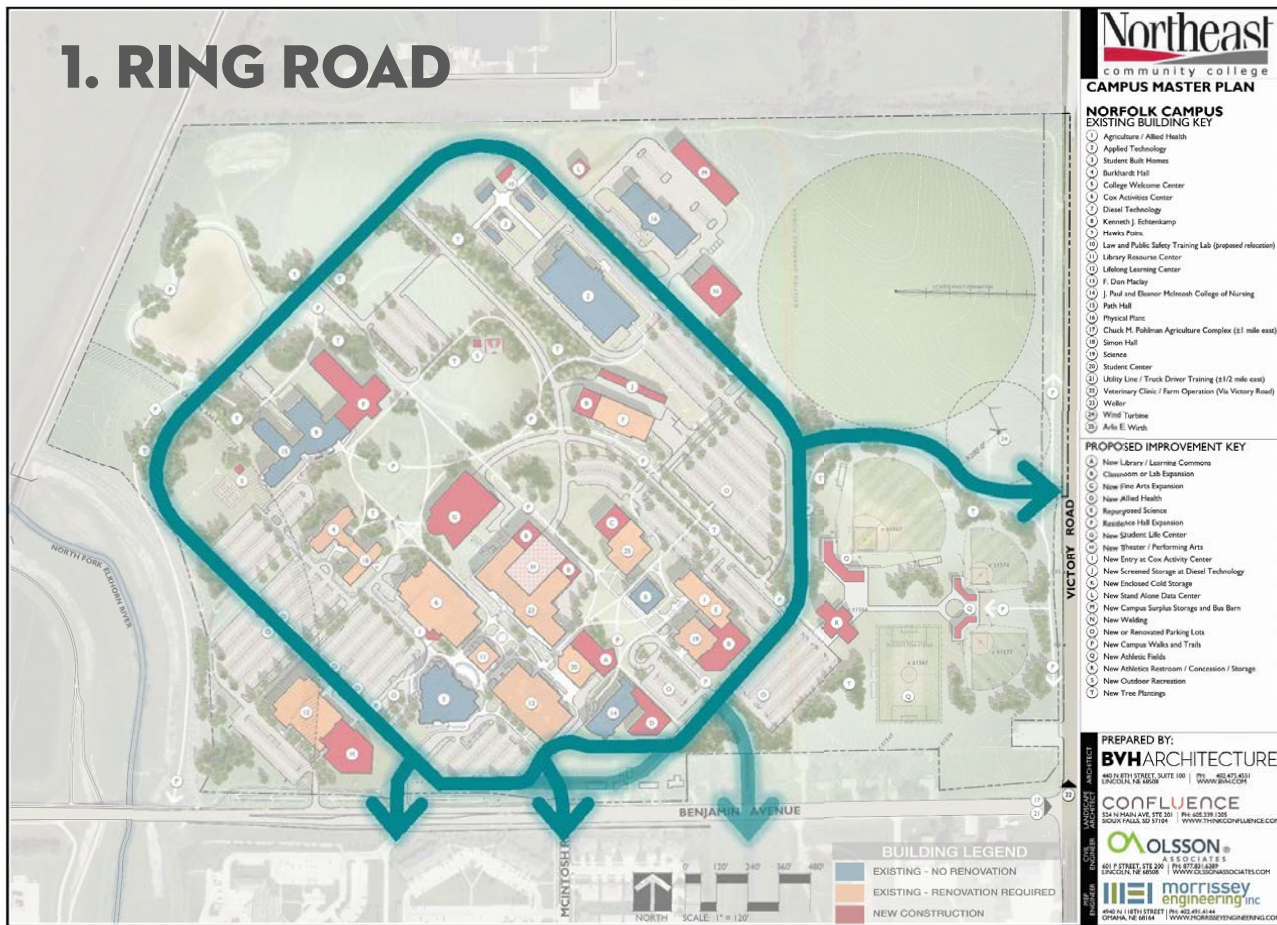
- **Ring Road.** The concept of establishing a “Ring Road” to allow major auto/truck traffic to circumnavigate the campus is not new, but the MSFP recommends that this road network be completed to help alleviate the number of safety issues caused by the current network of pedestrian paths, vehicular traffic and parking.
- **Perimeter Parking.** Once the Ring Road is complete, emphasis can be placed on moving personal vehicle parking to the perimeter of the campus to allow students and visitors to easily park and walk unobstructed to the interior of campus. Parking would be distributed appropriately to support the intensity of usage.
- **Pedestrian Connections.** Once parking lots at the very interior of campus are relocated, a system of pedestrian paths and walks can be expanded to help strengthen and knit together the campus fabric in a very pedestrian friendly manner. New pedestrian oriented malls can be developed and existing corridors can be enhanced in order to help improve the campus character as well as its functionality.
- **Campus Zones.** Aligning with the above concepts, Northeast can start to establish distinct functional zones that group like functions together to enhance the campus experience and support the various activities found on campus. The benefits include efficient flow and movement, enhancing residence life, improved public access, more effective delivery of services, and a better overall campus environment.



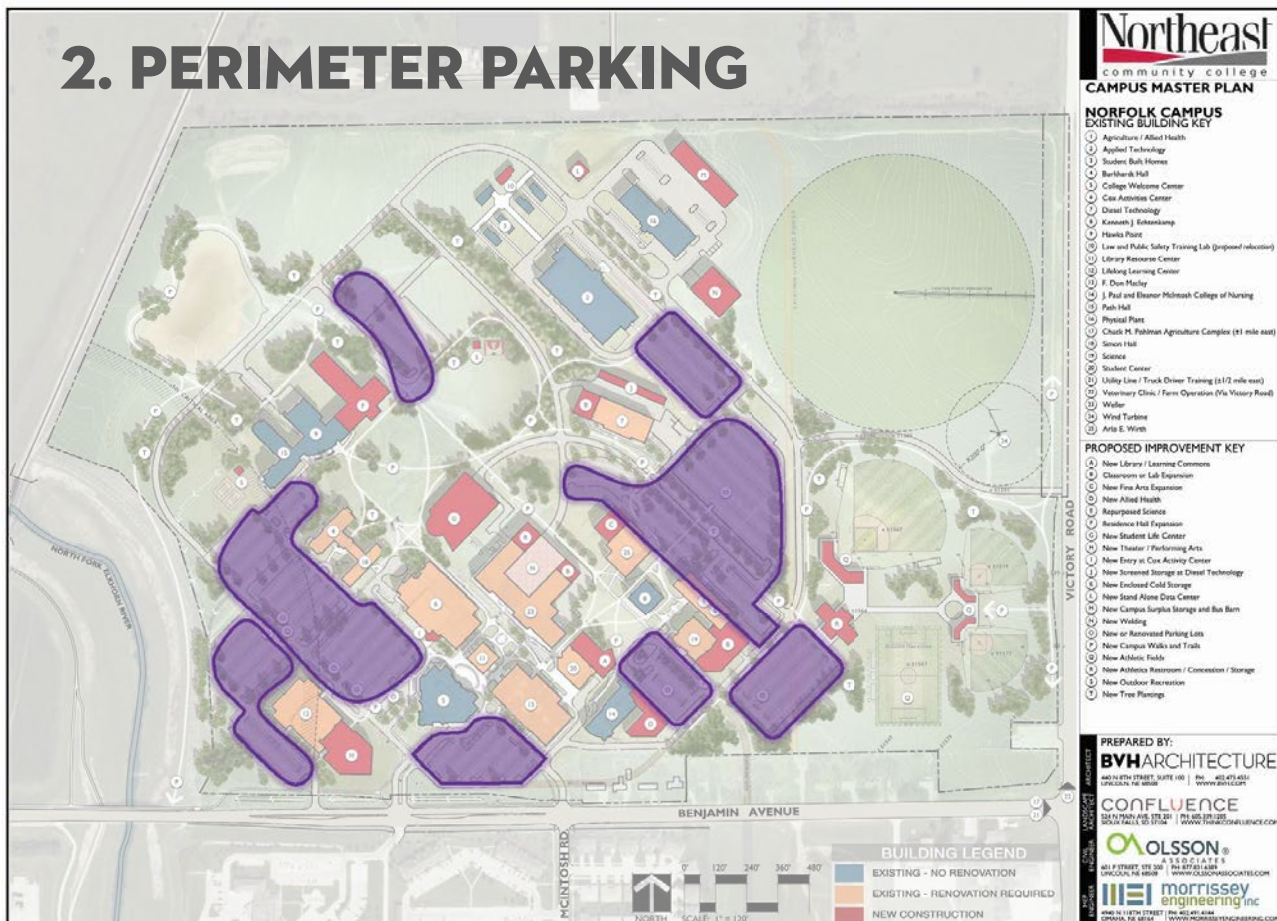
Top: Education Specialist Ed Hoffman (left) and Landscape Architect Lyle Pudwill study campus maps during a master planning workshop in 2016.

Bottom: Students enjoy the campus mall outside the Student Center.

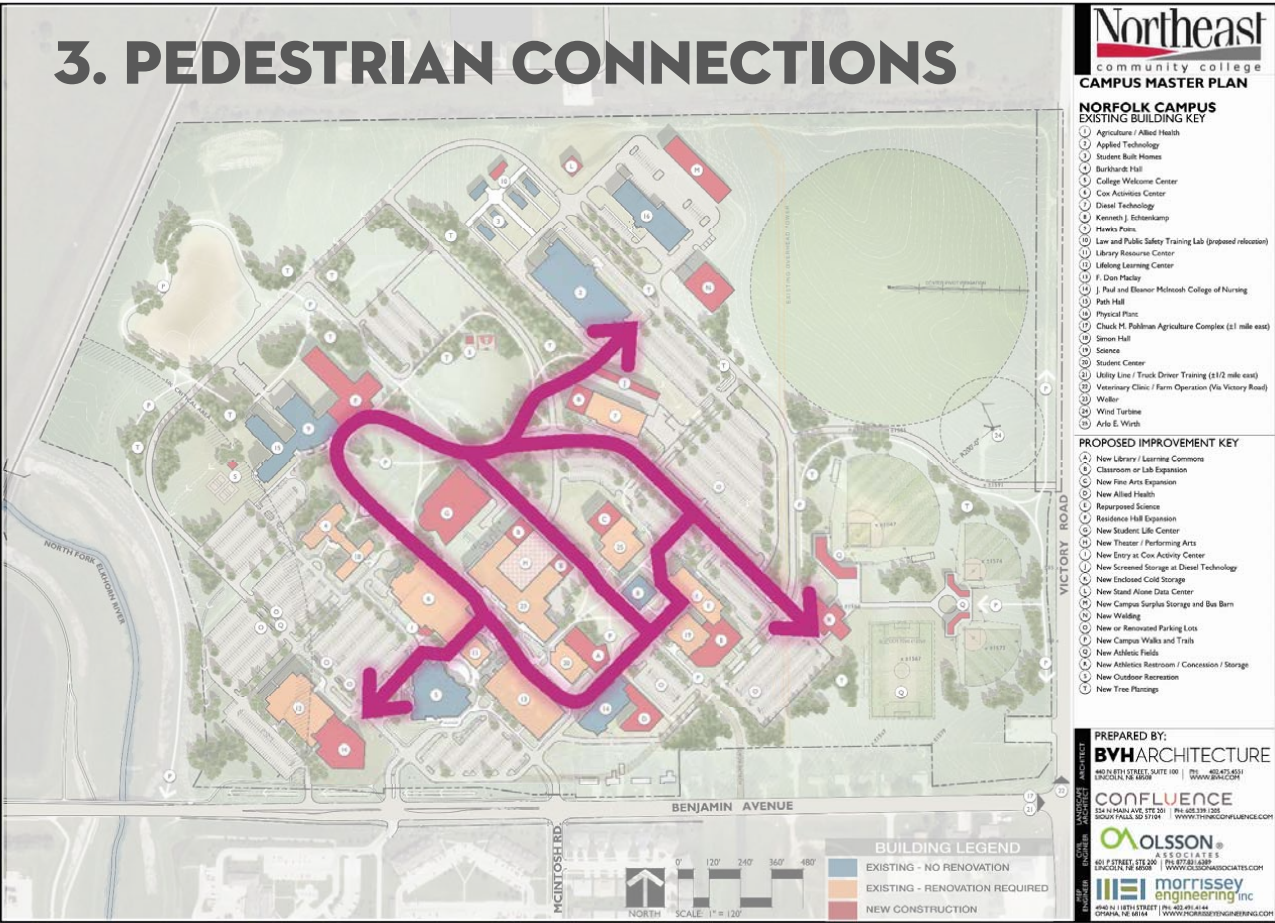
1. RING ROAD



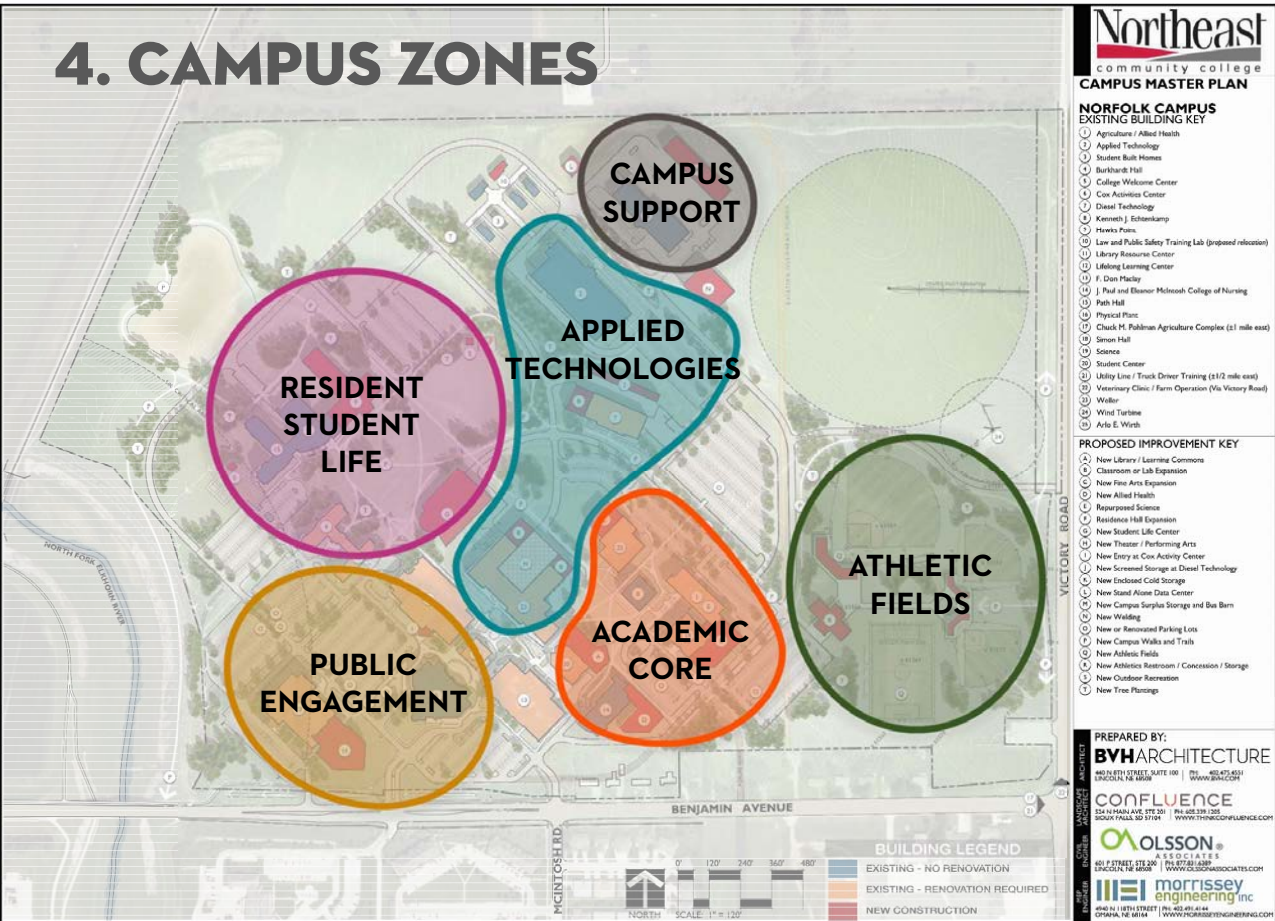
2. PERIMETER PARKING



3. PEDESTRIAN CONNECTIONS



4. CAMPUS ZONES



NORFOLK MSFP CONCEPT

At the south side of the main Norfolk campus (*Figure 12*), the *Master Site and Facilities Plan* suggests improving the public engagement zone with the development of a new Performing Arts addition to the Lifelong Learning Center. This improvement will allow performing arts programs to relocate out of the Cox Activities Center and permit the renovation of the building. This will allow the athletic programs much needed space for growth and will position Cox to function as the competitive athletic facility on campus.

Several recommendations are made for the resident student life zone on the west portion of campus. When occupancy rates and student housing demand allows, the construction of another residence hall wing connected to Hawks Point can occur. This will necessitate the removal of the deficient Apartments A and B along with removal of some interior roads and drainage ditches. The resulting removal also creates a new lawn or campus green focused on student use and recreation. Fronting this new campus lawn, the construction of a new Student Life Center is also recommended. Its location, along the existing central campus walk north of Cox and west of Weller, will help to energize the new outdoor green by fronting and engaging the residence halls. This outcome could result in a 24/7 level of energy and interaction to this zone of campus. The central location of the Student Life Center will also service the non-traditional and commuting students typically occupying the academic and technical core of campus.

The northern portion of the main campus side will see several improvements. The construction of a new campus Data Center, along with the implementation of the *Technology Infrastructure Master Plan* recommendations, will greatly improve the security and reliability of the campus network and data systems. North of the new Physical Plant, the MSFP recommends the construction of a new campus surplus storage and bus barn structure. This will allow the removal of the deteriorated structures at the interior of campus. The resulting land will be utilized for expanded parking and improved roads and circulation. Alongside of the current student-built homes and directly adjacent to Applied Technology, a new residential structure is recommended to be constructed to accommodate the Law and Public Safety Training Lab program and serve as a “smart home” for other technical programs. Also directly adjacent to the Physical Plant and Applied Technology buildings is a new facility for Welding. Located in the applied technologies zone, it is near the infrastructure and parking needed to support its program growth. Diesel Technology is

recommended for expansion and renovations at its current location along with construction of a new screened cover for equipment storage.

There are many envisioned improvements to the technical education and academic core of campus. At the heart of the campus, Weller is in need of extensive renovation. By relocating welding to a new facility, space in Weller is gained that can be repurposed for growth and enhancement for existing automotive programs and program expansion such as high performance automotive. Weller also needs extensive visual screening of the yard where project vehicles are stored, perhaps a covered or roofed screen as well as a wall or visual buffer at grade. This improvement should include enhancement to the adjacent walkway to develop a strong “north” pedestrian connection to the residence life zone to the north and academic core to the east. The Student Center is recommended to be repurposed and expanded in a significant way. With the removal of the interior parking north of the existing Student Center, a new open space/commons can be created for the academic core. The Student Center would be renovated and expanded to a service center model including the Library, Service Center, and Academic and Advising support. With the construction of the Ag and Water Center for Excellence, the Ag and Allied Health building can be renovated and reconfigured. Science is recommended to also be renovated and expanded to accommodate Science, Technology, Engineering and Math (STEM) based programs. The J. Paul and Eleanor McIntosh College of Nursing will also be expanded to accommodate growth in paramedic and health related programs. F. Don Maclay is also extensively renovated and the existing Library is repurposed into a multi-purpose campus conference and heritage center.

The east edge of the main campus will also see much needed improvements to help satisfy the needs identified in the Athletic Program Plan. Located just east of the overhead power line easement to Victory Road, new competition athletic fields are recommended to be constructed that would include a baseball field, two softball fields, a soccer field, and facilities for concessions, restrooms and locker rooms. Associated new and expanded parking will support the new athletic field as well as the academic core.



Top: Future additions are proposed to the campus' student life zone, including a new residence hall to connect to the east of Hawks Point.

Bottom: Several recommended improvements to the academic core of campus would affect buildings like Weller, whose welding program would be relocated to a new facility to make room for an enhanced automotive program.

EASTERN PORTION OF NORFOLK CAMPUS

East of Victory Road the eastern-most part of the Norfolk campus has many recommended improvements. The Utility Line building located in the southwest corner is recommended to have an expansion or separate facility constructed to house Wind and Renewable Energy programs. Northeast anticipates acquisition of land from the State of Nebraska that was part of the former Norfolk Regional Center. This land is currently identified as a location for a future Technology and Applied Research Park—a potential public/private development in conjunction with Northeast. The existing deteriorated Veterinary Clinic and Farm Operations buildings are recommended for removal. This land may be returned to agricultural plots or be a part of the technology park with a small portion

that can be developed into a 3-hole golf course supporting the College's turf management programs. At the southwest corner of the campus the new Ag and Water Center for Excellence will be developed. As part of a previous master plan and programming effort, this center will contain replacement structures for the existing farm operations as well as many programs housed in the Ag and Allied Health building on the main campus. The remainder of the land is devoted to agricultural plots, pasture, niche farming plots and habitat restoration projects.

The following table, provided by the Northeast Agriculture Department, describes anticipated future use of farm land on the eastern portion of the Norfolk campus (*Figure 13*).

TENTATIVE NORTHEAST COMMUNITY COLLEGE FARM PLANNING FOR FUTURE ACRES & USE				
FARM NAME	TOTAL ACRES	IRRIGATED ACRES	NON-IRRIGATED ACRES	CROP POTENTIAL
C3	42.08			Corn/Soybeans
R1	138.35	138.35		Corn/Bean/Forage
R3/R4	76.63	68.03	8.6	Corn/Bean/Forage
R5	7	7		Corn/Bean/Forage
R6	28.06	28.06		Corn/Bean/Forage
P1	78.4	70	8.4	Corn/Bean/Forage
P2	2.15		2.15	Brome-Pasture
P3	20		20	Brome-Pasture
P4	40.3		40.3	Brome-Pasture
P5	40	17	23	Corn/Bean/Forage
P6	9	9		Corn/Bean/Forage
P7	20		20	Native Grass-Pasture
Total Pasture	82.45			
Total Crop	419.52			
Total	501.97			

SOUTH SIOUX CITY EXTENDED CAMPUS

The *Master Site and Facilities Plan* recommends several improvements to the South Sioux City Extended Campus (Figure 14) that respond to the needs resulting from the utilization and space need analysis and identified from institutional input. During the planning horizon, ending in 2025, additional space may be needed due to reorganization of offerings and reduction of leased space. The plan illustrates adding adjacent buildings to accommodate both academic programs as well as technical offerings. The buildings are arranged in a manner that can start to shape the campus around a central court. The internal campus roads can be extended to adjacent streets to support circulation and parking at the perimeter, leaving the interior as a pedestrian zone. Also a soccer field/rec field is shown at the southern edge of campus. When an expanded technical facility is constructed, the programs currently housed in the Industrial Training building can be consolidated and this site will be repurposed for a physical plant operations facility.

O'NEILL AND WEST POINT EXTENDED CAMPUSES

The O'Neill and West Point Extended Campuses were reviewed as part of the *Master Site and Facilities Plan*. West Point offerings are currently provided in a leased facility, which is adequately sized for traditional academic needs. The College and the community have interest in developing a solution to provide for applied technology needs at this location and are currently exploring possible options to satisfy that identified need.

The O'Neill facility was recently completed and is adequately providing for the needs of this extended campus location.

HARTINGTON AND AINSWORTH REGIONAL OFFICES

Regional offices at both Hartington and Ainsworth are located in leased space and as such were not part of the Building Condition Assessment completed for College-owned facilities. Limited class and course offerings at regional office sites also negated the need for comprehensive utilization and space use analysis.



Top: West Point Extended Campus.

Bottom: O'Neill Extended Campus.

NORFOLK CAMPUS
EXISTING BUILDING KEY

- 1 Agriculture / Allied Health
- 2 Applied Technology
- 3 Student Built Homes
- 4 Burkhardt Hall
- 5 College Welcome Center
- 6 Cox Activities Center
- 7 Diesel Technology
- 8 Kenneth J. Echtenjamp
- 9 Hawks Point
- 10 Law and Public Safety Training Lab (*proposed relocation*)
- 11 Library Resource Center
- 12 Lifelong Learning Center
- 13 F. Don MacLay
- 14 J. Paul and Eleanor McIntosh College of Nursing
- 15 Path Hall
- 16 Physical Plant
- 17 Chuck M. Pohlman Agriculture Complex (± 1 mile east)
- 18 Simon Hall
- 19 Science
- 20 Student Center
- 21 Utility Line / Truck Driver Training ($\pm 1/2$ mile east)
- 22 Veterinary Clinic / Farm Operation (Via Victory Road)
- 23 Weller
- 24 Wind Turbine
- 25 Arlo E. Wirth

- (A) New Library / Learning Commons
- (B) Classroom or Lab Expansion
- (C) New Fine Arts Expansion
- (D) New Allied Health
- (E) Repurposed Science
- (F) Residence Hall Expansion
- (G) New Student Life Center
- (H) New Theater / Performing Arts
- (I) New Entry at Cox Activity Center
- (J) New Screened Storage at Diesel Technology
- (K) New Enclosed Cold Storage
- (L) New Stand Alone Data Center
- (M) New Campus Surplus Storage and Bus Barn
- (N) New Welding
- (O) New or Renovated Parking Lots
- (P) New Campus Walks and Trails
- (Q) New Athletic Fields
- (R) New Athletics Restroom / Concession / Storage
- (S) New Outdoor Recreation
- (T) New Tree Plantings

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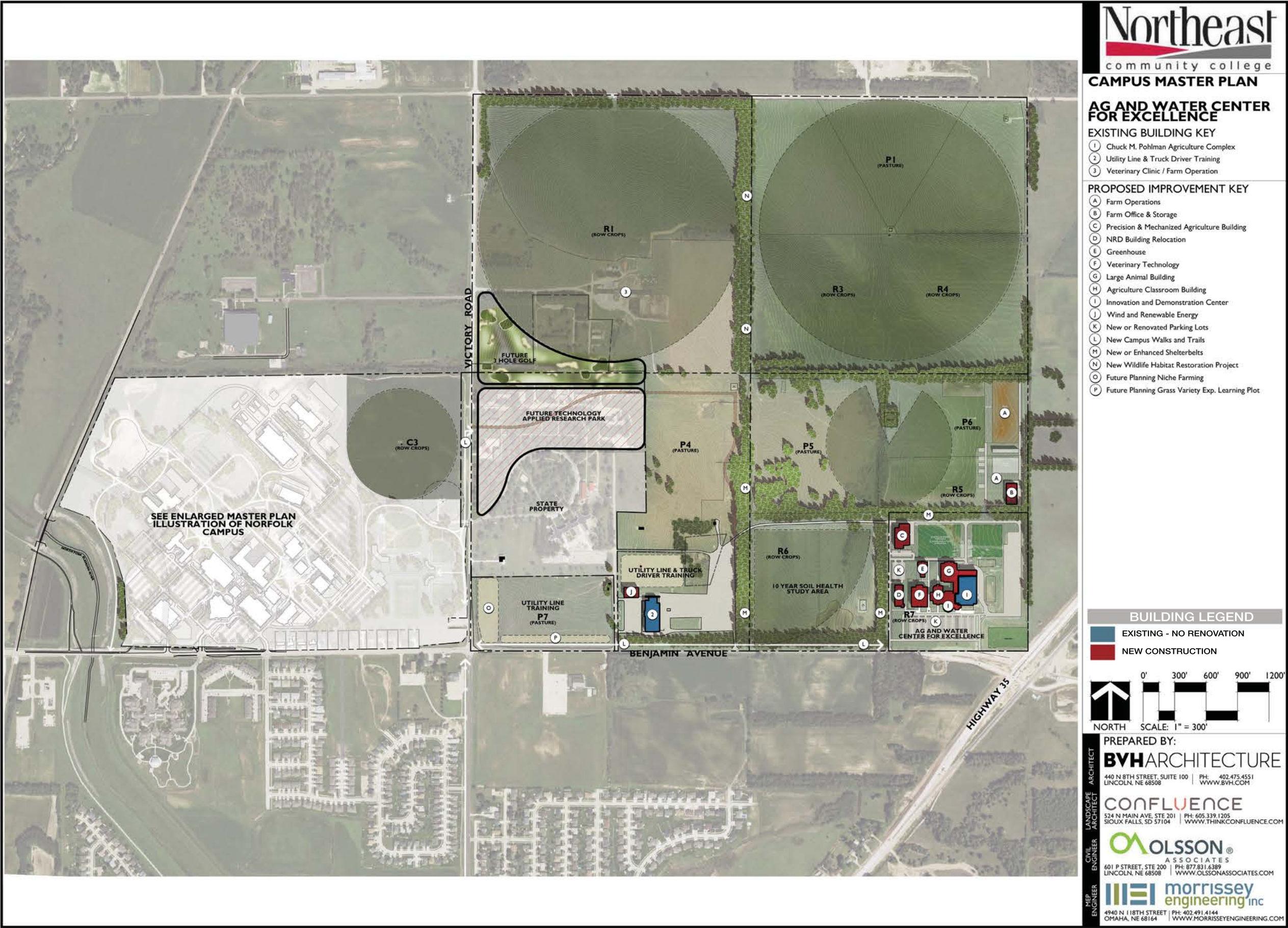
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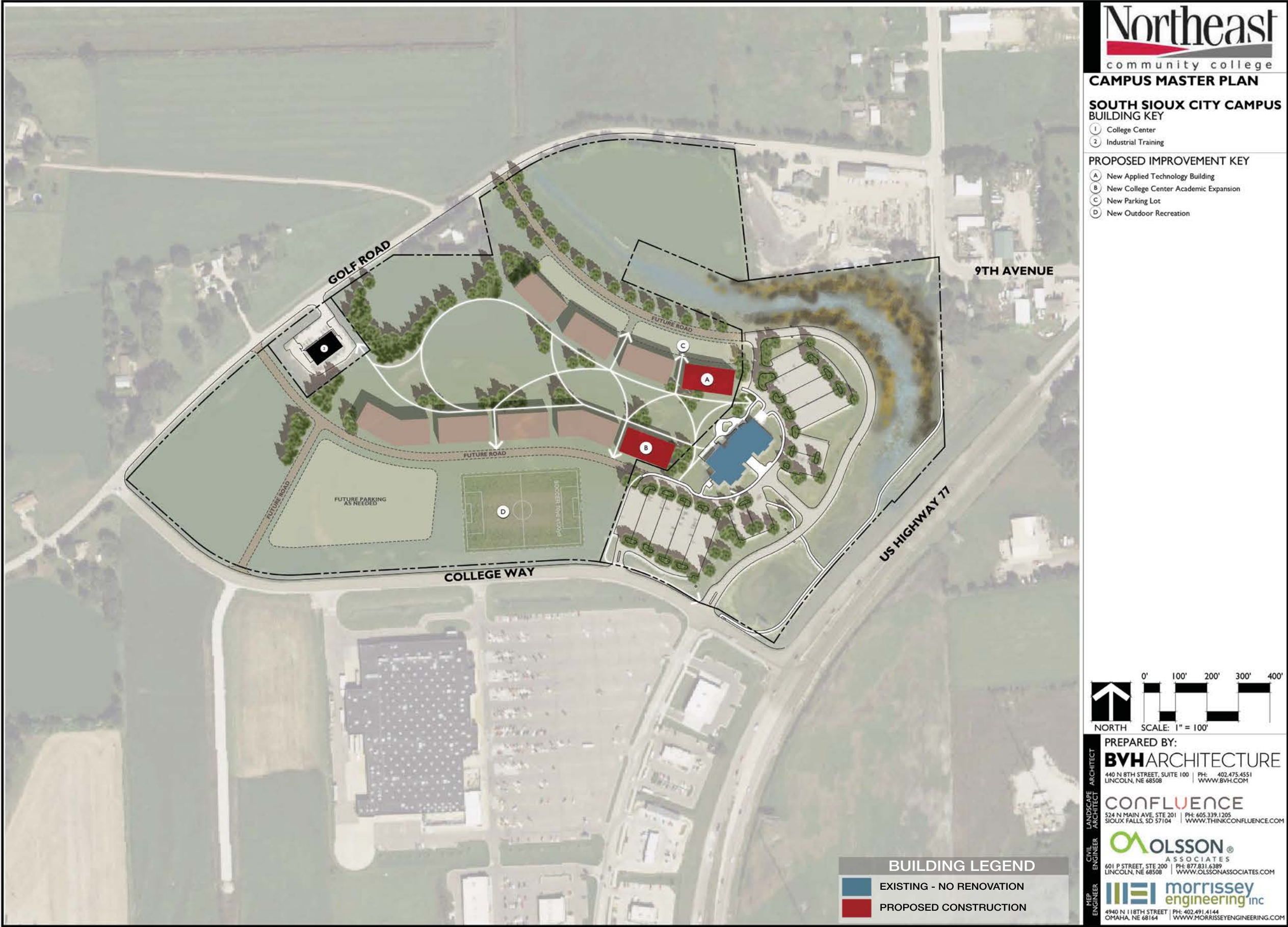
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NORFOLK CAMPUS AG AND WATER CENTER FOR EXCELLENCE MASTER PLAN / FIGURE 13



SOUTH SIOUX CITY EXTENDED CAMPUS MASTER PLAN / FIGURE 14

MASTER PLAN PROJECT SUMMARIES

This section contains a brief summary of the *Master Site and Facility Master Plan* improvements and recommendation for implementation. These recommendations are presented to assist Northeast in identifying funding and implementation strategies and are not listed in order of priority although each project summary contains a short description of the dependencies that will need to be coordinated to assist in proper project sequencing.

It is recommended that prior to implementation, more definitive programming and cost verification will need to be developed by proper programming to determine final space needs, total project costs and project schedules.

NORFOLK CAMPUS

AG AND ALLIED HEALTH

- Relocate Ag programs to Ag and Water Center for Excellence when constructed.
- Mechanical/electrical systems are sub-standard and in need of replacement.
- The exterior envelope of the building is in need of renovation per Building Condition Assessment.
- Lab and office space is in need of modernization and appropriate sizing. Initiate programming to determine final allocation of spaces.
- Site drainage needs to be improved around the building including increasing slopes away from the building and taking downspouts underground.
- Dependencies:
 - Ag and Water Center for Excellence will need to be completed or a phased component completed to accept relocation of Ag programs.
- Estimated total project budget: \$6,370,000.¹



¹ Please note that all estimated project costs included in this section are budgetary in nature and are to be used for planning purposes only. They are total project budgets (2017 costs) and include construction costs, design and engineering fees, Furniture, Fixtures & Equipment and a 10% project contingency.

APARTMENT A

- Remove structure when residence hall capacity allows adequate accommodation of resident population.
- Prepare site for future plaza.
- Dependencies:
 - Demolition of this structure is dependent on available residence hall capacity and the ability of the College or community to accommodate the population that will be displaced by removing this structure.
- Estimated total project budget: \$141,000.



APARTMENT B

- Remove structure when residence hall capacity allows adequate accommodation of resident population.
- Prepare site for future plaza.
- Dependencies:
 - Demolition of this structure is dependent on available residence hall capacity and the ability of the College or community to accommodate the population that will be displaced by removing this structure.
- Estimated total project budget: \$141,000.



APPLIED TECHNOLOGY

- Minor renovations are needed to accommodate a proposed plumbing lab.
- Dependencies:
 - N/A
- Estimated total project budget: \$194,000.



ARLO E. WIRTH

- Utilize this building to provide a temporary location for programs until permanent space can be renovated through the MSFP target year of 2025. Wind and renewable energy, accelerated paramedic training, and allied health programs have recently been reassigned to this swing space.
- This space should receive temporary modifications and flexible furnishings to make the space adaptable for the temporary occupancy of multiple programs. Provision of high quality general purpose classrooms is desirable.



- It is recommended that Arlo E. Wirth ultimately be renovated for future use by the Fine Arts program with the removal of the existing metal addition.
- Dependencies:
 - Completion of this building's role in the accommodation of temporary space provided to other renovation activities on the campus.
 - College of Nursing addition will need to be completed in advance of final relocation of Allied Health and Paramedic programs.
- Estimated total project budget: \$6,508,000.

BUILDING CONSTRUCTION

- Recommend the building be removed once adequate replacement storage is constructed.
- Prepare and restore site once building is removed.
- Dependencies:
 - This building can be removed once new storage and vehicle shelter has been accommodated near the Physical Plant building.
- Estimated total project budget: \$127,000.



BURKHARDT HALL

- Most extensive renovations/repairs are recommended to mechanical, electrical and conveying systems in the building as noted in the Building Condition Assessment.
- Minor interior renovation will be required for carpet replacement, acoustical ceiling tile replacement and some mill work/cabinetry modifications.
- Site drainage needs to be improved around the building including increasing slopes away from the building and taking downspouts underground.
- Dependencies:
 - No major concerns are noted relating to the renovation needs of this building. The College may want to consider phased renovation of the building to provide minimal impact on housing occupancy as renovation is completed.
- Estimated total project budget: \$5,604,000.



CHUCK M. POHLMAN AGRICULTURE COMPLEX

- Recommend restoration to interior surfaces containing effects of humidity.
- Recommend mechanical, electrical and lighting improvements noted in condition assessment.
- Dependencies:
 - No concerns are noted that would limit either minor renovation to the Chuck M. Pohlman building or to the construction of the Ag and Water Center for Excellence at this site.
- Estimated total project budget: \$2,154,000.



COLLEGE WELCOME CENTER

- Some exterior renovation needs associated with hail damage. Primary effects of the hail damage are evident at metal panels, roofing and flashings.
- Consider relocating academic advising and academic support to renovated and expanded Student Center (Student Success Center/Learning Center). Salvage space gained at Welcome Center to be approximately 2,300 ASF.
- Dependencies:
 - No restrictions limit exterior repairs for this building.
 - Relocation of advising and academic support from this building is limited by the need to renovate and expand the Student Center.
- Estimated total project budget: \$2,348,000.



DIESEL TECHNOLOGY

- This building is identified as being in fair condition structurally with a recommendation for major renovations of infrastructure and support systems.
- Lab space is identified as being deficient and an expansion is recommended as part of any renovation and modernization effort. Specific attention should be given to the development of side door access to improve traffic patterns for equipment entry and exit.
- Renovations to mechanical, electrical, fire protection and plumbing systems are recommended.
- Construction of new screened storage for demonstration and "program" vehicles is highly desirable and recommended.
- Site improvements including sidewalk, parking, drainage, and loading dock are recommended.



- Any additions for storage or programmatic offerings on this site will consider unique utility limitations for the site, specifically storm drainage that must be carefully planned and designed.
- Dependencies:
 - No unusual restrictions prohibit the expansion and renovation of this facility or the addition a storage facility.
- Estimated total project budget: \$5,507,000 (for renovation and expansion) and \$1,012,000 (for new storage building).

F. DON MACLAY

- The building is structurally in good condition with poor ratings noted for exterior, mechanical, and electrical systems requiring extensive renovations as noted in the Building Condition Assessment.
- Interior, accessibility and code compliance are rated to be fair which require moderate renovation.
- This building currently houses the College Data Center. The facilities are determined to be vastly inadequate and the MSFP recommends that the Data Center should be relocated to a new secure structure.
- Major renovation and reassignment of space is warranted for this building to accommodate instructional need as suggested. Considerations include the relocation of the Executive Offices to the Lifelong Learning Center, if the space is vacated, and relocation of the Mail Room/Copy Room and Word Processing Center to the renovated and expanded Student Center.
- Dependencies:
 - Several conditions associated with heavy utilization of the building currently limit renovation efforts for this building:
 - i. Completion of an expansion and renovation of the Student Center will allow relocation of several business services functions.
 - ii. Completion of a new, stand-alone data center will free up additional space.
 - iii. The possible reassignment of executive offices to a renovated Lifelong Learning Center would also open up space within this building.
 - Once space has been vacated the College will be able to manage a renovation that is specific to program goals.
- Estimated total project budget: \$12,884,000.



J. PAUL AND ELEANOR MCINTOSH COLLEGE OF NURSING

- All systems in this structure are noted to be in excellent condition with the exception of the building's exterior envelope which exhibits some damage as a result of hail and the minor renovations noted for the electrical system in Building Condition Assessment.
- This building has been recommended in MSFP as site for an addition to accommodate the relocation of existing health related programs from the Ag and Allied Health building and the Arlo E. Wirth building.
- New program considerations also to be housed in this addition will include clinical lab technician, dental assistant, public health services, respiratory care technology, surgical technology and accelerated paramedic training. The MSFP recommends development of a program statement to accommodate space for Northeast's proposed new offerings.
- Dependencies:
 - No restrictions exist to limit the addition of space at this facility to accommodate new program growth and the reassignment of Allied Health programs to this facility.
- Estimated total project budget: \$7,534,000.



KENNETH J. ECHTENKAMP

- This building was recently renovated.
- Some minor renovation needs exist as a result of hail damage on the building's exterior and electrical system needs have been noted in the Building Condition Assessment.
- Dependencies:
 - No unusual restrictions prohibit the expansion and renovation of this facility.
- Estimated total project budget: \$205,000.



LIBRARY RESOURCE CENTER

- Exterior, interior, electrical/mechanical systems and accessibility are all noted as being in fair to poor condition and are recommended for renovation.
- MSFP recommendations for the building include:
 - Moving existing library and service center functions from the building to a renovated and expanded Student Success Center. There is 8,161 GSF available for reassignment in this facility.



- Repurpose and renovate the Library structure for multipurpose meeting, conference space and interpretive space for campus historical artifacts and exhibits.
- Dependencies:
 - The repurposing and renovation of this building cannot be considered until existing library services and campus services functions are accommodated at the Student Center expansion.
- Estimated total project budget: \$1,978,000.

LIFELONG LEARNING CENTER

- The overall condition of the Lifelong Learning Center is good with minor renovations recommended in the Building Condition Assessment for the interior finishes, mechanical and electrical systems.
- Major renovation is noted for the exterior of the building as a result of existing hail damage.
- Additional space utilization and potential renovations will be considered as it may relate to on-going space lease agreements and reassignment of other function to this space.
- Dependencies:
 - No restrictions exist relative to the expansion of this facility to accommodate music and performing arts.
 - Renovation of the existing space will be determined by the availability or lack of availability of space currently leased to multiple outside agencies.
- Estimated total project budget: \$4,858,000



MAINTENANCE

- The building is in poor condition, recommended for removal once new space can be provided for Precision and Mechanized Ag.
- Prepare and restore site once building is removed.
- Dependencies:
 - This building can be removed once the precision agriculture program is accommodated at the Ag and Water Center for Excellence.
- Estimated total project budget: \$180,000.



PHYSICAL PLANT

- An additional space is recommended in the MSFP to accommodate bus storage that was not included at the time of original construction.
- A vehicle storage structure should be combined with space to accommodate surplus storage. Anticipated GSF need is approximately 10,000-12,000 GSF.
- Dependencies:
 - No limitations have been identified to restrict the addition of material and vehicle storage at this site.
- Estimated total project budget: \$1,900,000 (new vehicle storage building)



ROBERT P. COX ACTIVITIES CENTER

- The structural condition of the Robert P. Cox Activities Center has been determined to be satisfactory, but all other systems are in need of renovation. Listed as being in poor condition are the electrical system and building accessibility. Exterior, interior, and mechanical systems are also in need of renovation, but in fair condition.
- MSFP recommendations for renovation and repurposing of the building include:
 - Relocation of music and performing arts programs from Cox to a new structure aligned with the Lifelong Learning Center.
 - Resulting move would free up needed space in the Cox building while allowing on-going use of shared parking between Cox and Lifelong Learning Center for large events. Cox would be renovated to focus on needs of the athletic program including the competition gymnasium and associated competitive activities; Health, Physical Education and Recreation programs; expanded locker rooms; athletic training; and weight room. The theater will remain and be used for student activities and presentations.
- Renovation and addition is also recommended to improve accessibility at the main entrance and enhance/improve public amenities at lobby area (restrooms, concessions, etc.). The adjacent parking lot is in need of some minor reconfiguration for public access and in need of resurfacing.



- Dependencies:
 - Reassignment of music and performing arts function will be limited by the need for construction of a new facility aligned with the Lifelong Learning Center.
 - Space vacated by the relocation of the music and performing arts can then be reassigned to athletics. A major renovation of this building will include a small addition to enhance the building's primary entry.
- Estimated total project budget: \$14,813,000.

SCIENCE

- The electrical system is in poor condition requiring extensive renovation while the exterior and mechanical systems are in fair condition. Interior finish, accessibility and code compliance are rated as good to fair requiring some modifications and renovation.
- Major renovation, and potentially new additional space, is warranted for this building as suggested in the space utilization study and MSFP. Programming should also include provisions for newly proposed academic programs, a maker space, as well as collaboration space for students and faculty.
- A building addition to link Science to a renovated Ag and Allied Health building to promote this building complex as the focus of math and science programs on campus is recommended.
- Dependencies:
 - Space around the Science building is adequate to accommodate a building addition and will not be a limiting factor to expansion of this building.
 - Building expansion should consider removal of the existing green house and a replacement structure.
 - Programming for building use should occur after the existing programs housed in this facility have been reassigned to the Ag and Water Center for Excellence and to a proposed addition for the College of Nursing. Programming should also include provisions for newly proposed academic programs, maker space as well as a collaboration space for students and faculty.
- Estimated total project budget: \$6,668,000.



SIMON HALL

- Renovation/repair is recommended to replace deficient mechanical, electrical and plumbing systems for the building as noted in the Building Condition Assessment.



- Minor interior renovation is recommended to correct minor code deficiencies, carpet replacement, ACT replacement and some mill work/cabinetry modifications.
- Removal of ramp to basement is recommended to prevent storm runoff from entering the lower level. Install a lift to accommodate deliveries to mechanical room.
- Site drainage needs to be improved around the building including increasing slopes away from the building and taking downspouts underground.
- Anticipate on-going use of this structure as a residence hall through MSFP target year.
- Dependencies:
 - No major concerns are noted relating to the renovation needs of this building. The College may want to consider phased renovation of the building to provide minimal impact on housing occupancy as renovation is completed.
- Estimated total project budget: \$7,405,000.

STUDENT CENTER

- The Student Center is in fair condition with greatest needs identified for the exterior, electrical system and accessibility along with code compliance issues.
- The mechanical system and interior finishes rate better but are also in need of renovation.
- The building elevator requires minor renovation.
- The recent construction of a new residence hall and dining facility for the campus has created open, unassigned space in the building. The MSFP recommends that the Student Center be repurposed for functions that include:
 - Library/Learning Commons
 - Campus Service Center
 - Advising and Academic Support
 - Mail room, copy center, and word processing
 - Along with continued support of the College bookstore, snack bar, health services, and traditional recreation areas associated with the Student Center.
- With the relocation of these functions to the building, an expansion of the building will be required that could equate to approximately 27,000 GSF. The final size and square foot allocations must be considered in future programming efforts once the project is initiated.



- Dependencies:
 - Few restrictions impede the advancement of an addition to this structure, but parking will be lost as a result of expanding the Student Center footprint. The building is currently partially occupied with the relocation of the dining facility, freeing up space on the building's lower level.
 - New construction and phased renovation of existing space can be managed in the existing space.
 - Completion of building expansion will provide space for the reassignment of library and campus services.
- Estimated total project budget: \$14,493,000 (includes renovation and new addition).

SURPLUS STORAGE

- This building is recommended for removal as the cost for rehabilitation would outweigh the long term quality of resulting space.
- Dependencies:
 - This building can be removed once new storage and vehicle shelter has been accommodated.
- Estimated total project budget: \$94,000.



UTILITY LINE/TRUCK DRIVING

- Generally, this building is in good condition with renovation recommended to the building exterior as a result of hail damage along with renovation to the building's electrical system as noted in the Building Condition Assessment.
- Some minor drainage improvements are needed.
- Estimated total project budget: \$810,000.



VETERINARY CLINIC/FARM OPERATIONS

- The Building Condition Assessment found the majority of the systems associated with this complex to be deteriorated and in poor condition with structure, interior, and accessibility rating fair.
- The MSFP recommends their removal and replacement with a new veterinary clinic and farm operations complex as identified in the *Ag and Water Center for Excellence Master Plan*. This complex is recommended to be relocated to the Ag and Water Center for Excellence site.



- Dependencies:
 - Reassignment of the academic function currently housed in these facilities is dependent on the completion of host facilities at the Ag and Water Center for Excellence.
 - No unusual deficiencies at the Ag and Water Center for Excellence have been identified that would restrict advancement of the relocation of these programs.
- Estimated total demolition budget: \$474,000.

WELLER

- The Building Condition Assessment rates the Weller building as poor for interior construction and finishes, mechanical and electrical systems, and for accessibility and code compliance. Major renovation is recommended.
- The exterior enclosure rated fair and the building structure is determined to be good and readily flexible and adaptable to renovations and repurposing.
- The MSFP recommends that the Weller building continue in its current role for the campus with emphasis on automotive programs while relocating welding to a new building, thereby allowing program growth for new and existing programs including offerings such as high performance automotive.
- Due to its prominent central campus location, the Weller building renovation must develop architectural features designed to showcase technical offerings within the building while creating screening for project vehicles currently in exposed parking behind the building. This should include potential covering of the vehicle courtyard.
- Programmatic consideration should also focus on utilization and enhancements of general classroom and lab space.
- Significant site improvements are needed to improve pavement condition and increase drainage away from the building.
- Dependencies:
 - No limiting factors have been identified that might impede the expansion of this building. Vehicle screening and overhead infill for in-process project vehicles should be coordinated with the building additions.
 - Ideal conditions for renovation of the interior of the structure would first provide for the relocation of fine arts and social science programs currently housed in this building.
- Estimated total project budget: \$20,122,000.



NEW BUILDINGS

AG AND WATER CENTER FOR EXCELLENCE

- The MSFP supports the planning efforts previously completed in the *Ag and Water Center for Excellence Plan (Figure 15)* and recognizes the Center's planning budget.
- The proposed new buildings and their estimated costs are:
 - Veterinary Technology: \$4,793,945
 - Large Animal Building: \$2,743,222
 - Precision and Mechanized Agriculture: \$5,939,909
 - Farm Office and Storage Building: \$2,739,398
 - Agriculture Classroom Building: \$8,468,698
 - Greenhouse: \$865,755
 - Innovation and Demonstration Center: \$1,652,033
 - Chuck M. Pohlman Ag Complex Expansion: \$3,385,912
 - Farm Operations: \$319,413
- Estimated total project budget: \$45,118,000.

ATHLETIC FIELD RESTROOM/CONCESSION/STORAGE

- The MSFP recommends the development of athletic fields to support baseball, softball, and soccer competition on the Northeast campus (*Figure 16*). A supporting structure will be required to host the operational needs identified above.
- Estimated total project budget: please see following section "Other Improvements"-Area H for project development costs that include buildings, field construction and civil improvements.

DATA CENTER

- The need for a replacement data center has been identified by both the *Technology Infrastructure Master Plan* and the MSFP.
- Estimated total project budget: \$2,425,000.

EAST BENJAMIN AVENUE PROPERTIES

- The College has recently purchased three new properties along East Benjamin Avenue.
- The property at 903 East Benjamin Avenue is currently being used by the Director of Residence Life as living quarters. The properties at 901 and 905 East Benjamin Avenue have no current or future planned use.
- Dependencies:
 - No major concerns are noted relating to the renovation needs of these buildings.



LAW AND PUBLIC SAFETY TRAINING LAB

- Recommendations for improved access to the Norfolk main campus from East Benjamin Avenue will necessitate the removal of the existing Law and Public Safety Training Lab. A new location for the lab has been identified near the Student Built Home site on the northern edge of the main campus.
- Estimated total project budget: \$200,000.



RESIDENCE HALL EXPANSION

- The residence hall complex, including Path Hall and Hawks Point, have anticipated additional housing needs for the College. That anticipated need is supported by the Utilization and Space Needs Analysis Study. Rising occupancy of existing housing capacity and the need to remove existing Apartments A and B will determine appropriate timing for the addition of residence hall capacity.
- Estimated total project budget: \$16,202,000.



STUDENT LIFE CENTER

- The MSFP recommends the addition of a facility to complement existing facilities at the Robert P. Cox Activities Center. This space is anticipated to be approximately 45,000 GSF and will accommodate HPER, wellness activities, weight training, and will supplement athletics.
- Estimated total project budget: \$12,307,000.

THEATER/PERFORMING ARTS

- The MSFP recommends the construction of a new Performing Arts facility directly adjacent or connected to the Lifelong Learning Center.
- Estimated total project budget: \$6,340,000.

WELDING LAB

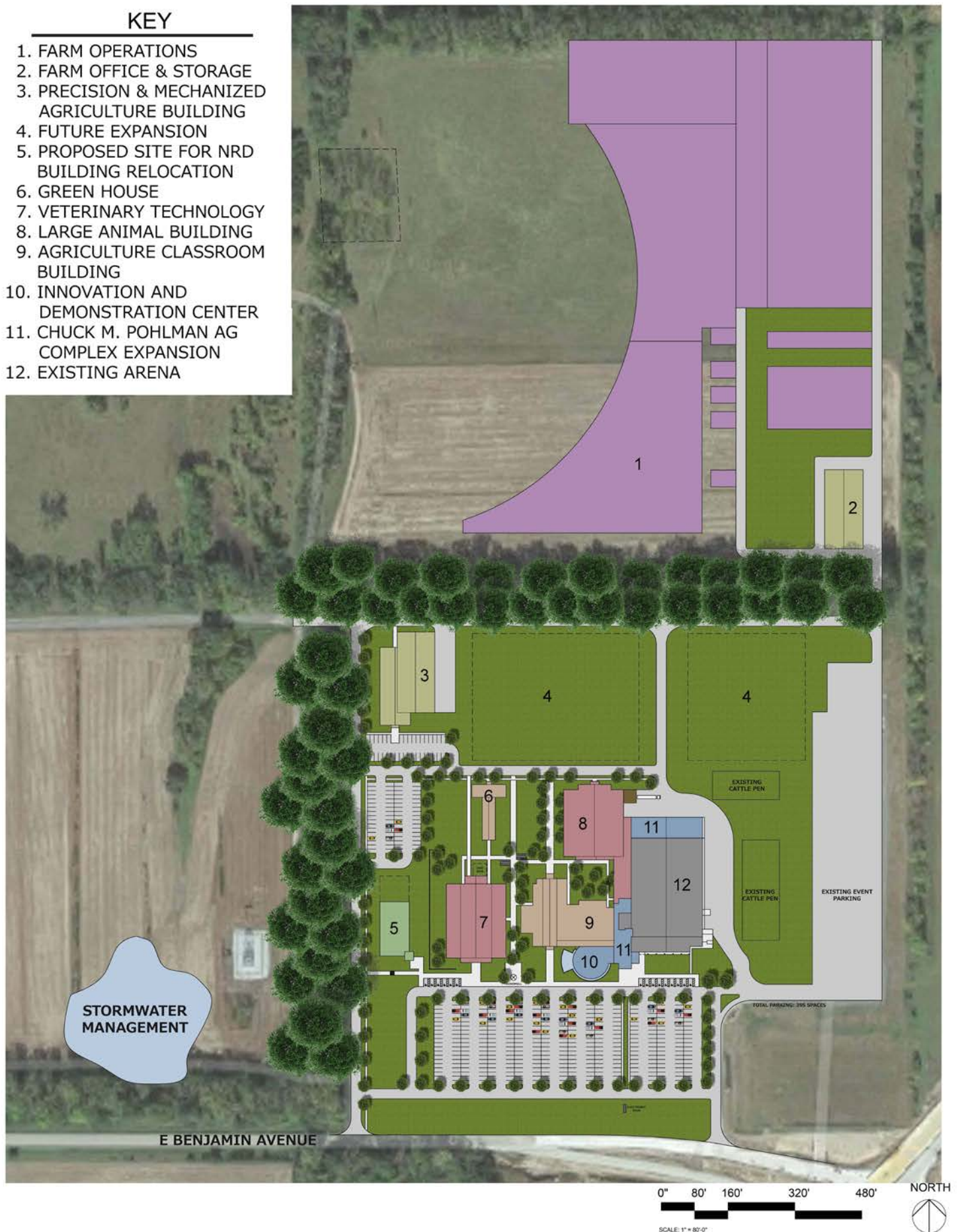
- The MSFP recommends construction of a new welding classroom near the existing Applied Technology building.
- Estimated total project budget: \$6,560,000.

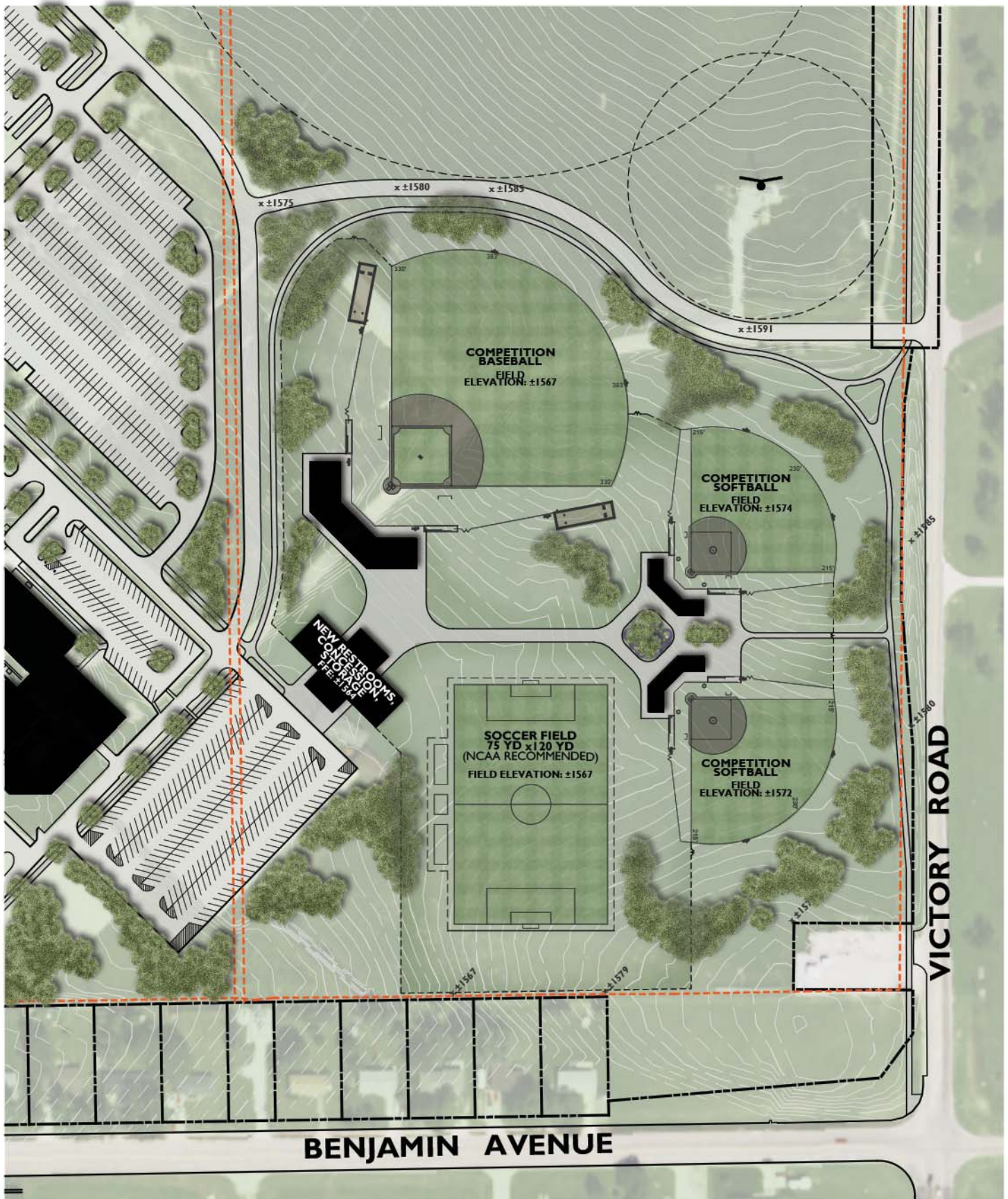
WIND AND RENEWABLE ENERGY BUILDING

- The MSFP recommends the construction of a new facility or addition to the Utility Line Building to house the Wind Energy Technician program and a possible expansion of alternative energy programming.
- Estimated total project budget: \$3,640,000.

KEY

1. FARM OPERATIONS
2. FARM OFFICE & STORAGE
3. PRECISION & MECHANIZED AGRICULTURE BUILDING
4. FUTURE EXPANSION
5. PROPOSED SITE FOR NRD BUILDING RELOCATION
6. GREEN HOUSE
7. VETERINARY TECHNOLOGY
8. LARGE ANIMAL BUILDING
9. AGRICULTURE CLASSROOM BUILDING
10. INNOVATION AND DEMONSTRATION CENTER
11. CHUCK M. POHLMAN AG COMPLEX EXPANSION
12. EXISTING ARENA





SOUTH SIOUX CITY, O'NEILL AND WEST POINT EXTENDED CAMPUSES

SOUTH SIOUX CITY EXTENDED CAMPUS

- Additional space needs at this location will be driven by reorganization of programmatic offerings; specifically, the relocation of the adult education program currently offered in rented downtown venues to the College Center. Additional space is also needed for more technical offerings.
- The MSFP recommends that new facilities to accommodate this growth be organized to create a future campus green/courtyard with separate adjacent facilities. Parking should be located outside of the campus core to maintain a pedestrian oriented campus.
- Space for outdoor activities such as soccer should also be incorporated into the long-term growth of the campus.
- The current Industrial Training facility at South Sioux City can be rehabilitated to a maintenance facility to support growing campus operations when a newer larger Industrial Training facility is constructed.
- Dependencies:
 - No limiting factors have been identified as Northeast has sufficient land to accommodate identified needs.
- Estimated total project budgets: \$275,000 (College Center renovations) and \$454,000 (Industrial Technology renovations). Estimated new construction project budgets: \$2,894,000 (new Applied Technology Facility) and \$3,148,000 (New Academic Addition).



WEST POINT EXTENDED CAMPUS

- The current space at West Point accommodates Northeast academic space and has no current provision for applied technology offerings.
- Northeast will continue to evaluate the need for applied technology instructional space at the West Point site.
- Dependencies:
 - Site identification and availability of a suitable site for construction are limiting factors.
- Estimated total project budget: none identified—leased site.

O'NEILL CENTER EXTENDED CAMPUS

- The O'Neill site has a new structure, and therefore no immediate renovation needs were identified for the target year of 2025 per the MSFP.
- Landscaping improvements are recommended.
- Dependencies:
 - No restricting conditions have been identified.
- Estimated total project budget: \$4,800.



OTHER INFRASTRUCTURE AND CAMPUS IMPROVEMENTS

This section contains various site, civil, infrastructure and landscape recommendations that accompany the facility recommendations presented above. These improvements are broken down by campus areas as noted on the accompanying campus map (*Figure 17*) to allow Northeast to program and plan for the improvements and align their implementation with the facility recommendations.

NORFOLK CAMPUS

AREA 'A' — COX PARKING LOT RENOVATION

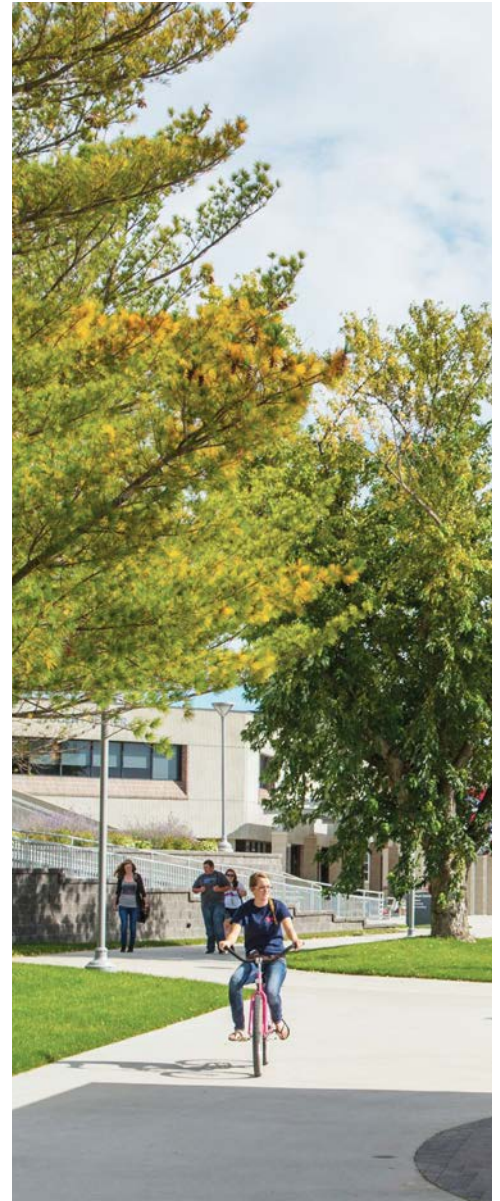
- Surface repair/pavement replacement on existing lot is recommended.
- Minor updates to lighting and landscape are to be included in the parking lot renovation.
- Estimated total project budget: \$941,000.

AREA 'B' — COMPLETION OF LOOP ROAD

- A new section of roadway completing the campus loop road is required.
- Earthwork, lighting and utilities associated with the continuation of the roadway are also recommended.
- Modification of existing parking lots will be needed to reduce the number of vehicular connections.
- Landscape improvements and the establishment of a continuous boulevard of canopy trees.
- Estimated total project budget: \$611,000.

AREA 'C' — NEW RECREATION TRAIL SYSTEM

- The MSFP recommends a connection to the City's existing bike trail system along the North Fork of the Elkhorn River.
- Estimated total project budget: \$415,000.



The 2017 Master Plan proposes to connect the Norfolk Main Campus' new pedestrian walkways and bike paths to the city's existing trail system, emphasizing a strong link between the College and the community.

AREA 'D' — NEW PARKING FOR NEW RESIDENCE HALL

- A new parking lot to support a future residence hall expansion is recommended including a generous drop-off zone to accommodate student move in/out.
- Landscape improvements to provide buffer between parking and residence hall should be included.
- Estimated total project budget: \$1,035,000.

AREA 'E' — NEW ROADWAY AND LANDSCAPE IMPROVEMENTS

- New section of roadway to provide a connection from the campus core back to the loop road at the west is recommended and should include establishment of a new tree grove on the sloped area at back side of Applied Technology.
- Estimated total project budget: \$783,000.

AREA 'F' — REPLACEMENT OF EXISTING CAMPUS ROADWAY

- Roadway improvements are recommended to replace the rural section with an urban section which includes curb and gutter.
- Addition and development of a new campus walk/trail.
- Storm sewer, earthwork, and lighting improvements.
- Landscape improvements and the establishment of a continuous boulevard of canopy trees.
- Estimated total project budget: \$734,000.

AREA 'G' — NEW PARKING - GENERAL

- New parking is recommended to replace parking removed for facility expansion.
- Estimated total project budget: \$1,461,000.

AREA 'H' — DEVELOPMENT OF OUTDOOR ATHLETIC FACILITIES

- The MSFP recommends the addition of a competition baseball field, two competition softball fields and a competition soccer field. Significant earthwork modifications to terrace fields into existing sloping grade will be required.
- Additional amenities for this complex will include fencing, plazas and walkway/trail connections, new campus monument sign, wayfinding signage and landscape improvements providing

buffering at the perimeter and within the compound. Utility extensions and drainage improvements are also required.

- Estimated total project budget: \$2,492,000 (for concessions, locker rooms and public restrooms). \$5,878,000 (for ballfields and soccer field construction along with all paving and grading).

AREA 'I' – NEW CAMPUS ENTRY AT BENJAMIN AVENUE

- Removal of existing residential structures is recommended to accommodate a new entrance drive to replace the existing drive to be eliminated in Area 'J'. These adjustments will create a longer stacking distance from Benjamin Avenue.
- Storm sewer, earthwork and lighting improvements, along with landscape improvements, will be required to provide an appealing entrance.
- Estimated total project budget: \$447,000.

AREA 'J' – SOUTH LOOP ROAD MODIFICATIONS

- Adjustment to the loop road are recommended to relocate this drive to the perimeter of campus creating a more direct route for the loop road around the south end of campus.
- Benefits from the adjustment include provision of a separation/ buffer at the front of the College of Nursing.
- This adjustment will eliminate the current eastern-most entrance onto Benjamin Avenue.
- These modifications will include piping of the concrete lined drainage ditch along Benjamin across the entire campus frontage and relocation of existing overhead power.
- Estimated total project budget: \$1,919,000.



Improvements to the Main Campus' entrance and landscaping are encouraged.

AREA 'K' – PARKING REVISIONS AND DEVELOPMENT OF NEW PEDESTRIAN QUAD

- Removal of existing parking for facility development is recommended along with the expansion of pedestrian corridors for improved pedestrian safety.
- Walk/trail improvements with wayfinding signage, convenience parking for quick access to new Student Center and landscape improvement to enhance the campus experience are also recommended.
- Estimated total project budget: \$564,000.

AREA 'L' – PEDESTRIAN AND VEHICULAR IMPROVEMENTS IN THE CAMPUS CORE

- The MSFP recommends modifications to existing roadways to improve access and limit pedestrian conflicts.
- Pavement improvements around Weller are recommended to improve drainage and accessibility along with walk/trail improvements for this area.
- Landscape improvements to enhance the campus experience are recommended.
- Estimated total project budget: \$411,000.

AREA 'M' – HAWKS VILLAGE

- The MSFP recommends the development of campus outdoor space for student recreation and enjoyment.
- Iconic gateway features to be included as well as extension of pedestrian walkway to Path Hall and Hawks Point.
- Additional walk/trail improvements should be included with wayfinding signage.
- Student recreation amenities including basketball, sand volleyball, open recreation fields and event pavilion(s).
- Landscape improvements providing buffering at the perimeter and within the area.
- Also recommend all associated storm sewer, earthwork and lighting improvements.
- Include surface drainage improvements including modifications to ramp to Simon basement.
- Estimated total project budget: \$1,859,000.

SOUTH SIOUX CITY EXTENDED CAMPUS**COLLEGE CENTER**

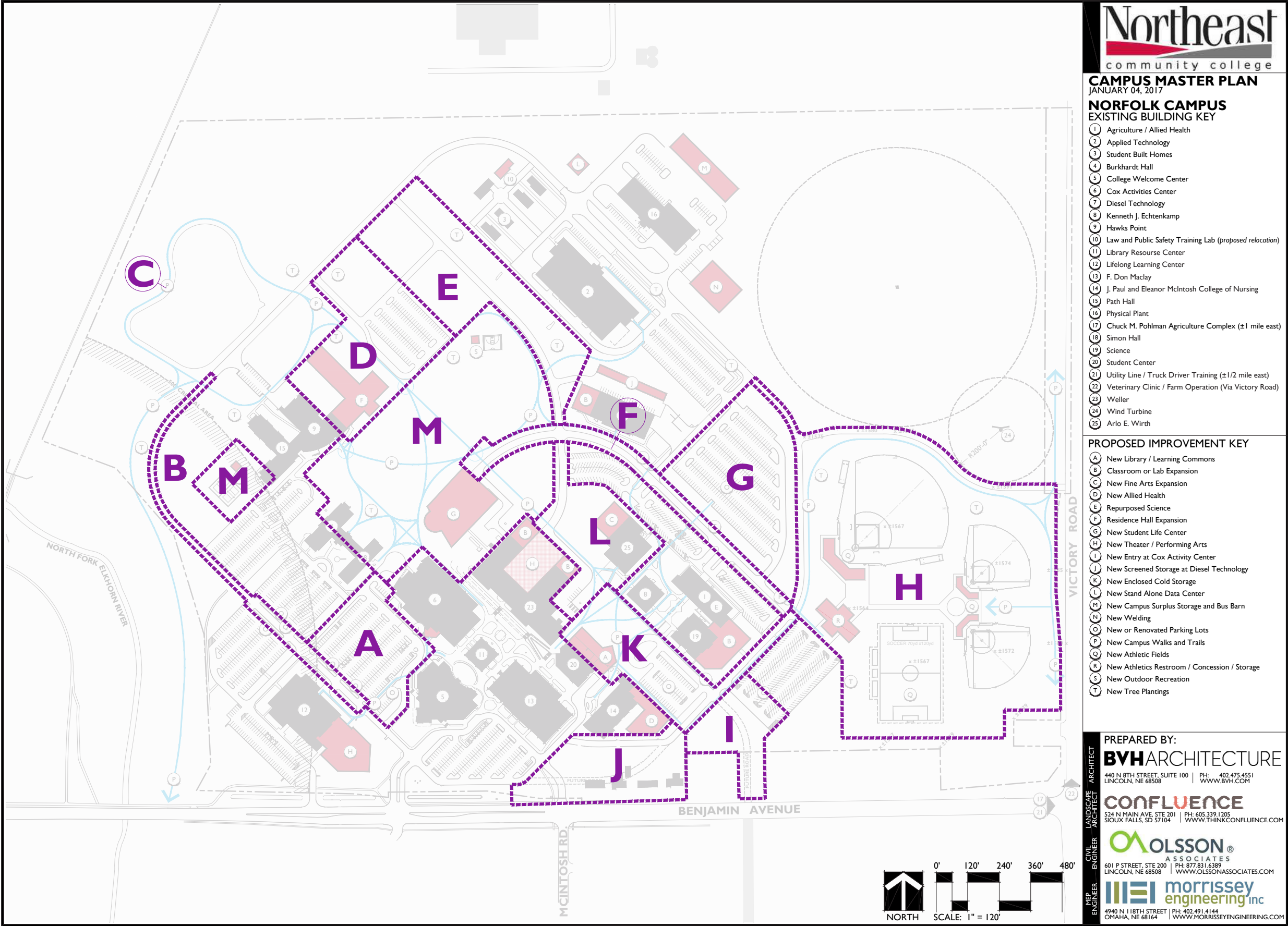
- Repairs to the existing parking lot surfacing to correct isolated settling locations.
- Addition of a shade structure to the west patio area.
- Addition of a recreation soccer field on the site.
- Estimated total project budget: \$426,462.

INDUSTRIAL TRAINING

- The addition of screening for outdoor material storage.
- Sidewalk and drainage improvements and repairs.
- Estimated total project budget: \$98,538.

O'NEILL EXTENDED CAMPUS

- Landscape screening of existing mechanical units.
- Storm water/landscape improvements to convert the wet swale north of the building to a rain garden or other landscape feature other than turf.
- Estimated total project budget: \$50,256.



NORFOLK CAMPUS IMPROVEMENTS SITE MAP / FIGURE 17

OUR VALUES:

We are a TEAM.

We are PROFESSIONALS.

We are STEWARDS.

We are LEADERS.

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