

Campus Master Plan
for the
University of Nebraska-Lincoln

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I. Executive Summary

A. Introduction

1. Institutional Profile

The University of Nebraska-Lincoln is a comprehensive, public land-grant university, with a threefold mission of teaching, research, and service. From its foundation by legislative charter, the institution has grown to its present size and complexity, and is now one of four units of a multi-campus University of Nebraska system. The University of Nebraska-Lincoln is the largest of these units. Serving a student population of nearly 23,000 in 1997 with its diverse programs of study, it offers degrees at the bachelor's, master's professional, and doctoral levels. It employs approximately 1,700 instructional, research, and service mission faculty, 1,300 professional staff, and 2,200 office/service personnel to carry forward its mission. Throughout its history, the University of Nebraska-Lincoln has always recognized that its greatest responsibility is to the people of Nebraska, but it is also mindful of its obligations as a member of larger regional, national, and international communities.

2. Brief History

The University of Nebraska was established by an act of the state legislature of Nebraska in 1869, two years after the state was admitted to the Union. The institution awarded its first undergraduate degree in 1873 and its first graduate degree in 1886. The University was designated as a land-grant institution under the Morrill Act of 1862 and became a member of the Association of American Universities in 1909. The University's mission as a comprehensive land-grant research university gradually evolved over the years. As in the case of most American universities, it experienced its greatest sustained growth during the period from the end of World War II until the mid 1970s, when its enrollment grew from 4,266 in 1945 to 22,477 in 1978. Enrollment reached a peak of 25,075 in 1982 before gradually leveling at about 23,000. In 1968 the University of Nebraska was reconstituted as a multi-campus system: The University of Nebraska-Lincoln became one of the three constituent units, along with the University of Nebraska Medical Center, located in Omaha, and the University of Nebraska at Omaha. In 1991, the University of Nebraska system was expanded to four campuses by in-

cluding the former Kearney State College, now known as the University of Nebraska at Kearney.

3. Facilities

Facilities of the University of Nebraska–Lincoln are located on two Lincoln campuses, known as the City Campus and the East Campus as well as locations across the State of Nebraska. The City Campus is situated just to the north of Lincoln's central business district, and the East Campus is in a largely residential area about two miles to the northeast. On the City Campus are found the majority of the administrative offices, the Colleges of Architecture, Arts and Sciences, Business Administration, Engineering and Technology, Fine and Performing Arts, Journalism and Mass Communications, and Teachers, as well as the Conservation and Survey Division, the State Museum, the Sheldon Art Gallery, the Lied Center for Performing Arts, and the intercollegiate athletic facilities. On the East Campus are found the Agricultural Research Division, the College of Agricultural Sciences and Natural Resources, the Cooperative Extension Division, and the International Programs Division of the Institute of Agriculture and Natural Resources; the College of Human Resources and Family Sciences, and the College of Law. Additionally, the Department of Special Education and Communication Disorders (a department in Teachers College), is housed in the Barkley Memorial Center; the Nebraska Educational Telecommunications Center, and the Division of Continuing Studies are located on the East Campus. The College of Dentistry, which is part of the University of Nebraska Medical Center, is also located on the East Campus.

The Colleges of Human Resources and Family Sciences, Architecture, and Engineering and Technology operate programs with physical facilities on the campus of the University of Nebraska at Omaha or at other Omaha sites; the Cooperative Extension Division and the Agricultural Research Division operate district research and extension centers at Concord, Scottsbluff, North Platte, and Clay Center. The Agricultural Research Division also has research facilities at Mead, Sidney, Alliance, Whitman, Plattsmouth, and Virginia. The Nebraska State Museum has operations and physical facilities at Fort Robinson near Crawford and the School of Biological Sciences of the College of Arts and Sciences maintains the Cedar Point Biological Station near Ogallala. The Division of Continuing Studies administers programs throughout the state

of Nebraska and the Cooperative Extension Division operates in every county of the state. In cooperation with the citizens of the Grand Island area, College Park at Grand Island, an educational center, was opened in 1992. This center houses classrooms and other facilities used by several postsecondary educational institutions, including UNL. Thus the "campus" of the University of Nebraska–Lincoln extends to every corner of this large state, making its services available to all Nebraska citizens.

4. Campus Planning History

The original University of Nebraska campus covered a four-block area and the first building, University Hall which was completed in 1871, was located at its center, the present site of Ferguson Hall. The Agriculture College was organized in 1873 and in 1874 the Board of Regents purchased the Moss Culver farm--320 acres located along what is now Holdrege Street. This became the agriculture campus, presently known as East Campus.

By 1910, the University had outgrown its original site, and after a public referendum determined that the campus should not be moved to the agriculture campus, a plan was developed to expand the City Campus.

The City Campus plan developed in 1914 by Shepley Ruttan and Coolidge established the west and east boundaries of the campus at 10th and 14th Streets with the south boundary at R Street and the north boundary at U Street.

By 1917, the Agriculture Campus had taken form around a north-south mall that today is terminated at its north end by L.W. Chase Hall.

In 1926, a new plan for the City Campus was developed under the guidance of George N. Seymour, President of the Board of Regents. In the Seymour Plan, the City Campus perimeter moved to both sides of 10th, 16th, and R Streets. The north boundary was defined by W Street. Parts of the Seymour Plan are clearly visible today. Most significant are the Stadium Mall, the Library to Coliseum Mall, and the 12th Street vista that leads to the columns. All have played a significant part in defining the formal, exterior spaces of the City Campus.

In 1966, the firm of Caudill, Rowlett and Scott, architects, planners and engineers was commissioned to do a comprehensive campus planning study. The City Campus plan published in 1967 was based on a planning concept termed

"The Pedestrium" where the academic area of the campus was to be closed to vehicular traffic and parking was to be located at the periphery of the campus, next to a major circulation system that encircled the campus. As a result, several streets internal to the campus were closed.

The East Campus plan was based on the concept of three concentric rings—with the academic core at the center, surrounded by research activities which in turn was surrounded by support functions. The Library was designated the center of this concentric system. As was the case on City Campus, a major circulation system encompassed the campus, and the center was planned for the pedestrian.

A perimeter transportation and parking system surrounding a pedestrian core was the most notable legacy of the Caudill Rowlett Scott plan for both campuses.

A comprehensive facilities analysis was completed in 1985 by all University of Nebraska campuses and a set of space planning guidelines was established during that exercise.

5. The Planning Continuum During the Past Decade

In 1986-87, the University of Nebraska-Lincoln initiated a series of related self-study and planning efforts in anticipation of its North Central Association of Colleges and Schools ten year re-accreditation review. The self-study was designated by UNL as a "spring-board for future planning" and it provided a substantial base for planning activities that followed.

In 1988 the Institute for Agriculture and Natural Resources completed a strategic plan and in 1989 followed with an action plan.

In February, 1990 UNL began an intense effort to complete the planning cycle started with the 1986-87 institutional self-study by developing a Strategic Plan for the University of Nebraska-Lincoln. It was subtitled *Preparing for the 21st Century: A Time for Educational Excellence and Creative Partnerships*. The campus also built on its 1985 facilities analysis, producing updated land use plans for the City and East Campuses.

On December 14, 1990, final drafts of the UNL Strategic Plan and Preliminary Master Site Plans were presented to the Regents' Planning and Governance Subcommittee. They were accepted by the entire Board the next day. Plans from the other campuses of the University of Ne-

braska system were also accepted. The Board stated that "in accepting, [the Board] recognizes that planning is an on-going process and therefore revisions and updates will be brought to the Board periodically." The Board of Regents has since approved the mission statements and strategic plans of all the University of Nebraska campuses.

The Institute of Agriculture and Natural Resources updated its Strategic Plan in June, 1992 and its Action Plan in December, 1992. In August 1993, UNL initiated a campus-wide effort to update its 1990 Strategic Plan. Planning sessions involving the chancellor, vice chancellors, deans and directors of academic and support units were held during February and March, 1994 as the planning process continued. One of the aforementioned sessions was devoted to the Comprehensive Facilities Plan and its relation to the plans and priorities of UNL's academic and support units. A Vision Statement and a Strategic Agenda evolved from these activities and were presented by then-Chancellor Spanier in his 1994 State of the University speech. The Vision Statement broadly described where the University of Nebraska-Lincoln wanted to be by the beginning of the 21st century in its continuing quest for excellence. The Strategic Agenda served as a bridge between the UNL vision and the more specific plans of the colleges, academic departments and support divisions.

In March, 1995 the Institute of Agriculture and Natural Resources once again updated its Strategic Plan. Under the leadership of Chancellor James Moeser, the Strategic Plan for the University of Nebraska-Lincoln, 1997-2003, was updated in October, 1996 and again in November, 1997. This document is included in the most recent *University of Nebraska Strategic Framework*.

6. 1998 Master Plan Update

In April of 1998, the firms of Bahr Vermeer & Haecker, Architects, Lincoln, Nebraska, in association with EDAW, Inc of Denver, Colorado, were commissioned to update the Master Plan. The scope of work also included the preparation of preliminary master plan concepts for the five extended campuses. This Master Plan is to be presented at the December 1998 Board of Regents meeting.

The Master Plan Update draws upon much of the material previously prepared by the Institute of Institutional Research and Planning (IRP) in early 1998. It also includes information gathered through numerous focus group

information gathering sessions and master plan concepts prepared at three design workshops held on UNL campuses.

The following Master Plan Update is organized by presenting the needs assessment, analysis and concepts, and master plan concepts for City Campus and East Campus. It is then followed by preliminary Master Plan concepts for the five Extended Campuses.

Appendix “A” of this document contains the University of Nebraska – Lincoln Strategic Plan..

B. Guiding Principles

1. University of Nebraska-Lincoln Vision Statement

The University of Nebraska-Lincoln Campus Master Plan responds to the following campus-specific Vision Statement which is included in the *University of Nebraska Strategic Framework*.

2. Vision and Strategic Plan

“The object of the University of Nebraska-Lincoln, as expressed in the University's charter of 1869, is to afford to the inhabitants of the state the means of acquiring a thorough knowledge of the various branches of literature, science, and the arts, and to prepare students for productive lives in agriculture, engineering, business and the professions.”

“We envision the University as a community of scholars engaged in continuous learning and the creation of new knowledge, whose campus is the entire state of Nebraska, whose textbook is the world and the universe beyond it. Our community embraces all cultures and nations, studies the past in order to serve in the present and to prepare for the future. We seek the truth for its own sake.”

“We are a community that assists students in forming personal ethical and value systems that will guide their lives and enable them to be good citizens in a free and democratic society.”

“We envision a mission of educational outreach and service to all of the people of the state, building Nebraska's economy and contributing to the quality of life in the state and beyond.”

The Master Plan also responds to the University of Nebraska – Lincoln Strategic Plan, which is included as Appendix A.

3. Campus Master Planning Goals

The following goals are to be used by administrators and physical planners to guide them as the Campus Master Plan for the University of Nebraska-Lincoln is implemented. Many of the goals listed below respond to current programmatic and physical conditions while others anticipate issues of the future. Although the goals are listed under separate headings, they are in many cases, related and interdependent.

- a. Goals related to the University's tripartite mission of teaching, research, and public service:
 - Support the goals and objectives of the University of Nebraska-Lincoln Strategic Plan, recognizing that the academic requirements of the University should establish its operating and capital priorities.
 - Upgrade the quality of classrooms and class laboratories and provide these teaching facilities with state-of-the-art equipment.
 - Provide appropriate facilities and equipment for high priority research and graduate programs.
 - Provide facilities that properly support academic, research, outreach and administrative computing.
 - Improve faculty offices where required to enhance teaching, research and public service. Locate and arrange offices to support more effective student-faculty interaction and encourage interaction among faculty. Provide each full-time faculty member with a private office served by appropriate connections to a fully integrated communication and information network.
 - Improve on and off-campus teaching, outreach, research, and campus support services through an integrated information infrastructure.
 - Provide facilities that properly support service functions required to meet campus needs.

b. Goals concerning campus safety and security:

- Continue to assign a high priority to both life safety issues and accessibility for the disabled.
- Provide security for persons, animals used in teaching and research, and unique or expensive property. Keep campus safety and security in mind when planning facilities for activities that occur during and beyond traditional university hours (e.g. computer user rooms and campus parking).
- Give continued attention and a high priority to the safe handling and disposal of hazardous materials.
- Work with the City of Lincoln, the Lower Platte South Natural Resources District, the U.S. Army Corps of Engineers and the Federal Highway Administration to construct an integrated flood control/safe traffic corridor around the east edge of City Campus and provide flood control along the north and east sides of East Campus.

c. Goals for the effective movement of people, vehicles and materials:

- Plan for the continued improvement of student, faculty, staff and visitor parking. Visitor parking should be adequate, convenient, and easy to find. Retain as much open landscaped space as possible as parking plans are developed. Include appropriate landscape screens and shade trees in parking areas.
- Remove, to the fullest extent possible, automobile traffic from the core of both the City and East Campuses. Where it cannot be completely removed, the traffic should be segregated or de-emphasized. Work with the City of Lincoln and other Nebraska communities to solve campus access problems.
- Plan for the safe, efficient movement of pedestrians and bicycles on campus, identifying functional bicycle and pedestrian routes. Provide for adequate and aesthetically pleasing bicycle storage.
- Develop and maintain a single integrated campus parking and transit services plan for the effective movement of people, vehicles and materials.

- d. Goals promoting functional efficiency in buildings:
- Improve space management on all campuses. Make efficient space utilization part of reallocation considerations, and improve classroom and class laboratory utilization through more effective scheduling policies and the provision of more appropriately sized rooms.
 - Correct existing qualitative and quantitative building and infrastructure deficiencies identified in the University's physical facilities audits.
 - Where appropriate make space more flexible or adaptable to reuse and conversion.
- e. Goals dealing with the orientation of pedestrians and vehicle operators:
- Emphasize major entrances to the campuses. Work with the communities in which the campuses are located to provide directional signage that leads to these gateways.
 - Designate at least one visitors' center on each campus that is located at a major entrance, easy to find and near adequate visitors' parking.
 - Improve exterior and interior way finding on all campuses through the development of a comprehensive signage system.
- f. Goals relating to the built and natural environment and the image our campuses should project:
- Create campuses that possess a sense of place, beauty and functionality that clearly represents the priorities and aspirations of the University of Nebraska-Lincoln.
 - Place a high priority on the quality of the campus environment—trees, landscaping, open space, landmarks, vistas, building massing and the relationship of architectural materials and styles.
 - Adopt and adhere to campus design standards and guidelines.
 - Continue to enhance and maintain dedicated open spaces containing botanic collections for use in our university classes, research, public education, and daily enjoyment.
 - Carefully plan for the development and enhancement of campus edges, creating a blend of activities, archi-

ecture and landscaped space that enhances the image and functions of the university and the surrounding community.

- Provide interior and exterior environments that enhance the intellectual and social interactions of students, faculty, staff and visitors.
- g. Goals relating to cost effectiveness, maximum return, minimizing operational and maintenance costs, and initial cost/life cycle cost considerations:
- Improve the campuses' existing facilities and infrastructure through a systematically administered and regularly funded renewal and adaptation program.
 - Guide plans for new construction and renovation with design standards that provide the university with optimal long-range life cycle cost benefits.
- h. Goals concerning relations with the State and surrounding communities:
- Plan for facilities and an information technologies infrastructure that will enhance the University's outreach programs and establish a visible positive presence throughout the State.
 - Maintain viable planning linkages with surrounding communities. Support the improvement of adjacent neighborhoods.

Additional master plan objectives were developed during on-campus master plan workshop sessions. These statements are summarized in the "Needs Assessment" chapter of this master plan and address primarily the physical characteristics of the campuses.

C. Process

1. General Overview of the Process

The University of Nebraska-Lincoln Campus Master Plan was developed over an eight-month period and utilized a participatory workshop process that involved a diverse cross-section of campus constituents and stakeholders-including all campuses-City, East, and the five Extended Campuses. A broad based level of information and input was gathered utilizing this process and constitu-

ents were involved in the development of master site plan concepts as well. The master plan process and the development of the master plan occurred in three phases of work as follows:

2. Needs Assessment Phase

The Needs Assessment Phase began with a series of ten information gathering sessions over a six-day period in April 1998. Participants who attended the workshops included UNL Facilities Management, Business and Finance Directors, Business and Finance Planning Group, University Planning Team, Extended Campus Directors, Student Affairs Directors, ASUN Executive Committee, Greek Association, Residence Hall Association, UNL Deans, Chancellor's Cabinet, UNOPA and UAAD Executive Committees, the Academic Planning Committee and the Academic Senate Executive Committee. Input was solicited for master plan goals, campus needs, positive and negative attributes about the existing campus, and stakeholders' visions of a future campus. Concurrently with the master plan needs assessment, Paulien and Associates were commissioned by the university to conduct a campus-wide space needs study. The results from this study helped guide many of the decisions for the Campus Master Plan. Also during this phase of work, the existing physical campuses were surveyed and analyzed by the design team.

3. Alternative Concept Phase

During this second phase of work, three master plan design workshops were held on May 5, 6, and 7, 1998; June 30 and July 1, 1998 and September 3 and 4, 1998 with the participants listed above. During these work sessions, goals, objectives, and issues for the city and east campuses were reviewed and concept alternatives were developed for campus gateways, character zones, pedestrian circulation, vehicular circulation and parking, services, architecture, streetscape, site furniture, and signs, building materials, and expansion areas. Ultimately two campus master plan concepts were developed and evaluated by the participants. At the end of the phase, a comparative assessment was made of the proposed concepts which resulted in the identification of preferred master plan concepts for the City and East Campuses.

4. Master Plan Concept

The final phase of work included the development of the preferred master plan concepts for City Campus, East Campus, and the five Extended Campuses. These concepts have been developed to coincide with six-year planning and budgeting cycles which coincide with the biennial budget cycles. Included with the physical development, architectural exterior design guidelines and landscape guidelines have been recommended for City and East Campus. The master plan provides a framework for campus planners to assist them with growth and change on campus, while maintaining flexibility and response to phasing strategies and resource allocation.

D. Information Gathering, Initial Assumptions and Goals

1. Introduction

The Space Needs Analysis research was provided in a separate report by Paulien and Associates from Denver, Colorado. The consulting firm was hired to examine City and East Campus space needs of the University of Nebraska-Lincoln. The major responsibility of Paulien and Associates, Inc. was to analyze existing space and apply appropriate space guidelines to determine current and future space needs.

The space analysis is based on faculty and staff data as well as a headcount enrollment total of 22,847 for the Fall 1997 semester as the base year, and a target year headcount enrollment projection of 25,000 in the Fall 2007 semester. Faculty and staff levels during this ten year period will be impacted by research growth projections as well as enrollment.

During the early information gathering sessions, the following basic planning assumptions and goals were established.

2. City Campus

a. Assumptions:

- Assume implementation of the Antelope Creek Floodway and Antelope Valley Parkway as proposed

in the Antelope Valley Major Investment Study “Draft Single Package”.

- Assume construction of the Holdrege Street extension as proposed in the City of Lincoln’s 6-Year Capital Improvement Plan.
- Plan for target headcount enrollment of 25,000 students for City and East Campuses in 2007.
- Plan for significant growth in research productivity and staffing by the year 2007.

b. Goals:

- Eliminate the 100-year floodplain that constrains campus development.
- Maintain the building density in the core of campus.
- Eliminate existing through traffic within campus.
- Discourage vehicular traffic in the core of campus.
- Make the campus core more pedestrian friendly.
- Replace and consolidate parking lost to building, roadway, floodway and open space development.
- Develop a shuttle transit system between parking facilities and the campus core.
- Replace and consolidate recreation fields lost to development.
- Eliminate the backlog of deferred building, landscape and utilities maintenance.
- Improve visitor orientation and wayfinding on campus.
- Establish highly visible “Gateways” to the campus.
- Provide sites for future building needs and opportunities.

3. East Campus

a. Assumptions:

- The 100-year floodplain of Deadman’s Run will continue to exist and cannot be used for building sites.

- Huntington Avenue will be connected to the new northeast roadway as proposed in the Antelope Valley Major Investment Study.
- Plan for target headcount enrollment of 25,000 students for City and East Campuses in 2007.
- Plan for significant growth in research productivity and staffing by the year 2007.

b. Goals:

- Maintain a lower building density on East Campus than on City Campus.
- Complete the internal loop drive system within campus for improved accessibility.
- Consolidate campus entry points along Holdrege Street to improve traffic and pedestrian safety.
- Concentrate academic functions within the internal loop drive and discourage vehicular traffic from this area.
- Concentrate major visitor-generating facilities and support service functions outside of the internal loop drive and along 33rd Street.
- Provide sites on campus for field research that requires close proximity to students and faculty.
- Provide sites for future building needs and opportunities.
- Replace and consolidate parking lost to building and open space development.
- Maintain a prominence of open, green space and landscaped areas on campus.

E. Design Concept Strategies and Evaluation

1. Introduction

This section summarizes and describes major features of the Master Plan for both the City and the East Campuses. For a more complete list of proposed projects, refer to the Master Plan Concepts – Chapter IV for City and East Campuses and Chapter V for the Extended Campuses.

2. City Campus

- The 100-year flood potential from Antelope Creek is eliminated by a new, park-like floodway along the east perimeter of campus.
- Through traffic is eliminated from the campus core area by a continuous perimeter road system comprised of the Antelope Creek Parkway, the Holdrege Street By-Pass, I-180/10th Street and Q Street.
- A system of parking structures and parking lots intercepts traffic near the campus perimeter and reduces vehicle and pedestrian conflict in the campus core area.
- A shuttle bus system serving parking garages and lots provides convenient access to the campus core area.
- A strategy of building renovations and additions in the campus core meets future space requirements in that area without greatly increasing building density.
- An extensive building renovation and replacement program eliminates a significant backlog of deferred building maintenance.
- The elimination of the 100-year flood plain provides an opportunity to create a “R & D Quadrangle” east of 17th Street, between R and Vine Streets.
- A system of major and minor malls provides an organizing framework for campus development, improves wayfinding and preserves open space.
- An official visitor and guest welcoming and orientation center near the administrative and academic core area (13th and Q Streets) provides an official “front door” for the campus.
- Another important campus gateway on Vine Street, near the Beadle Center is given major prominence.
- The relocation and consolidation of campus support functions near the perimeter road system provides improved access to both City and East Campuses.
- Recreation fields displaced by roadway/floodway and building construction are replaced and consolidated near campus residential areas.

3. East Campus

- The park-like border along the south edge of the campus is extended entirely around campus, and incorporates elements for campus identification.
- A new south entrance drive complements the historic main campus mall, reduces the number of entrance points and potential traffic conflicts on Holdrege Street, and provides a strong campus identification element.
- The renovation of the historic campus mall re-establishes its formal character and complements the neo-classical architecture.
- The completion of the loop drive system improves internal campus circulation.
- A new campus entrance from 48th Street improves campus accessibility, especially for visitors to the law library, veterinary diagnostic center, animal science facilities, and dental clinic.
- A new Huntington Avenue entrance leading to a new Union Mall will improve access to the campus core and East Campus Union.
- Bank stabilization and erosion control along Deadman's Run will preserve experimental plots and improve public safety.
- Building sites are identified to meet future space needs and potential building opportunities.
- Recreation fields are relocated and consolidated adjacent to the proposed East Campus Recreation Center, convenient to the campus core area.
- Parking lots displaced for building sites and roadway expansion are relocated and consolidated adjacent to the loop drive.

4. Extended Campuses

The scope of this Master Plan did not provide for as intensive a participatory planning process for the Extended Campuses as was provided for the City and East Campuses. Work sessions were held with the Campus Directors and IANR Staff to assess the needs and goals of the Extended Campuses. These findings are summarized and presented in Chapter V. Also preliminary development diagrams are presented.

F. Conclusions, Recommendations, and Phasing Proposals

1. City Campus

a. Phase 1: 1999 – 2005

- The deferred maintenance bond projects approved by the 1998 Nebraska Legislature will be completed or begun.
- Most projects funded through the University of Nebraska Foundation's Capital Campaign should be constructed or begun.
- Major Athletic Department projects at Memorial Stadium and the Devaney Sport Center will be constructed or begun. The Ed Weir Track will be renovated and Buck Beltzer Baseball Field will be relocated.
- The State may fund the new City Campus Hazardous Materials Facility.
- The Esther L. Kauffman Residential Center will be constructed.
- A new Honors Dormitory may be constructed or begun.
- Construction of the Antelope Creek Floodway, Antelope Valley Parkway and several buildings would result in the removal of UNL buildings, parking lots and recreation fields, some of which will require replacement.
- The initial phase of parking structure development will begin.
- A west wing may be added to the Beadle Center.
- Phase 1 of Memorial Mall should be completed.

b. Phase II: 2006 – 2011

- Athletic Department projects at the Devaney Sports Center, Memorial Stadium, new tennis facilities, a new softball and soccer complex, and the remodeling of Cook Pavilion are anticipated.
- Additional phases of parking garages may be constructed.
- Phase II of Memorial Mall should be completed.

- Construction of a mixed-use development.

c. Phase III: 2012 and Beyond

- Additional phases of parking garages may be constructed.
- Buildings will be constructed in the R & D Quadrangle as needs and opportunities arise.
- A plaza may be constructed west of the West Stadium.

2. East Campus

a. Phase I: 1999 – 2005

- The deferred maintenance bond projects approved by the 1998 Nebraska Legislature will be completed or begun.
- The project funded through the University of Nebraska Foundation's Capital Campaign should be constructed.
- The State may fund additional capital construction projects, including the new Library Central Storage Facility.
- The former Tractor Test Lab may be converted into a museum with private funding.
- Funding will be sought to complete stream bank stabilization, Holdrege Street entrance improvements and perimeter park improvements.

b. Phase II: 2006 – 2011

- A new East Campus Recreation Center and recreation field improvements may be completed.
- An East Campus Parking Garage may be constructed or begun.
- Funding will be sought to construct a new 48th Street entrance and renovate the historic campus mall.
- A second phase of the Library Central Storage Facility may be required.

c. Phase III: 2012 and Beyond

- A third phase of the Central Library Storage Facility may be required.
- Funding will be sought for construction of a new Huntington Street entrance, Union Mall, enhancement of the Campus Botanical Garden and completion of the internal loop drive.

3. Extended Campuses

The goals and needs of the Extended Campuses are summarized in Chapter V. As noted previously, a comprehensive planning effort for each campus was beyond the scope of work for this plan. It is recommended that all of the Extended Campuses undergo a planning process similar to that of the City Campus and East Campus to develop detailed long-range plans.

II. Needs Assessment

A. Stakeholder Comments

It was the desire of the UNL to gather information on needs and desires for the future development of the City and East campuses from a wide cross-section of stakeholder groups. The following planning objectives were developed for each campus after conducting a series of ten information gathering workshops with UNL administration, faculty, staff and students, in April of 1998. In total, over 100 persons were interviewed during this period.

1. City Campus: Workshop Summary

a. Campus Edges

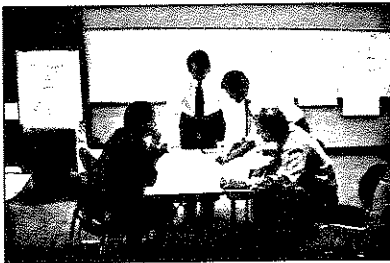
- Define campus edges while extending armatures to encompass UNL properties that are outside of the major boundaries.
- Create visual, ceremonial and physical gateways to welcome and orient visitors as they enter the campuses.

b. Define "Character Zones" on campus.

- Create special places that support the human experience on campus.
- Improve the Pedestrian Experience by creating way-finding features.
- Enhance landscape elements and emphasize existing landmarks, malls and vistas.
- Accentuate the historic grid to aid in way-finding and orientation.

c. Develop a hierarchy of order throughout the campus.

- Develop major and minor feature spaces along the pedestrian pathways.
- Support the feature spaces with enhanced landscape, signage, materials and lighting.



d. Vehicle Circulation

- Connect outlying buildings such as the Beadle Center and the Devaney Center to main campus through defined pathways.
- Develop enhanced and clear bus/shuttle routes for the campus.
- Maintain and improve existing service systems.

e. Pedestrian Circulation

- Promote a pedestrian campus by discouraging parking and vehicle traffic within the campus core. Locate parking structures at the perimeter of the campus.

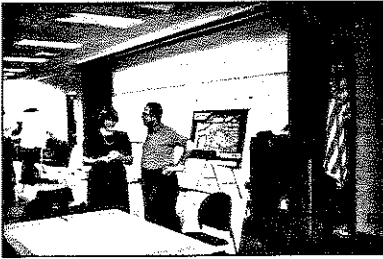
f. Parking

- Connect parking structures to the campus core with enhanced transit and pedestrian systems.
- Locate new parking structures at the perimeter of the campus, at major cardinal entry points.
- Limit parking on “R” Street to visitor parking.
- Create a clear and efficient shuttle service from perimeter parking to areas throughout the campus to move people effectively while restricting the use automobiles on campus.

g. Architectural

- Identify and strengthen a cohesive “Campus Character”. Support the current “Collegiate Georgian” style by the development of design guidelines that are sympathetic to the scale, material and design intent of this image.
- Visually connect buildings on campus to achieve a cohesive campus.
- Establish uniform building materials to create a sense of place upon entering the campus.
- Restrict construction of high rise buildings on campus.
- Ensure that additions to existing buildings make a positive impact on the campus.
- Create master plan concepts for Development Zones

2. East Campus: Workshop Summary



a. Campus Edges

- Create a perimeter park, 100'-150' zone to define the campus boundary, and present a positive image to the surrounding community.
- Enhance 33rd Street as a city street.

b. Gateways

- Create a major ceremonial entrance along the south.
- Relocate and develop a new gateway from the north.
- Enhance the entry points from east and west with signage and landscape.
- Consider a visitor center/reception at the Dairy Store located in the Food Industry Complex.

c. Define "Character Zones" on campus.

- Enhance the existing historical mall.
- Improve the pedestrian experience by removing vehicles from core of campus.
- Enhance landscape elements and emphasize existing landmarks, malls and vistas.
- Support the feature spaces with enhanced landscape, signage, color palette, materials and lighting.
- Continue to develop the Botanical Garden Arboretum as major features for the campus.
- Establish a gathering space/plaza on the south of the Union.

d. Vehicle Circulation

- Remove vehicle traffic from the core of campus.
- Remove parking from the existing Mall.
- Complete loop road to connect campus and provide orientation for visitors and transit service.

e. Pedestrian Circulation

- Promote a pedestrian campus, remove vehicles from core of campus. Locate parking structures at the perimeter of the campus.
- Enhance and develop informal curvilinear walks throughout campus.
- Provide appropriate bike access and adequate bike parking at campus entry points.
- Develop campus connections for pedestrian and bike travel from the Lincoln Trail System.

f. Parking

- Connect parking structures with enhanced transit and pedestrian systems.
- Locate new parking structures at the perimeter of the campus, at major cardinal entry points.
- Improve access and visitor parking at East Union.
- Create a clear and efficient shuttle service from perimeter parking, to areas throughout the campus to move people effectively while restricting the use of the automobile on campus.

g. Architectural

- Identify and strengthen a cohesive “Campus Character”. Support the current style, by the development of design guidelines that are sympathetic to the scale, material and design intent of this image.
- Visually connect buildings on campus to achieve a cohesive campus
- Establish uniform building materials to create a sense of place upon entering the campus.
- Restrict construction of high rise buildings on campus.
- Ensure that additions to existing buildings make a positive impact on the campus.



B. Campus Wide Space Needs

1. Introduction

The consulting firm of Paulien and Associates, Inc. was hired to examine City and East Campus space needs of the University of Nebraska-Lincoln. The major responsibility of Paulien and Associates, Inc. was to analyze existing space and apply appropriate space guidelines to determine current and future space needs. The information provided in Paulien's report has been used as a guide in developing the campus Master Plan and is summarized in this chapter.

The space analysis is based on faculty and staff data as well as a headcount enrollment total of 22,847 for the Fall 1997 semester as the base year, and a target year headcount enrollment projection of 25,000 in the Fall 2007 semester. It is anticipated that faculty and staff levels during this ten year period will be impacted by research and enrollment growth.

In October, 1998, Chancellor Moeser appointed 29 faculty and administrators to the Nebraska Future Task Force on Research and Graduate Studies. The Task Force has been asked to identify goals of Nebraska's research and graduate activities; how they should be organized and to recommend how the University should implement them. The Chancellor is looking to the Task Force to assist in developing a research plan.

When the Research Plan is completed, planners will have a much clearer sense of how the physical environment of the campus should respond to its research objectives. At that time, it will be important to revise the target year space analysis of research and office facilities.

2. Space Analysis Guideline Definitions

a. Guideline Assumptions

The space analysis consultant used the University of Nebraska Space and Land Guidelines (NU Guidelines) which were prepared June 19, 1985 and revised January 13, 1987 as the primary source of guideline formulas for determining UNL space needs. For some space need categories alternative guideline models were used as deemed appropriate.

Classroom and Classroom Service Guidelines

NU Guidelines specify a classroom utilization goal of 30 hours of use per week at 65 percent student station occupancy. Calculations of classroom space needs were based on an average 20 assignable square feet (asf) per student station, rather than the 16 asf per student station average suggested in the NU Guidelines. Twenty asf per student recognizes the growing presence of computers in the classroom and is consistent with current practice at peer institutions, according to the consultant. As the new technology is added to existing classrooms, seating capacities will be reduced and utilization rates will increase.

Teaching Laboratory and Service Guidelines

Space requirements for teaching laboratories were based on NU Guidelines.

Open Laboratory and Service Space Guidelines

Open and individual study laboratories are not specifically addressed by either the NU Guidelines or the Council of Educational Facilities Planners International (CEFPI) guidelines. Therefore the existing space assigned to open laboratory functions was assumed to be needed, and carried forward as the guideline asf for the base year. Target year open laboratory needs were determined according to ten year enrollment trends projected for each college.

Research Laboratory and Service Guidelines

Guideline analysis for research space needs at base and target years were calculated using a method developed by the consultant for the University of Missouri. The method is based on a space module per faculty member, with the space sizes varying by research type. A 22% growth of research space needs during the next decade has been tentatively projected. It is anticipated that this will change when the Nebraska Future Task Force has completed its work, and a research plan has been developed. Additional graduate assistants, postdocs, and technicians were also determined based on projected levels of research activity.

Academic Office and Service Guidelines

NU Guidelines were used to calculate Academic Office and Service space requirements based on the existing and

projected staffing patterns of each college and unit. The consultant included guideline space in this category for student organizations at 60 asf per organization, and flexible-use academic commons space at 500 asf for each academic department.

Administrative & Support Offices & Service

Offices used to conduct activities in support of the academic functions of the institution are categorized as administrative and support office space. NU Guidelines were used to calculate space requirements based on the existing and projected staffing patterns of each unit.

Library Guidelines

Library space needs were calculated using a combination of the NU Guidelines, the Association for College and Research Libraries (ACRL) Guidelines and adjusted guidelines from CEFPI. The library analysis is based on collections data reported by UNL in its response to the 1996-97 Association of Research Libraries questionnaire.

Space needs for the Law Library were calculated using the same guideline assumptions as were used for the University Libraries Analysis, with several exceptions. The number of volumes per stack unit was considered to be 75 rather than 125. The percentage of reader stations for students and faculty was increased from 30 to 35. Information contained in the Schmid Law Library Addition program statement was also used as a guideline reference.

Recreation Guidelines

The NU Guidelines were used to calculate recreation space needs. This formula allows space for the total student, faculty and staff headcount.

Athletics Guidelines

The consultant did not analyze athletics space, however, a comprehensive facilities master plan has been developed by Athletics to assess current deficiencies and assess future needs. Facilities needs were determined by interview data from all departments, physical inventory of existing facilities, structural studies and comparisons to peer institutions. Continued success is in part dependent on having the best facilities, which will in turn help the University to

continue to attract the best student athletics, coaches and staff. In this summary, existing space was entered for both base and target years. Thus, an artificial space need of zero percent is presented. A list of proposed Athletic Department Construction Projects for the years 1998-2011 are presented in a separate display. Preliminary cost estimates developed by the Athletic Department are included, but since the projects have not been programmed, assignable square foot estimates are not available.

Assembly & Exhibit Guidelines

There are no appropriate numeric guidelines available for the space analysis of Assembly and Exhibit at the campus level. Therefore, base and target year guideline space presented is drawn from preliminary programming efforts on the Sheldon Gallery addition, the Visitor Center and proposed modifications to the Howell Theatre.

Student Union and Culture Center Guidelines

NU Guidelines specify a formula of 6.5 square feet for each graduate and undergraduate student for student union space and 2.0 square feet for each student for bookstore space. These two were combined into a factor of 8.5 square feet per student to calculate student union space needs. Culture Center space is included in these calculations.

Physical Plant and Central Storage Guidelines

The NU Guidelines formula was used to calculate physical plant space needs. This formula includes factors for campus areas served by the physical plant, acreage served by Landscape Services and General Stores space per student. Programmed space requirements for the City Campus Hazardous Materials Center was also included in the guideline requirement.

Other Academic Department Space Guidelines

For other academic department space, existing space was used as the guideline amount for the base year. Target year space needs were determined by applying growth factors of each college to base year space.

Other Administrative & Support Department Space Guidelines

For other administrative and support department space needs, existing space was used as the guideline amount for the base year. For the target year, half of the overall growth projection was used as the growth factor for all administrative and support units.

Residence Life

Residence hall space cannot be readily determined by guideline analysis. Existing UNL residence hall space was used as the guideline amount for the base year. The overall UNL projected target year enrollment increase of 9.4 percent was used to derive a target year space need, along with space guidelines that are based on the current cluster concept, rather than the old double loaded corridor model.

Division of Continuing Studies Hotel Guideline

It was assumed that no additional hotel space is needed in either the base or target year. Therefore the existing base year area was used for both guidelines.

Space Needs Analysis Summary

The following charts summarize the space needs for Base Year 1997 and projected space needs for Target Year 2007.

University of Nebraska-Lincoln				
Space Needs Analysis Summary (City and East Campuses)				
Base Year 1997				
Space Type	Base Year ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Classroom & Service	210,995	257,613	(46,618)	(22)
Teaching Labs & Service	175,093	243,086	(67,993)	(39)
Open Labs & Service	230,239	230,239	0	0
Research Labs & Service	410,338	627,170	(216,832)	(53)
Academic Offices & Service	590,149	596,594	(6,445)	(1)
Administrative & Support Offices & Service	255,400	223,976	31,424	12
University Libraries	290,065	343,068	(53,003)	(18)
Law Library	28,118	41,022	(12,904)	(46)
Other Academic Dept. Space	470,870	470,870	0	0
Other Admin. & Support Dept. Space	479,529	479,529	0	0
Recreation	166,184	211,492	(45,308)	(27)
Athletics ***	518,068	518,068	0	0
Assembly & Exhibition	246,754	274,162	(27,408)	(11)
Student Union & Culture Center	175,648	194,200	(18,552)	(11)
Physical Plant & Central Storage	107,237	105,382	1,855	2
Residence Life	1,039,130	1,039,130	0	0
DCS Hotel	24,536	24,536	0	0
Subtotal	5,418,353	5,880,137	(461,784)	(9)
Space Freed & Not Assigned	0	0	0	0
Useable Unassigned Space	0	0	0	0
Total	5,418,353	5,880,137	(461,784)	(9)
Structured Parking Space *	179,151	179,151	0	0
Future Athletics Proposals	0	**	**	**
* Refer to parking summary for number of stalls				
** Assignable area not available. Refer to list of proposed projects and preliminary cost estimates.				
*** See comments on Athletics space guidelines				
IRP, revised 11/18/98				

University of Nebraska-Lincoln				
Space Needs Analysis Summary (City and East Campuses)				
Target Year 2007				
Space Type	Target Year ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Classroom & Service	250,200	281,872	(31,672)	(13)
Teaching Labs & Service	209,993	278,139	(68,146)	(32)
Open Labs & Service	221,914	263,150	(41,236)	(19)
Research Labs & Services	419,650	685,173	(265,523)	(63)
Academic Offices & Service	610,290	690,376	(80,086)	(13)
Administrative & Support Offices & Service	260,352	224,776	35,576	14
University Libraries	356,729	386,406	(29,677)	(8)
Law Library	43,475	54,201	(10,726)	(25)
Other Academic Dept. Space	487,638	538,794	(51,156)	(10)
Other Admin. & Support Dept. Space	479,698	485,054	(5,356)	(1)
Recreation	166,184	255,077	(88,893)	(53)
Athletics	518,068	518,068	0	0
Assembly & Exhibition	274,162	274,162	0	0
Student Union & Culture Center	205,369	212,500	(7,131)	(3)
Physical Plant & Central Storage	84,305	106,931	(22,626)	(27)
Residence Life	1,243,165	1,237,405	5,760	0
DCS Hotel	24,536	24,536	0	0
Subtotal	5,855,728	6,516,620	(660,892)	(11)
Space Freed & Not Assigned	53,340	0	53,340	100
Useable Unassigned Space	15,848	0	15,848	100
Total	5,924,916	6,516,620	(591,704)	(10)
Structured Parking Space *	1,121,451	1,535,451	(414,000)	(37)
Future Athletics Proposals	**	**	**	**
* Refer to Parking Summary for number of stalls.				
** Assignable area not available. Refer to list of proposed projects and preliminary cost estimates.				
*** See comments on Athletics space guidelines				
IRP, 10/12/98, Revised 11/18/98				

3. Commentary on the Space Analysis

a. Limitations of the Analysis

The following is taken from the Space Needs Analysis developed by Paulien and Associates, Inc.

“The consultant utilized campus data provided by UNL for staffing, courses, and facilities information. Adjustments to these data files were made based on discussions with UNL faculty and administration and on-site observations.

“Fall 1997 data were used for the base year providing a ‘snapshot in time’ of staff, courses and facilities at UNL.

“While normative guidelines are a good general indicator of relative need, they are not a substitute for college facilities programming. College programming will most accurately determine specific needs and building fit. Further, this study analyzes space needs but does not focus on evaluating the quality of existing space.”

b. Comments on the Findings

Classrooms and Service

A 46,618 assignable square foot (asf) deficit has been calculated for classrooms and classroom service space in base year 1997. Projects funded through the legislature’s deferred maintenance initiative and the Capital Campaign will add a net increase of 39,205 asf to the classroom inventory. However, the increased enrollment projected for the year 2007 will work against that gain resulting in a 31,672 asf deficit in 2007. The double use (as both theatres and lecture halls) of two auditoria in the proposed Ross Film Theatre (6,120 asf) will help reduce the gap, bringing the projected deficit down to 25,552 asf.

Teaching Labs and Service

A 67,993 asf deficit has been calculated for teaching labs and service space in base year 1997. It is reasonably safe to assume that Open Lab space listed in the inventory presently covers much of that deficit. Renovation and new construction proposed for the next decade will add a net increase of 34,900 asf to the teaching lab inventory, and

should compensate for enrollment growth projected for target year 2007.

Open Labs and Services

Existing space assigned to open laboratory functions was assumed to be needed in base year 1997 and no deficit was shown. As mentioned previously, some of the 1997 base year space is used to cover the deficit shown for teaching labs. Proposed renovation, new construction, and demolition projects resulted in a net loss of 8,325 asf in target year 2007. The deficit of 41,236 asf shown for target year 2007 responds to projected enrollment growth. This space deficit should be verified during the development of projects yet to be programmed.

Research Labs & Service

A 216,832 asf deficit has been calculated for research labs and service space in base year 1997. The method used to project research lab and service space requirements is based upon a space guideline per faculty member developed by the consultant for the University of Missouri, and should be more reflective of current research space requirements than the decade-old NU Space Guidelines for research space. The Target Year 2007 deficit is projected to increase to 265,523 asf in response to general growth assumptions in research activity and relatively small increases in research space through renovation and new construction projects that have been programmed to date. The magnitude of the present research space deficit calculations supports the master plan concepts of creating an "R&D Quadrangle" east of 17th Street between R and Vine Streets and providing space for research facilities on East Campus. It is anticipated that the work of the Nebraska Future Task Force will validate that finding.

Academic Office and Service

Academic office and office service space is calculated to be in small deficit, 6,445 asf in base year 1997. By the target year 2007 academic office and office service space will receive a net increase of approximately 20,141 asf as a result of renovations, demolitions and new construction. Yet a deficit of 80,086 asf is forecast for target year 2007 based upon NU Space Guidelines and projected staffing growth for some colleges and units. This growth can be attributed to anticipated enrollment increases and growth in research activity.

Administrative and Support Office and Service

Administrative and Support Office and Service space is estimated to be in surplus by 31,424 asf in base year 1997. By the target year 2007, administrative and support office and service space is forecast to be in surplus by 35,576 asf. A significant portion of this calculated surplus is caused by the method used to calculate net assignable area for the space inventory in 1997. The net assignable area of rooms containing moveable office cubicles is calculated by multiplying the entire breadth by the entire length of the room. This calculation does not recognize the circulation space between cubicles as non-assignable space. (Spot checks have revealed that about 20 percent of rooms containing moveable office cubicles is devoted to internal circulation pathways). Adjustments to the space inventory will be made so that future space analysis will not count circulation space within rooms containing moveable office cubicles as net assignable office area.

University Libraries and Law Library

A deficit of 53,003 asf is calculated for library space on campus in the base year 1997. This calculation confirms the shortage in library reader stations, stack space and support space that has been observed by students, faculty and staff for several years. By 2007, the space analysis consultant projects library space will be in deficit by 29,677 asf. This closing of the space deficit is due to a proposed addition to Love Library North, (a computer-aided learning center) and the proposed construction of the first phase of a Library Central Storage facility. The latter will permit the transfer of lesser used items from the active library collections into storage, thus freeing stack space for future collection growth.

A base year space deficit of 12,904 asf is calculated for the Law Library. Despite the programmed renovation of and addition to the Law Library, a continued deficit of 10,726 asf is forecast for the target year 2007. However, the greatly improved operating efficiency of the Law Library following the renovation and addition will partially offset the space shortage. The Law Library site will accommodate additional expansion should that become necessary.

Other Academic Department Space and Other Administrative and Support Department Space

The space categories of “other academic department space” and “other administrative and support department space” includes all space assigned to an academic or administrative department, other than assigned classroom, class lab, open lab, research lab, office and office service space. Examples of uses within this broad category include study or reference rooms, animal quarters, greenhouses, and meeting rooms, to name a few.

Most of the space uses grouped in the “other” categories have no formal space guidelines. The need for these spaces is typically determined on a case by case basis, justified in a formal program for a proposed facility. For that reason, the space analysis consultant has chosen to forecast the need for future space in these two categories by applying estimated growth factors for each academic unit to the base year space inventory, and half of the overall UNL growth to the administrative units.

In line with the consultant’s methodology, no surplus or deficit in the “other” categories is calculated for base year 1997. By target year 2007, a deficit of 51,156 asf is projected for academic units and 5,356 for administrative and support department space category. Only a small amount of additional space is anticipated to be provided in these two categories during the ten-year period between the base year and target year. Additional space that may be constructed in these categories will need to be justified during the programming for additional renovation or new construction projects.

Recreation

Recreation space is calculated to be in deficit by 45,308 asf in 1997 and by 88,893 in target year 2007. NU Space Guidelines were used by the consultant in determining needed recreation space, and are based on student, faculty and staff headcount, which are forecast to grow in response to the target year enrollment assumption. No change in the recreation space inventory has been forecast between the base and target years which would reduce the projected space deficit. However, the master plan for East Campus shows a site for a new campus recreation center, replacing the existing Activities Building. If this facility is realized, much of the forecast recreation space deficit will be eliminated.

Athletics

Existing space was analyzed and compiled in a master plan completed by Athletics. The Department continues to grow with the addition of women's sports to address gender equity concerns and in response to the ever-changing environment of collegiate athletics. Athletic facilities now are often cramped overcrowded and poorly located. Facilities needs were determined by interview data, physical inventory and structural analyses of existing facilities and comparisons to peer institutions.

Existing space assigned to Intercollegiate Athletics programs is assumed to be needed for the program and is entered as a given for base year 1997. That base amount is carried forward to target year 2007. A list of Athletic Department maintenance and construction projects proposed for implementation between 1998 and 2011 are listed in Chapter IV of this report. Preliminary budget estimates provided by the Athletics Department are listed, but no space estimates are provided because the proposals have not been programmed.

Student Unions and Culture Center

The space analysis consultant has calculated a base year 1997 deficit in student union space of 18,552 asf, using NU Space Guidelines for student union and bookstore space (in recognition of the combination of these two types of facilities on both City and East Campuses). The current renovation and addition project at the City Campus student union will add almost 30,000 asf to this space category, thereby reducing the projected deficit to only 7,131 asf by the target year 2007.

Physical Plant and Central Storage

The consultant has calculated a slight surplus in physical plant and central storage space, amounting to 1,855 asf in base year 1997, which changes to a deficit of 22,626 asf by the target year 2007. While this appears to be a significant deficit, it occurs mainly due to the assumed elimination of several buildings (Inventory Building, Auto Body Shop Building, Texaco Building, etc.) as a result of construction of the Antelope Valley Floodway and Parkway during the next decade. There are many variables in determining space necessary for an efficient Physical Plant and Central Storage function (e.g. the degree to which services are outsourced or provided in-house, whether or not delivery is

via a zone system or from a central shop). While the calculation provided in this analysis is helpful, it may not be a reliable indicator of where this function's space needs will be in the future. Efficiency may dictate that it be smaller or larger than the figure indicated. This issue will be addressed with further study.

Residence Life

In response to future headcount enrollment growth assumptions, residential life space requirements will increase 198,275 asf by target year 2007. Two proposed projects, the Esther L. Kauffman Residential Center and a new Honors Dormitory will provide the additional space needed to accommodate this projected growth.

Division of Continuing Studies (DCS) Hotel

It is assumed that the 24,536 asf presently maintained by DCS as Conference Hotel Space will remain sufficient in quantity for the next decade.

C. Existing Land Inventory and Utilization

1. Introduction

The purpose of this section is to present and compare the current land holdings of the University of Nebraska-Lincoln to the land inventory shown in the benchmark 1985 Comprehensive Facilities Plan, which was based on FY 1983-84 data. With one exception, that plan established the campus boundaries for City and East Campuses that were subsequently approved by the Board of Regents.

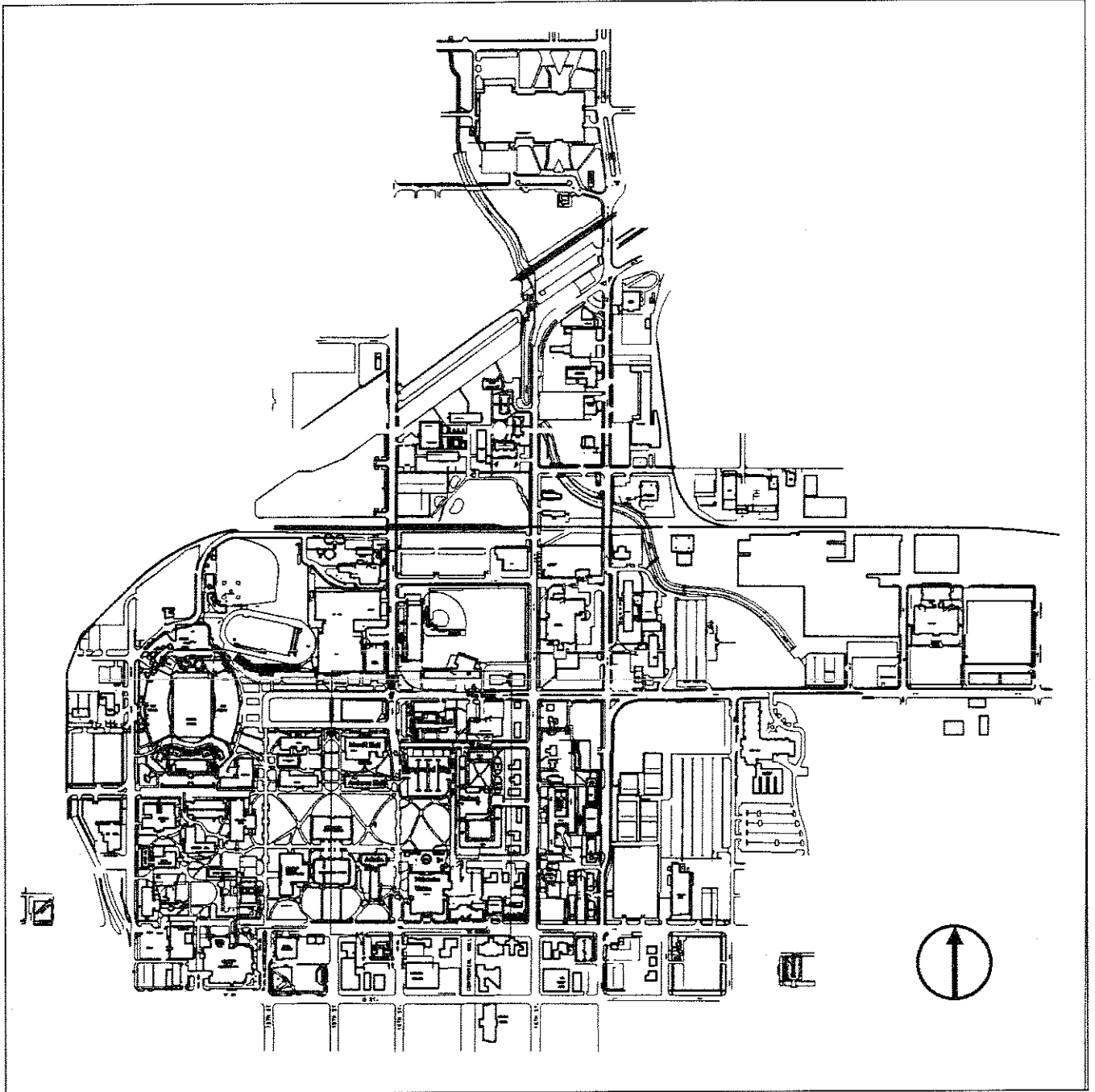
Also this section introduces a method of organizing the City and East Campuses into sectors. These sectors have been developed geographically and are meant to assist with the analysis of each campus in terms of land use and design guidelines development.

Finally, this section contains a brief analysis of each sector in terms of existing land use and utilization and special character.

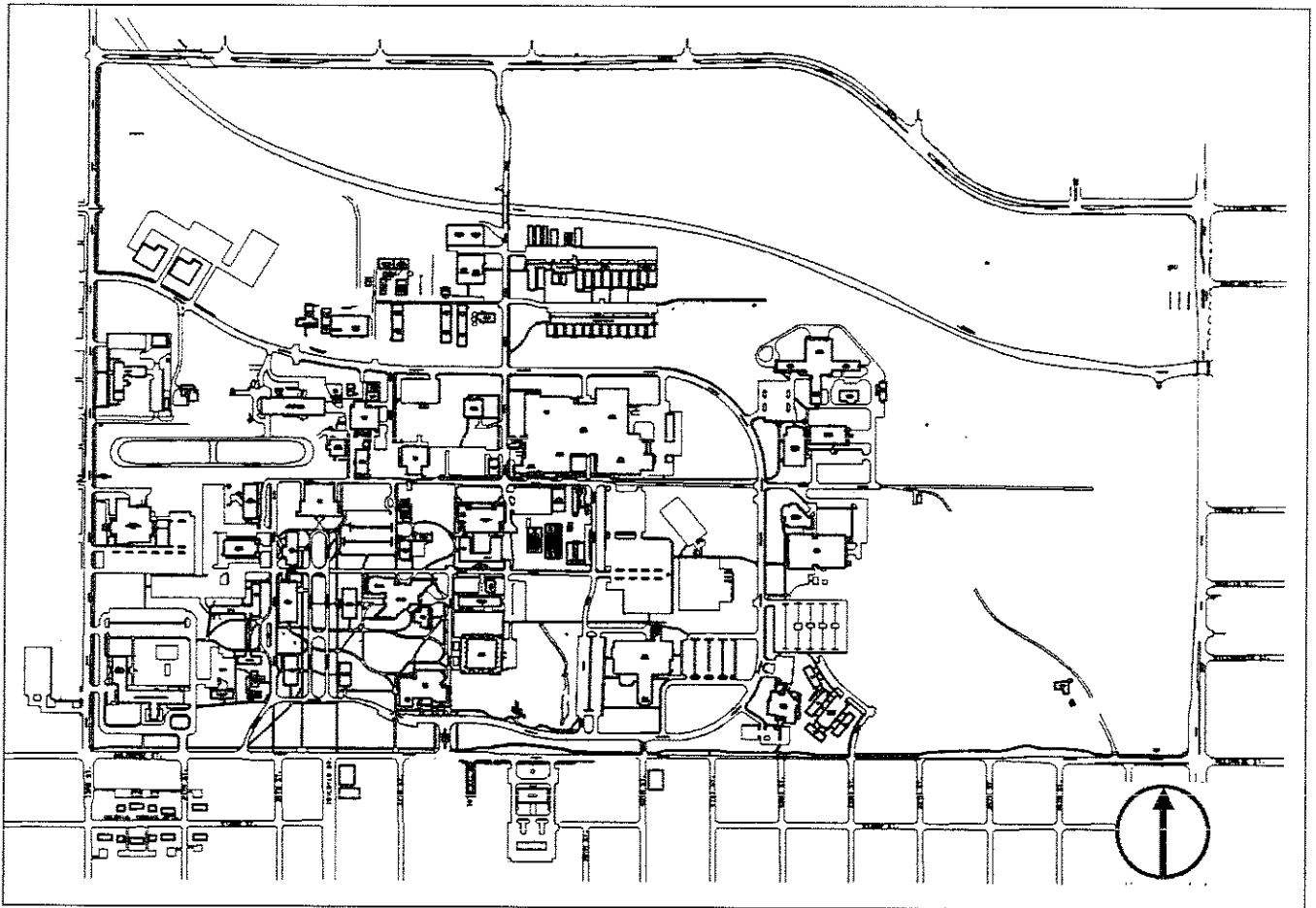
2. Land Inventory

The assessment of land for the 1985 Comprehensive Facilities Plan involved searching all known records to ascertain the amount and location of the land owned and used by UNL. Current and future needs were calculated by factoring density and circulation, as well as projecting land area needs from the program and need statements for new construction projects that had been written at the time of the 1985 report. Land was categorized according to seven uses: building sites, parking, outdoor recreation, intercollegiate athletics, agriculture-related, circulation, and other UNL-owned land. Maps were then used to outline areas for proposed purchase, and a boundary for future expansion was established. Using this method, a land deficit of 65.66 acres for the City and East Campuses and 1,120 acres for the Extended Campus locations was projected for the year 1990. These calculations guided the establishment of campus boundaries in 1985.

The 1985 plan has been used to guide land purchases and the assignment of land uses, with one change: Following the discovery of a conflict between UNL's 1985 Comprehensive Facilities Plan and the Northeast Radial Reuse Plan adopted as a part of the City of Lincoln's Comprehensive Plan, a task force was developed to re-establish a mutually acceptable east boundary for City Campus. This task was completed in 1989, and approved by the Board of Regents as a change to the Comprehensive Facilities Plan.



Existing City Campus



Existing East Campus

3. Analysis

The following table illustrates the comparison between university-owned land as recorded in FY 1983-84 and the present university holdings. The majority of the purchases have been within the campus boundaries as they were defined in the 1985 Comprehensive Plan. Purchases and land trades associated with the extended campus locations have been determined by specific needs in those locations.

University of Nebraska-Lincoln
Land Comparison
FY 1983-84 to FY 1997-98

Campus	FY 1983-84	FY 1997-98	Change
City and East	582.82 Acres	624.62 Acres	+41.8 Acres
Extended Campuses	31,962.00 Acres	35,876.50 Acres	+3,914.5 Acres
Total	32,544.82 Acres	36,501.12 Acres	+3,956.3 Acres

As a part of the ongoing process of revising the Comprehensive Plan, the factors used to calculate the land deficit and project future needs will be evaluated for possible changes, as will assumptions made about the general character and function of the City and East Campuses and the Extended Campuses. This process may result in a recommendation to modify the campus boundaries, as presented in the following sections.

4. Conclusion

As UNL moves into the twenty-first century, and as land becomes more difficult and more expensive to obtain, it will be increasingly important to make the most efficient use of the land that is available. The need of the surrounding communities and neighborhoods to plan for their own growth and development, particularly in areas where the needs of the community and UNL are interrelated, such as traffic and water movement, must be considered in the planning for UNL's future.

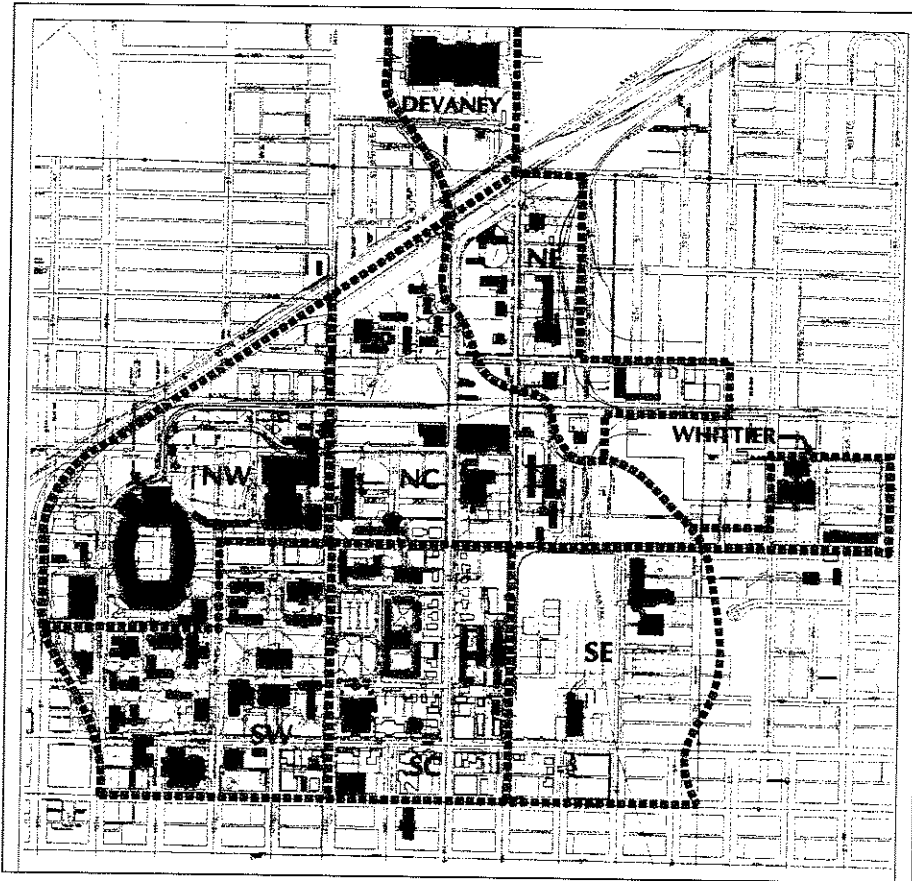
The proposed Antelope Valley Flood Control Project will have a significant impact on both UNL and the adjacent communities. This project will provide additional land for development through bringing land out of the 100- year flood plain. This project will redefine the "edge condition" between the University and its neighboring communities.

Ongoing change, community-wide issues, proposed programmatic changes, density and circulation factors and general assumptions about the character of the campuses and the assignment of land for particular uses must continue to be incorporated into the University's planning processes.

5. Campus Sectors

a. Introduction

During the development of the Master Plan, campus planners and the design team developed the concept of utilizing campus “sectors.” These sector zones were established as a method to subdivide the City and East Campuses into smaller geographic sections to help with the planning process. These sectors divide the campuses into zones that have similar physical and functional characteristics, yet have a clear zone boundary.



b. City Campus Sectors

NW Sector

This sector, at the northwest corner of the City Campus, contains facilities for intercollegiate athletics and student recreational facilities. Memorial Stadium, Ed Weir Track, Buck Beltzer Baseball Field, Cook Pavilion, the Coliseum, Sapp Recreation Facility, Military and Naval Science Building, and the UNL Power Plant are all contained in this sector. The western and northern edges of the sector are created by the Holdrege Street Extension.

NC Sector

This NC sector, located in the main north central area of City Campus, contains the Harper Schramm Smith residence halls, Greek houses, inter-collegiate women's softball field, and student recreation fields and courts. The sector also includes Mabel Lee Hall and Henzlik Hall, Nebraska Hall, and the Scott Engineering Center. The eastern most edge of this zone will be the proposed Antelope Parkway and the northern edge of the zone will be Holdrege Street Extension.

NE Sector

This sector is located along the northeastern boundary of City Campus and encompasses a zone between the Malone Neighborhood to the east and north and the core of City Campus. The future Antelope Valley Parkway divides this zone from the center of City Campus. This sector contains the majority of City Campus support services including Landscape Services, UNL Police, Maintenance, Business Services, Transportation Services, and Facilities Management.

Devaney Sector

The northern most sector of City Campus is bounded by the future Antelope Parkway to the west and the State Fair Park to the north and east. The Bob Devaney Sports Center and surface parking comprise the facilities in this zone.

Whittier Sector

This sector is comprised of Whittier School, a former Junior High School, the surrounding student recreation fields, adjacent family housing units, and surface parking. This sector is bounded on the south by Vine Street and the Malone Neighborhood to the north and east. The Malone Neighborhood surrounds Whittier on the north and east, with the Cushman Plant located to the west. Two UNL housing properties are located south of Whittier and north of Vine Street.

SW Sector

The SW sector is the oldest area on City Campus is part of the original campus plat. Several of the buildings in this sector date back to the late 1880's and early 1900's. Landscaping is generally mature with well landscaped paths and newer memorial gardens. This sector also includes newer construction dating from the 1960's, and other buildings that have additions currently underway. The function, form, style, and materials included in this sector vary and create a diverse mix of buildings and spaces. The sector is generally academic in nature and contains Love Library and the Administration Building as well as public, fine and performing arts functions. Facilities in this sector include; Temple Building, and Howell Theatre, Torn Notebook Plaza (Madden Garden), Lied Center for Performing Arts, Kimball Recital Hall, Westbrook Music Building, Architecture Hall, Brace Lab, Richards Hall, Manter Hall, Ferguson Hall, Hamilton Hall, Woods Building, 501 Building, Andrews Hall, Burnett Hall, Bessey Hall, Morrill Hall, Mueller Carillon, Sheldon Memorial Art Gallery, and College of Business Administration. The boundaries of this sector are I-180 to the west and Q Street to the south. This sector is densely developed with few building sites available for new construction. A few non-university properties are included in this sector, primarily along Q Street.

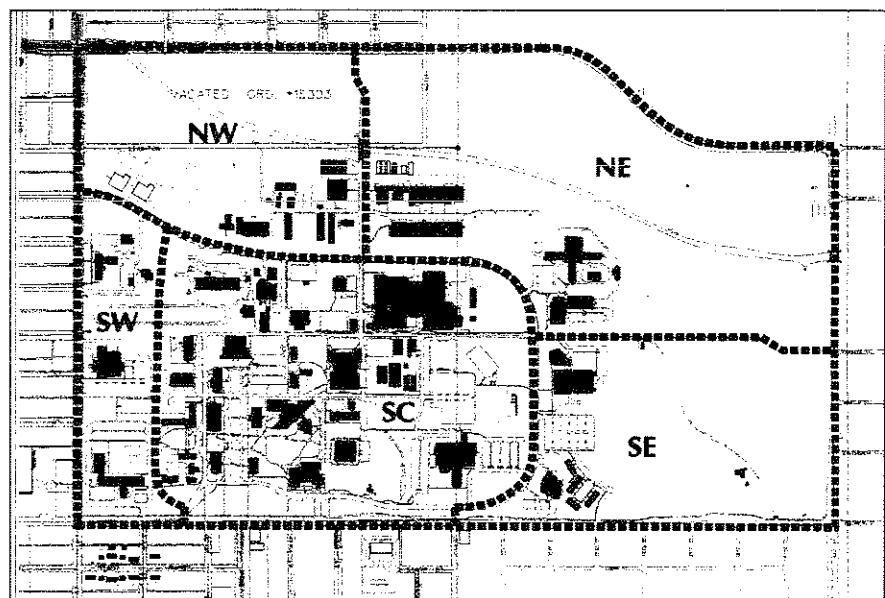
SC Sector

The SC sector is located at the south center portion of the campus and contains residence halls, Greek houses, Student Union, and other student services including the Student Health Center and campus ministries facilities. Many of the buildings vary in construction date, style and material. A historic district containing the majority of the fraternities and sororities along 16th Street and R Street gives

the area a residential as well as historic quality. The southern boundary of this sector is Q Street.

SE Sector

Much of the SE sector of City Campus is currently considered as the future development zone or growth area for City Campus. The Beadle Center located at the northeast corner of the sector is the only major facility located in this sector at the present time. Of the land in this sector, the majority owned by the University is currently devoted to recreation fields, surface parking, and the mail and distribution services building, a former lumber yard. The eastern most boundary of this sector is the proposed Antelope Parkway and the south boundary is Q Street. The eastern boundary of this sector will be the “new” eastern edge of UNL with the construction of the Antelope Parkway. As a result of the Antelope Valley proposal, a large portion of this sector would be removed from the 100-year flood plain and made suitable for future development.



c. East Campus Sectors

NW Sector

The NW Sector is located in the northwest corner of East Campus and contains facilities that are predominantly support facilities in nature and agricultural plots. Facilities lo-

cated in this sector include landscape shops and yards, warehouses, a hazardous materials collection center, seed lab, USDA Physiology and Agronomy Physiology storage facilities, old poultry barns, and the State of Nebraska Game and Parks Commission's Headquarters. The Game and Parks' facilities are not owned by the University of Nebraska-Lincoln. Dead Man's Run bisects the sector and approximately 60% of the land area is within the 100 year flood plain. The western-most boundary of the sector is North 33rd Street and the northern boundary is Huntington Avenue.

NE Sector

This sector is located in the northeastern corner of East Campus and contains facilities which are supportive to the agricultural research mission of the campus along with some academic facilities. The facilities located in this sector include Forestry Service equipment storage, Forestry Science greenhouses, Weed Science greenhouses, Plant Science greenhouses, research plots and Horticulture greenhouses, along with animal research facilities and veterinary diagnostic and veterinary basic science centers. Dead Man's Run also bisects this sector and 60% of the land north of Dead Man's Run is in the 100-year floor plain. The northern boundary of the sector is Huntington Avenue and the eastern most boundary is North 48th Street.

SW Sector

The SW Sector of East Campus lies along the western-most boundary of East Campus and contains the Nebraska Center for Continuing Education facilities, the Nebraska Educational Television facilities, and the Pershing Armory facilities owned by the Nebraska National Guard. The western border of the Sector is North 33rd Street and the southern border is Holdrege Street.

SC Sector

This sector contains many of the oldest facilities on East Campus and includes portions of the original campus development. Many of the buildings in this sector date back to the late 1880's and are grouped around a north/south landscaped mall. Landscaping is generally very mature with well-landscaped paths and new memorial gardens. This sector also contains new facilities dating from the 1960's and 1970's. The function, form, style, and materials

included in this sector generally relate to the historic earlier buildings of East Campus and are constructed of brick with sloping shingled roofs. This sector is generally academic in nature, but contains facilities which are heavily used by the public including the East Campus Student Union and the C. Y. Thompson Library. Facilities in this sector include Agricultural Hall, Family Resources Center, Love Hall, Fedde Hall, Burr Hall, Home Economics, Activities Building, Ruth Leverton Hall, Ruth Staples Child Development Laboratory, L. W. Chase Hall, Biological Systems Engineering Laboratory, Tractor Testing Track, Livestock Judging Pavilion, Forest Service Laboratory, Mussehl Hall, Kiesselbach Crops Research Laboratory, Water Resources Lab, Natural Resources Hall, Plant Science hall, Keim Hall, Nebraska East Union, Plant Industries Building, Miller Hall, Agricultural Communications Building, Agricultural Communications Building, Food Industry Complex, C. Y. Thompson Library, Animal Science Complex, Plant Science Teaching Greenhouse, Horticulture Teaching Greenhouses, Insect Lab, College of Dentistry, recreation facilities, and parking facilities. The southern-most boundary of this sector is Holdrege Street.

SE Sector

Much of the SE Sector of East Campus is devoted to agriculture plots, but contains the Law College facilities, Barkley Memorial Center, and University Park Apartments on the western edge of the sector. A tributary of Dead Man's Run is also contained in the sector. The sector is bordered by Holdrege Street to the south and North 48th Street to the east.

D. Information and Learning Technology Infrastructure

1. Information Services

a. Mission Statement

The Mission of Information Services is to provide professional leadership and support for the instructional, research, and outreach programs of the University of Nebraska-Lincoln.

- Providing leadership in the development and delivery of information services for the desktop, for the classroom, for distance learning, and for research;

- Promoting and supporting networking and the integration of information resources and services on a campus, state and national basis;
- Providing timely, equitable and seamless access to scholarly collections of print and electronic resources;
- Promoting information literacy through training, documentation, short courses, and educational software; and
- Maintaining a pluralistic, highly qualified staff committed to excellent service, continuous learning, and the values of the educational experience.

b. Renovation and New Construction

As the Master Plan is implemented and as new facilities are constructed or when renovating existing structures, consult Information Services for directives from their *Strategic Plan and Priorities 1997/1998*, and for any further detailed information regarding information technology requirements. Information and Learning Technology is a high priority of UNL. Goals of the plan must be extended and reinforced by the implementation of the Master Plan.

E. Utility Systems

1. Introduction

As part of the Master Plan preparation Ferris Engineering proposed Master Plan developments as well as examined existing campus utility systems. The major issues and concerns with existing systems and recommendations for utility systems to support Master Plan concepts are included in the following section.

2. City Campus

a. Major Concerns

Major concerns with respect to the City Campus utilities are the following:

- Keeping utility service site corridors available to buildings from utility origination or generation points and/or from main distribution loops to allow future connections, maintenance and/or enhancements.

- The areas that lack proper capabilities should be noted in the documentation. Some of those are discussed herein.
- Funding and implementing preventive maintenance upgrades on a continuing basis to maintain or improve reliability of the utilities infrastructure. Maintenance and repair upgrades are noted as applicable.

Sanitary (SS) and Storm (ST) Sewers and Domestic (DW) and Fire Suppression (FW) Water General

The City of Lincoln (CL) owns all of these mains. The services to the individual buildings are owned by UNL. The building lines are categorized as being in respectable condition. The mains from the CL seem to be adequate to support the needs of the individual building services. Individual or groups of buildings are metered from CL mains, therefore, there is a significant presence of CL owned and maintained water mains within the campus confines. The fire suppression systems in individual buildings seem to be adequately served by the CL DW system. The CL tests all of the mains periodically as part of their preventive maintenance process.

Natural Gas

People's Natural Gas serves the campus and owns the mains. There are no known major or widespread problems with the mains and service lines. The primary usage of natural gas is for boiler fuel at the utility plant. The agreement with the utility company is an "interruptible" basis, i.e., in the event of a shortage of fuel, the utility plant can be shut off from the supply of natural gas fuel. When that occurs, stored oil stand by is used as boiler fuel.

Fuel Oil

Fuel oil is present at the utility plant as a natural gas alternative for boiler fuel. Fuel oil used to be consumed in significant quantities as a primary fuel. Due to air and ground water environmental issues, however, the economics currently favor natural gas for primary boiler fuel.

Significant changes have occurred in the past five to ten years in fuel oil storage and usage at the utility plant as a result of the economic considerations. The storage capacities have been reduced to limit the costs of housing significant quantities of fuel as well as limiting the liability

exposure in the event of a spill. Approximately twenty (20) days of fuel oil storage capacity are currently maintained. Secondary containment around storage apparatus has been installed or is planned for retrofit to help reduce the liability.

b. Steam

Generating Plant

By the end of 1998, the city campus utilities plant will house five (5) active steam generators with nominal delivery pressures of 250 PSIG (superheated to 500 degrees F) or 625 PSIG (superheated to 825 degrees F). The oldest boiler is approximately forty (40) years old (250 PSIG) and the others are approximately thirty (30) (625 PSIG), seven (7) (250 PSIG), one (1) (250 PSIG) and less than one (1) years (625 PSIG) old. The higher delivery pressure is required to supply turbine drives on chillers for cooling season operation.

Distribution System

Distribution Type

The majority of the distribution is walk through tunnel. Storm water in the tunnel system is removed via gravity drains or by sump pumps located in manholes. A small portion of the mains are direct buried, particularly to the Devaney Sports Center.

Capacity

The system capacity seems to be generally very adequate.

Maintenance and Repair Issues

As a general rule the tunnels and the lines within the UNL tunnels are able to be maintained and repaired as needed.

Condition and Suitability of Distribution

As a general rule the tunnels are not congested and accessibility issues do not appear to be a problem. Confined space issues, however, may need to be addressed. Some of the ladders in manholes need upgrading.

c. Chilled Water

Generating Plant

The city campus utilities plant currently houses five (5) active chilling units. Providing heat rejection for these chillers are three (3) cooling towers. The oldest chillers, of which there are two (2), are approximately thirty four (34) years old and the others are approximately thirty (30), twenty (20) and four (4) years old.

Distribution

Distribution Type

The distribution type is direct buried ductile (DIP) or cast (CIP) iron pipe with no insulation.

Capacity

The system capacity seems to be adequate except in the general vicinity of the Kimball Recital Hall, the Lied Performing Center and Architecture Hall (southwest portion of campus). A project which will provide additional capabilities via connections back to the main lines to the north and east of these facilities is included in the recommendations, but not yet funded.

Maintenance and Repair Issues

As a general rule the lines have not required significant maintenance and repair. The single most prevalent problem associated with the mains is failures due to vertical shear of the pipe mains. If this occurs, it is as a result of heaving from frost at the beginning of the cooling season. These types of failures, however, do not occur frequently.

Condition and Suitability of Distribution

As a general rule the condition of the mains and service lines is judged to be adequate and does not present major problems.

Cooling Towers

There are two (2) cooling towers serving the chillers and steam condensers in the utility plant. The smaller one was rebuilt in 1991 and the larger one in 1993.

d. New Building Services

Athletic Performance Facility

The proposed site for this facility seems to be adequately surrounded by all of the necessary utilities. It is possible that natural gas serving a radiant heating system may be the system of choice to serve the building. Further research into this project is required before final selections and recommendations are made.

Research Area

Chilled Water

The chilled water (CW) service main routing south of campus down 16th street, whose primary mission is to serve the Capitol, appears to be adequately sized to extend to the SW corner of 17th and "R" and to serve at least a portion of the facilities planned in this area. The capitol CW line is estimated to be from 1.5 to 2.0 times larger than needed for that service. The utility corridor along the south side of Vine Street from 16th to past 19th, that was extended to the Beadle Center in approximately 1994, also has CW distribution mains present. Some excess capacity was planned into the design of this line and thus this line appears to be another source of potential service to this proposed complex of buildings.

Steam

The utility corridor that was extended to the Beadle Center in approximately 1994 has high pressure steam distribution mains present. Some excess capacity was planned into the design of this line. This line is a source of potential service to this proposed complex of buildings.

e. Recommendations

Completion Recommended Before End of 2005

Many of these projects have been deferred for a number of years, therefore, the quality and reliability of the utility systems becomes more questionable with each year.

Enclose and Retube City Campus #6 Boiler

This boiler was constructed with the firing area inside and the remainder of the boiler outside. This approach was sometimes taken during the 1960s and 1970s in an attempt to reduce the capital cost. This approach is seldom taken today because of the additional temperature stresses applied to the boiler and the inability to be able to locate all of the required accessible areas inside a fairly small firing area. This boiler needs to be brought up to today's standards via this retrofit.

Steam Tunnel and System Repair Phase 1

This work consists of ongoing general preventive maintenance and upgrades to the steam tunnel system on campus.

f. Completion Required Before the End of 2011

These projects should be funded and scheduled to be completed in the long term time frame by the end of 2011.

City Campus Steam Tunnel and System Repair

This project consists of the structural rebuilding of sections of the steam system and the steam tunnel. The tunnel along 16th Street from S to T, along S Street from 14th to 16th Street, and sections North of Manter are in need of structural repairs. Sections of the steam and condensate line and several expansion joints need to be replaced. Asbestos insulation should also be removed and replaced.

Replace City Campus #5 Boiler

The existing #5 boiler on the City Campus was installed in 1965 and has been retubed once. The economizer is no longer operational and the unit is beyond its expected useful life. The efficiency of this unit has dropped to ap-

proximately 60% and the reliability is low. The capacity of this unit (40,000 lbs per hour) does not lend itself to the campus load pattern. This unit should be replaced with a high efficiency 83%, 80,000 lb/hr 250 PSIG 500 degree unit similar to the #2 boiler installed in 1997.

City Campus Chilled Water System Renovation

There are a number of chilled water isolation valves and vents that need repair and replacement along with several areas of high corrosion rates where the pipe should be replaced. These areas should be addressed to reduce the possibility of outages and to improve reliability.

Renovation of City Campus Shop and Operators Control Room

The existing shop and maintenance area is inadequate because of space, configuration and location. A portion of the area on the first floor where the old coal fired boilers were located and have now been removed should be renovated to provide storage and a workable shop area. With the installation of a central control center, an environmentally controlled room should also be created for operators to monitor and control the three major plant systems, electrical, chilled water and steam.

Installation of a Centralized Plant Automation System

Most of the major plant equipment controls have been converted to microprocessors. These units should now be connected to a central control system to allow a more efficient operation of the integrated systems. The ability to optimize operation of combinations of equipment will save operating costs. The shortage of utility operators in the work force has also created a need for this central control system. Less people will be required to monitor equipment located over a square block of building area which is distributed over three floors.

Utilities Master Plan

The completion or updating of a detailed Utilities Master Plan (UMP) should be undertaken as a necessary by-product of the planning process shortly after this Master Plan is completed. The goal of the UMP process is to develop a detailed condition analysis, assess utility needs and project costs and priorities to assure that a continued flow

of utilities (uninterrupted) is provided to each building on each campus.

3. East Campus

a. Major Concerns

The major concerns with respect to the East Campus utilities that need addressing are basically similar to City Campus and are generally as follows:

- Keeping utility service site corridors available to buildings from utility origination or generation points and/or from main distribution loops to allow future connections, maintenance and/or enhancements.
- The areas that lack proper capabilities should be noted in the documentation.
- Funding and implementing preventive maintenance upgrades on a continuing basis to maintain or improve reliability of the utilities infrastructure. Maintenance and repair upgrades are noted as applicable.

Sanitary (SS) and Storm (ST) Sewers and Domestic (DW) and Fire Suppression (FW) Water General

Similar to City Campus, the City of Lincoln (CL) also owns only the mains serving the East Campus. The services to the individual buildings are again owned by UNL. However, the services to the individual buildings on East Campus are more substantial in length and distance from the CL mains. Currently, however, the building lines are categorized as being in respectable condition. The mains from the CL currently seem to be adequate to support the needs of the entire East Campus. The domestic water is metered at a small number of locations as it enters the campus boundaries. The fire suppression systems in individual buildings seem to be adequately served by the CL DW system. The CL tests all of the mains periodically as part of their preventive maintenance process. A UNL project is currently under construction to upgrade significant portions of the domestic water system branch mains on East Campus.

Natural Gas

People's Natural Gas serves East Campus and owns the mains. There are no known major widespread problems

with the mains and service lines. The primary usage of natural gas is for boiler fuel at the utility plant. The agreement with the utility company is an "interruptible" basis, i.e., in the event of a shortage of fuel (winter), the utility plant can be shutoff from the supply of natural gas fuel. When that occurs, stored oil standby is used as boiler fuel.

Fuel Oil

As at city campus, fuel oil is present at the utility plant as a natural gas alternative for boiler fuel. Fuel oil used to be consumed in significant quantities as a primary fuel. Due to air and ground water environmental issues, however, the economics currently favor natural gas for primary boiler fuel.

Significant changes have occurred in the past five-ten years in fuel oil storage and usage at the utility plant as a result of the economic considerations. The storage capacities have been reduced to limit the costs of housing significant quantities of fuel as well as limiting the liability exposure in the event of a spill. Approximately twenty (20) days of fuel oil storage capacity are currently maintained. Secondary containment around storage apparatus has been or is planned for retrofit to help reduce the liability.

Steam

Generating Plant

The east campus utilities plant currently houses three (3) active generators delivering steam at a nominal pressure of 125 PSIG. The boiler ages are on average from fifteen to thirty years old, however, they have all been rebuilt in the last five (5) years.

Distribution System

Distribution Types

The distribution type is approximately 60% walk-through tunnel. Storm water in the tunnel system is removed via gravity drains or by sump pumps located in manholes.

The remaining approximately 40% consists of a rectangular concrete trough buried at varying depths, but with the bottom of the trough generally below the frost line (ap-

proximately 5'-0"). The trough consists of steam and condensate main or branch pipes completely encased with a combination moisture repelling and insulating material (Gilsulate 500®).

The service line to the Nebraska Educational Telecommunications Network building is a direct buried line having individual steam and condensate carrier pipes encased in another pipe surrounded by insulation (RicWil®).

Capacity

The system capacity seems to be generally very adequate.

Maintenance and Repair Issues

As a general rule the tunnels and the lines within them are able to be maintained and repaired as needed.

Condition and Suitability of Distribution

As a general rule the tunnels are not congested. Confined space issues, however, may need to be addressed. Some of the ladders in manholes need upgrading. The trough system has recently had most of the insulation systems replaced. The ground water level has not been a particularly troublesome issue in the past as far as attempting to invade the tunnels, troughs or direct buried lines.

Chilled Water

Generating Plant

The East Campus utilities plant currently houses three (3) active chilled water generating units. The oldest chiller is an open drive electric centrifugal which was installed during the middle 1970s. The other two active units are high pressure steam absorption units that are approximately eight (8) years old. Serving these chillers are three (3) cooling towers. Two of the cooling towers have been rebuilt in the last eight years.

Distribution

Distribution Type

The distribution type is direct buried ductile (DIP) or cast (CIP) iron pipe with no insulation.

Capacity

The system capacity seems to be generally adequate except at the northeast area of the campus in the vicinity of the Animal Research facility. Unregulated flow to the Animal Research facility and surrounding buildings causes unmet cooling loads.

Maintenance and Repair Issues

As a general rule the lines have not required significant maintenance and repair. The single most prevalent problem associated with the mains is failures due to vertical shear of the pipe mains. If this occurs, it is as a result of heaving from frost at the beginning of the cooling season. These types of failures, however, do not occur that often.

Condition and Suitability of Distribution

As a general rule the condition of the mains and service lines is quite adequate and does not present problems.

4. Recommendations

a. Completion Recommended Before End of 2005

Many of these projects have been deferred for a number of years, therefore, the quality and reliability of the utility systems becomes more questionable with each year.

Replace East Campus Cooling Tower

The remaining unit needs to be rebuilt to bring it in line with the general vintages and reliability of the other cooling tower infrastructure components at the plant.

Retube East Campus Centrifugal Chiller (#4)

This chiller is between twenty and thirty years of age. Wear and tear over the years have combined to necessitate this as a preventive maintenance and reliability upgrade.

Steam Tunnel and System Repair Phase

This work consists of ongoing general preventive maintenance and upgrades.

b. Completion Required Before End of 2011

These projects should be funded and scheduled to be completed in the long term time frame by the end of 2011.

East Campus Domestic and Chilled Water System Renovation

The east campus domestic water system has an area of old 6" main that is too small to provide adequate pressure and volume for fire sprinklers and water use in the buildings. The area around the East Campus Mall and the Food Industry Complex are major areas of concern. A new 12" line should be installed to replace the existing 6" line increasing pressure and volume. Sections of the chilled water system should be replaced where the existing pipe size reduces pressure and capacity of chilled water supply.

East Campus Steam Tunnel and System Repair

This project consists of the structural rebuilding of sections of the steam system and the steam tunnel. The tunnel along Fair Street from the Activities Building to Musshel Hall and south from Fair Street to Agriculture Communications needs to be rebuilt. Sections of the steam and condensate lines and several expansion joints need to be replaced. Asbestos insulation should also be removed and replaced.

Renovate East Campus Storm and Sanitary Sewer Systems

Replace and repair existing storm and sanitary sewer systems to provide adequate service buildings and grounds. Install additional storm sewer system to provide adequate

drainage in the East Campus Mall and loop areas where there is a lack of adequate surface drainage.

Utilities Master Plan

The completion or updating of a detailed Utilities Master Plan (UMP) should be undertaken as a necessary by-product of the planning process shortly this Master Plan is completed. The goal of the UMP process is to develop a detailed condition analysis, assess utility systems needs, project costs and priorities to assure that a continued flow of utilities (uninterrupted) is provided to each building on each campus.

5. General Recommendations - Both Campuses

Coordination

One major issue of concern is that of utility and building coordination when a new building or renovation is proposed and designed. The UNL utilities department is normally afforded a fairly small window of opportunity to be part of the process of formulating the specifics of utility services to the building. This is particularly true of steam and chilled water. This should be addressed in the master plan in terms that encourage more allowance (time and funding) for participation in the building planning and design process. If UNL FMP personnel availability is a problem in providing a continuum during the complete planning and design process for the utilities, a consultant should perhaps be retained to assist in this role.

Hydraulic Models

Some efforts have been made in the past to develop hydraulic models of some of the systems as a useful tool for planning. This is mostly applicable and true for steam and chilled water. The models developed to date have been used primarily to pinpoint problems and to offer potential solutions to the problems. It is important that these models be a dynamic tool that are afforded updating anytime a change is proposed or made to the systems. This type of effort should be budgeted as a line item in the annual utilities division's budget and should be included in every significant building project. The initial development of the models databases should be included with the Utilities Master Plans on both campuses.

Future Needs

Some of the future facilities utilities have been discussed herein. However, as the plans and programs develop it is expected that significant revisions will occur. Therefore, utilities planning must be provided a continuum of updating, either via the Utilities Master Plans and its updates, or specific utilities planning and design elements coincident with major building projects.

6. Electrical Power System

The University of Nebraska-Lincoln campus presently receives primary electric service from LES (Lincoln Electric System). The source has proven to be extremely reliable over the years. LES supplies power to a substation located at 14th and Avery Street. The substation (Avery) is owned and maintained by UNL. Supply voltage from LES is 34.5 Kv. Two (2) dual winding 12.47/4.16 Kv transformers rated 7500/10,000 KVA each, one 4.16 Kv rated 3750/4695 KVA and one 4.16 Kv rated 7500/10,000 KVA dedicated to Chiller #4 in the CUP. The substation configuration is the overbuilt structure type with bare cable overhead on metal towers that form the main and transfer busses. The transformers are oil filled with fan forced cooling to obtain the higher KVA rating. The transformers are free of PCBs. Oil filled 34.5 KV circuit breakers serve as the main breaker on the utility entrance to the Avery Street substation and a second unit serves as the main for the East Campus distribution line. The substation capacity to handle peak demand is the total rating of transformers and equals 34,695 KVA, including Chiller #4 transformer. City Campus distribution capacity for peak loads is 24,695 KVA. Provisions are made in the substation to also serve the East Campus by a 34.5 Kv overhead distribution line.

The peak electrical demand recorded at the substation in the past 24 months was 32,000 KW, and occurred October 1997. The average monthly peak demand averages 24,900 KVA.

a. The maximum demand comprises three major loads:

State Capitol Building	Approximately 2000 KW
East Campus	Approximately 8000 KW
City Campus	The remaining 22,000 KW

In May of 1998, the East Campus load was disconnected from the Avery substation and served directly from LES distribution lines. By relieving the East Campus load from the Avery substation, approximately 25% to 30% of additional capacity will be available at the substation for Campus loads.

The 12.47 and 4.16 Kv distribution feeders from the transformer's secondaries are extended underground to a double ended 15 Kv metalclad switchgear lineup. One side of the switchgear bus is 12.47 KV and the other is 4.16 Kv.

Three 12.47 Kv distribution circuits and five 4.16 Kv distribution circuits exit the substation switchgear underground for distribution to City Campus. The following table denotes circuit designation and loads served:

TABLE 1

12.47 Kv Distribution Circuits Loads

Circuit 10/Unit 29 HSS Food Service
 Harper/Schramm/Smith
 Greek Housing (4 Houses)
 Sports Center
 Facilities Management
 Business Services
 Food Stores
 Transportation Services

Circuit 11/Unit 31 Capitol Building

Circuit 12/Unit 32 Buck Beltzer Field
 Eng. Complex
 Nebr. Hall

4.16 Kv Distribution Circuits Loads

Circuit 4/Unit 21 Sheldon Art
 Woods Building
 Music Building
 Kimball Recital
 Love Library Addition

Circuit 9/Unit 25 Abel Hall
 Sandoz Hall
 ASFS

Circuit -/Unit 27 CUP Switchgear

Circuit -/Unit 23 CUP Switchgear

4.16 Kv distribution circuits (-/Unit 27 and -/Unit 23 exit the substation switchgear underground in a concrete ductbank to metal clad switchgear lineup in the Central Utility Plant (CUP). From the CUP, they are further distributed in an underground concrete encased ductbank system to facilities on the City Campus. The following (Table 1) denotes circuit and loads served:

TABLE 1

CUP 4.16 Kv Circuit No. Load

Circuit 1/Unit 19 Military Science
 Coliseum
 Field House (old)
 West Stadium
 East Stadium
 Avery Lab
 Sapp Rec Center
 Cook Pavilion

Circuit 2/Unit 16 Morrill Hall
 Andrews Hall
 Burnett Hall
 Bessey Hall
 Oldfather Hall

Circuit 3/Unit 20 Richards Lab
 501 Building
 Behlen-Brace
 Arch Hall West
 Architectural Hall
 Hamilton Hall
 Stadium Office Building

- Circuit 5/Unit 3 Love Library (old)
 Temple
 Ferguson
 Manter Hall
 CBA
- Circuit 6/Unit 1 Teachers College
 Administration Building
 Nebraska Union
 State Historical
- Circuit 7/Unit 2 Lyman Hall
 Henzlik Hall
 Student Health
 Selleck Quad
 Mabel Lee
 Bancroft
- Circuit 8, Unit 7 Raymond Hall
 Piper Hall
 Cather Hall
 Pound Hall
 Wick Alumni Center
- North Auxiliary/Unit 5 Power Plant:
 New Air Comp.
 No. 6 Boiler
 Softener
 Polisher
 No. 2 Cooling Tower
 Feed Water Booster Pumps #3 & 4
 North Parking Lot
 Fuel Oil Pumps (2 new)
- East Auxiliary/Unit 4 Power Plant:
 Gen. No. 1 & 2
 Boilers #1, 2, 3 & 4
 Feedwater Booster Pumps #1 & #2
 Old Air Compressor
 Boiler Feedwater Pumps

Fuel Oil Pumps (2 old)
Supervisory Control
Shop

West Auxiliary/Unit 17 Power Plant:

Gen. #3
Chiller Room
Boiler No. 5
No. 1 Cooling tower
Fuel Oil House

b. Distribution of Power Circuits

Primary power circuits are distributed through City and East Campus via an underground concrete encased ductbank system. The only overhead distribution is the 34.5 Kv line to the East Campus and a short run of 12.47 Kv overhead to the Sports Center and was rebuilt in 1998.

A radial distribution system is used to provide electrical service to individual campus facilities. The primary feeders are routed to individual buildings via concrete encased ductbanks. All primary feeder cables (including 4.16 Kv circuits) are copper, rated for 15 KV, shielded and have 133% insulation levels. Approximately 75% of the primary feeders are Paper Insulated Lead Covered (PILC) cables that are at least 30 years old. These types of cables have a long life (40+ years) but require periodic checking for oil leakage. The remaining (25%) cable is Ethylene-Propylene Rubber (EPR) insulation. EPR has proven to be a long life medium voltage cable insulation reacting favorable with the damp/wet atmosphere experienced in most Campus manholes.

The majority of the City Campus and the entire East Campus is served at the 4.16 Kv level. A few facilities on the City Campus and the State Capitol building are served at the 12.47 Kv level (reference Table 1 for 12.47 Kv distribution).

The cables are in good condition as they are lightly loaded and well protected from damage. There are very few records of cable failures. It is critical that the PILC cables be periodically checked for oil leaks.

The underground ductbank system is accessed through a myriad of manholes. Many of these manholes contain oil filled switches that are utilized as disconnecting means for tap offs from the main 'trunk' line to individual buildings. The oil filled switches have been virtually untouched in damp manholes for 20 to 30 years. When the switch is operated under load (opened or closed) an arc (flame) may be created if the insulating medium (oil) is contaminated by moisture. There is a high incidence of violent explosions and failure of this type of switch attributed to insulation degradation. Numerous cases are documented of workers being seriously injured, maimed or even killed when operating these type of switches. The older manholes constructed prior to 1980 are very confined and are deteriorating. The newer manholes installed in the late 1980's and early 1990's were constructed with more space and are in good condition.

c. Recommendations

Expand or construct a new substation located directly west of present location. This will allow access and reconnection to existing distribution circuits. The new substation can be planned and constructed to allow addition of new equipment to meet projected load expansion for the next decades and add redundancy to allow maintenance on equipment without lengthy power interruptions. The Avery substation has no room for expansion. Equipment in Avery substation is aged and should be replaced before a catastrophic failure occurs. Preventive maintenance such as testing of insulating fluid should be performed on the transformers and circuit breakers on a yearly basis (minimum) and connections checked on overhead busing with infrared cameras for loose connections. Equipment failure would result in complete power outage for loads fed by the effected transformer. Little, if any, capacity for redundancy exists. Clearances will be difficult to maintain if transformers or other equipment needed to be replaced after failure. The existing substation would remain operational and could continue to serve City Campus loads during construction. After new substation is tested and operational, existing distribution loads could then be systematically 'cut-over' to the new system with minimal downtime. Access to LES distribution lines for service to substation expansion must be coordinated with construction of new north level parking structures programmed for the northwest corner of 14th & Avery.

Replace all oil filled switches located in manholes with SF₆ vault style switches which are not subject to violent failures. Approximately 20% have been replaced to date. Fireproof cables in manholes.

East Campus substation will require substantial renovation to increase power capacity to adequately serve new buildings and provide redundancy. Replace existing transformers and switchgear. Expand and increase capacity of distribution feeders.

With a major upgrade of electrical infrastructure, it is recommended that a fault and overcurrent protection coordination study be performed which can benchmark the new system and will be invaluable when used to properly size equipment ratings and overcurrent protection.

Replace PILC cable as it fails or if significant oil leakage is found with EPR insulated cable. Manufacturers are reducing future production of lead covering type of cable. Experienced cable splicers for this type of cable are becoming fewer. Most cable faults are the result of improperly formed splices or terminations.

Consider identifying and replacing the more badly deteriorating and space deficient manholes. New electrical codes issued in 1999 will redefine standards for manhole construction.

As the Campus expands to the new borders defined by the Master Plan, careful study should be given to the cost effectiveness of expanding the distribution system to pick up these loads or allow LES to serve the new facility from existing distribution system through a separate meter. LES would totalize all meters and still present a single electrical utility bill to the University.

F. Transportation and Parking

1. Introduction

Parking at the University of Nebraska-Lincoln continues to be an area of constant planning and change. Today we see this change occurring rapidly on City Campus due to considerable construction on and adjacent to the campus. This will continue on both campuses over the next ten years and have a major impact on the campus transportation and parking system. Parking and transit services are

also one of the most important issues for students, faculty, staff, and visitors, as was learned at the focus sessions. In addition, the goal of creating a more friendly pedestrian campus was also embraced unanimously by focus groups.

The following items address the current and master plan objectives of the Parking and Transit systems at UNL. This list does not address personnel needs or any other internal requirements to maintain efficiency, but it does list those items that would benefit the campus community in relation to the efficiency and effectiveness of the Parking and Transit Services system, as the Master Plan is implemented. For further detailed information on parking and transit refer to the Master Plan Concepts Chapter of this document.

2. Analysis

a. StarTran Performance and Cost Evaluation

The benefits of the StarTran program have been experienced by those who prefer using alternative forms of transportation as well as those who used to travel to campus by car. The number of users increased to a point of bringing a balance back to the staff and faculty parking on the west side of City Campus. However, the lack of night transportation greatly diminishes the program's effect and planning options for parking. The program is intended to be studied soon to assess possible enhancements as the Master Plan is being implemented.

b. Parking Lot Security

Initiation of a campus security camera program is being considered. This will entail placing several cameras on buildings to monitor vandalism, theft, and other security problems on campus grounds and parking areas. The Residence Hall Association operates an escort service for students walking late at night on campus.

c. Further Explore and Implement Multi-level Parking

Parking demand continues to increase as well as the number of passengers per vehicle and vehicles owned per family. A parking structure should be erected at 14th and Avery or at the south edge of campus, depending on the progression of construction on City Campus. A structure could be a simple facility with out extensive equipment ex-

penses or personnel requirements. It could be a non-cashiered structure specifically designed for permit holders with the addition of a number of metered stalls dedicated to visitors. The design would address security issues related to late night walking of students living in the residence halls. The future loss of parking due to construction necessitates this parking facility. A second parking structure designed to accommodate commuter students and residence hall students should be considered to relieve the impact of the Antelope Valley Project and the Holdrege extension. Recreational facilities should also be considered when determining the number of stalls required.

Refer to the Master Plan Concepts – Chapter IV for more information on parking structure construction and stall replacement.

d. City Street Usage

Street usage agreements or acquisitions should be explored in the near future. Heavy traffic in various areas of the City Campus is causing a safety problem for pedestrians, especially on R Street and 14th Street. It would also offer an opportunity for temporary parking during upcoming transitions. "U" Street must be vacated between 14th and 15th as part of the construction of the Esther L. Kauffman Residential Center.

e. Administration Lot Usage

ADA and service vehicle needs should be evaluated in relation to the current use of the parking lot located west of the Canfield Administration Building.

f. Night Transit Service

A study regarding night transit service should take place using a Graphic Interface System, a city grid map, and current UNL data. The results would allow the evaluation of area densities and possible route destinations. Night transit service would reduce the demand for parking permits and increase transit usage.

g. Crosswalks

An evaluation by the City of Lincoln should be made on all crosswalk areas internal to the City Campus in order to reduce the number of pedestrian/vehicle accidents.

h. Bicycle Circulation

Bicycle and pedestrian conflicts continue to be a safety concern. The heavy pedestrian usage, especially at the central part of City Campus, causes many unsafe situations. The many focus group discussions of students and others confirmed that definite action is needed, in the form of restricted bicycle access to central areas of campus during certain peak class/pedestrian usage times combined with better safety awareness and enforcement. With this approach, enhanced bicycle parking facilities will be important at strategic locations especially at entry points to campuses which will allow bicycles users easy access to safe bicycle parking areas prior to becoming a pedestrian on campus.

i. Speed Limits

Internal and surrounding speed limits should be studied. One example is the area between 17th and R, and 17th and Vine which has an acceptable 25 mph speed limit. This area has an average amount of pedestrian movement to and from the parking lot to the east. Ironically, however, vehicle traffic is allowed to speed up at Vine St. to 35 mph as it approaches a heavily utilized area by pedestrians coming from and going to the Abel/Sandoz Complex.

j. Computer System Updating

Converting to a more user-friendly environment would increase efficiency and access. This type of system would create reports immediately and solve several internal system problems. Computer expertise in this transition would be required. Being able to cross reference social security numbers with license plates and tickets would eliminate part of the duplicate plate issue with the Department of Motor Vehicles.

k. Conclusions

From a campus parking and transit planning standpoint, the previously mentioned issues are very important. In particular, major emphasis should be placed upon the construction of additional multi-level parking and the elimination of pedestrian/vehicular conflicts. Without expansion vertically, the great improvement in parking and transit ef-

iciencies that has been made in the last few years will begin to revert to the inefficient conditions of the past.

Detailed planning information will be presented in a Master Parking Plan that will be completed early in 1999.

G. Open Space and Landscaping

The purpose of this section is to discuss the development of landscape and site elements as an integral part of the campus aesthetic, and, in the case of the University of Nebraska-Lincoln Botanical Garden and Arboretum (UNLBGA) - the teaching collection. Walks, drives, and streets, as essential components of the circulation system, will also be addressed in this section. Over the past two decades, the deliberate development of a high quality, maintainable campus environment has contributed to the overall quality and character of the campus as well as to the quality of campus life. Enhancement of the landscape through the use of plant materials continues. (The impact of the October 25, 1997 storm will be addressed in later in this section) However, renovation and replacement of sidewalks, retaining walls, irrigation systems, exterior lighting, streets and signs are also needed. Repair and construction of the twelve miles of streets and twenty-five miles of sidewalks and malls at UNL are addressed as funds permit. Deterioration continues at a faster pace than restoration, due to age, increased use, and weather.

This section focuses on City and East Campuses. A similar effort is needed for the extended campus locations.

1. Analysis

a. Landscape



The October 25, 1997 snowstorm resulted in devastation of the City and East Campus landscapes, affecting both mature and new trees and shrubs. Fortunately, the shift in emphasis toward botanical diversity begun in the late 1980's, and the introduction of shrubs, grasses, and perennials as integral elements of the landscape reduced the aesthetic impact of the storm to some extent. Full assessment of the storm damage will take another six months to a year to complete, as will planning for the replanting. Prior to the storm, the updated tree and shrub inventory for City and East Campuses showed a total of 9,521 trees

and 32,250 shrubs, with a replacement value of \$10,441,115.

With the loss of more than 1000 trees, planting new trees will continue for several years to compensate for the storm damage.

Both City and East Campus landscapes have been developed as a botanical garden. Designated by the Board of Regents as the University of Nebraska Botanical Garden and Arboretum (UNLBGA), it is commonly referred to as "The Garden". The plant Collections and landscape are utilized by classes ranging from horticulture and botany to art and architecture.

The botanical garden that comprises the green cores of City and East Campuses is the focus of the botanical diversity and teaching collection. Used by classes ranging from plant taxonomy and botany to art and architecture. The Garden is an ever-changing living laboratory and museum. As the flagship arb in the Nebraska Statewide Arboretum system, The Garden serves to extend the teaching, research, and outreach missions of the University well beyond the campus by providing a venue for vicarious enjoyment, tours, and formal teaching.

Development and long-term maintenance of The Garden is supported in part by The Garden Friends, a non-profit 501c3 organization with an ambassadorial mission. Memorials and recognition trees and collections include individual specimens and entire gardens, among them the recently established Jeanne Vierk Yeutter Garden on East Campus. The restored wrought-iron gates south of Love Library on City Campus, the gift of multiple donors, stand permanently open to welcome campus visitors.

The development of the botanical garden throughout the entire campus has helped to create an overall identity for the University. Emphasis has been placed on creating a landscape that ties together the diverse campus architecture and uses a wide variety of trees, shrubs, ornamental grasses and perennials to add year round interest to the campus. Particular attention has been given to landscape enhancement for the football season and graduation time.

Specific improvements in the campus landscape include the creation of a new plaza north of the Nebraska Union. Designed to accompany the Nebraska Union expansion that is currently under construction, the landscaped plaza will be completed in the spring of 1999. It will include the

new Broyhill Fountain, a plaza with planting beds for trees, shrubs and perennial flower displays, and outdoor stage. Completion of the Beadle Center allowed installation of a landscape featuring native plants. The renovation of Burnett Hall and the addition to Walter Scott Engineering Center provided opportunities for landscape renovation as well. The new parking structure at Stadium Drive included enhancement of those street frontages, with planting beds of trees and shrubs and seating. Landscape plantings were included in the surface parking lot project that was completed last year. Smaller landscape improvements were made in other areas of both campuses, including additions to the Arboretum and Botanical Garden collections.

In addition to being an art form in its own right, the campus landscape presents a unique opportunity to incorporate sculpture into environmental settings on a large scale. The collections of the Sheldon Memorial Art Gallery extend into campus with such notable works as Claus Oldenberg's "Torn Notebook," located on the corner of 12th and Q Streets.

Due to the harsh climate and uncertainties of nature, as well as conscientious planning efforts, the campus landscape will continue to change and evolve. Completion of an intensive inventory and mapping effort using GIS and AutoCAD is an ongoing project in the development of the landscape. This effort will produce base maps with a high degree of accuracy that can be tied to facilities information in other departments. Addition of irrigation systems in critical core areas of campus and conversion of old systems to more efficient systems continues as funding allows. As a result of input received from biannual campus safety walks, new area lights were added in some locations, and old fixtures were converted to more effective metal halide. Where needed, benches, trash containers, and ash urns are added as funds permit. Introduction of the "no smoking" policy in university buildings resulted in a significant increase in the need for outdoor ash urns.

Much work is needed on the campus information, identity system, and way-finding systems which includes campus building signs and directories. As a result of work with the City of Lincoln and the Nebraska Department of Roads, primary directional street signs were updated last year. As part of the Master Plan Update, new standards and design guidelines will be developed. As signage on campus is revised, updating of the existing signs on campus can occur.

b. Sidewalks, Malls and Plazas

The commitment to a primarily pedestrian campus that was started as a result of the Caudill Rowlett Scott planning effort in the late 1960's continues. The original City Campus malls that serve as a key element in the pedestrian system are nearing the end of their useful life. These malls have been noted in the past as a central focal open space for the campuses. The need to expand these as well as renovate them were identified as a major design issue in focus group sessions.

Bike trails are gaining importance as a functional part of the campus circulation system. Since the 1990 Master Plan was presented to the Regents, the Central Lincoln Trail (bike and hiker trail) has been completed on City Campus along the west side of 19th Street from "R" Street to "Y" Street in the historic Rock Island Railroad corridor. The Antelope Valley project proposes to extend the bike trail connections in several locations. Acquisition of the Union Pacific Railroad property between 10th and 19th Streets on City Campus will allow establishment of an additional interior bike corridor. Bikes and pedestrians will be accommodated in the new plazas north of Nebraska Union, north of Morrill Hall, and east of Memorial Stadium.

New walks were constructed in conjunction with the CBA addition project, and a north-south walk on the west side of the Coliseum was completed, connecting the student parking lot north of Avery Avenue with Memorial Mall. Construction of the Beadle Center included restoration of walks along Vine Street and 19th Street, and through the recreation area west of the building. A walk parallel to the Loop Road was added from the Barkley Center northwest to the Nebraska Game and Parks Commission on East Campus. Walks were added north of Burnett Hall in the space formerly occupied by the City Campus greenhouses, and also between Mabel Lee and Henzlik Halls.

The repair, replacement, and construction of walks, plazas and malls must continue as future funding allows.

c. Drives

Drives on both campuses usually serve as pedestrian and bicycle ways as well as providing vehicular access. Changes associated with the 10th Street overpass project resulted in the construction of a new drive connection between the parking lot west of Westbrook and 11th



Street. The CBA drive was rebuilt as a result of that building addition project. The renovation of Burnett included changes in the north service court. The growing impact of the access needs for overnight delivery, service vehicles and telecommunications services must be addressed to reduce the conflict between pedestrians and service vehicles using the malls and sidewalks.

d. Streets

Since the 1990 Master Plan was presented to the Regents, the 10th Street overpass project on the west edge of City Campus has been completed. This project has resulted in a major change in the function of the City Campus transportation system, by closing 10th Street (now Stadium Drive) to through traffic and returning the south section of the street between "R" and "T" Streets to parking and university service access. The first phase of the Holdrege Bypass, running parallel to the railroad tracks between 10th and 14th Streets, was also completed as part of the 10th Street overpass project. Additional changes can be expected as a result of the planning currently underway for the Antelope Valley project. The proposed traffic conveyance is shown on the master site plans in Section IV. Further details on connections between the Antelope Valley Roadway and the internal University streets will be developed during the next several months by Antelope Valley Planning Consultants.

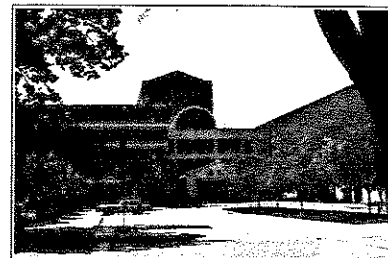
Major street repair was completed on 15th Street and a section of the East Campus Loop Road. Many of the internal streets (those owned by the university) identified in a December, 1991 survey of streets are still in need of repair, as are City streets that are located within university boundaries. Memorial Mall east of Memorial Stadium and the East Campus Mall; will need to be renovated in the near future, as will the older sections of the Loop Road on East Campus.

2. Conclusion

Progress continues on plans for the preservation, restoration, development, enhancement, and educational interpretation of the campus landscape. Recognition of walks, retaining walls, drives, streets irrigation systems and exterior lighting as important parts of the campus infrastructure should continue, and greater emphasis should be placed on providing for their ongoing maintenance and renovation.

H. Recreation and Inter-collegiate Athletics

As part of the Master Plan development, focused discussions with the Athletic Department and the office of Campus Recreation were held to identify and confirm future needs and potential projects and developments for the master planning period. The tremendous amount of construction and expansion of facilities on both City and East Campuses, due in part to the deferred maintenance initiative LB 1100, and as part the future construction of the Antelope Valley project, will cause a considerable amount of reconfiguration of open space. This will greatly impact both recreation and inter-collegiate athletics facilities. The following section summarizes the needs of both and was used as a point of departure for master planning efforts.



1. Recreation

As part of the Master Plan process, the office of Campus Recreation inventoried the current outdoor and indoor recreation facilities on both campuses and developed a list of needs which was analyzed during the Master process.

The priority of serving the ever-expanding student sports clubs on recreational fields has placed extreme demands for additional, flexible sports fields and open space. The Antelope Valley project will also cause the need to relocate many existing facilities such as the softball fields at 19th and Vine Streets and several smaller outdoor courts. In addition, efforts are underway to acquire the Union Pacific right-of-way that bisects the City Campus from east to west at approximately Y Street. If this acquisition is successful, recreation areas located in the center part of City Campus will be affected positively allowing additional space for the development of future facilities.

2. Future Needs

Besides the existing or current inventory of recreational facilities, future needs identified for campus recreation programs include the following:

- Relocate the three softball diamonds at 19th and Vine Streets to a new softball complex as part of the Antelope Valley project.
- Construct four to six additional sports club fields.
- Construct a ropes course and retreat site within a 20-30 minute drive from City Campus or at East Campus.

- Construct two sand volleyball courts in proximity to Cather/Pound/Neihardt Complex.
- Construct two outdoor basketball courts in proximity to Harper/Schramm/Smith.
- Construct one to two sand volleyball courts at East Campus tennis complex.
- Construct storage/field maintenance/supervisor building at East Campus fields.
- Construct equipment storage/field maintenance/supervisor building at Mabel Lee fields.
- Construct a sand volleyball court at Mabel Lee fields.
- Construct an outdoor playground area in close proximity to Campus Recreation Center.
- Consider installation of synthetic turf on six recreation fields to help with field utilization.

3. Future Indoor Recreation Facility Needs

- Construction an addition to the Campus Recreation Center—if not feasible at City Campus, program an additional facility expansion at East Campus.
- Construct or remodel East Campus activities facility.
- Relocate women's gymnastics in Mabel Lee Hall and convert existing area to basketball/volleyball courts. The gymnastics program will not be moved unless new facilities are constructed at the Devaney Sports Center.
- Construct a six-court indoor tennis pavilion on City Campus.

An incorporation of these recreation facilities into the future Master Plan is considered a priority to help maintain the high quality of life for students at both City and East Campuses.

4. Inter-collegiate Athletics

Due to inter-collegiate athletics growth and the need for improved and modern facilities, a multi-phased plan for the construction of additional facilities and the expansion of existing facilities has been developed by the Athletic Department.

The Athletics Department has also undertaken a Structural Condition Survey of Memorial Stadium – 1995, performed by WJE and a Structural Condition Survey of the Devaney Sports Center – 1998, performed by Leo A. Daly. These surveys have identified several deferred maintenance projects which are included in the Athletic Facilities Master Plan or are currently underway. As part of the master planning process, this preliminary facilities master plan for inter-collegiate athletics was reviewed and analyzed for its feasibility and was coordinated with other campus developments. The plans for inter-collegiate athletic facilities are focused on the City Campus only at the NW Sector and the Devaney Sector.

A brief summary of the phased improvements includes the following:

- Phase I, which has already been partially implemented, includes the construction of Memorial Stadium Skyboxes and East/West Stadium Concourse Improvements. Other Phase I improvements include renovating the Ed Weir Track facility.
- Phase II improvements will include a new athletic performance center, relocated baseball facilities, relocated softball fields, new dedicated football practice fields, a new North Stadium Concourse, and outdoor track locker rooms, press and spectator facilities.
- Phase III improvements are centered around East and West Stadium improvements. These include new football team facilities, new athletic medicine facilities, new stadium events support facilities, expanded food service and academic services, and a new Hall of Fame.
- Phase IV improvements include an expanded athletic department office building at the South Stadium and a new South Stadium Concourse.

These projects are reflected in the proposed Master Plan Concept – Chapter IV. A detailed list of the projects and their costs are contained in Chapter VI of this document.

Further study of Phase II improvements is occurring at this time with UNL Facilities Management and IRP. A detailed Sector Study has been initiated for the Athletic Performance Center which will confirm needs, project requirements, and costs and will include the preparation of concept plans to confirm the feasibility of the project.



Project scheduling is an important consideration for the above projects—many of which depend upon the successful completion of the Memorial Stadium Skyboxes and the relocation of the baseball complex to a site off campus.

The Devaney complex is also undergoing change and expansion due to the need for additional space for intercollegiate athletic programs. The future construction of the Antelope Valley improvements will also have a considerable affect on the Devaney complex. The needs for the Devaney Center include renovated indoor track complex and additions for wrestling/gymnastics, arena for athletic competition and basketball practice, an addition for throwing events, and a multi-purpose strength complex for the facility. The indoor track renovation is currently being initiated by UNL Facilities Management. The Antelope Valley implementation will impact the Devaney complex through the construction of raised overpasses and interchanges south of Devaney at Holdrege Street and the railroad tracks. The impacts on the Devaney Center include the elimination of parking and access (both vehicular and pedestrian) to the Devaney Center plus the loss of visibility to the complex. The Antelope Valley plan is continuing to evolve. The master plan process included the development of alternative concept proposals which were reviewed by athletics, UNL, and presented to the Antelope Valley planning team. The most current concepts for the area surrounding the Devaney Center are included in the Master Plan Concepts – Chapter IV of this document.

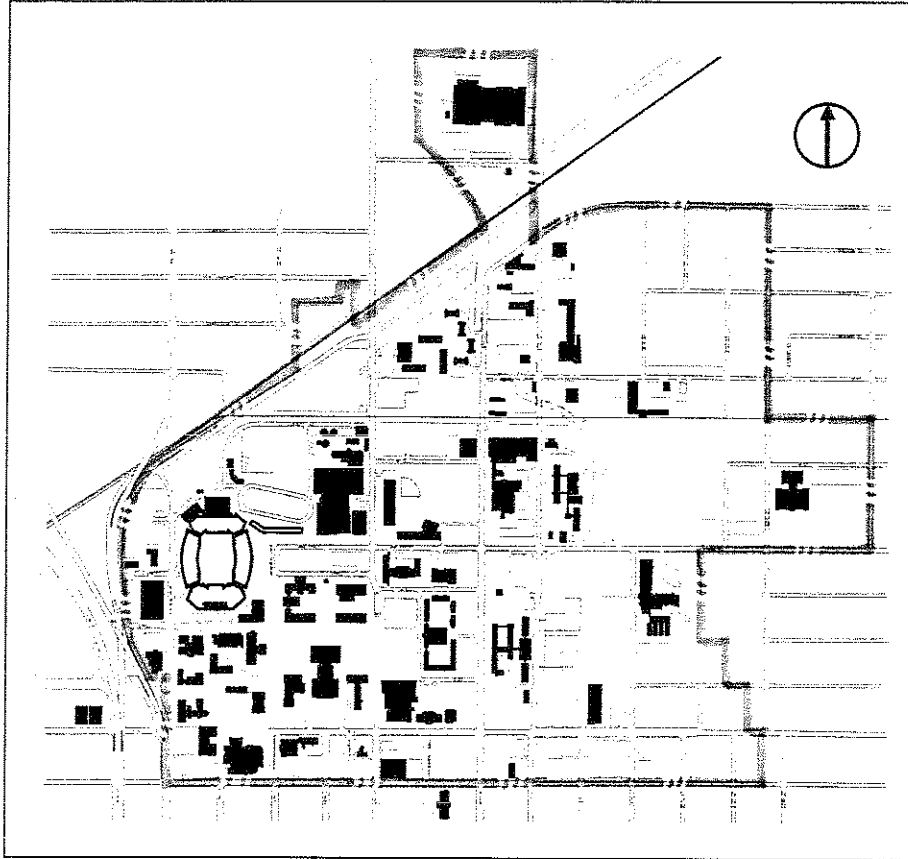
III. Analysis and Alternative Concepts

A. Campus Organization Analysis

The City and East Campuses were each studied and analyzed to identify the existing organizational structure, functional zoning, pedestrian and vehicular patterns, access, use areas, special character zones, gathering places, visitor destinations, potential development areas and important views. The following diagrams illustrate the analysis of each campus.

1. City Campus

- Planning Boundaries
- Organizational Structure
- Functional Zones
- Vehicular Circulation and Parking
- Automobile Access
- Pedestrian Circulation and Corridors
- Walking Distance
- Significant Views
- Character Zones
- Gathering Places
- Visitor Destinations
- Potential Development Sites
- Fire Access Routes
- Service Access/Routes
- Flood Plain

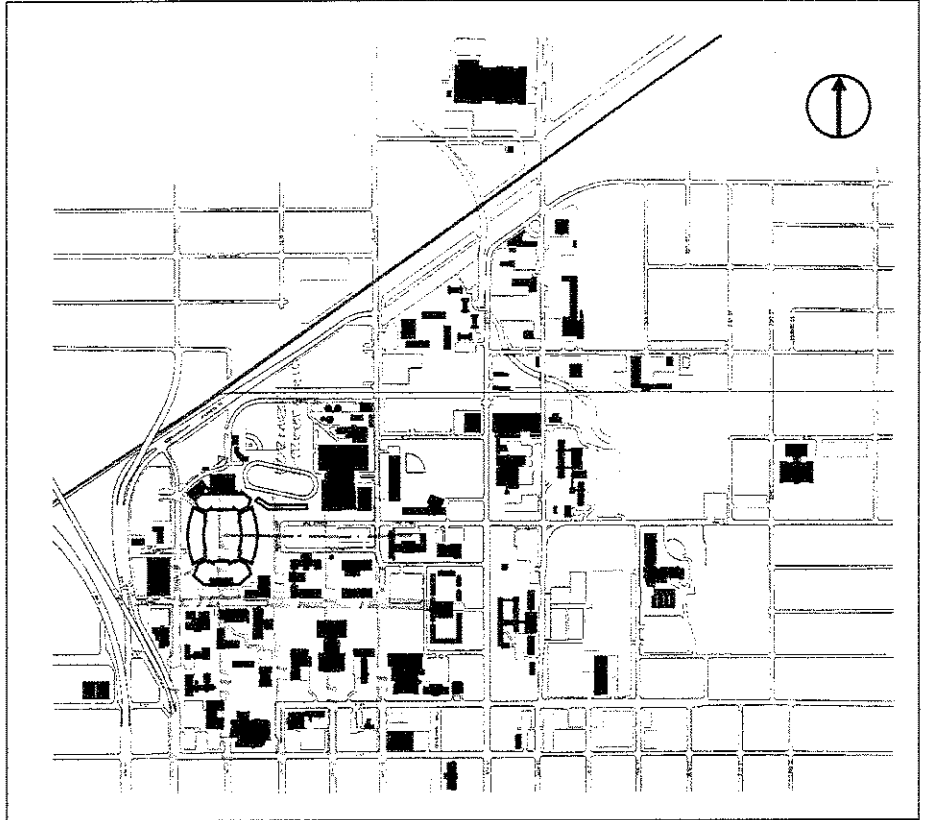


Plan diagrams existing City Campus boundaries.

a. City Campus Planning Boundaries

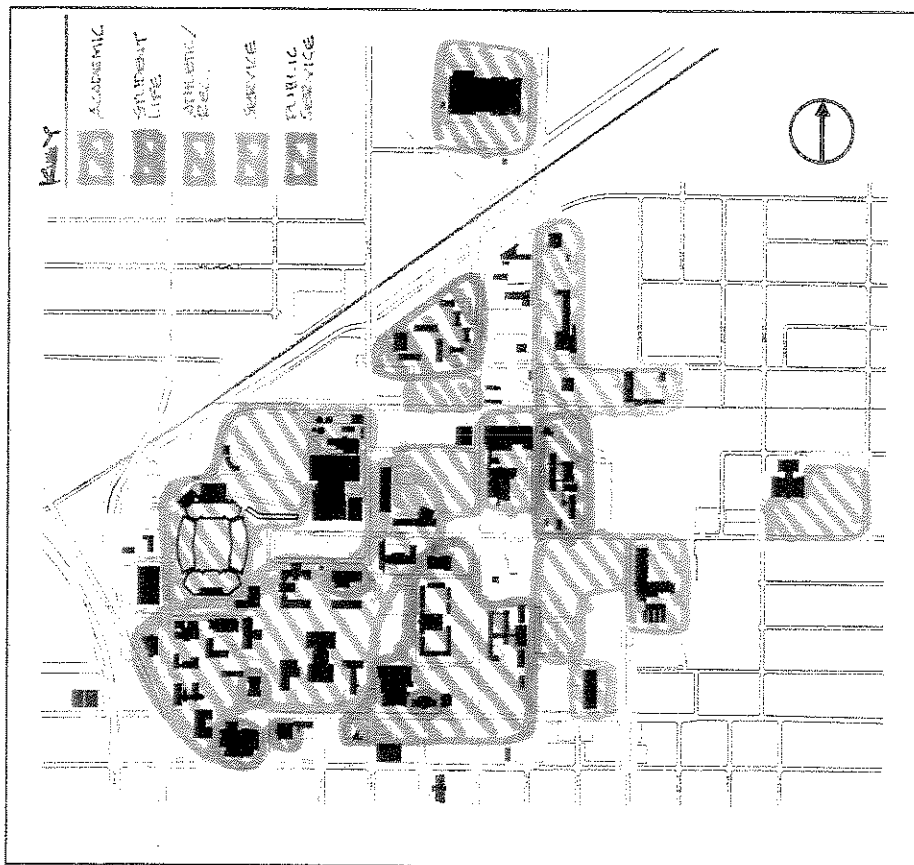
Existing City Campus Planning Boundaries are Q Street to the south, I-180 to the west, Holdrege Street to the north (plus the Devaney Center) and roughly 20th and 21st Streets to the east including the old Whittier School.

Former city street grid establishes the major organizational structure of the City Campus.



b. City Campus Organizational Structure

The former street grid of the city is the main organizational element of the Campus. As the Campus grew from its beginnings, the street grid was respected and buildings were sited on the grid and streets remained open and a part of the Campus until the 1960's.

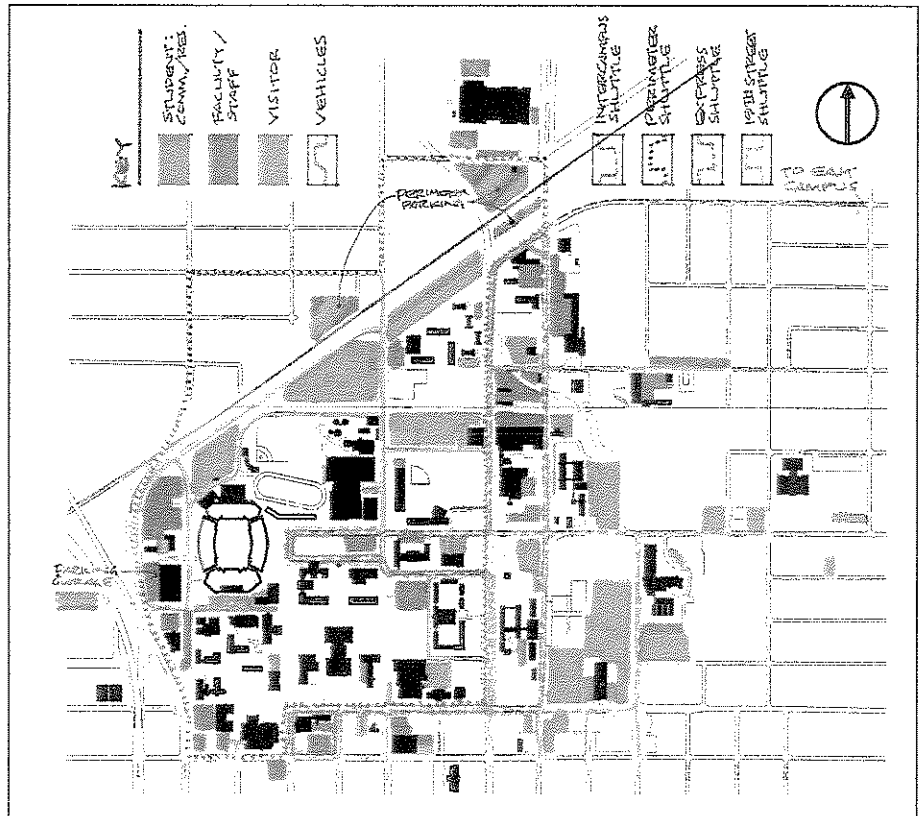


Functional Zones for academic, student life, athletic/Recreation, service and public service are shown.

c. City Campus Functional Zones

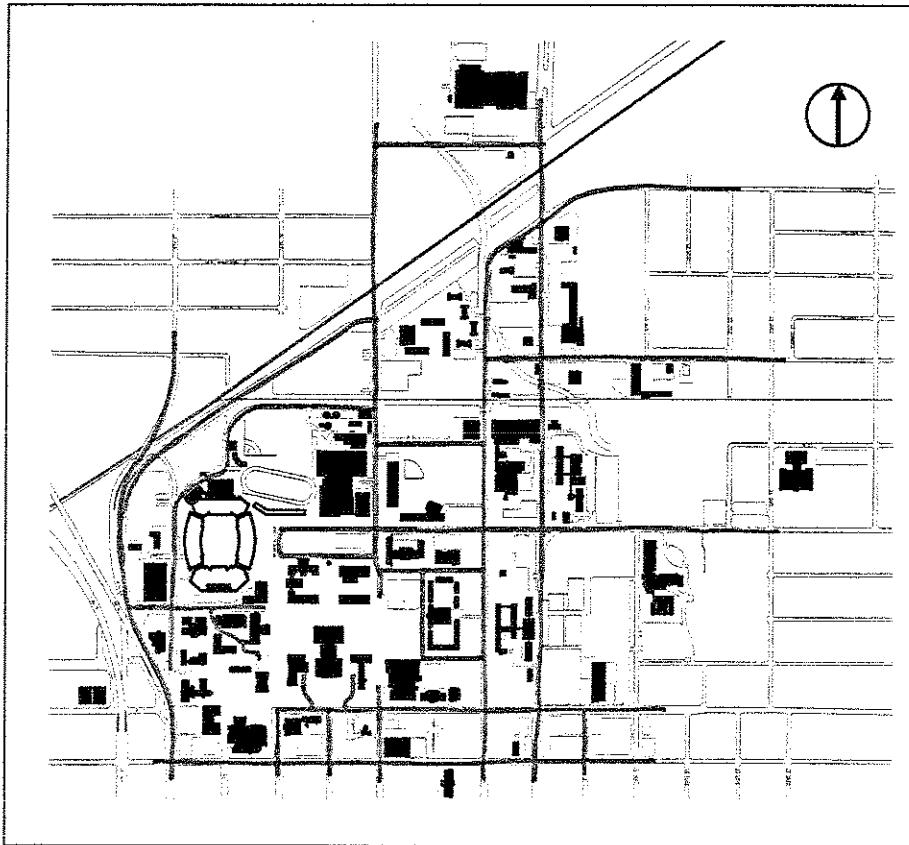
This diagram illustrates the current land use or functional zones. The academic zone is located in the south and central parts of Campus; student life is located in the south, central, and north center of Campus with service concentrated at the northeast corner and athletics concentrated at Memorial Stadium and Devaney Complex.

The diagram shows student, faculty and visitor parking as well as vehicle and shuttle circulation routes.



d. City Campus Vehicular Circulation and Parking

Vehicles are allowed in almost all parts of Campus except to the south/central portion, which, since the 1960's has been developed as a pedestrian zone. Parking for faculty and staff is presently dispersed throughout Campus and parking for students is located at the outer north and east edges of the existing Campus. Shuttle/transit services circulate through and around Campus linking all major parking areas.

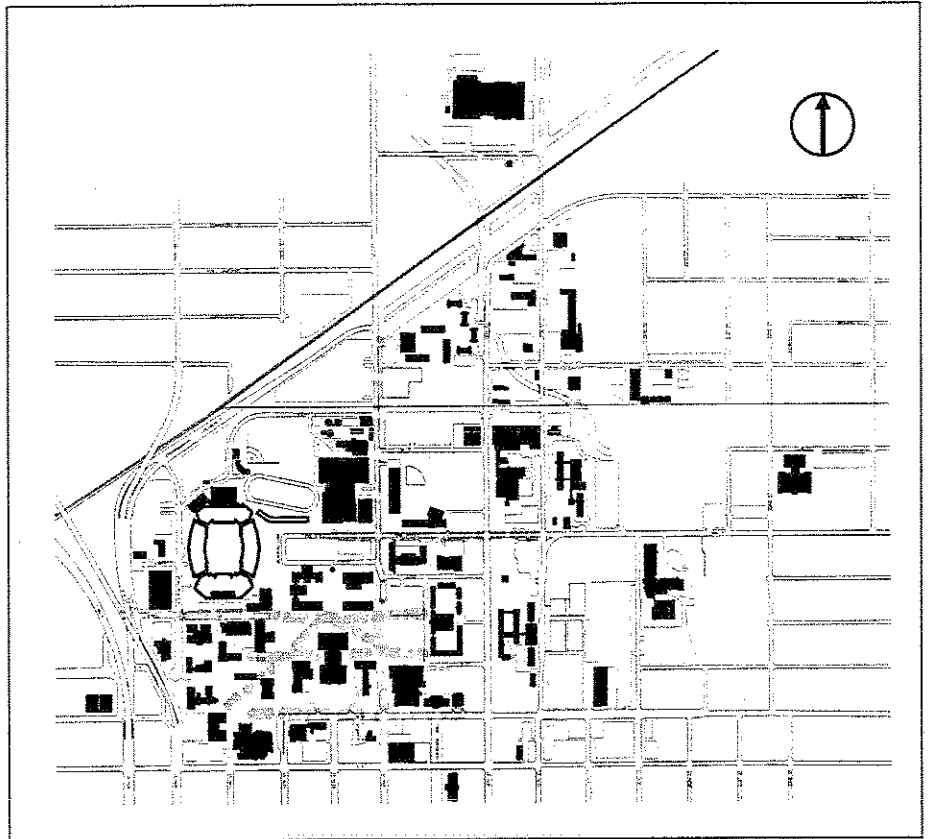


The map demonstrates the extent of automobile access on campus.

e. City Campus Automobile Access

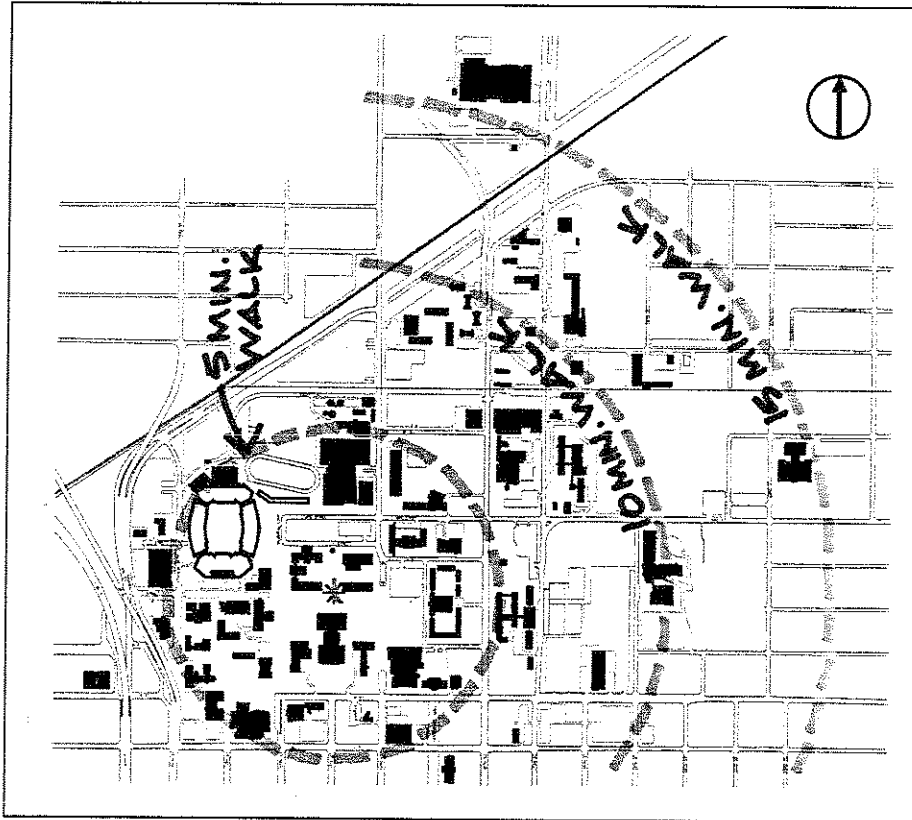
Automobiles can access virtually all areas of City Campus, except those areas “pedestrianized” in the late 1960’s. Major one-way pairs—16th and 17th Streets—slice through the east edge of Campus. Major streets and arterials including R Street, I-180, and Holdrege Street form the south, west, and north edges of City Campus. The construction of the proposed Antelope Valley Roadway will alter traffic patterns on the east and north sides of City Campus dramatically.

Pedestrian corridors are diagramed, showing major pedestrian access through campus.



f. City Campus Pedestrian Circulation Corridors

The major pedestrian circulation corridors are located in the south central portion of City Campus—those areas closed to traffic in the late 1960's. The routes include R Street, the old S Street and T Street. 12th Street and 14th Street are major north/south pedestrian routes. Portions of North 14th Street are not closed to traffic.

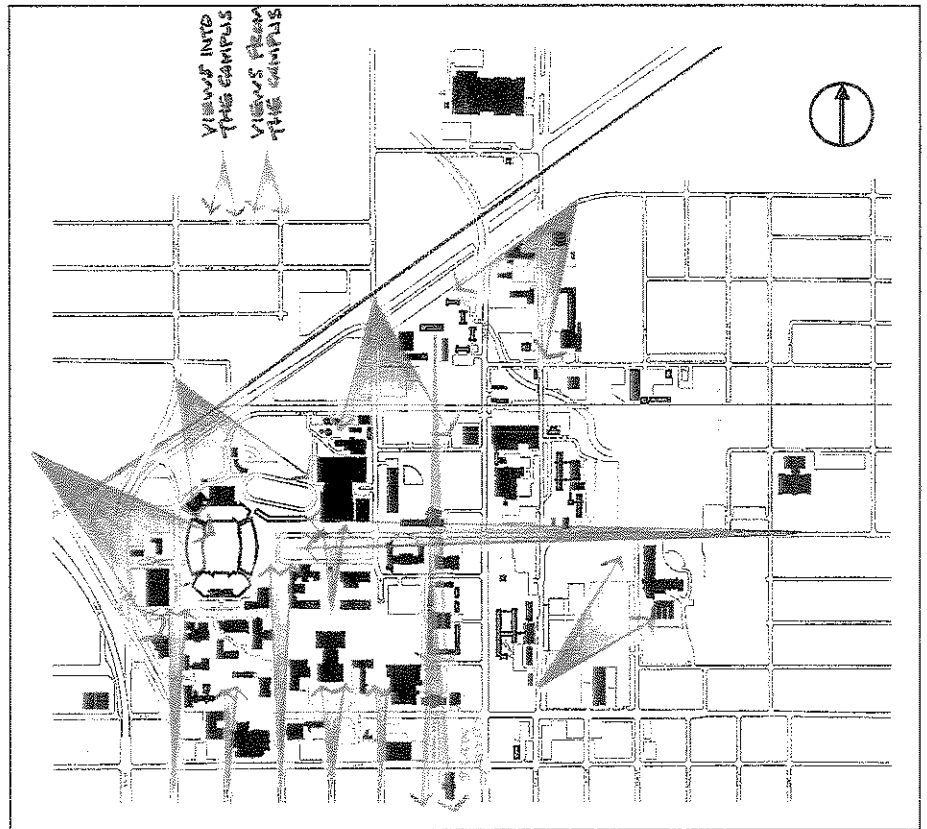


The diagram shows the extent of the campus that can be reached within a five, ten and fifteen minute walk from the core of campus.

g. City Campus Walking Distance

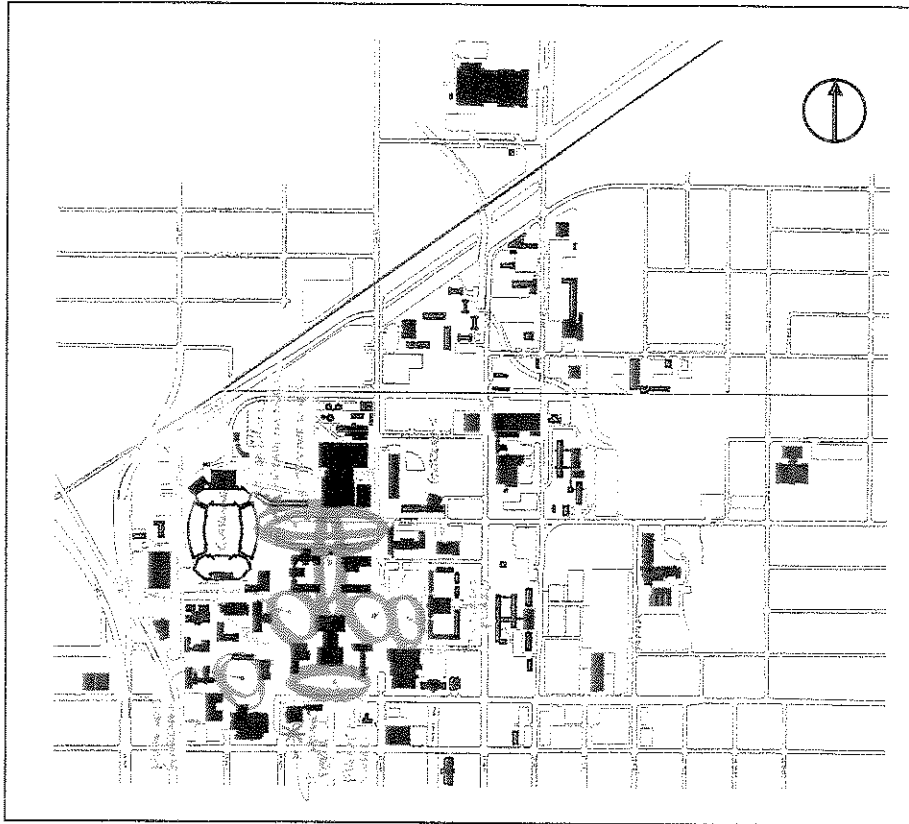
From a central campus point north of Love Library, pedestrians can access the entire central core of Campus within five minutes, an additional five minutes allows access to the Beadle Center. The Engineering Center and the Harper/Schramm/Smith Residence Hall Complex. A 15 minute walk reaches out to the Devaney Center, the old Whittier School and adjacent neighborhoods.

The diagram demonstrates views into the campus and views from the campus.



h. City Campus Significant Views

The most significant views into Campus occur along city streets looking north from downtown into the historic core of City Campus and also from the north from I-180 and Holdrege Street overpasses. The new skyboxes are emerging as a major focus of City Campus from many vantage points around the city. Significant views from the Campus focus on the State Capitol building.

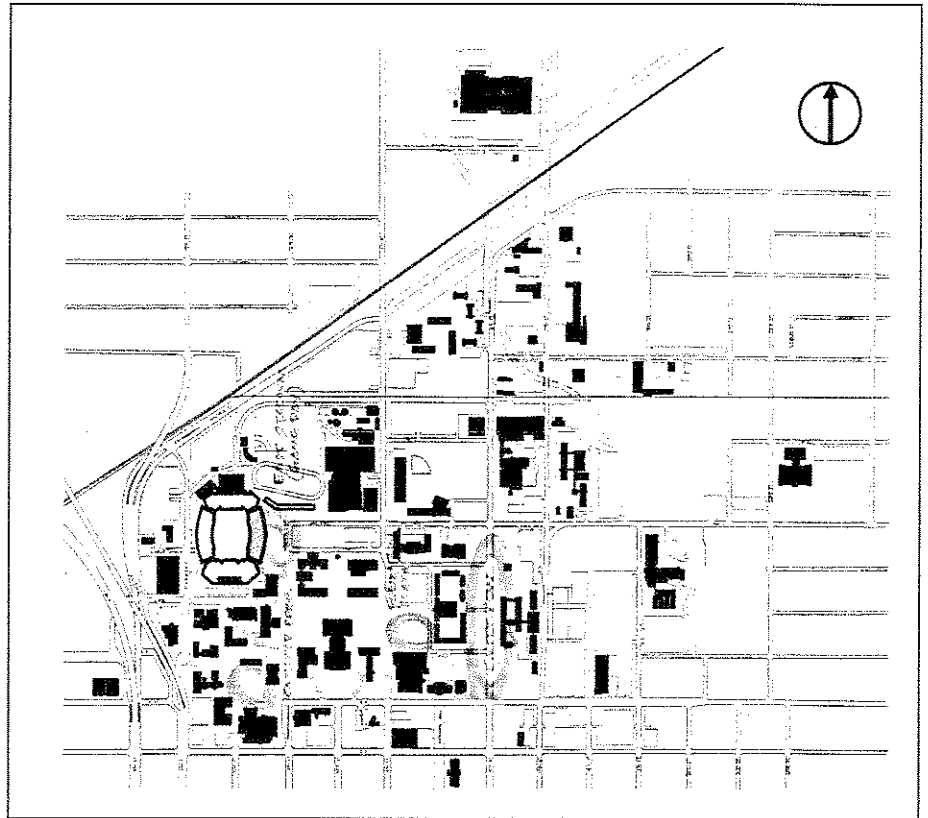


Existing campus character zones of the City Campus demonstrate areas of high visual quality and positive human experience.

i. City Campus Character Zones

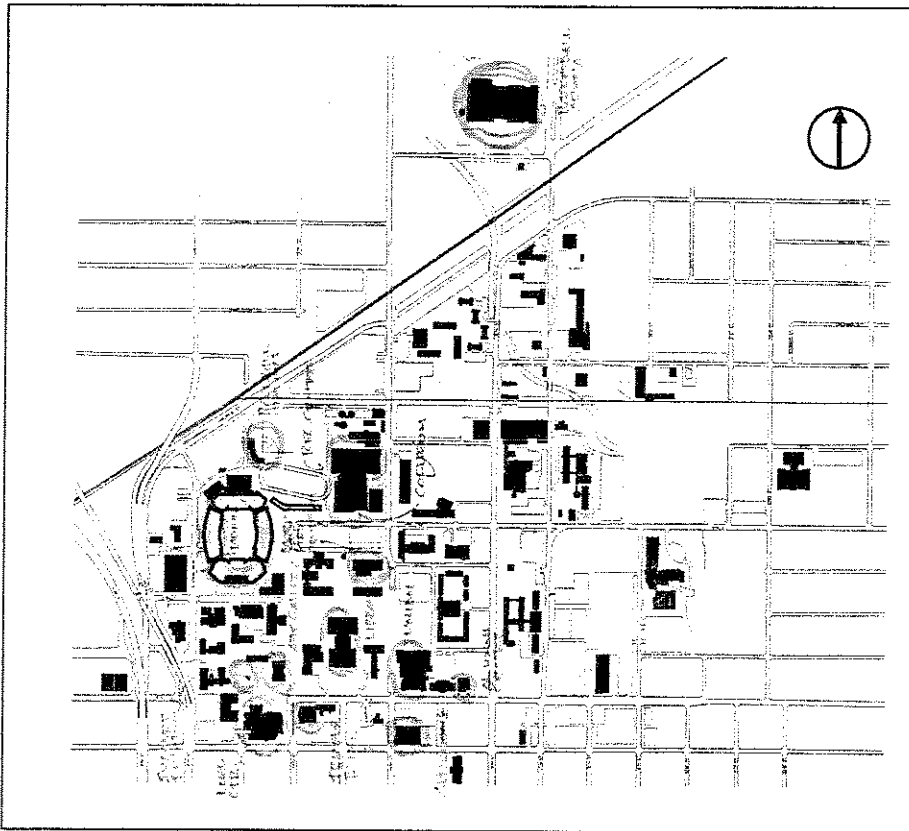
These are the areas of highest visual quality that provide a memorable experience of City Campus. The front yard of Love Library, Sheldon/sculpture garden, the Love Library south garden, Donaldson and Cather Gardens, Union Plaza, Memorial Mall, Mueller Tower Mall, and the columns east of the Stadium— all contribute to the character of City Campus and should be strengthened and respected in future planning.

This map diagrams areas for both formal and informal gathering.



j. City Campus Gathering Places

The main outdoor gathering places for students, visitors, faculty and staff at City Campus generally occur at the Union Plaza/Broyhill Fountain, the Sheldon Sculpture Garden for outdoor jazz events, etc., and the Plaza east of the Stadium on football Saturdays. A lot of pedestrian activity also occurs in the Historic Greek House area along 16th Street.

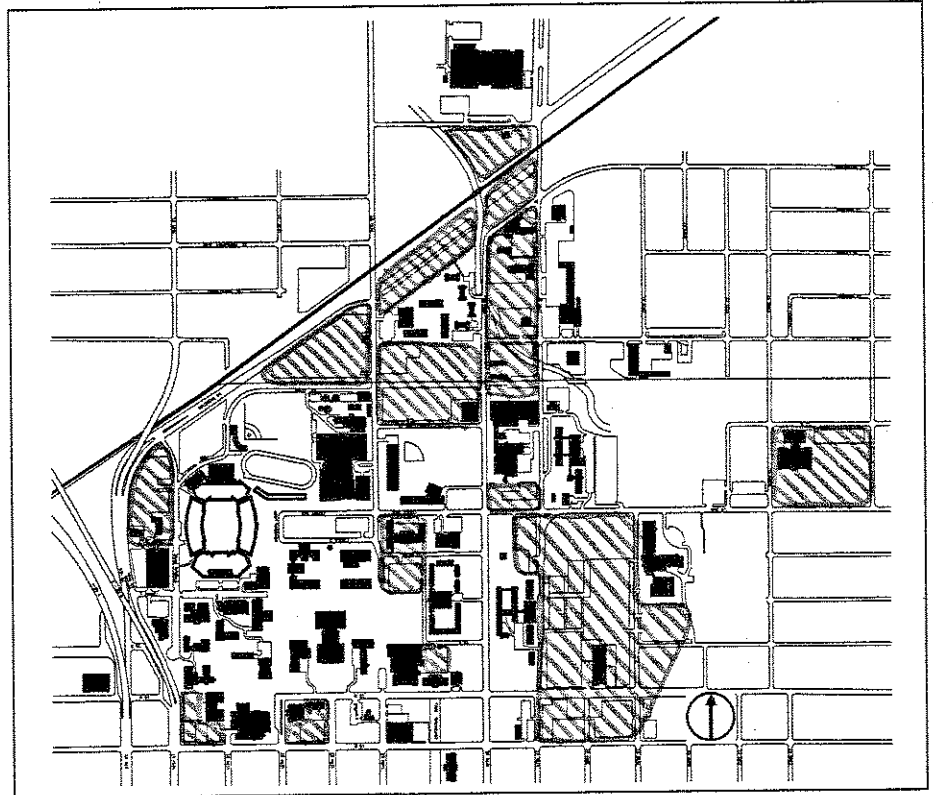


This map notes locations of key visitor destinations.

k. City Campus Visitor Destinations

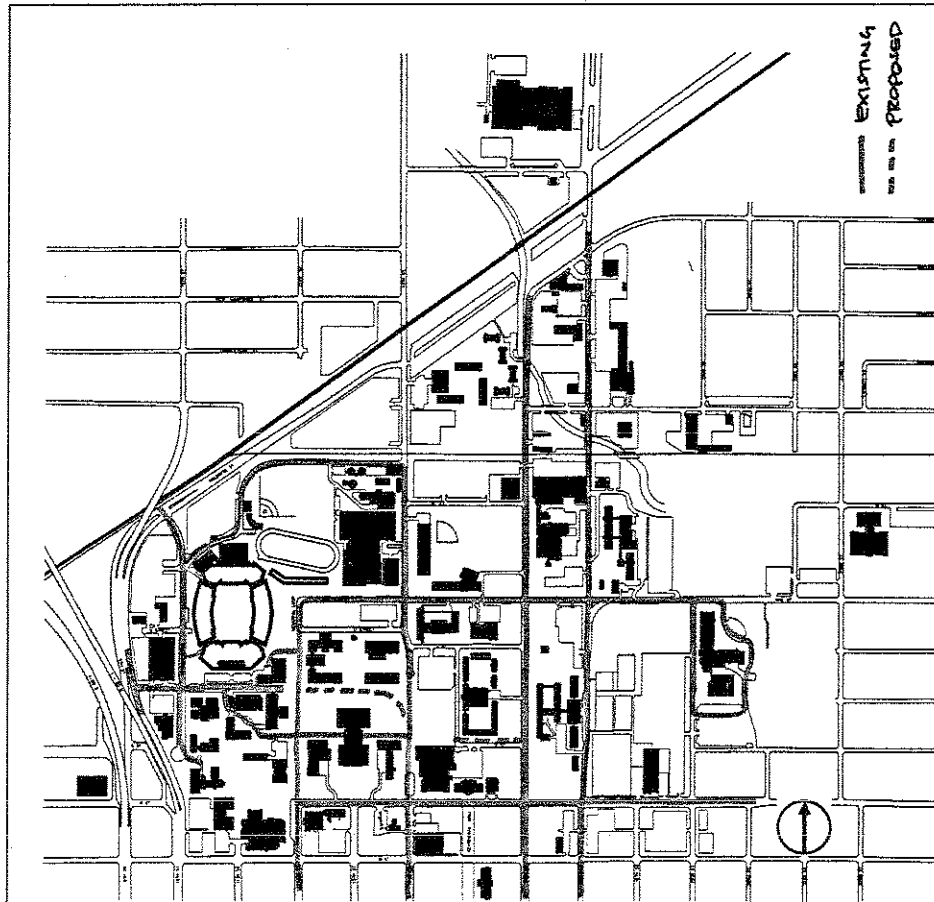
The UNL City Campus contains a number of important visitor destinations, many of which lie within the center of City Campus such as Morrill Hall and the Coliseum/Rec Center. Other major destinations include arts facilities such as the Lied Center, Kimball Recital Hall, the Temple Building, Sheldon Gallery, Love Library, Student Union, Memorial Stadium, and the Devaney Center.

This diagram demonstrates areas of potential development for City Campus.



I. City Campus Potential Development Sites

The greatest opportunity for future facility development exists on the eastern side and north central area of City Campus. The development of the Antelope Creek project will permit the University to develop land currently located in the 100 year flood plain on the east side of the Campus.



This map diagrams existing and proposed fire access routes.

m. City Campus Fire Access Routes

The City Campus has clearly established Fire Access Routes. The proposed routes will provide for a greater ease of access.

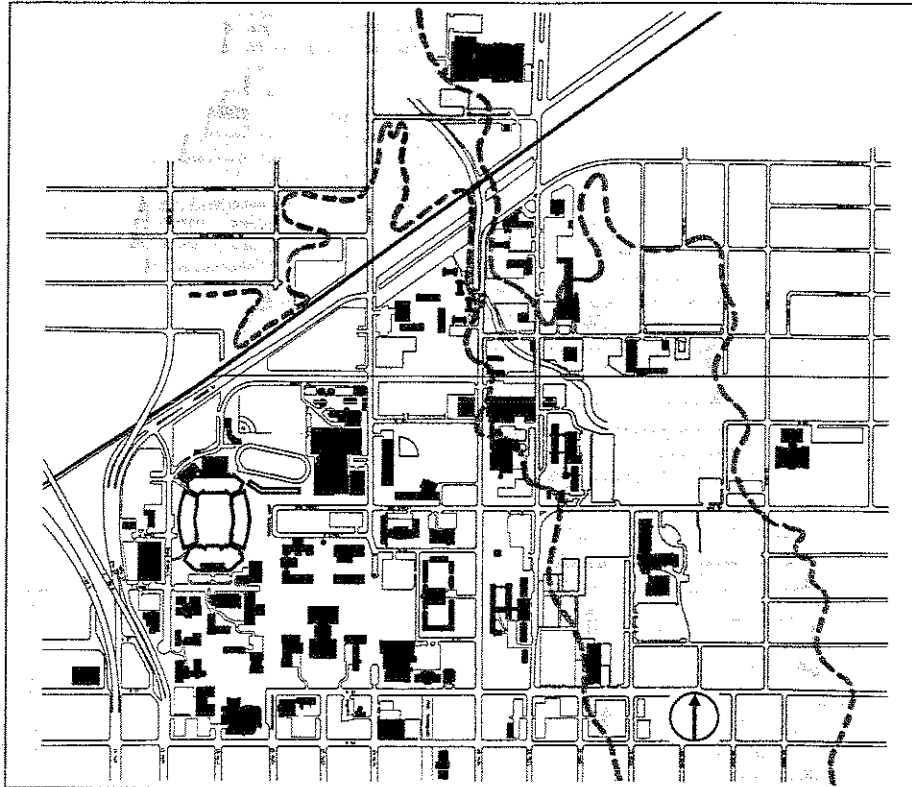
Service/Access routes are diagrammed in this map. “ * ” denotes locations of service/access entrances .



n. City Campus Service/Access Routes

The City Campus Service/Access Routes are identified. The Master Plan, will strive to reduce the number of automobiles in the core of campus, while at the same time provide an organized, efficient and effective access system for service vehicles.

o. City Campus Flood Plain



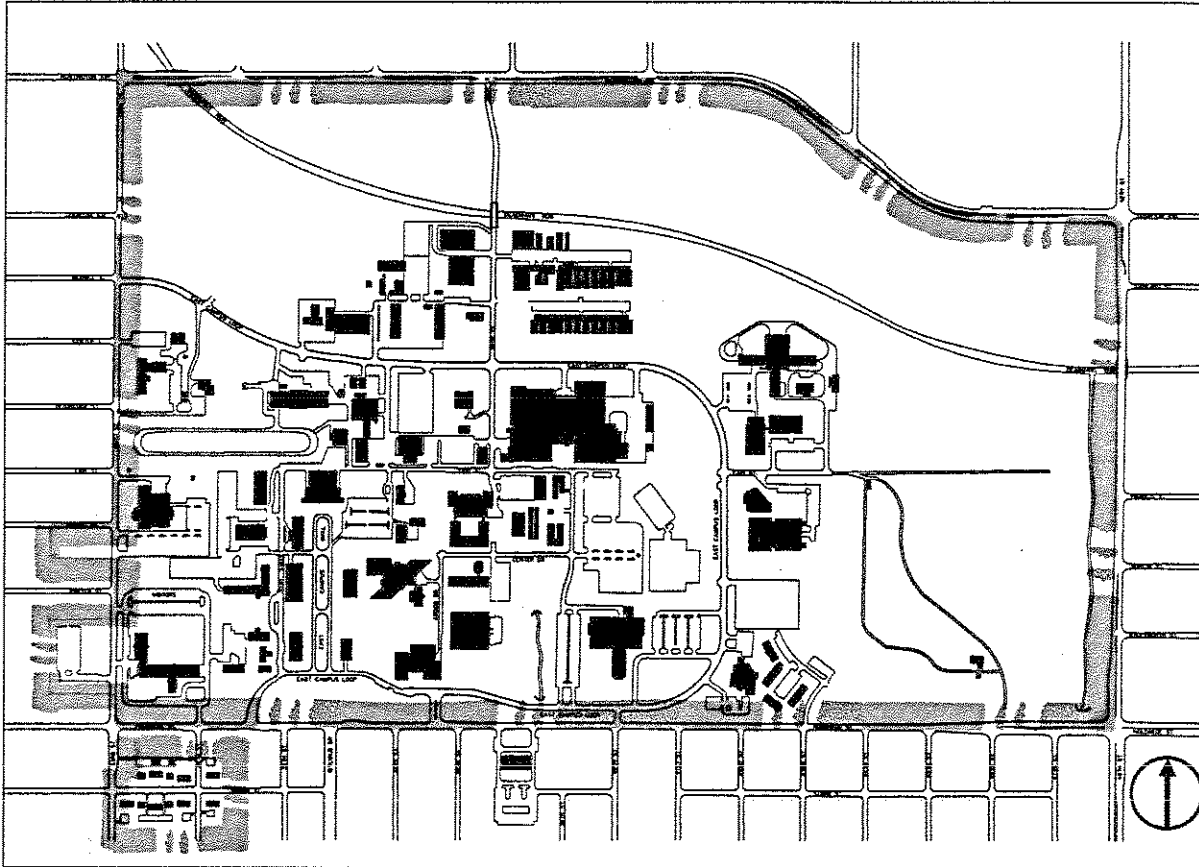
This map diagrams the floodway channel and 100 year flood plain.

Additions and new construction on City Campus must take into account the floodway channel and the 100-year flood plain. These areas are currently devoted to recreation fields, surface parking, and the mail distribution services building.

2. East Campus

- Planning Boundaries
- Organizational Structure
- Functional Zones
- Vehicular Circulation and Parking
- Automobile Access
- Pedestrian Circulation Corridors
- Walking Distance
- Significant Views
- Character Zones
- Gathering Places
- Visitor Destinations
- Potential Development Sites
- Fire Access Routes
- Service Access/Routes
- Flood Plain

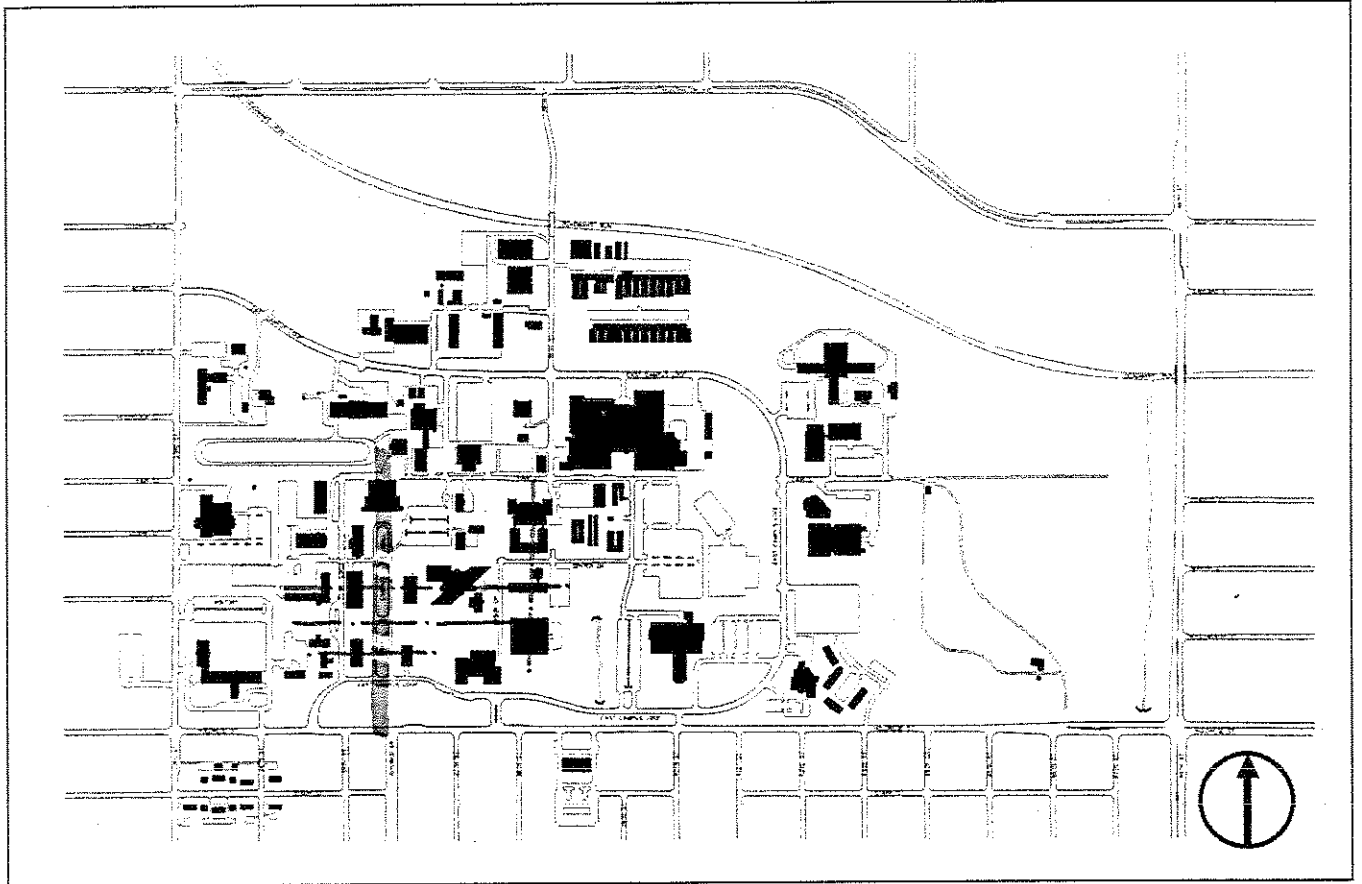
a. East Campus Planning Boundaries



Existing East Campus Planning Boundaries are generally Holdrege Street to the south, 33rd Street to the west, Huntington Avenue to the north, and 48th Street to the east.

Plan diagrams existing East Campus boundaries.

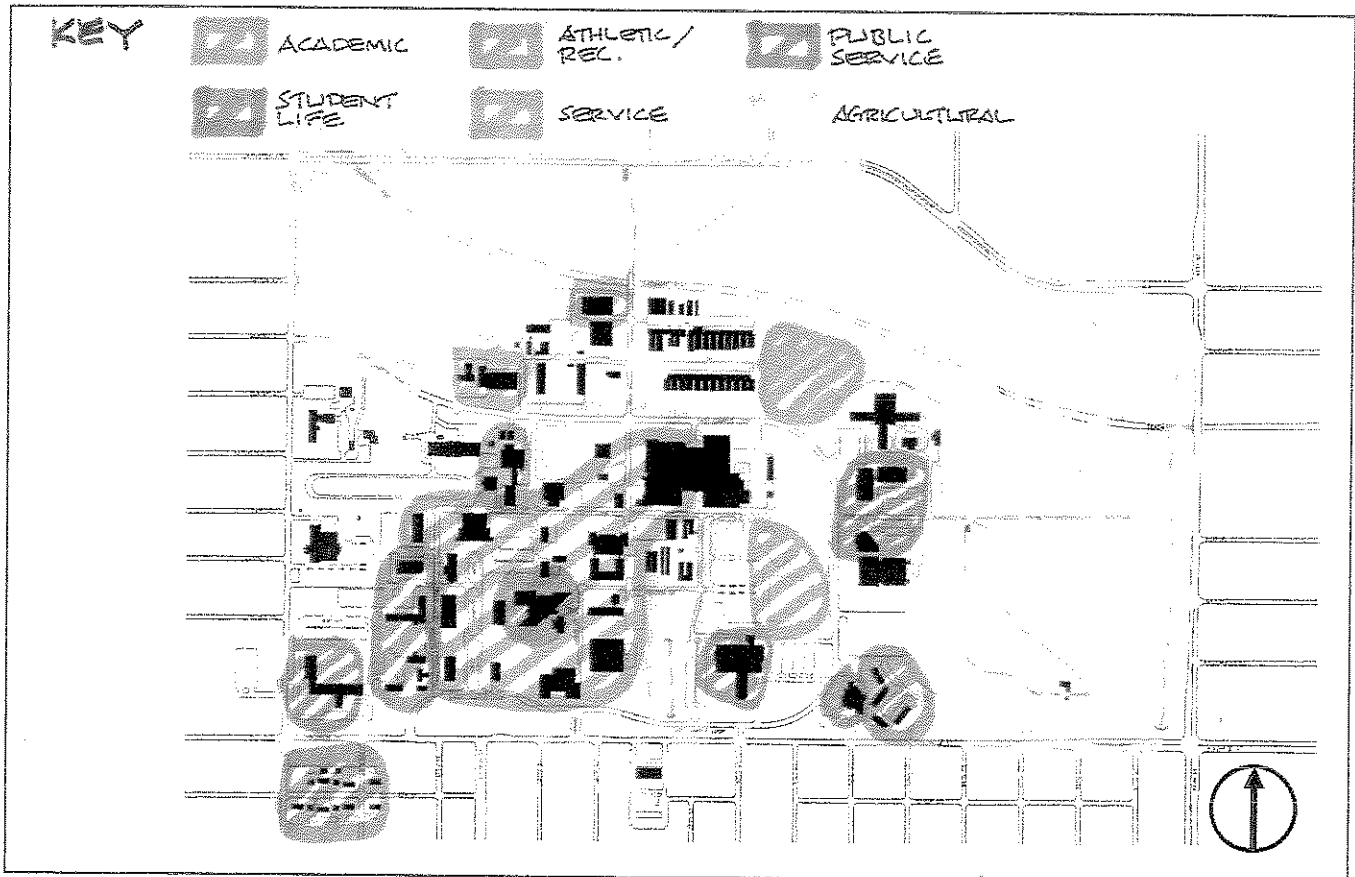
b. East Campus Organizational Structure



The historic mall and east/west axis establish the major organizational structure of the East Campus.

The original East Campus mall, plus several minor east/west axes give the UNL East Campus its basic organizational structure. This historic original core of the Campus has been surrounded by supporting functions and agricultural plots. A loop road encloses most of the central core of the Campus.

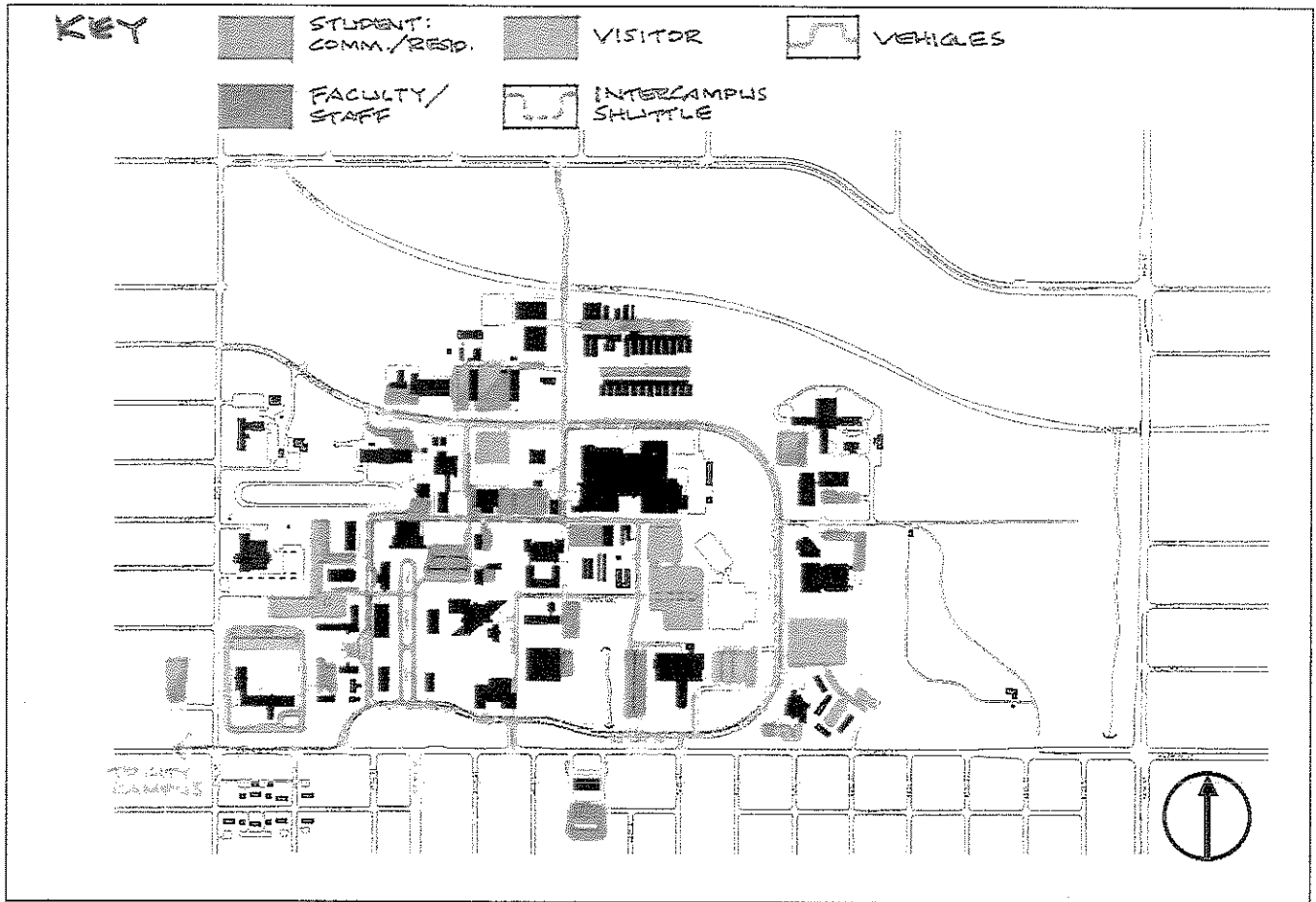
c. East Campus Functional Zones



This diagram illustrates the current land use or functional zones on East Campus. The academic functions are located predominately in the central part or in the original heart of Campus. A highly utilized Student Union lies in the center of Campus with other student life functions located at the east side of Campus and at the south west and southeast corners of Campus. Several academic public service functions are at the outer ring of the Campus, including the Nebraska Center for continuing Education, Dental College, Barkley Center, Law School, and Veterinary Sciences Complex. Agricultural plots surround the Campus to the north and east.

Functional Zones for academic, student life, athletic/recreation, service, public service and agricultural are shown

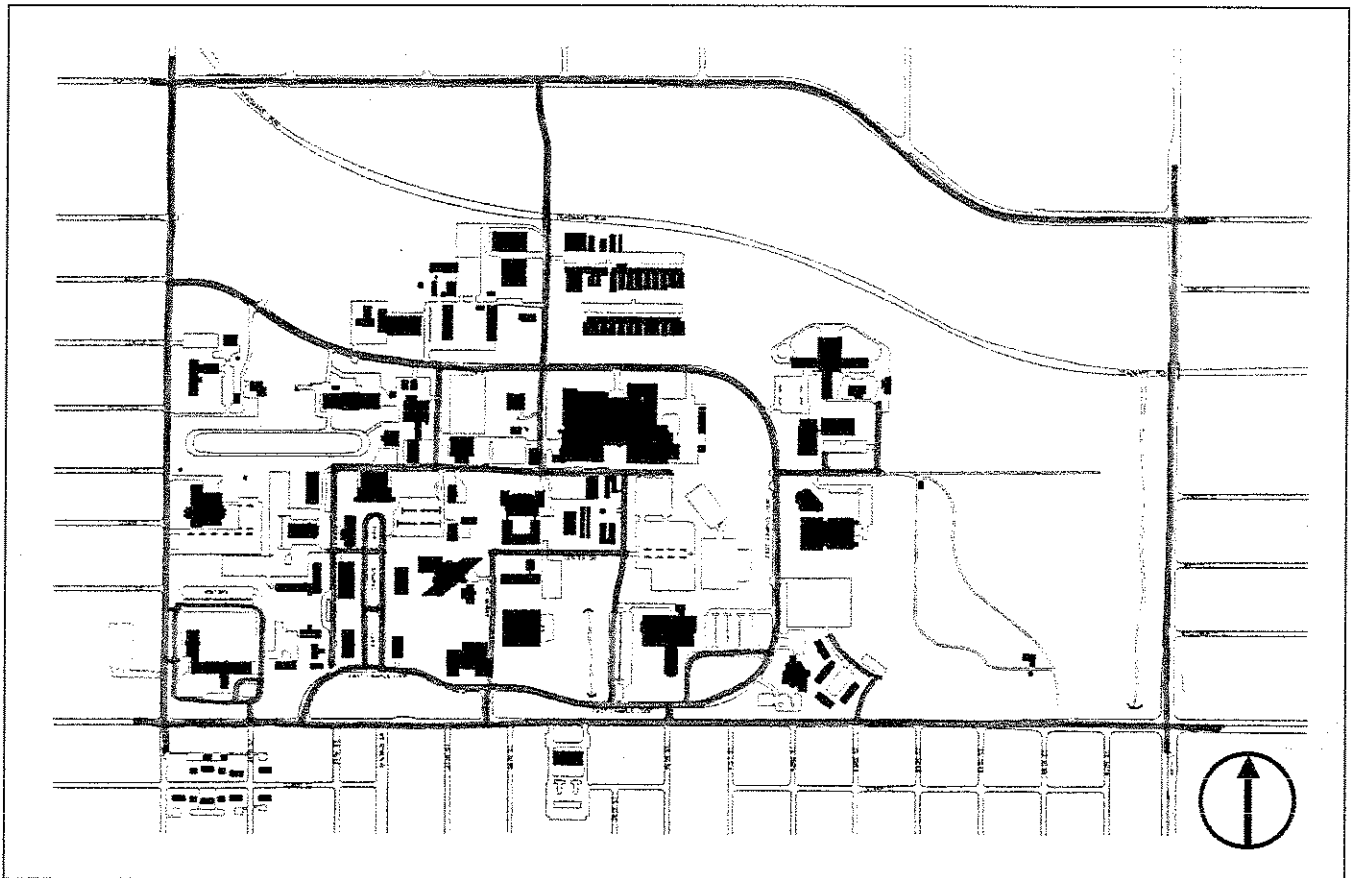
d. East Campus Vehicular Circulation and Parking



The diagram shows student, faculty and visitor parking as well as vehicle and shuttle circulation routes.

Vehicles are allowed in almost all parts of Campus, except to the south/central portion which is limited to service vehicles for the Union and C.Y. Thompson Library. Parking for faculty and staff is dispersed throughout Campus while parking for students is located outside the central core except for a large lot directly north of the Dental College. Shuttle and transit services circulate through and around Campus via the perimeter loop road, penetrating from the north down to the student housing areas and back to Holdrege Street, completing a loop around East Campus.

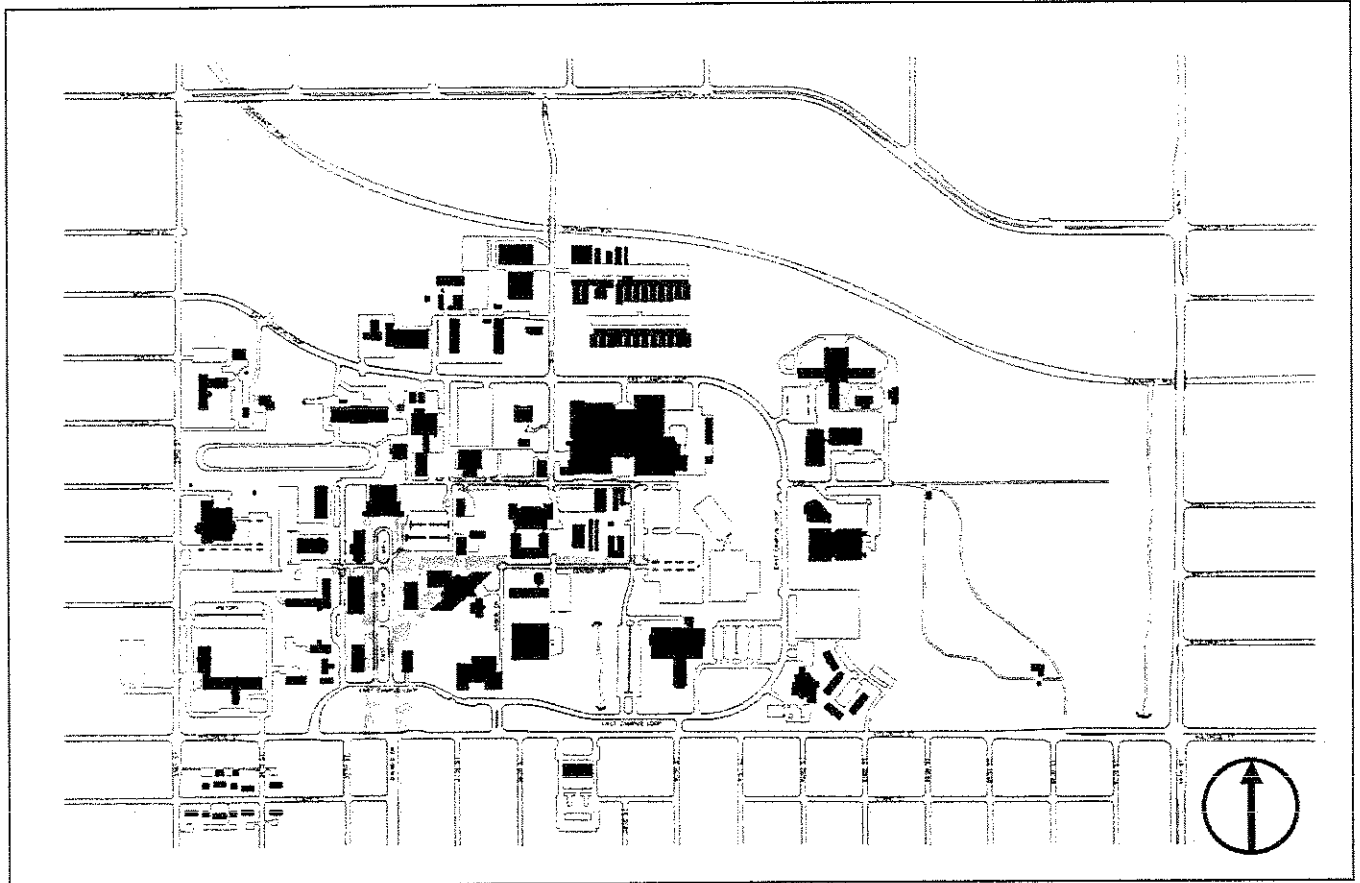
e. East Campus Automobile Access



Automobiles can access virtually all areas and buildings on Campus except the agricultural plots. Major arterials—North 33rd Street, North 48th Street, and Holdrege Streets—border the east, south, and west edges of East Campus. Major entry points occur at/along Holdrege Street, North 33rd Street, and Huntington Avenue which in turn link to the East Campus loop road. The loop road allows traffic to circumnavigate the core of East Campus easily, feeding traffic to smaller local streets running to the heart of East Campus.

The map demonstrates the extent of automobile access on campus.

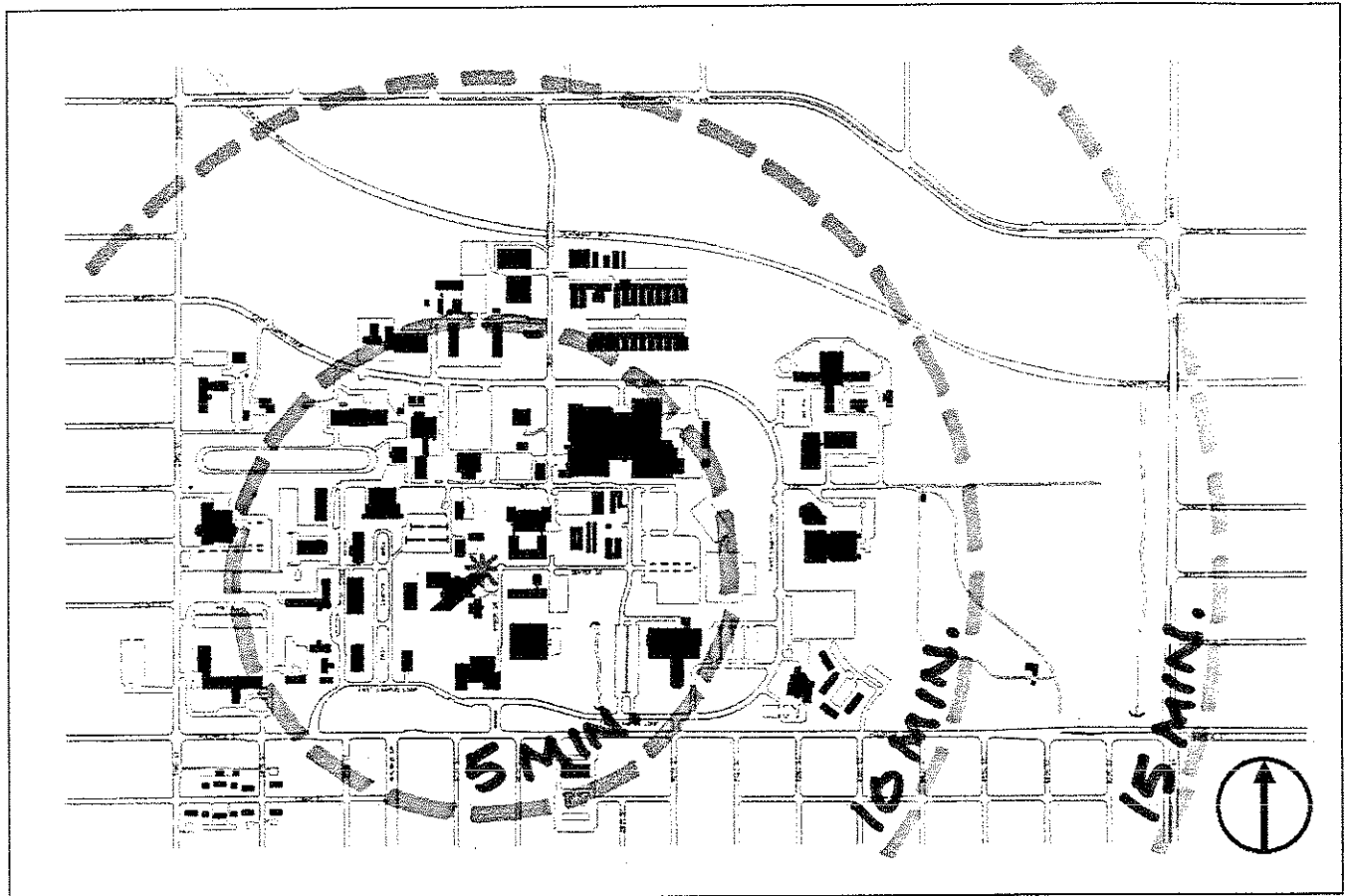
f. East Campus Pedestrian Circulation Corridors



Pedestrian corridors are diagrammed, showing major pedestrian access through campus.

The major pedestrian circulation corridors on East Campus are located in the central and original core of Campus. Those routes include the historic East Campus Mall (north/south corridor) and east/west corridors of Fair Street and Center Street. A major diagonal path also links the Student Union with academic facilities southwest of the Union.

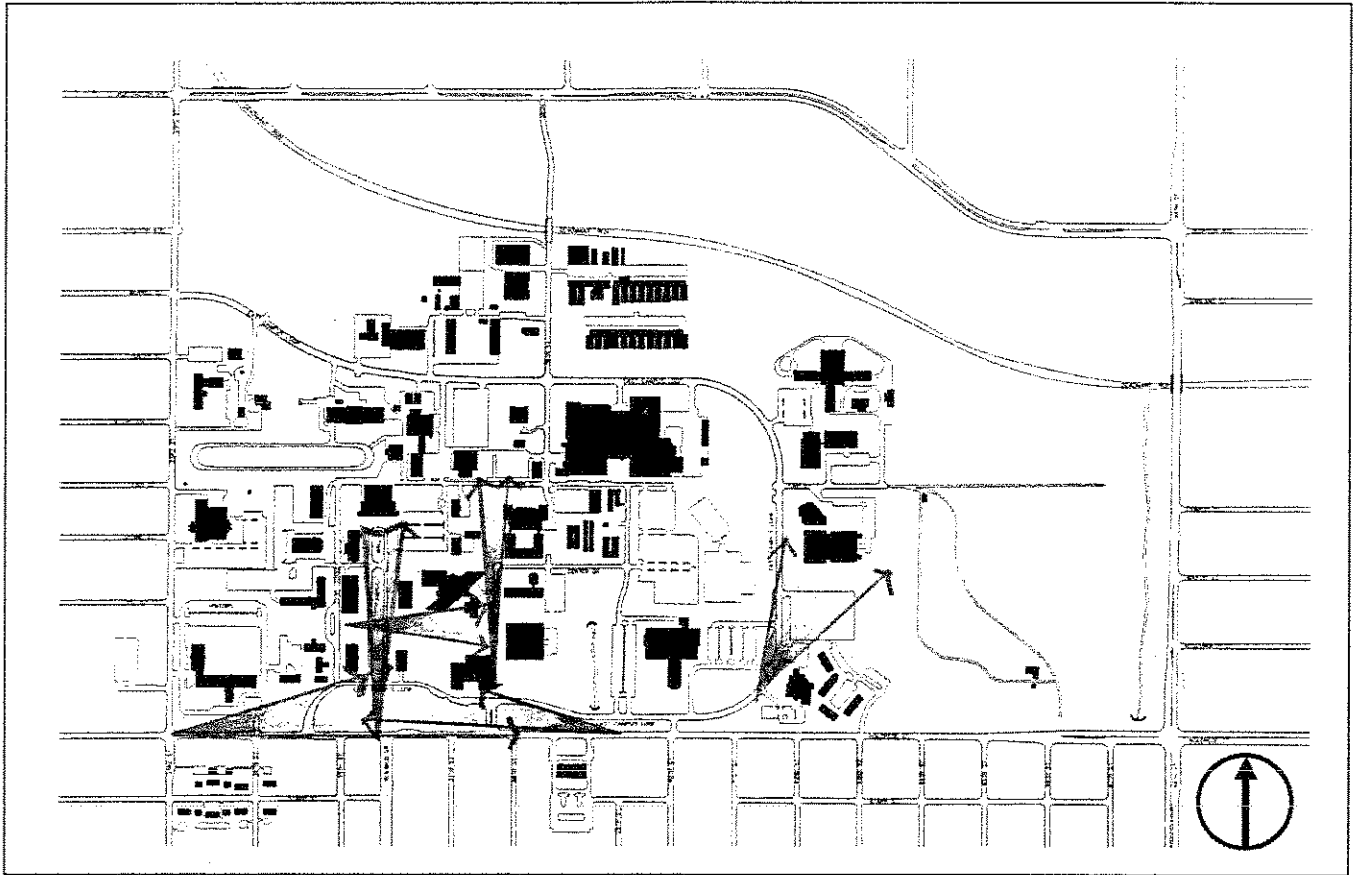
g. East Campus Walking Distance



From a central Campus point near the Union, pedestrians can access most everything on Campus in five minutes or less except for the veterinary facilities, the Law School, and the Barkley Center, which require an additional five minutes. Fifteen minutes allows pedestrian access to the agricultural plots and adjacent neighborhoods.

The diagram shows the extent of the campus that can be reached within a five, ten and fifteen minute walk from the core of campus.

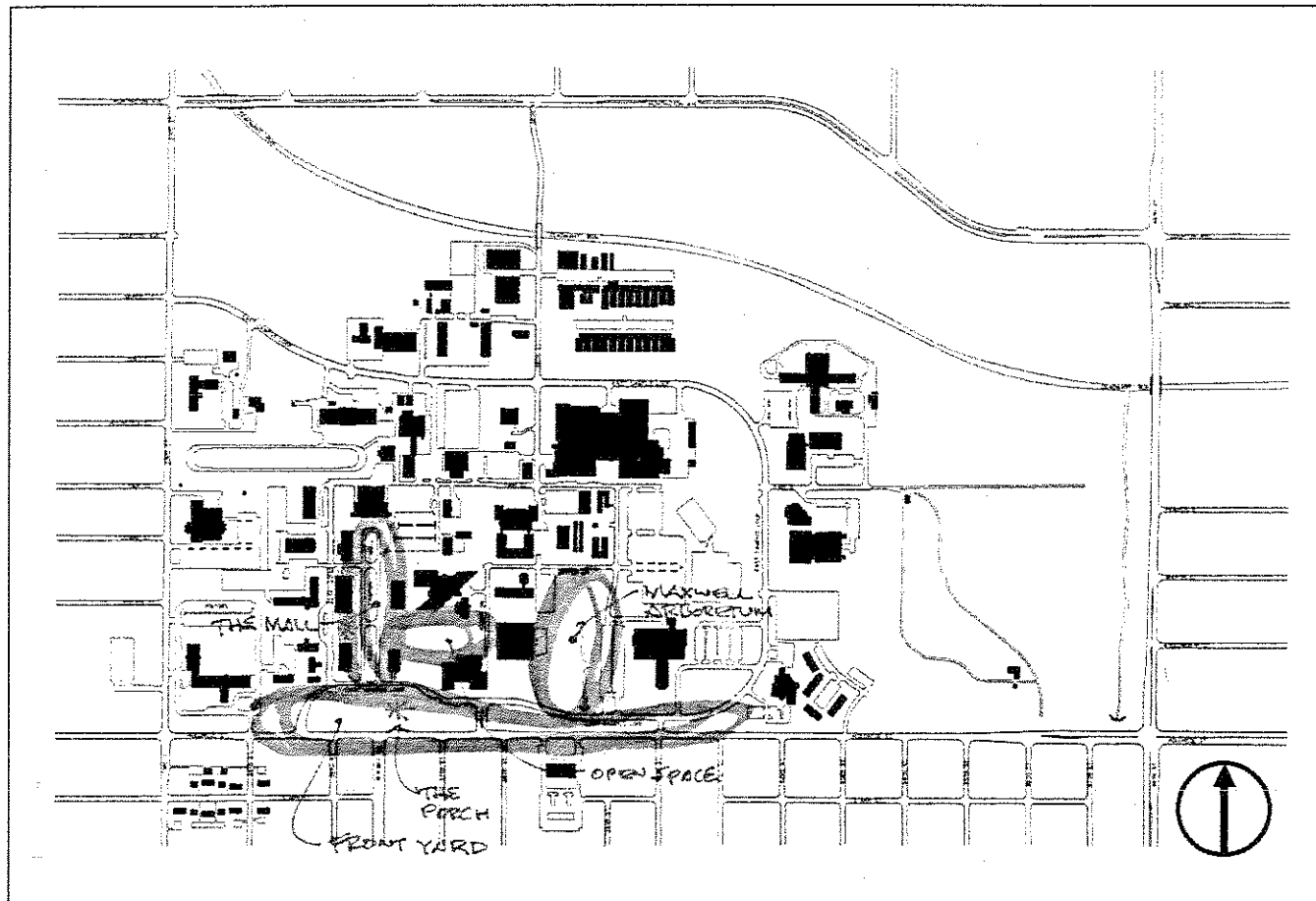
h. East Campus Significant Views



The diagram demonstrates views into the campus.

The most significant views into East Campus occur from the southern edge along Holdrege Street into the historic East Campus Mall and park-like areas.

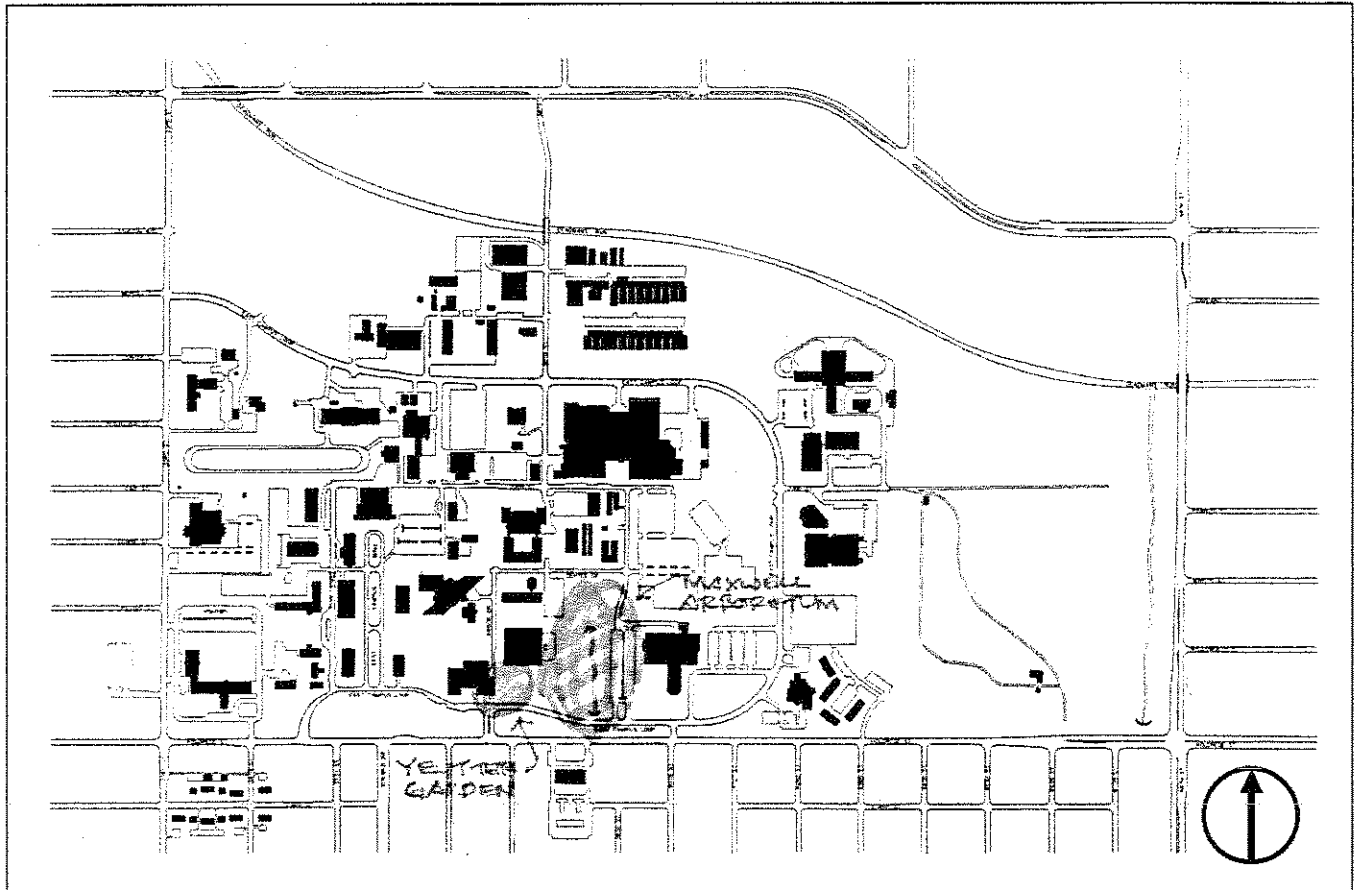
i. East Campus Character Zones



These are the areas of highest visual quality that provide a memorable experience of East Campus. The southern “park-like” edge of East Campus along Holdrege Street, the historic East Campus Mall, the open space south of the Student Union, and the Maxwell Arboretum all contribute to the character and quality of the East Campus environs.

Existing campus character zones of the East Campus demonstrate areas of high visual quality and positive human experience.

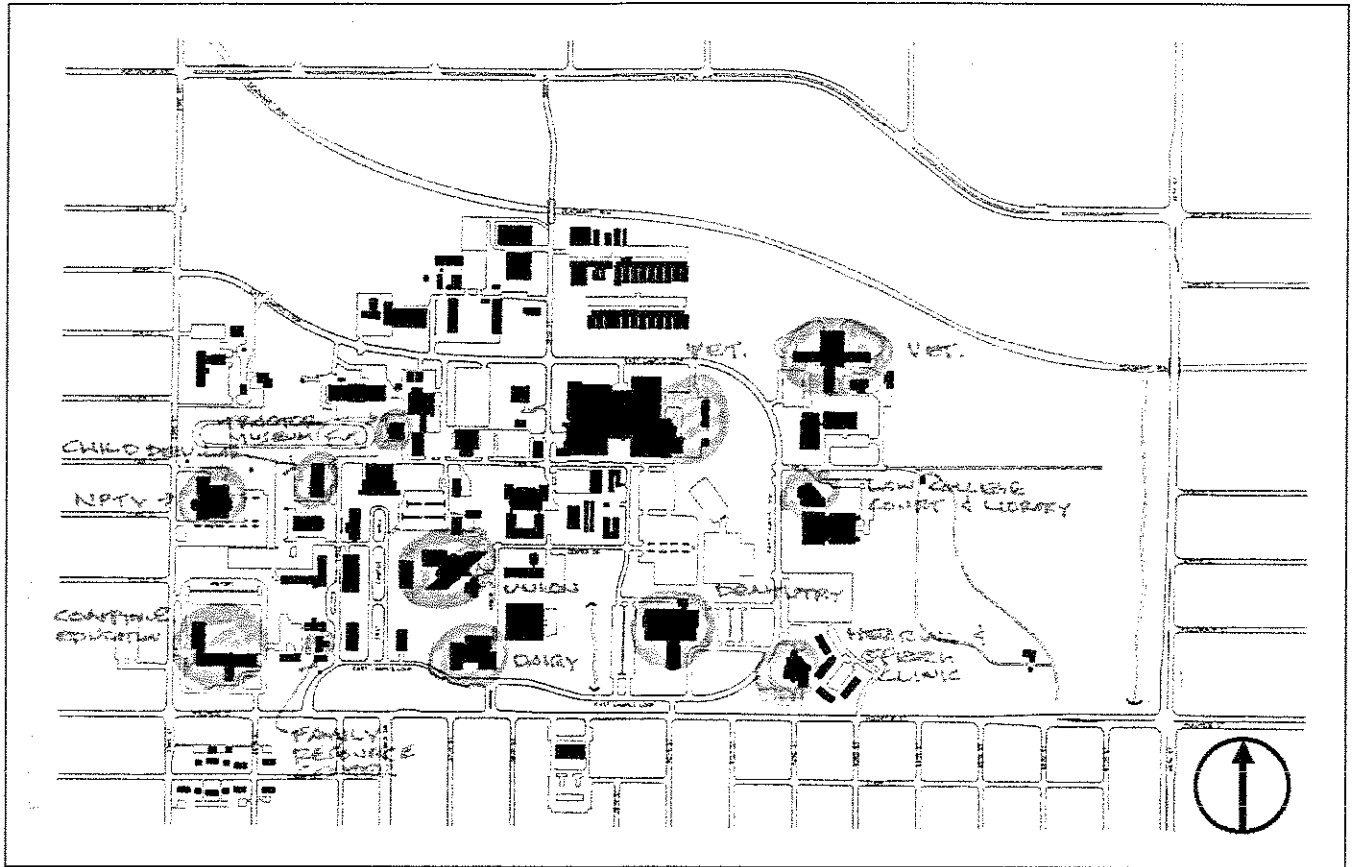
j. East Campus Gathering Places



This map diagrams areas for both formal and informal gathering.

The main outdoor gathering places for students, visitors, faculty and staff at East Campus are centered around the attractive and serene Maxwell Arboretum and Yeutter Garden. Activity would probably occur south of the Union if space were provided.

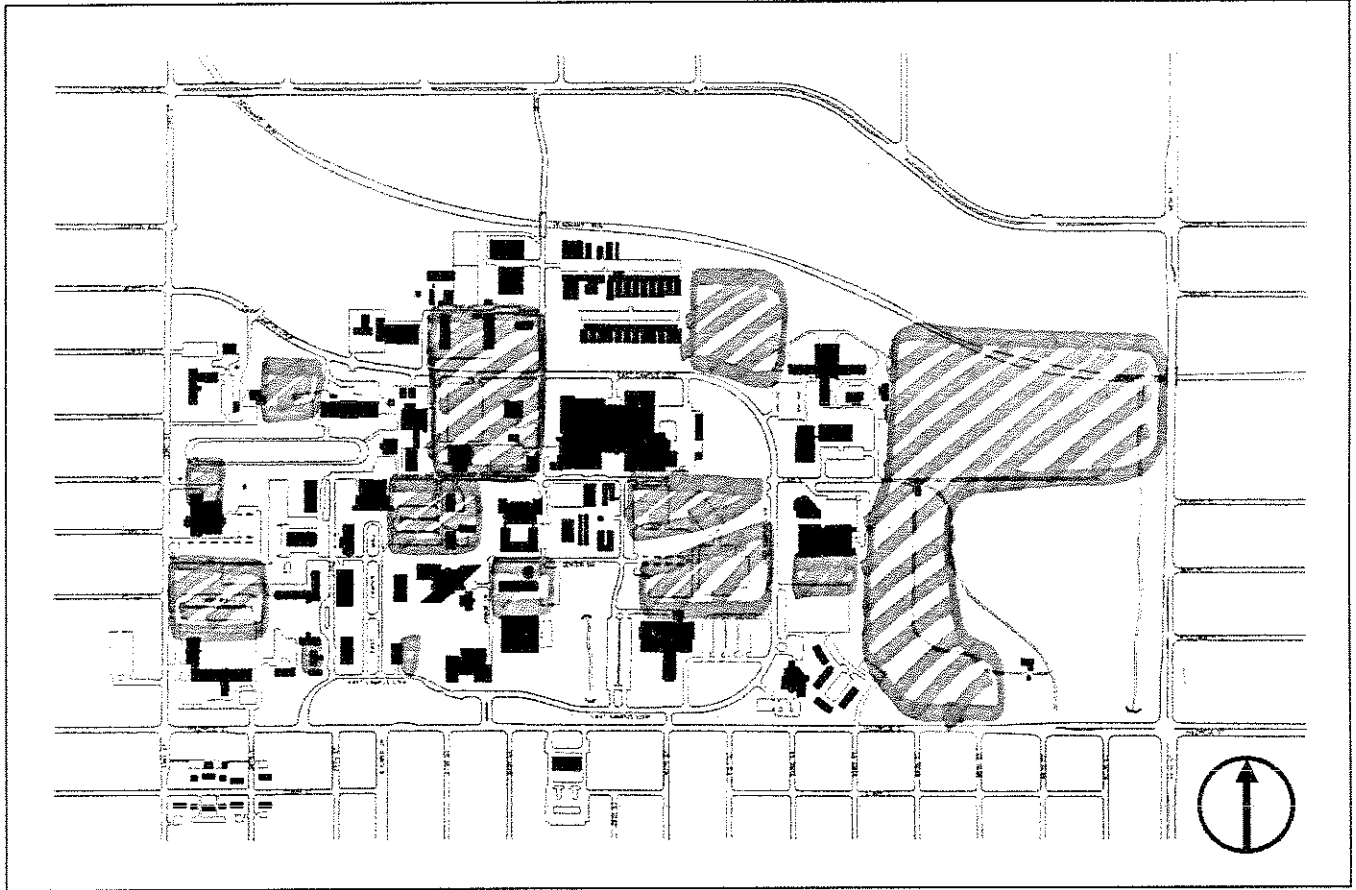
k. East Campus Visitor Destinations



The UNL East Campus, by the nature of its mission and many public functions located on campus, contains several important visitor destinations scattered across the Campus. These include the Nebraska Center for Continuing Education, NETV, Child Development Lab, Tractor Testing Lab, Family Resource Center, East Campus Union, Dairy Store, Dental College, Barkley Center, Law College, Veterinary Science Complex, and Animal Sciences Complex.

This map notes locations of key visitor destinations.

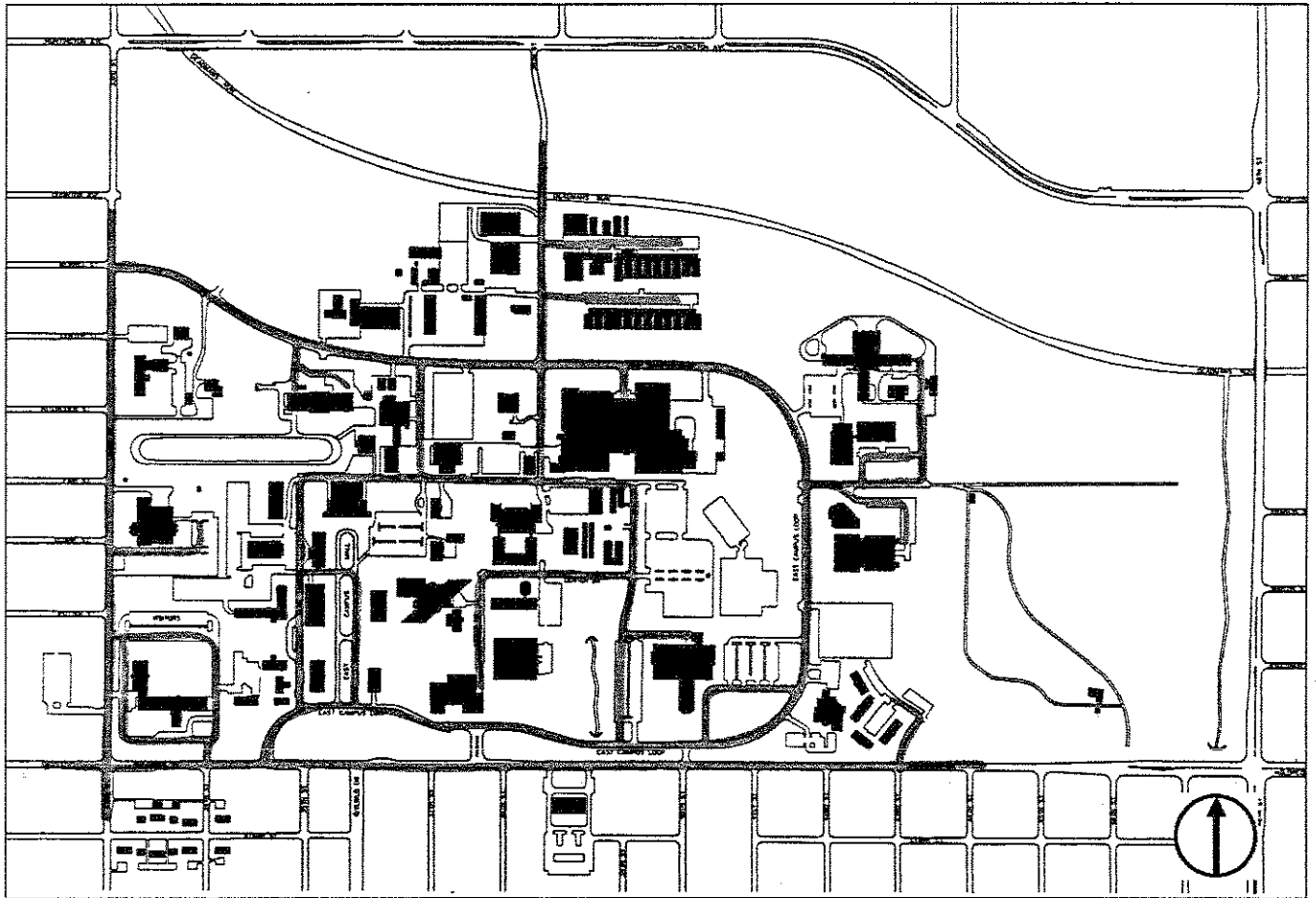
I. East Campus Potential Development Sites



This diagram demonstrates areas of potential development for City Campus.

East Campus has a great amount of land within its borders, yet much of it is used for agricultural research and instruction (ag plots) and a substantial amount lies within the 100 year flood plain along Dead Man's Run. Future development will most likely occur in underutilized areas inside of the Loop Road.

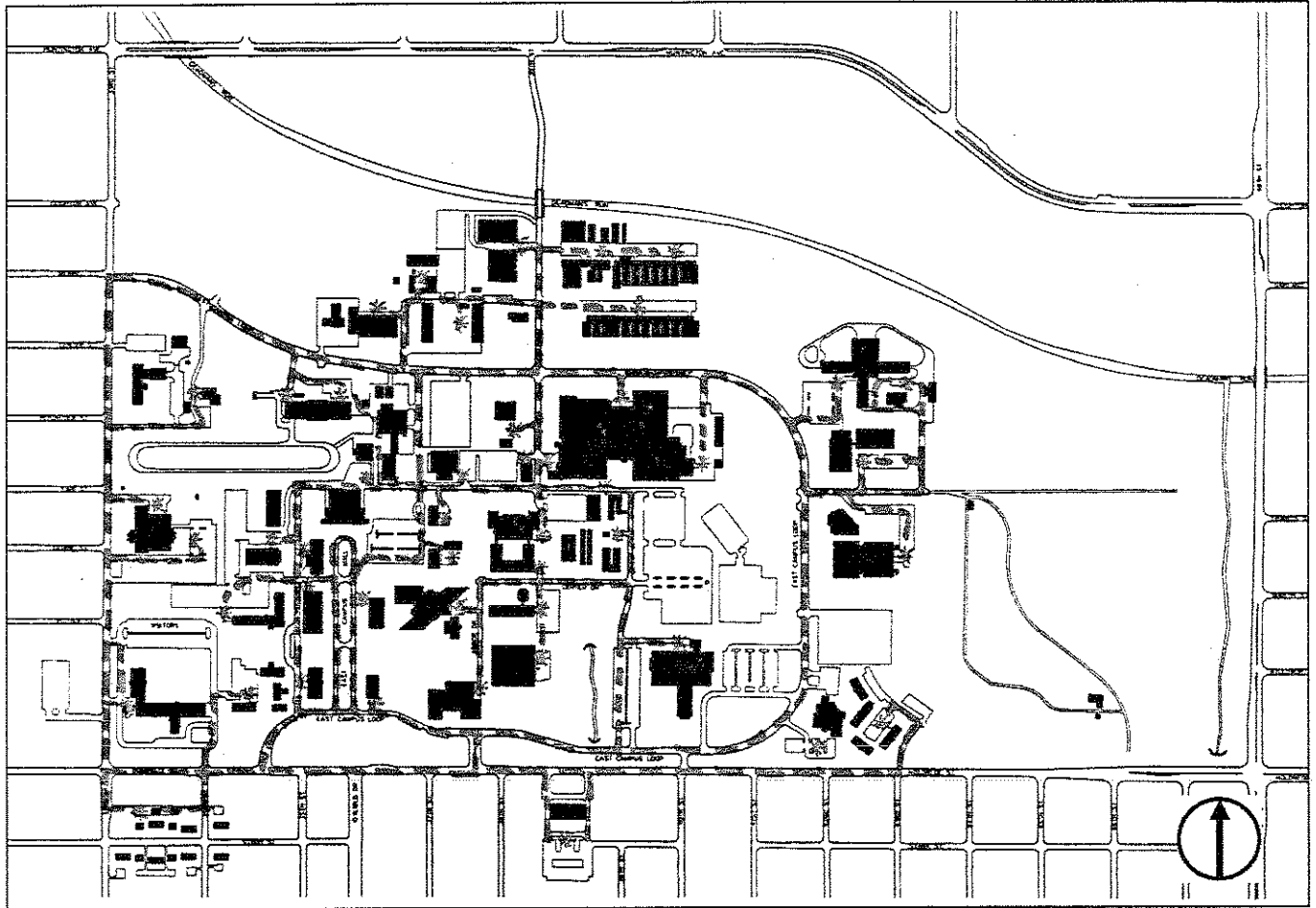
m. East Campus Fire Access Routes



The East Campus has clearly established Fire Access Routes.

This map diagrams fire access routes.

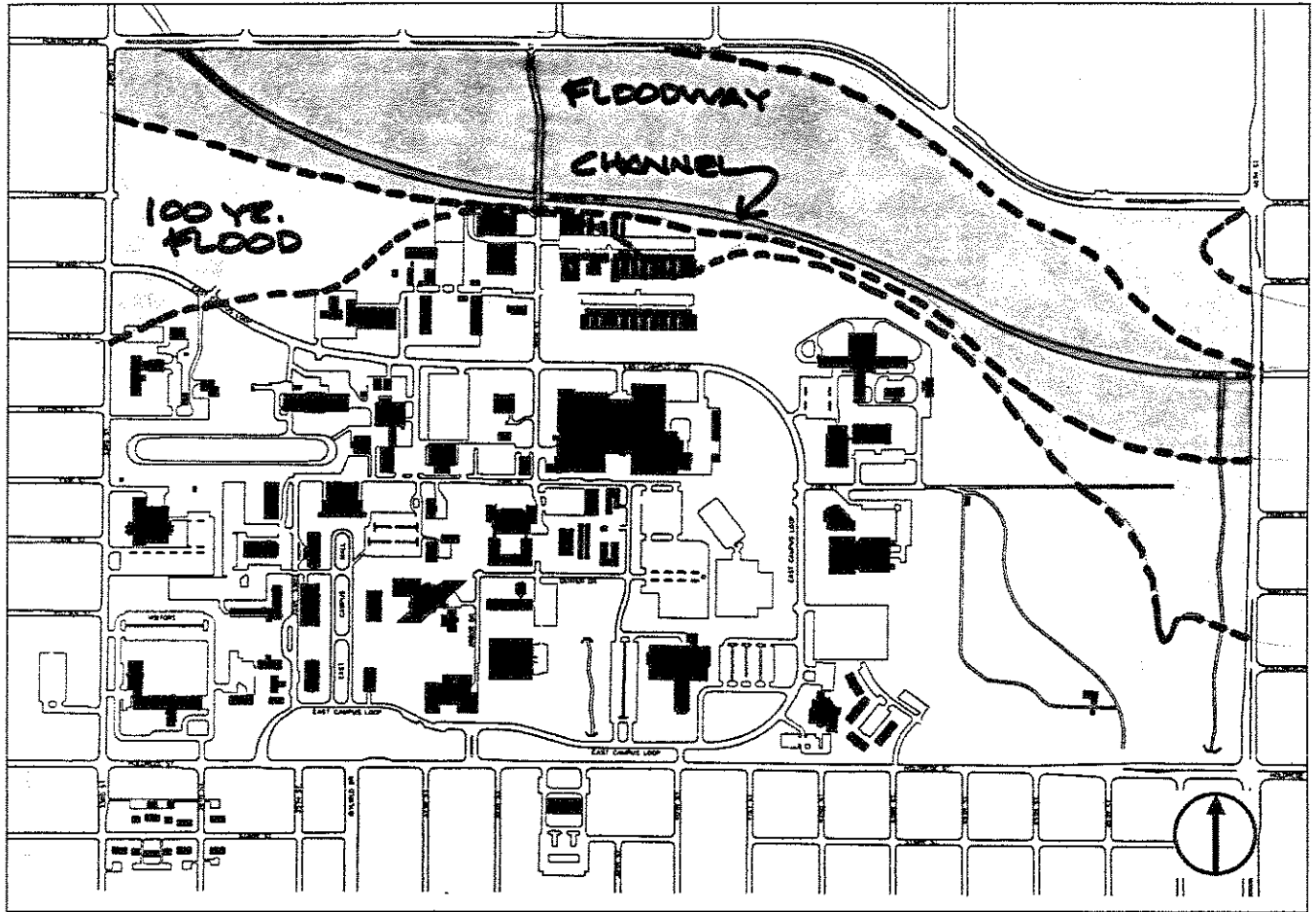
n. East Campus Service Access Routes



Service access/routes are diagrammed in this map. “ * ” denotes locations of service/access entrances.

The East Campus Service Access/Routes are identified. The Master Plan will strive to reduce automobile traffic in the core of campus, while at the same time, provide an organized, efficient and effective service access system.

o. East Campus Flood Plain

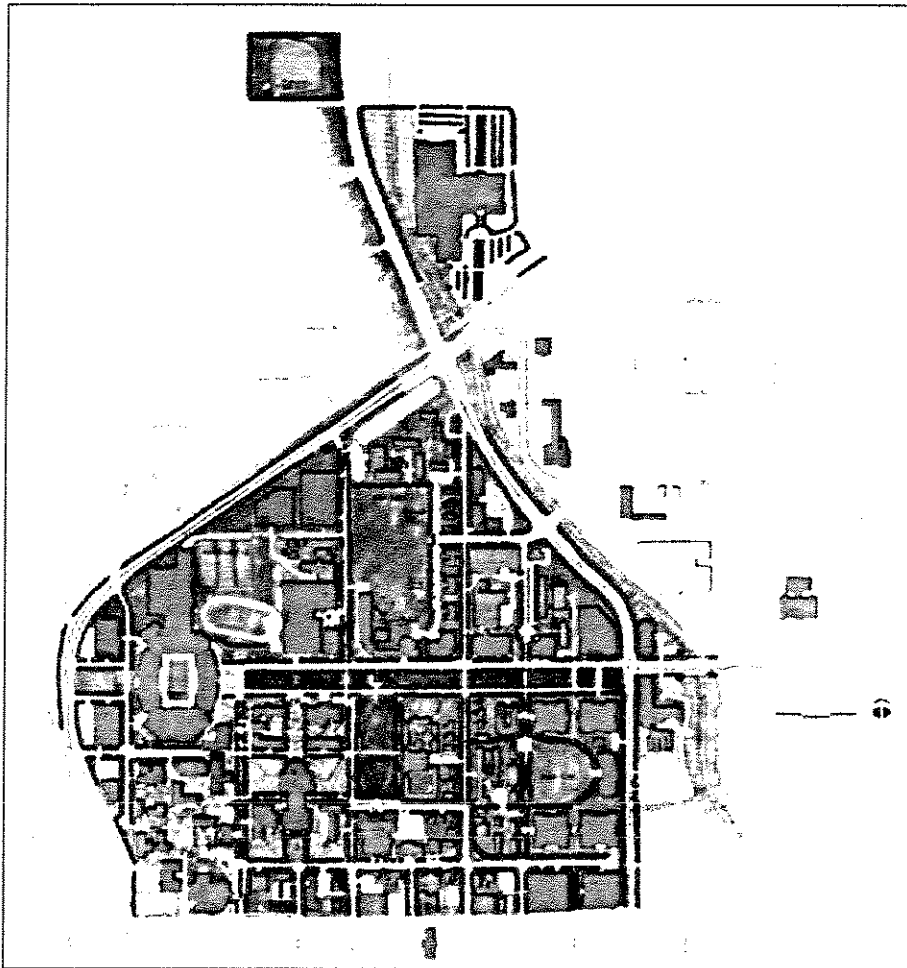


Additions and new construction on East Campus must take into account the floodway channel and the 100-year flood plain. These areas, currently used for agricultural purposes should remain in that use for the future.

This map diagrams the floodway channel and 100 year flood plain.

B. Alternative Concepts

Four alternative master plan concepts were produced during the planning process—two for City Campus and two for East Campus. From design workshops conducted in May 1998, many ideas for campus organization and structure, pedestrian circulation, traffic and parking, campus edges, landscaping and architecture were generated. These preliminary ideas were then incorporated into two different master plan concepts for each campus. These concepts were synthesized and presented at another design workshop on 30 June and 1 July 1998 to all participants of the campus master planning team. From these workshops, one final concept emerged and was presented at the September workshops. The following section contains the four preliminary master plans and a brief discussion of the various organizational concepts included in each. Please note all of the following plans show potential build-out beyond the 12-year planning horizon.



The existing Memorial Mall is extended to the Beadle Center.

The Union Mall is proposed between the Memorial Mall and the Student Union.

Antelope Parkway is on the west side of the Beadle Center.

A new Research and Academic development is proposed for the SE quadrant.

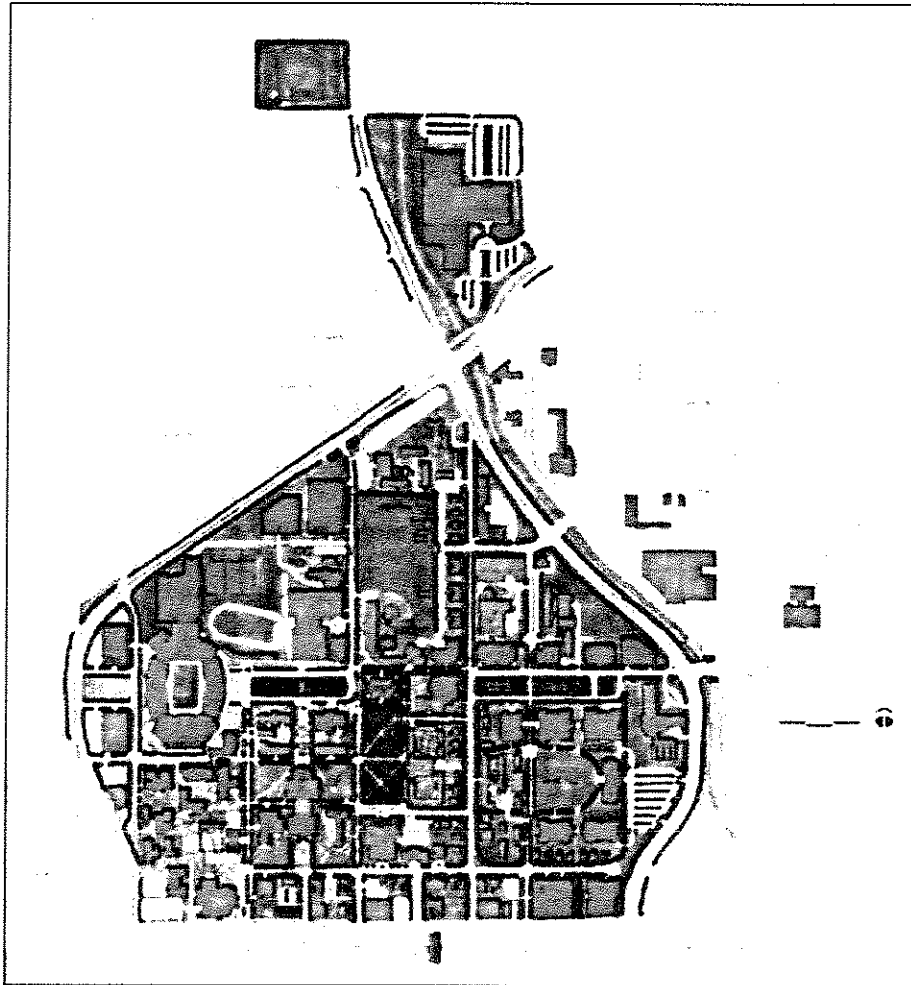
Perimeter parking structures are planned to encourage a pedestrian core to the campus.

1. Preliminary City Campus Master Plan Option "A"

The main organizational structure of Option A is characterized by the development of a grand east to west Memorial Mall—extending from Memorial Stadium to the Beadle Center—and the development of Union Mall extended from the City Campus Union north to Memorial Mall. The campus edges are Q Street to the south, I-180 to the west, Holdrege Street to the north, and Antelope Valley/Parkway to the east. Option A illustrates the Antelope Parkway route to be located on the west side of the Beadle Center—essentially on existing 19th Street right-of-way. A new research and development/academic area is shown south of Vine Street and east of 17th Street. Major entries to City Campus are located at 13th and Q Streets, 14th and Avery Streets, and 19th and Vine Streets. New structured

parking facilities are shown at each of these gateways and also at 17th and R Streets to further the concept of reducing automobile traffic from the core of City Campus and the development of a campus more friendly to pedestrians. The concept also shows roadway and parking modifications at the Devaney Center, 16th and 17th Streets, and Holdrege Street due to future implementation of the Antelope Valley plan.

City Campus Concept A ultimately was chosen as the preferred concept for further development with the exception of the Antelope Parkway location.



The existing Memorial Mall is extended, in two separate links, to the Beadle Center creating a two-part mall.

The Union Mall is proposed between the Memorial Mall and the Student Union.

Antelope Parkway is on the east side of the Beadle Center.

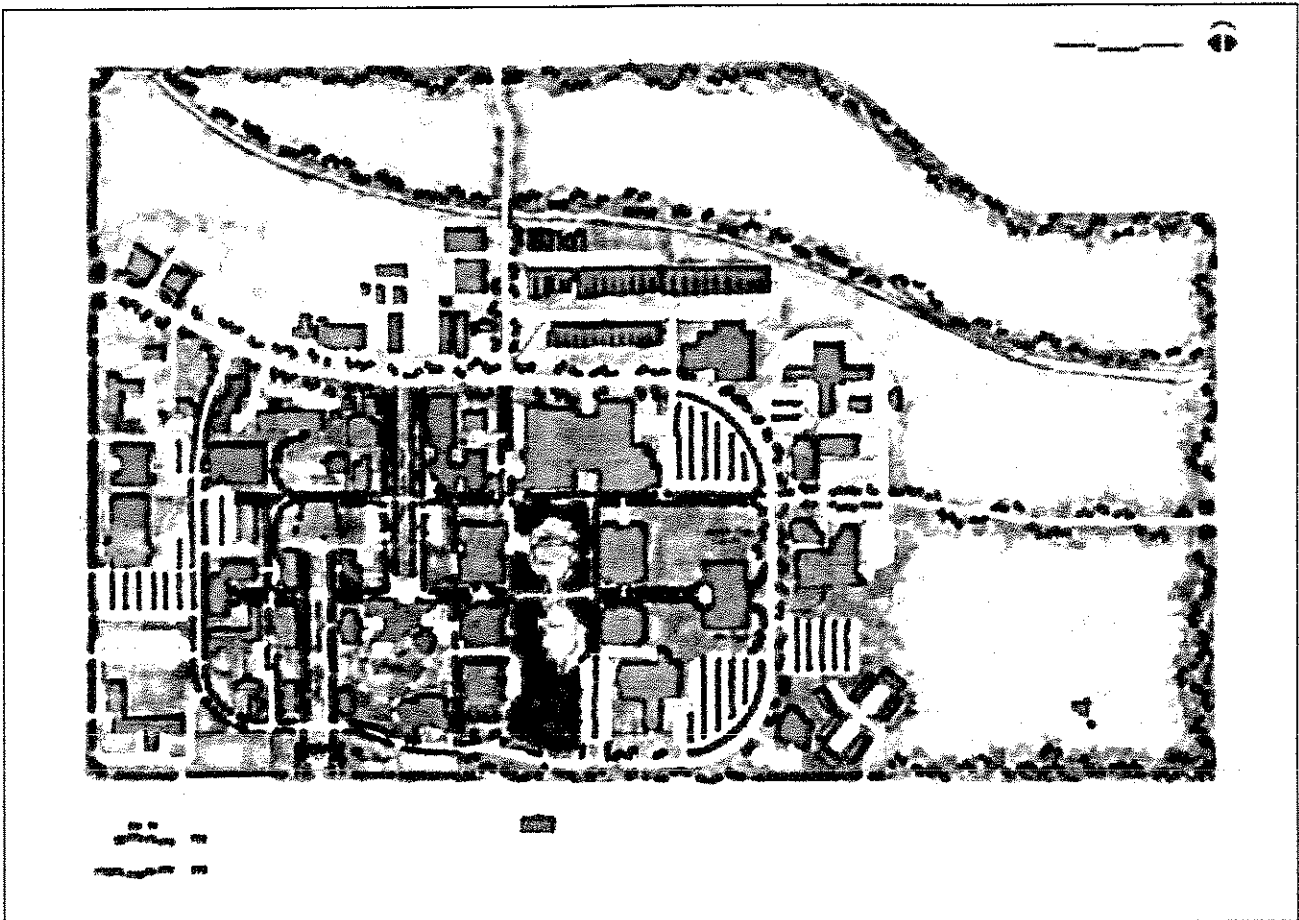
A new Research and Academic development is proposed for the SE quadrant.

Perimeter parking structures are planned to encourage a pedestrian core to the campus.

2. Preliminary City Campus Master Plan Option "B"

The main organizational structure of Option B is the development of a two part Memorial Mall, an eastern portion and a western portion, which are connected by a signature structure—in this case the proposed Esther L. Kauffman Residential Center. Union Mall as proposed in Option A is also anchored by the Residential Academic Center at the north axis. Many of the proposed developments in Option A are also incorporated into Option B including the research and development/academic areas at the eastern edge of City Campus, parking structures, campus gateway entrances, etc. Concept B does locate the proposed Antelope Parkway at the eastern side of the Beadle Center.

3. Preliminary East Campus Master Plan Option "A"



The loop road would be completed

Union Mall proposed north of the Student Union.

New campus entrances are proposed along the south and east, as well as improvements at the perimeter of campus.

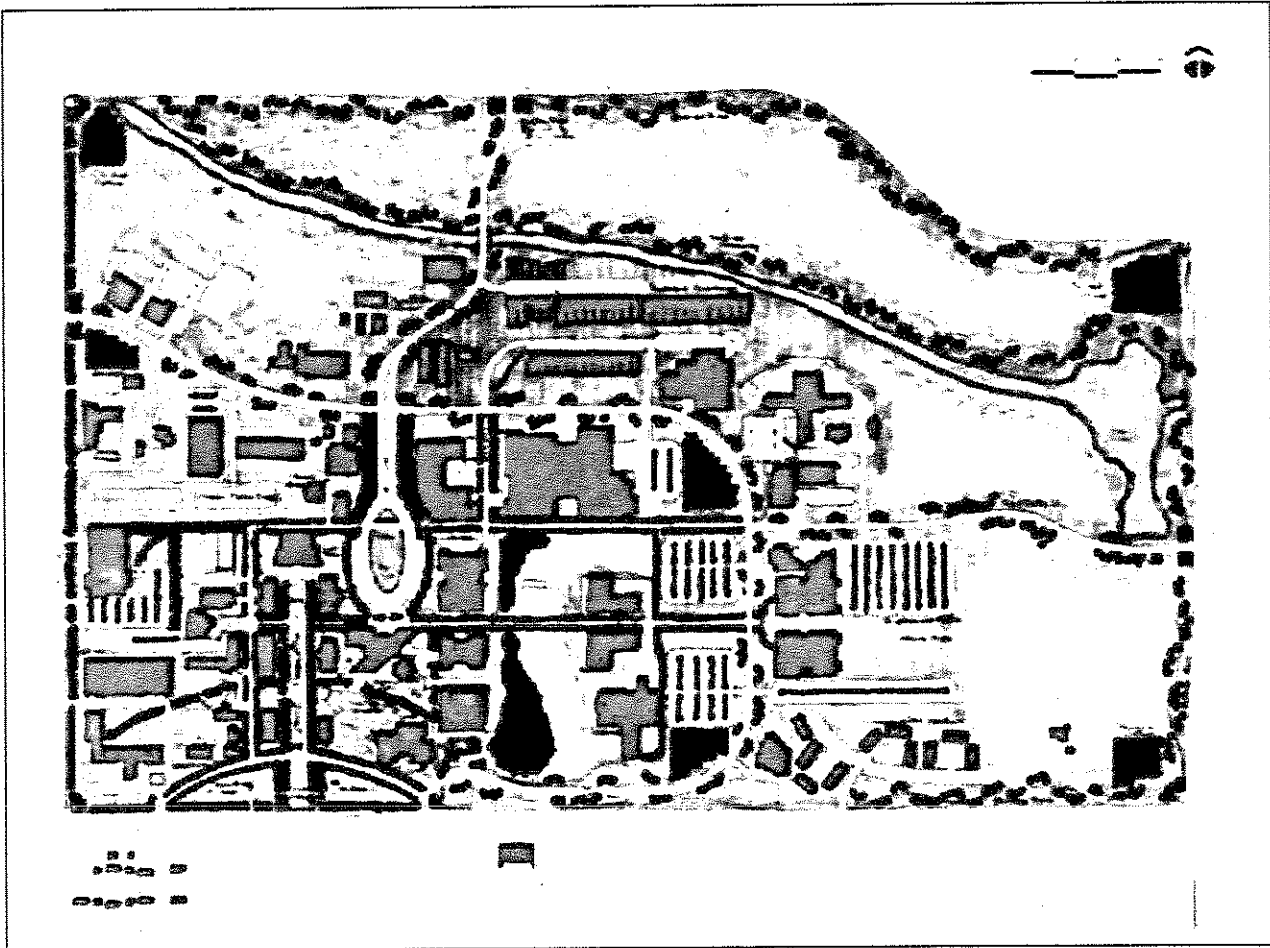
Proposed parking at the perimeter of campus.

The organizational structure of Option A is characterized by the completion of the East Campus loop roadway and the development of a new Union Mall north of the East Campus Student Union to gain better access to this intensely used facility. A new campus entry is shown on Holdrege Street by extending the historic East Campus mall south forming a new entrance. Another new entrance is proposed at the east side of campus at 48th and Francis Streets. Parking at the central part of campus has been moved to the perimeter roadway, allowing the interior of campus become more pedestrian friendly and provide areas for new facilities or recreational uses. The perimeter edge of East Campus is enhanced with landscaping and paths—extending the park-like south edge at Holdrege

Street around the southeast and north perimeter of East Campus. The west side, along 38th Street, would be enhanced by continuing the street tree planting. A new parking structure is proposed on the loop road on the site of the existing Tractor Test Track for faculty, staff, and visitors to the core of East Campus.

East Campus Concept A ultimately was chosen as the preferred concept for further refinement. This plan also incorporated several elements of Concept B into a final master plan concept.

4. Preliminary East Campus Master Plan Option "B"



New campus entrances are proposed along the south and east, as well as improvements at the perimeter of campus.

Union Mall proposed north of the Student Union.

Proposed parking structure the perimeter of campus.

The organizational structure of Option B is characterized by the development of a new grand sweeping arched entrance roadway at the south/Holdrege Street side of East Campus. This new entrance drive is centered on the historic East Campus mall. Option B also includes a new east entrance from 48th Street to the campus loop roadway and a new entry road at the north side of campus which connects to a grand oval mall at the north side of the Union. Option B retains the Tractor Test Track and, therefore, the campus loop roadway is not completed as it was in Option A. A new parking structure located north of the Nebraska Center for Continuing Education is identified for visitor, staff, and students, as well as users of NCCE and NPTV.

IV. Master Plan Concepts City and East Campus

A. City Campus

1. Introduction

The intent of this master plan is to enhance the existing character of the City Campus and to create a framework for future development for the next 20 or 30 years.

Names used to describe proposed malls, plazas, walks, drives and open spaces are used for locational value in this Master Plan and do not represent official names. The naming of these facilities will require review and approval procedures outlined in the University of Nebraska Policy for Naming Facilities.

It is proposed to lengthen the organizational element created by the existing two-block-long Memorial Mall east of the stadium by extending it five more blocks to the east. The continuous seven-block-long, half-block-wide green space provides a very strong east/west physical and visual axis through the center of City Campus.

Extension of the mall east of 16th Street to the Beadle Center will require acquisition of the Alpha Chi Omega Sorority and the Sigma Alpha Mu Fraternity. Negotiations are underway with Alpha Chi Omega to determine a relocation and acquisition strategy that is satisfactory to the sorority and the university, and the university is holding discussions with the fraternity on the acquisition of its property. The Chancellor has pledged not to exercise the power of eminent domain to acquire the sorority's property. August 1, 1999 has been established as the completion date for the sorority and university to reach a mutually acceptable agreement on the terms of relocating the sorority. If an agreement is not reached by that date, the Alpha Chi Omega Sorority will remain at its present location and the University of Nebraska-Lincoln Master Plan will be amended accordingly.

Perpendicular to Memorial Mall and due north of the Nebraska Union lies Union Mall. This one-block-wide and one and one-half-block-long green space occupies an open space area known as North Park and a parking lot. The intersection of Memorial and Union Malls is anchored by a proposed new clock tower rising eight to ten stories and providing a new orientation landmark on City Campus.

The proposed Antelope Parkway project on the east edge of City Campus causes dramatic changes in the existing vehicular circulation patterns in and around City Campus

and provides many acres of land for development by confining the Antelope Creek floodplain to an open, landscaped and park-like channel.

Future campus landscape character will relate very closely to existing conditions with only a few exceptions. The major north/south and east/west pedestrian circulation corridors aligning with the original city street grid will be formally planted with rows of shade trees setting them apart from the informally planted campus grounds. The two major ceremonial open spaces on campus, Memorial and Union Malls, will also be planted in a formal pattern setting them apart and focusing attention on distant views and focal points.

New campus architecture will draw on the best examples currently existing. Buildings will be generally low to mid-rise heights and be characterized by the use of red brick and tan stone materials.

2. City Campus Master Plan

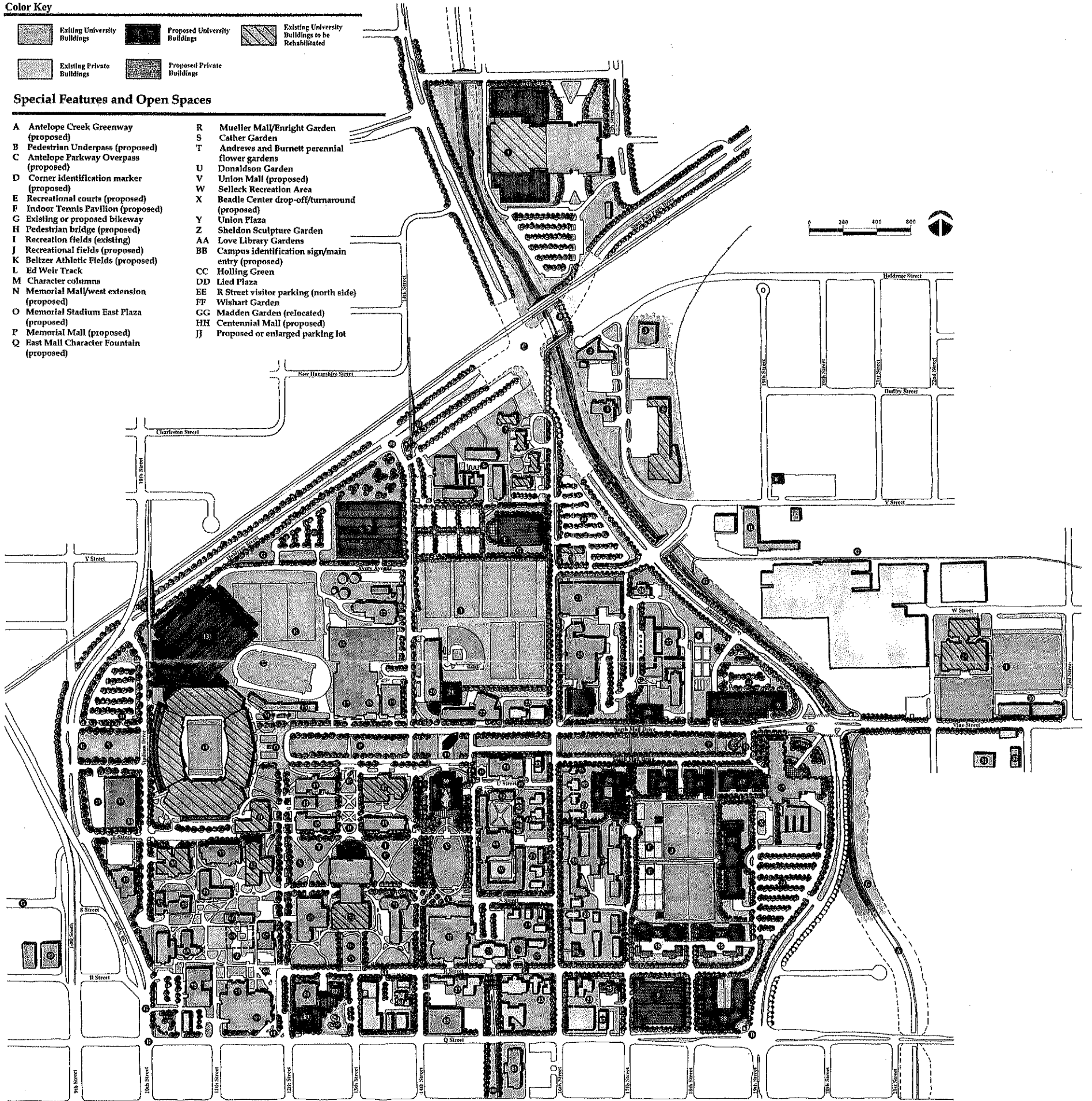
See following page.

Color Key



Special Features and Open Spaces

- A Antelope Creek Greenway (proposed)
- B Pedestrian Underpass (proposed)
- C Antelope Parkway Overpass (proposed)
- D Corner identification marker (proposed)
- E Recreational courts (proposed)
- F Indoor Tennis Pavilion (proposed)
- G Existing or proposed bikeway
- H Pedestrian bridge (proposed)
- I Recreational fields (existing)
- J Recreational fields (proposed)
- K Beltzer Athletic Fields (proposed)
- L Ed Weir Track
- M Character columns
- N Memorial Mall/west extension (proposed)
- O Memorial Stadium East Plaza (proposed)
- P Memorial Mall (proposed)
- Q East Mall Character Fountain (proposed)
- R Mueller Mall/Enright Garden
- S Cather Garden
- T Andrews and Burnett perennial flower gardens
- U Donaldson Garden
- V Union Mall (proposed)
- W Selleck Recreation Area
- X Beadle Center drop-off/turnaround (proposed)
- Y Union Plaza
- Z Sheldon Sculpture Garden
- AA Love Library Gardens
- BB Campus identification sign/main entry (proposed)
- CC Holling Green
- DD Lied Plaza
- EE R Street visitor parking (north side)
- FF Wishart Garden
- GG Madden Garden (relocated)
- HH Centennial Mall (proposed)
- JJ Proposed or enlarged parking lot



M A S T E R P L A N

BAHR VERMEER & HAECKER · EDAAW

11 · 18 · 98

Facilities

- | | | | | |
|---|--|--|--|---|
| <ul style="list-style-type: none"> 1 Devaney Sports Center and proposed additions 2 University Police Services 3 Landscape Services 4 Maintenance 5 Food Stores, Business, Mail and Distribution Services 6 Harper, Schramm, Smith Residence Halls 7 Existing Greek Houses to be renovated to future use 8 Proposed transportation services replacement 9 Proposed future parking garage 10 Boat House 11 Facilities Management 12 Utility Plant 13 Proposed future athletic performance complex 14 Memorial Stadium 15 Ed Weir Track building | <ul style="list-style-type: none"> 16 Cook Pavilion 17 Coliseum 18 Sapp Recreation Center 19 Military and Naval Science 20 Mabel Lee Hall *21 Proposed future replacement for Lyman/Bancroft Halls 22 Henzlik Hall 23 Existing Greek houses 24 Nebraska Hall 25 Walter Scott Engineering Center and proposed Chemical Engineering addition 26 G.E. Building 27 Abel, Sandoz Residence Halls 28 Proposed undetermined future use 29 Whittier Building 30 Vine Street Apartments 31 U Street Apartments 32 Husker Hall 33 Stadium Drive parking garage | <ul style="list-style-type: none"> 34 Parking Services 35 501 Building *36 Richards Hall 37 Behlen Lab 38 Brace Lab 39 Manter Hall 40 Ferguson Hall *41 Avery Hall *42 Hamilton Hall and proposed hazardous materials addition 43 Bessey Hall 44 Oldfather Hall 45 Burnett Hall 46 Mueller Tower 47 Morrill Hall 48 Andrews Hall 49 Proposed future clock tower 50 Esther L. Kauffman residential center 51 University Health Center 52 Seaton Hall | <ul style="list-style-type: none"> 53 Benton Hall 54 Fairfield Hall 55 Selleck Quadrangle 56 Syford House 57 Corner Stone Chapel 58 Proposed future honors residence hall 59 Cather, Pound, Neihardt Residence Halls 60 Proposed future R & D Building 61 Proposed future R & D Building 62 Proposed future addition to Beadle Center 63 Beadle Center 64 Proposed future R & D Building 65 Architectural Hall 66 Woods Hall 67 Sheldon Art Gallery 68 Proposed future underground addition to Sheldon Art Gallery 69 CBA (Business Administration) | <ul style="list-style-type: none"> * 70 Love Library and proposed addition 71 Canfield Administration Building 72 Nebraska Union 73 Nebraska State Historical Society 74 Wick Alumni Center 75 Proposed future Greek houses 76 Proposed future R & D Building 77 Proposed future R & D Building 78 Westbrook Music Building 79 Kimball Recital Hall 80 Lied Center for Performing Arts 81 Temple Building 82 Proposed future Visitor's Center 83 Proposed future Mary R. Ross Film Theater 84 Culture Center 85 Alexander Building 86 School of Journalism 87 Credit Union 88 Proposed future mixed use development 89 University Press warehouse |
|---|--|--|--|---|

* LB1100 deferred maintenance projects

3. Master Plan Recommendations

a. Campus Edges

Campus boundaries are important areas in which to begin establishing identifying image and character. The edges of City Campus are identified as the future Antelope Parkway on the east, Holdrege Street on the north, the I-180 Expressway on the west, and the one-block-wide zone on the south between Q and R Streets known as “the zipper” because of interlocking campus and downtown functions.

Antelope Parkway and the associated greenway is proposed to provide a very distinctive eastern boundary to the Campus. The future tree-lined corridor will contain four lanes of traffic with a planted median as well as the grass sloped Antelope Creek and a major hiking/biking trail.

Another major section of the perimeter loop road system is Holdrege Street By-Pass paralleling the north edge of Campus along the BN railroad tracks. This street will assume some of the same urban transportation corridor aspects as Antelope Parkway. Four lanes of traffic will be separated by a planted median and rows of shade trees will be planted along both sides. In addition, screen planting is recommended along the railroad tracks to buffer the visual impact. Pedestrian walks will also be provided. The Devaney Center, located north of the railroad tracks, although situated outside of the perceived Campus edges, will be better connected to the main part of Campus by an enhanced pedestrian walkway extending north on 16th Street and below the Antelope Parkway/Holdrege Street overpass.

The west side of City Campus is bordered by I-180 Expressway and 10th Street as it swings west of the Stadium Drive parking garage. I-180 is elevated through most of this area providing views into the stadium complex and western edge of City Campus. 10th Street will be planted with rows of shade trees along both sides and pedestrian sidewalks will be provided.

The south edge of City Campus is characterized by a one-block-wide zone where the Lincoln central business district and the City Campus overlap. This integration of city and campus should be encouraged and enhanced with street tree planting and pedestrian amenities such as benches, lights, and special paving along both sides of the north/south streets, effectively extending the campus landscape south

into the city and drawing the city street grid north into City Campus. The future reconstruction of Centennial Mall will provide a strong link between the campus, the city and the capitol building.

b. Entrance/Gateways

Entries to City Campus are a very important aspect of creating a positive image of the University to first-time visitors and guests. These entries establish a gateway and sense of arrival onto the campus. Entry signs and structures identify the University and introduce the design theme repeated throughout the campus.

The main City Campus entry, where all visitors will be directed, is located at 13th and R Streets. 13th Street, along with Love Library, a significant campus landmark, provides an attractive focal point. 13th Street has recently been converted to two-way traffic to facilitate access. A new Visitors' Center is to be constructed on the southwest corner of this intersection. A low, horizontal "University of Nebraska" sign wall should be constructed at the north edge of the lawn in front of Love Library.

The existing garden plantings and iron gates remain unchanged. Consideration should be given to extending the curb line on the north side of R Street in front of Love Library into the street eliminating the possibility of parked cars blocking the view across the lawn to the sign wall. It is also recommended that parking on the north side of R Street between 12th and 16th Streets be reserved for visitors.

The east entry to City Campus will be at Vine Street and Antelope Parkway. Vine Street is recommended as the new main access route between City and East Campuses. It provides direct access to Memorial Mall, a significant open space on City Campus. A new parking garage will be constructed on the north side of Vine Street, effectively forming "book end," gateway architecture with the Beadle Center on the south side of Vine Street. Low entry walls, similar to the main entry at 13th Street, will flank both sides of Vine Street along with appropriate landscaping. It is recommended that a campus directory map and visitor information be provided in the new parking garage discussed above. This east entry to City Campus could, in the future, become the most active of all entries due to its location off Antelope Parkway as well as its relationship to Memorial Mall and the East Campus.

The north gateway to City Campus is located at Holdrege Street and 14th Street. Holdrege Street will become a more significant transportation corridor with the construction of Antelope Parkway. The intersection at 14th Street will provide direct access into a new parking garage at 14th and Avery Streets. A new pedestrian overpass is also recommended at this intersection providing accessibility between City Campus and the historic North Bottoms Neighborhood and State Fair Park. Low sign walls and appropriate landscaping will flank both sides of 14th Street providing a gateway image and screening the surface parking lots to the east and southeast.

The west gateway to City Campus is more visual than physical. The views of campus and Memorial Stadium offered by southbound I-180 provide a very positive first impression and will be further enhanced with the completion of the stadium skybox construction and the possible construction of a plaza west of the stadium and north of the existing stadium drive parking garage. No other identification signs or walls are recommended for this area.

c. Ceremonial Open Spaces

The core of City Campus contains several important open spaces, both existing and proposed: Memorial Mall, Union Mall, Union Plaza, East Stadium Plaza, and Mueller Mall. These areas are the heart of City Campus and provide opportunity for a variety of outdoor student activities. They are memorable places, reflecting the heritage and tradition of the University. Additionally, an improved and expanded Centennial Mall from the south edge of City Campus to the Capitol is a significant open space impacting the campus in a positive way.

(1) Memorial Mall

The primary campus open space proposed is Memorial Mall. This seven-block-long space would form the east/west spine of City Campus, anchored by Memorial Stadium on the west and the Beadle Center on the east. A new campus landmark, the clock tower, would sit in the middle of the mall on axis with the Union, Union Mall, and the new Esther L. Kauffman Residential Center. Vine Street would form the north edge of Memorial Mall and is suggested to be renamed North Mall Drive. South Mall Drive would align with the existing two-block segment between 12th and 14th Streets east of Memorial Stadium. For the foreseeable future, south Mall Drive would jog around the University Health Center between 15th and 16th Streets. If it becomes necessary to

replace the Health Center in the future, it is recommended that this section of South Mall Drive be relocated to its proper alignment.

Both North and South Mall Drives would be open to automobile, transit, bicycle, and pedestrian traffic. However, there should be no automobile parking on either drive. School buses will be allowed to park on south Mall Drive at Morrill Hall for visiting student classes. Allowing automobile traffic on Memorial Mall will provide visitors a pleasant opportunity to experience the heart of City Campus before parking and further exploring as a pedestrian. Formal rows of shade trees should line each side of both North and South Mall Drives with pedestrian walks provided along the outside edges of each drive. The mall green space should be predominately lawn with passive activities allowed. A water feature with high vertical features is recommended as a focal point at the east end of the mall adjacent to a new entry plaza at the Beadle Center.

Extension of the mall east of 16th Street to the Beadle Center will require acquisition of the Alpha Chi Omega Sorority and the Sigma Alpha Mu Fraternity. Negotiations are underway with Alpha Chi Omega to determine a relocation and acquisition strategy that is satisfactory to the sorority and the university, and the university is holding discussions with the fraternity on the acquisition of its property. The Chancellor has pledged not to exercise the power of eminent domain to acquire the sorority's property. August 1, 1999 has been established as the completion date for the sorority and university to reach a mutually acceptable agreement on the terms of relocating the sorority. If an agreement is not reached by that date, the Alpha Chi Omega Sorority will remain at its present location and the University of Nebraska-Lincoln Master Plan will be amended accordingly.

(2) Union Mall

Perpendicular to Memorial Mall and due north of the Nebraska Union lies Union Mall. Anchored on the north by the new Esther L. Kauffman Residential Center, it occupies the area now known as North Park and a parking lot. This is a significant campus open space and is recommended to be formal in character. It is recommended that a graceful elliptical walk connect into the new Union Plaza water feature on the south end and a formal axial walk extending into the Kauffman Center courtyard on the north end. The existing east/west walk extending west of the Selleck Quadrangle should remain a major pedestrian corridor.

Planting on Union Mall should be limited to formal rows of shade trees along the ellipse and the flanking north/south pedestrian corridors with the addition of flower and shrub plantings on the south end of the ellipse to allow the new Union Plaza stage and water feature to better relate to Union Mall.

(3) Union Plaza

Union Plaza, currently under construction as part of the Nebraska Union renovation and expansion project, will become the major outdoor student gathering place on City Campus. A small stage, water feature, shade trees, and benches are incorporated into this central space.

(4) East Stadium Plaza

This popular, game day gathering place is being redesigned to improve its function. Together with the adjacent grand historic columns, this plaza also lies at the western end of Memorial Mall and the northern end of the 12th Street pedestrian corridor placing it in a position of prominence. The west loop drive connecting North and South Mall Drives is recommended to be moved about 20 feet to the east to accommodate an expanded Stadium Plaza and to allow the 12th Street pedestrian corridor to connect to the plaza instead of the street.

(5) Mueller Mall

This historic open space between Love Library and the Coliseum should be restored to its former prominence. The design should recognize the space as a north/south linear mall with formal rows of shade trees along each side and the historic crossing "X" walks restored. The mall should be predominately lawn and trees. The new, planned north addition to Love Library should respond to the strong north/south axis of Mueller Mall.

d. Active Recreation Open Spaces

Within the Master Plan, inter-collegiate athletic practice fields remain in the area northeast of Memorial Stadium. However, the layout is changing in response to a proposed Athletic Performance Complex currently under study. Construction of the Athletic Performance Complex would necessitate relocation of the baseball field, probably to an off-campus site.

Recreational sports fields have been reconfigured and consolidated near campus residential areas. A large complex occupying approximately 18 acres, containing soccer/football/rugby/ultimate fields, a softball field, and both indoor and outdoor tennis courts is located just south of the Harper/Schramm/Smith Residence Halls between 14th and 16th Streets. Another reconfigured recreational sports area of approximately nine acres lies just east of the Cather/Pound/Neihardt Residence Halls, near the current field location and also serves as open space within the new Research and Development Quadrangle. Additional fields also exist at the old Whittier School site at 23rd and Vine Streets. Additional recreation courts for tennis, basketball, volleyball, and horseshoes are located just east of the Abel/Sandoz Residence Halls.

e. Passive Recreation Open Spaces

Throughout the campus are several open areas suitable for passive recreation such as throwing a frisbee, strolling or simply enjoying the sun. The largest of these spaces is Memorial Mall with over seven acres of lawn area. Next is Union Mall with about an acre and a half. The value of passive recreation and open spaces should not be overlooked and these areas should be maintained and enhanced with appropriate landscaping. Additionally, the gardens east and west of Love Library, the library "front yard" gardens, and the Sheldon Art Gallery sculpture garden also serve as valuable open space. The aesthetic quality of campus open spaces and gardens plays an important role in student, faculty, and staff recruitment.

f. Botanical Gardens and Arboretum

The entire University of Nebraska-Lincoln campus was designated as a botanical garden and arboretum by the Board of Regents in 1988. Appropriate landscaping and attractive garden areas featuring specimen trees, flowering shrubs, perennials and ornamental grasses enhance the campus and serve as a teaching resource, reinforcing the University's educational mission. Additional displays should also be developed at all gateway areas, as previously discussed, as well as at focal point areas such as the proposed new clock tower, East Stadium Plaza, water feature at the east end of Memorial Mall, northeast side of the Beadle Center, and south end of Union. Mall.

The Master Plan for the University of Nebraska-Lincoln Botanical Garden and Arboretum, prepared in September

The Master Plan for the University of Nebraska-Lincoln Botanical Garden and Arboretum, prepared in September 1996, should be used to guide development of the campus landscape in coordination with the Campus Master Plan. As both plans are updated in the future to reflect new needs, the campus landscape/botanical garden and arboretum will be adapted to meet these needs.

g. Building Settings

An important landscape zone often overlooked on college campuses is the transition area between ground plane and architecture. Often referred to as “foundation planting,” these beds of various shrubs, ground covers, and small trees allow the buildings to sit gracefully on the land. Foundation planting should be provided on all sides of campus buildings. Special attention should be given to all building entries with plant materials selected for scale, texture, seasonal color, and overall visual impact. Building entries that face Memorial Mall should be treated as “front porches” with seat walls, planters, lights, and benches providing opportunities for small informal gatherings.

h. Building Additions/Renovations and New Construction

In addition to the changes proposed to the physical campus landscape and spatial development, the Master Plan for the City Campus contains a significant amount of new building construction and renovation. A major portion of this future work is a result of LB1100, the deferred maintenance initiative passed and funded recently by the Legislature. A large amount of renovation and construction work is also due in large part to several major and generous private donations which will fund new facilities.

A building construction, renovation/addition and replacement program is currently underway with the renovation of the Nebraska Union, Richards Hall, the design and construction of the Esther L. Kauffman Residential Center, the replacement of Lyman and Bancroft Halls, the construction of a chemical engineering addition to Scott Engineering Center, the construction of the Ross Film Theater and UNL Visitors Center, the renovation of Avery Hall, the renovation of the Security Mutual Building for Journalism, the renovation of and additions to Love Library. This program eliminates a significant backlog of deferred maintenance and helps to meet future space requirements without greatly increasing the building density at the core of City Campus.

Athletics, Recreation and Parking and Transit also have many future projects identified to help accomplish the planning goals of improving the parking reserves, enhancing the transit system and meeting the demands for growing and expanding athletic and recreational sport programs. Major athletic facilities included in the Campus Master Plan include renovation of the Ed Weir outdoor track, additional improvements to Memorial Stadium, an Athletic Performance Center, new grass football practice fields, remodeling of Cook pavilion, remodeling of the south Stadium Office Building, and new baseball, softball, soccer, and tennis facilities. Proposed improvements at the Devaney Sports Center include additions for indoor track, gymnastics, and wrestling, a 5,000 seat arena, a natatorium, and other fan amenities such as video screens and restrooms.

As noted previously, the Master Plan contains a large land area in the SE Sector of City Campus near the Beadle Center for campus expansion. With the improvements of the Antelope Creek channel, a great amount of University land is taken out of the 100 year flood plain allowing UNL to utilize the land for future development. The Master Plan envisions this area as the site for development of a Research and Development Complex containing functions similar to that of the Beadle Center. The new Research and Development Complex will complement the existing Beadle Center and allow for the Beadle Center expansion. Other new developments in this sector will include a new Honors Dorm and the expansion of the historic R Street Greek Row in an eastward direction. This extends the existing student life functions and continues the pleasing transition of the University to the downtown Lincoln area.

As part of the Master Plan development, the timing and phasing of all of the projects listed above was analyzed with Institutional Research and Planning, UNL Facilities Management, and the Campus Master Plan participants to develop an orderly, logistical process of the project development. As a result, a detailed listing of all Master Plan projects and phasing maps/diagrams have been included in the Master Plan. This information is located at the end of this chapter. Also a comprehensive summary list of Master Plan Projects and development timeframe is located later in this chapter.

i. Vehicular Circulation and Transit Systems

One of the major goals of the Master Plan is to make City Campus more “pedestrian friendly” with the elimination of through traffic. This will be accomplished by the development of a continuous perimeter road system comprised of Antelope Parkway, Holdrege Street, I-180/10th Street, and Q Street. The elimination of through traffic will also include the systematic elimination of many surface parking lots in the campus core. A system of new parking garages and surface lots intercepts traffic at the perimeter where an enhanced transit shuttle bus system will provide convenient access to the campus core areas.

Several small surface parking areas must remain intact to continue to serve their special functions and to provide parking for people who are disabled. 14th Street will be open to automobile traffic only as far south as the Campus Recreation Center where it will become transit only. 16th Street will serve local traffic only and be enhanced as a pedestrian corridor. 17th Street will provide service access only to the building complexes north and south of Memorial Mall. 17th Street will not cross the Mall. Automobile traffic will be allowed on Memorial Mall as stated above as well as the loop around the Selleck Quadrangle comprised of S, U, and 15th Streets. R Street will remain as it exists with the exception of visitor parking only on the north side between 12th and 16th Streets. R Street will also provide access, at the southeast corner of campus, to the Beadle Center drop-off loop and an expanded surface parking lot south of the Beadle Center. As the area west of Memorial Stadium continues to develop and change over time, consideration should be given to Stadium Drive becoming pedestrian only.

As discussed above, an enhanced transit system is a key component of the pedestrian campus. Recommended transit route service routes were developed during the Master Planning process and are illustrated on the attached diagrams. The goal of the new enhanced campus transit system is to provide an improved level of service. Service hours would be extended and shuttles would run more frequently – cutting wait times to five to seven minutes. Enhancements will be provided at the new garages to help transition from personal vehicles to shuttles.

Strategically placed parking structures are also a key component of the future campus transit system. The following chart summarizes the proposed parking space needs and the associated construction of facilities to help

meet the needs. Refer to the transit routing diagram for recommended transit routes.

Transit Routes for the City Campus are diagramed showing the enhanced transit system to be implemented as a part the Master Plan.

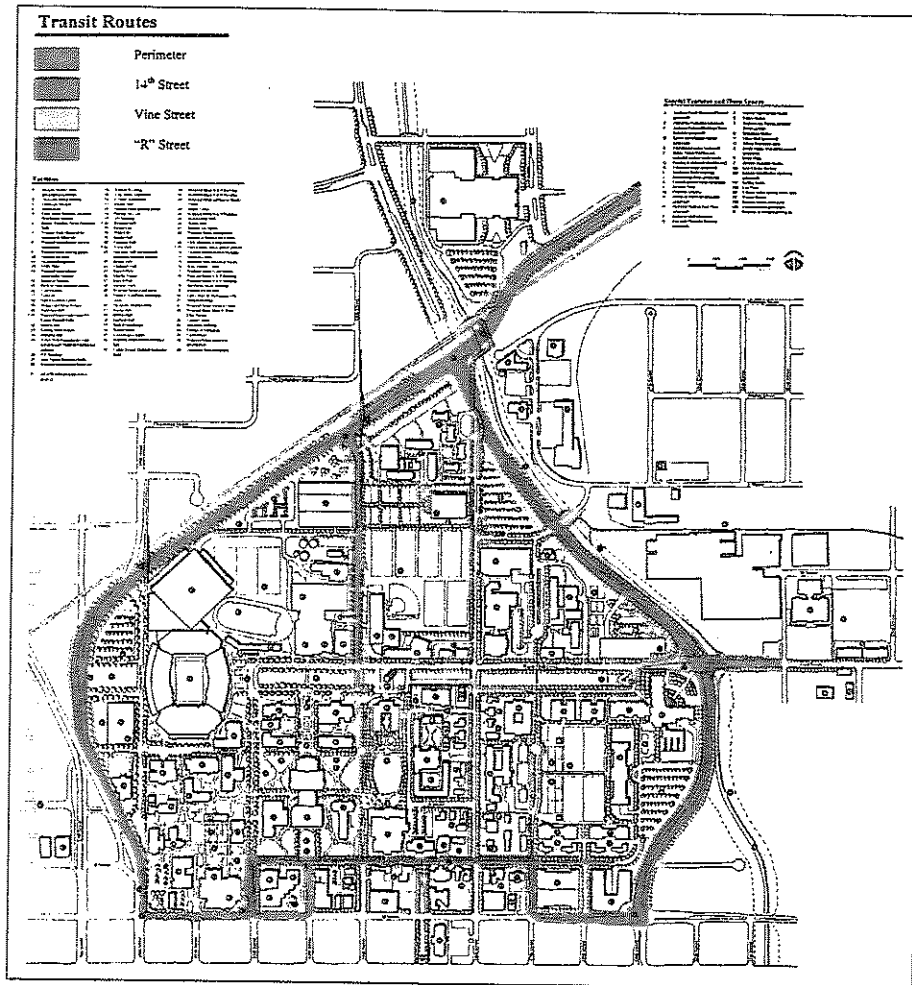
Transit Routes:

Perimeter Route - Blue

14th Street Route - Purple

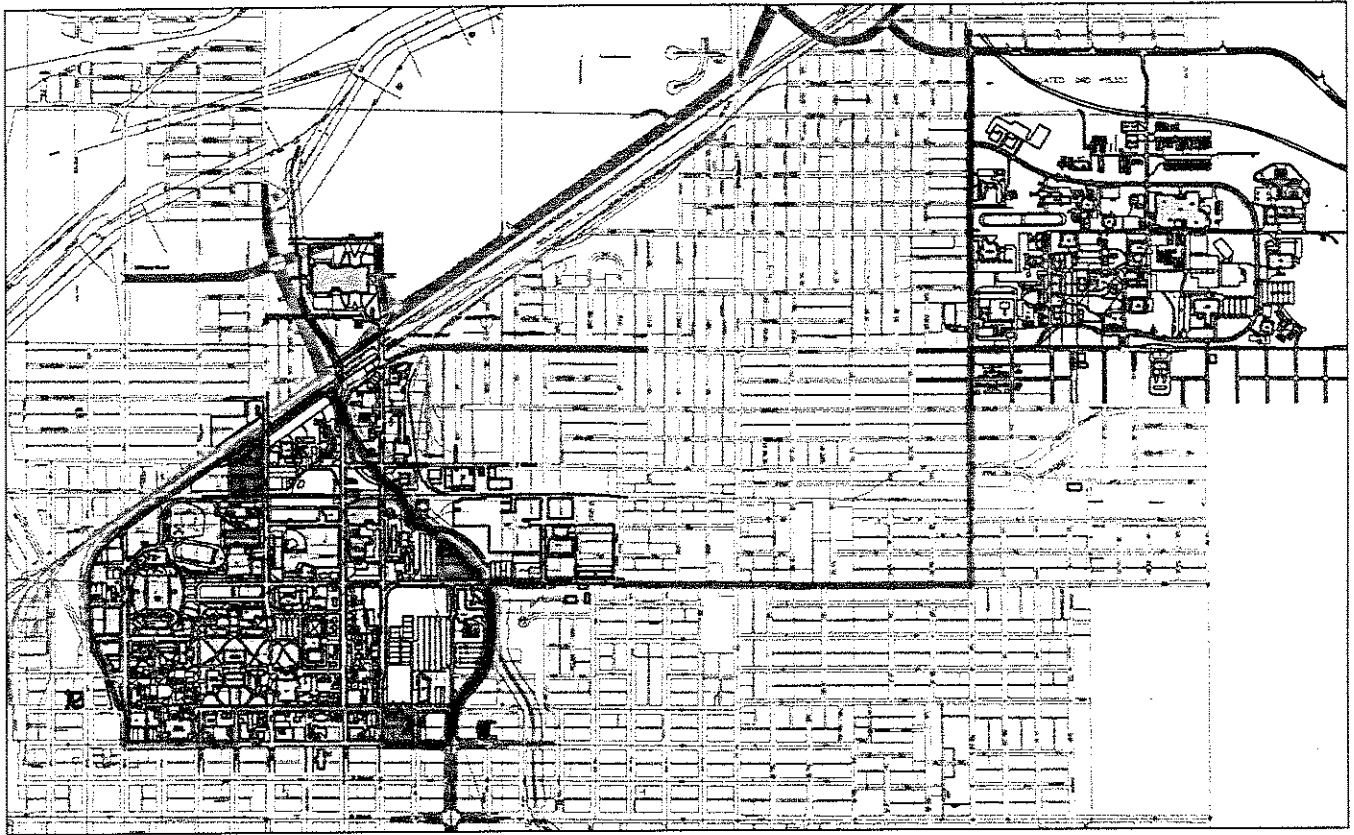
Vine Street Route - Tan

'R' Street Route - Red



The office of Parking and Transit Services is currently developing a detailed Master Plan for all of these proposed parking and transit improvements. This comprehensive plan will contain information on the parking structure development, transit system development, bicycle lane development, financing plans and development schedules. The plan is to be completed in late 1998 or early 1999.

All new or reconfigured surface parking lots should be developed with planting islands containing trees, and shrubs. The edges of these lots should also be buffered with plants to screen objectionable views.



The major transit routes between the campuses become Vine and 33rd Streets.



Service and emergency access will continue as it does currently with the exception of 15th Street not crossing Memorial Mall. Delivery vehicles should be limited to service access areas and the use of pedestrian walks minimized.

Along with parking and transit improvements within the campus, connection between the campuses should also be improved. This includes enhancement of the transit system. Transit routes both on City Campus and the routes between City and East Campus will be altered due, in part, to the Antelope Parkway Project. The preferred route between the campuses will shift to Vine and 33rd Streets as opposed to the current route on Holdrege and 33rd Streets.

The following charts reflect the parking needs for both the City and East Campus. The numbers demonstrate the potential need for stalls throughout the phases of Master Plan implementation. The first chart describes parking need, rationale for the need, number of stalls and time-frame for replacement of stalls. The second chart shows

the timeframe and number of stalls for new parking garages proposed in the Master Plan.

FUTURE PARKING STALL NEEDS BY TARGET YEAR 2007

Displaced Location	Reason for Displacement	Stalls Displaced	Year Replacement Needed
NORTH GARAGE			
14th and Avery	Structure Site	150	1999
14th and Avery	Holdrege Extension 8% Closed	61	1999
17A and Area 10 Selleck	RAC 100% Closed	175	1999
Area 3 HSS Rock	Holdrege Extension 100% Closed	201	1999
Stormies Lot	Holdrege Extension 40% Closed	62	1999
Area 20 Old Headquarters	Holdrege Extension 20% Closed	75	1999
New Hampshire Perimeter	Consolidation 100% Closed	303	1999
Jacobs Lot	Antelope Valley 30% Closed	128	2003
Area 3 HSS Paved	Antelope Valley 31% Closed	130	2003
Area 2/3 Inventory	Antelope Valley 100% Closed	146	2003
Area 10 Old Body Shop	Antelope Valley 100% Closed	30	2003
Area 10 GE	Antelope Valley 83% Closed	63	2003
Area 10 Nebraska Hall	Antelope Valley 100% Closed	133	2003
Memorial Mall *	Mall Redevelopment 100% Closed	280	2001
Bancroft/Lyman *	Mall Extension/Building Demo 100%	41	2001
		1978	
SOUTH GARAGE			
Visitor Lot	Structure Site 100% Closed	22	2001
Area 10 Foundation	Embassy Suites 100% Closed	25	2001
17T	Visitor Center 100% Closed	33	2001
Area 10 Temple	Visitor Center 100% Closed	89	2001
Additional Stalls	New Accommodation	431	2001
Union Cul-de-sac *	Pedestrian Mall 100% Closed	22	
17th and R (SW Corner) *	Building Site 100% Closed	40	
19th and Q (NW Corner) *	Building Site 100% Closed	150	
		812	
EAST GARAGE			
Area 3 Abel Sandoz	Antelope Valley 6% Closed	23	2003
Area 3/20 17th and R	Structure Site	63	2003
Area 3/20 19th and Q	Antelope Valley 29% Closed	62	2003
Area 3/20 Daywatch	Consolidation 100% Closed	15	2003
Area 3/20 Daywatch South	Consolidation 100% Closed	57	2003
Area 10/21 Beadle	Antelope Valley 30% Closed	112	2003
Area 3 Vine	Consolidation 100% Closed	130	2003
Area 3/20 Cushman	Consolidation 100% Closed	40	2003
Area 10 Lower Engineering	Chem E Site 100% Closed	83	2003
Health Center Reserved	Mall Extension 100% Closed	68	

Health Center Reserved*	Mall Extension 100% Closed	68	
Lots 17th to 19th, R to Vine*	Rec Fields, Structure Sites 24% Closed	300	
Area 8A 17 th and Vine	Building Development	156	
		1109	
EAST CAMPUS GARAGE			
Burr/Fedde Lot*	Loop Road Extension	243	
East Campus Mall*	Historic Mall Renovation	40	
Livestock Judging Pavilion*	Natural Resources Building Site	137	
Biochemistry Lot*	EC Rec Center Site	58	
		478	
STADIUM DRIVE GARAGE			
None	None	0	NA
*Projects listed in the 1998 Parking Master Plan as "unscheduled development." Source: Parking and Transit Service; IRP (10/9/98).			

PARKING GARAGE SPACE NEEDS BY TARGET YEAR 2007					
UNL Parking Garages	Stalls Needed	Stalls NSF	Est Stalls Constructed*	NSF Constructed	Net Space Need
North Garage 14th and Avery	1,978	593,400	1,800	540,000	53,400
South Garage	812	333,600	600	180,000	153,600
East Garage	1,109	285,900	741	222,300	63,600
Stadium Drive Garage	597	179,151	597	179,151	0
East Campus Central Garage	478	143,400	0	0	143,400
Totals	4,974	1,535,451	3,738	1,121,451	414,000
Source: *Parking and Transit Services; IRP (10/9/98).					

j. Pedestrian Circulation

The hierarchy of pedestrian walkways ranges from wide formal corridors along the old north/south, east/west street grid to narrower more informal walks between buildings and diagonal, curving walks through the garden areas.

The wide, north/south, east/west pedestrian corridors should be formally planted with rows of shade trees along both sides. Benches should be provided at appropriate locations as well as appropriate, pedestrian level light fixtures. Paving materials should be of high quality due to the significance of these corridors. Fourteenth and 16th Streets should be treated as pedestrian corridors and enhanced as discussed above.

All other pedestrian walks on campus may be developed in formal or informal ways depending on location and use. Benches should be provided in appropriate locations as well as security level lighting. Paving materials may be concrete or enhanced with special paving at building entries as desired.

As discussed under “edges,” pedestrian access will be developed to the Devaney Center along the 16th Street alignment and under the Antelope Parkway/Holdrege Street overpass. In addition, pedestrian overpasses will be developed across the railroad tracks at 10th and 14th Streets providing access to the north.

k. Bike Circulation

Several city of Lincoln bicycle routes currently provide access to City Campus. In addition, new routes will be developed. The Antelope Creek greenway along the east edge of City Campus will contain a bikeway along most of its length with periodic access points at surface streets such as Vine Street. Another bikeway, the MOPAC, is being developed along the existing east/west rail corridor between W and Y Streets. This trail will traverse the north part of City Campus, closely following the rail corridor and connecting again to city of Lincoln routes west of City Campus.

Bikes are permitted throughout campus; however, rules and regulations should be strictly enforced to insure pedestrian safety. In addition, a bicycle dismount zone might be considered for the heaviest pedestrian activity areas in the campus core area. Bicycle racks could be provided on transit vehicles and secure storage provided at many key locations throughout City Campus, but not necessarily at every building.

l. Sculpture, Water Features, Memorials

These special features give a campus life along with a sense of tradition and heritage. They contribute strongly to the creation of memorable places. Sculpture currently exists in several key locations with a large concentration in the Sheldon Sculpture Garden. Additional locations should be considered throughout City Campus either on a permanent or changing basis in gathering places, activity centers, or along walks.

The new Broyhill Fountain has been constructed with the Union Plaza redevelopment and another is proposed as a

The new Broyhill Fountain has been constructed with the Union Plaza redevelopment and another is proposed as a focal point at the east end of Memorial Mall. Small water features should also be considered with the development of courtyards in new buildings such as the Esther L. Kauffman Residential Center.

City Campus offers many opportunities for memorials or recognition of alumni, donors, and other benefactors. Several of the proposed major campus elements are ideally suited for this purpose such as the clock tower, the focal point fountain on Memorial Mall, Stadium Plaza, and Union Mall. Other opportunities for donor recognition are the numerous benches around the campus, sculpture, heritage groves in the garden areas, individual trees along Memorial Mall, or engraved pavers in the plaza areas. The University should avail itself of every opportunity to provide recognition for those who want to be a part of the new campus vision while at the same time recognizing those who came before, making the University what it is today.

m. Site Furnishings

Site furnishings, sometimes overlooked as design elements, contribute significantly to the overall character, comfort, and usability of the campus. Several types of benches, tables, and trash receptacles are currently in use on campus. While certain areas on campus may require unique furnishings designed for a particular purpose or setting, standard designs should be used wherever possible to maintain design continuity. In selecting standard designs for site furnishings, consideration should be given to traditional design, such as the heavy timber benches recently placed on the East Stadium Plaza. Umbrella tables and chairs could be appropriate in outdoor patio areas such as Union Plaza. Large planters with flowers could be used to enhance high activity paved areas such as plazas and building entries.

Timber planters and railroad tie retaining walls do not give an impression of lasting quality and should be replaced with more appropriate materials when opportunities occur. A consistent bollard design should be used throughout the campus when vehicle control is needed and the use of post and wire or split rail fence should be avoided. In most cases walk design, and landscaping can be used to direct pedestrian traffic.

Additional recommendations for site furnishings will be included in a companion set of campus design guidelines.

n. Lighting

Light fixtures, like site furnishings, contribute to campus image and character while serving their primary function of safety and security. Several different styles of light fixtures currently exist on campus and should continue to be used until replacement becomes necessary. At that time, new campus light standards should be observed for roadways, parking lots, pedestrian walkways, plaza areas and special accent areas. Accent lighting should occur only in very special areas such as campus entry signs, water features, "icon" building facades, campanile and clock towers and, perhaps, buildings fronting on major malls such as Memorial Mall.

Recommendations for light design standards will be included in a companion set of campus design guidelines.

o. Sign System

The existing City Campus sign system consists mainly of metal post and panel building identification signs and metal parking regulation signs. These signs need to be redesigned to convey an image of quality and timelessness, consistent with the campus vision. Traffic control signs must comply with Federal Highway Administration standards.

A way-finding sign system is needed to direct visitors in vehicles to the official Visitor Center, parking garages, and major visitor destination drop off points. These signs can be free-standing metal post and panels signs or signs attached to existing light poles as appropriate to the location.

When visitors have parked and become pedestrians, a different way-finding sign system is needed to direct them to buildings and other points of interest. Directory maps should be provided at parking garages and at central gathering places and major pedestrian crossroads on campus. Such places include plazas, entrances to pedestrian malls, and major campus entry points. Directory maps should also show intracampus transit routes and city transit bus stops.

Exterior building identification signs should list occupant departments and internal building directories should list individual occupants and room numbers.

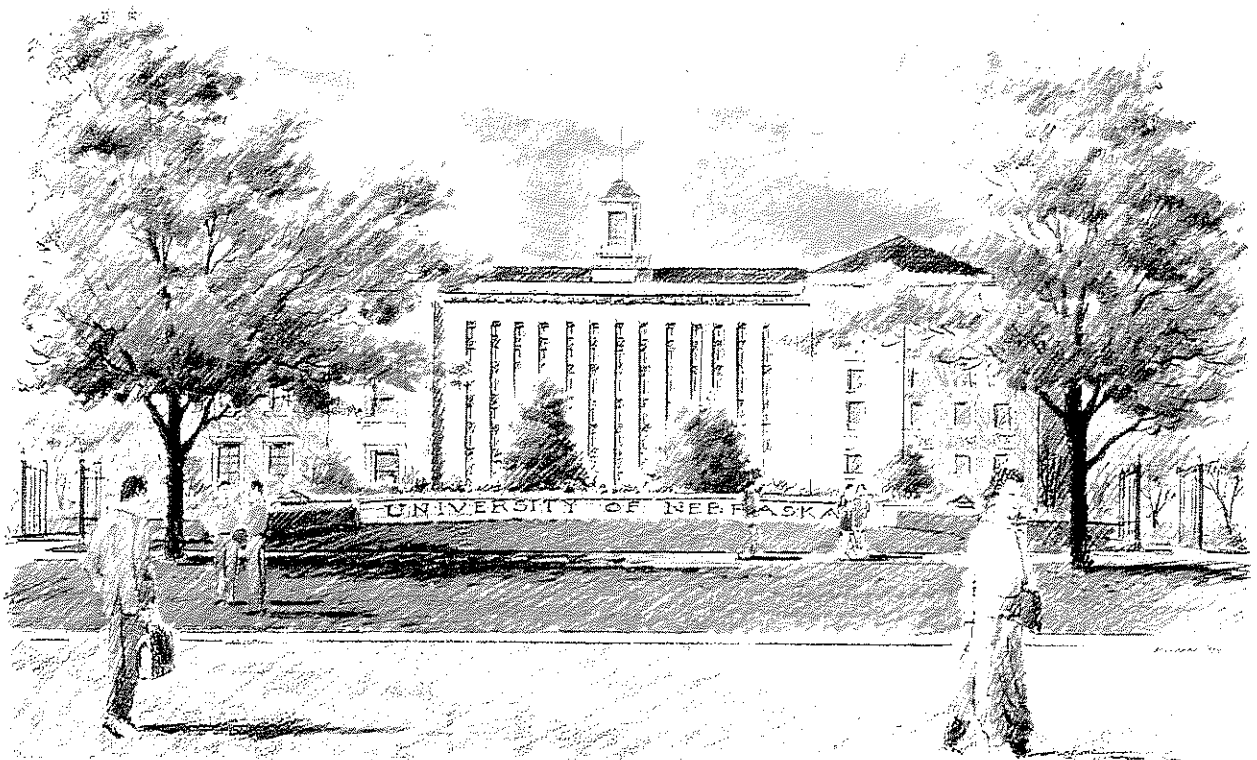
Temporary signs may be useful for special events of short duration, such as summer learning "camps," shows, and exhibitions. Some limitations on size and design are appropriate even for temporary signs and should be

enforced by permit specifying sign size, material, location, and duration. Semi-permanent signs, such as banners hung from poles, can be appropriate for special events such as class reunions, college anniversaries, and recurring festivals. Banner design should be standardized as to size, material, and mounting method and should be enforced by permit as to location and duration.

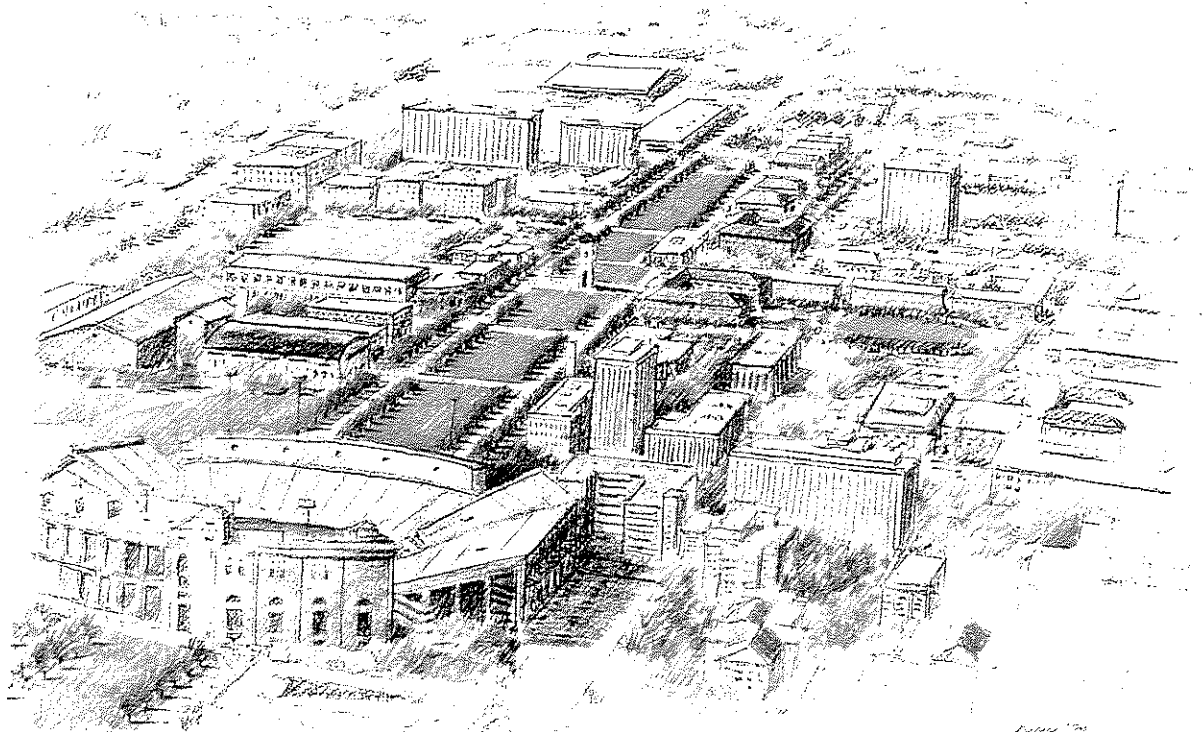
Sign standards will be included in the a companion set of campus design guidelines.

4. Character Sketches

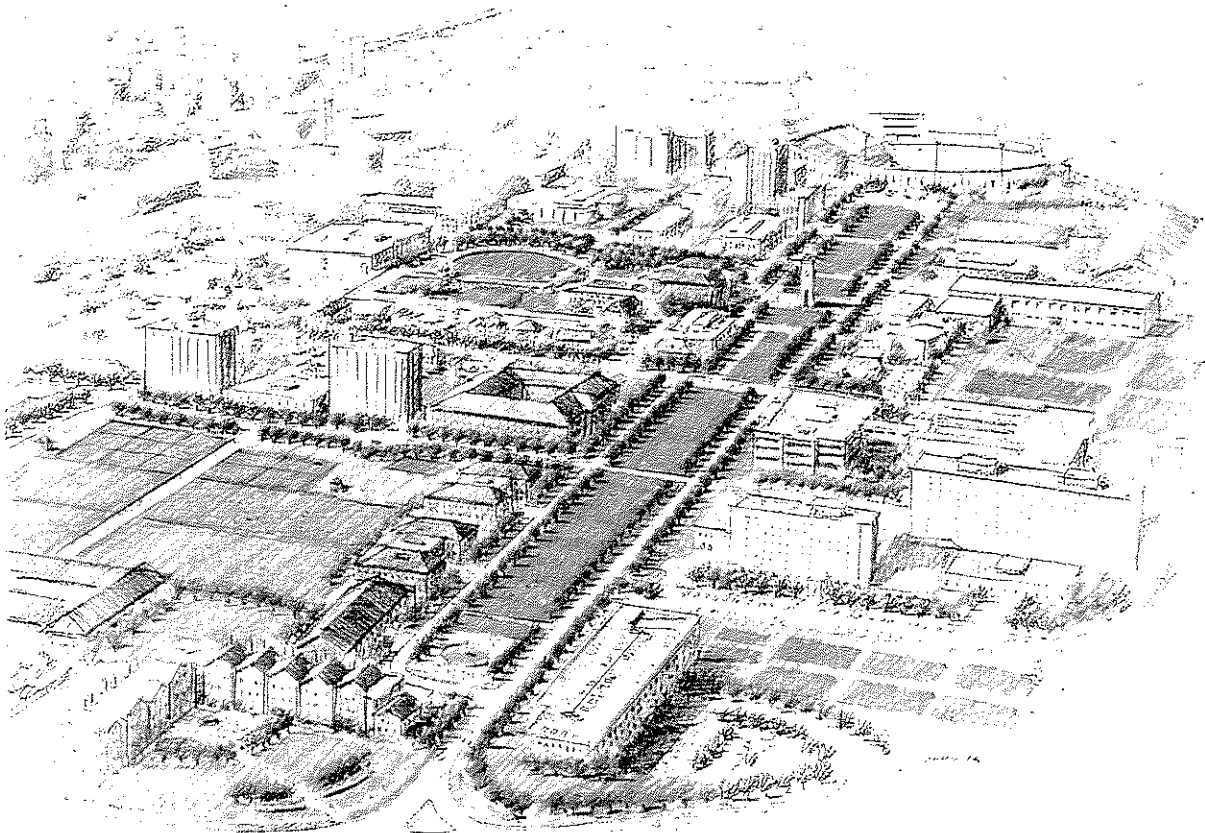
See following pages.



City Campus - Identification Sign at Love Library



City Campus – Memorial Mall looking west.






City Campus - Memorial Mall looking east.

5. Phasing Diagram

The following diagrams denote the timing/phasing of the projects identified and contained in the Campus Master Plan. A series of three (3) six-year phases are utilized to coincide with the biennium budgeting cycles. Facility demolition and new construction phasing diagrams are included along with a complete list of project for each of the Master Plan phases.

Phasing

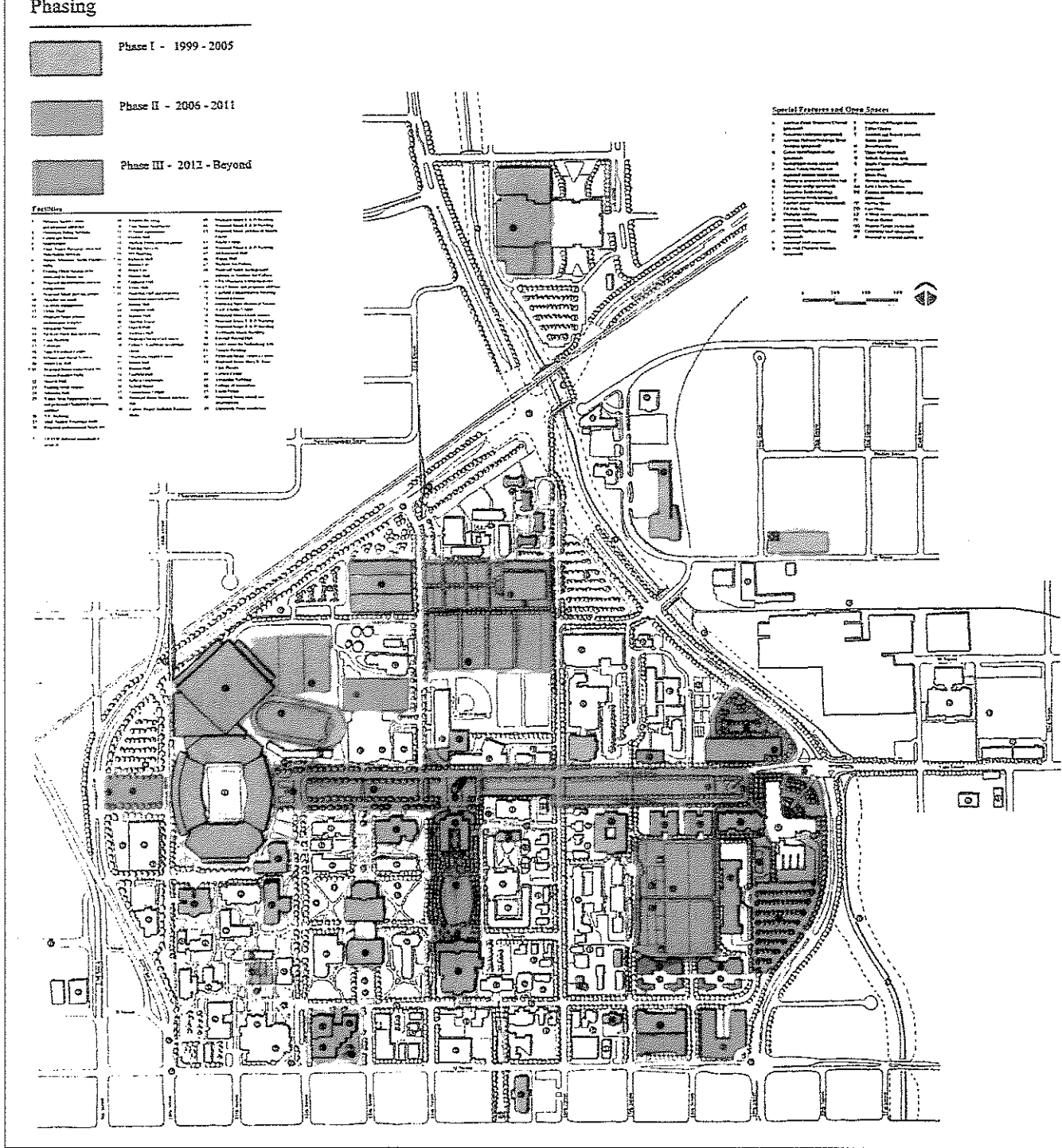
-  Phase I - 1999 - 2005
-  Phase II - 2006 - 2011
-  Phase III - 2012 - Beyond

Features

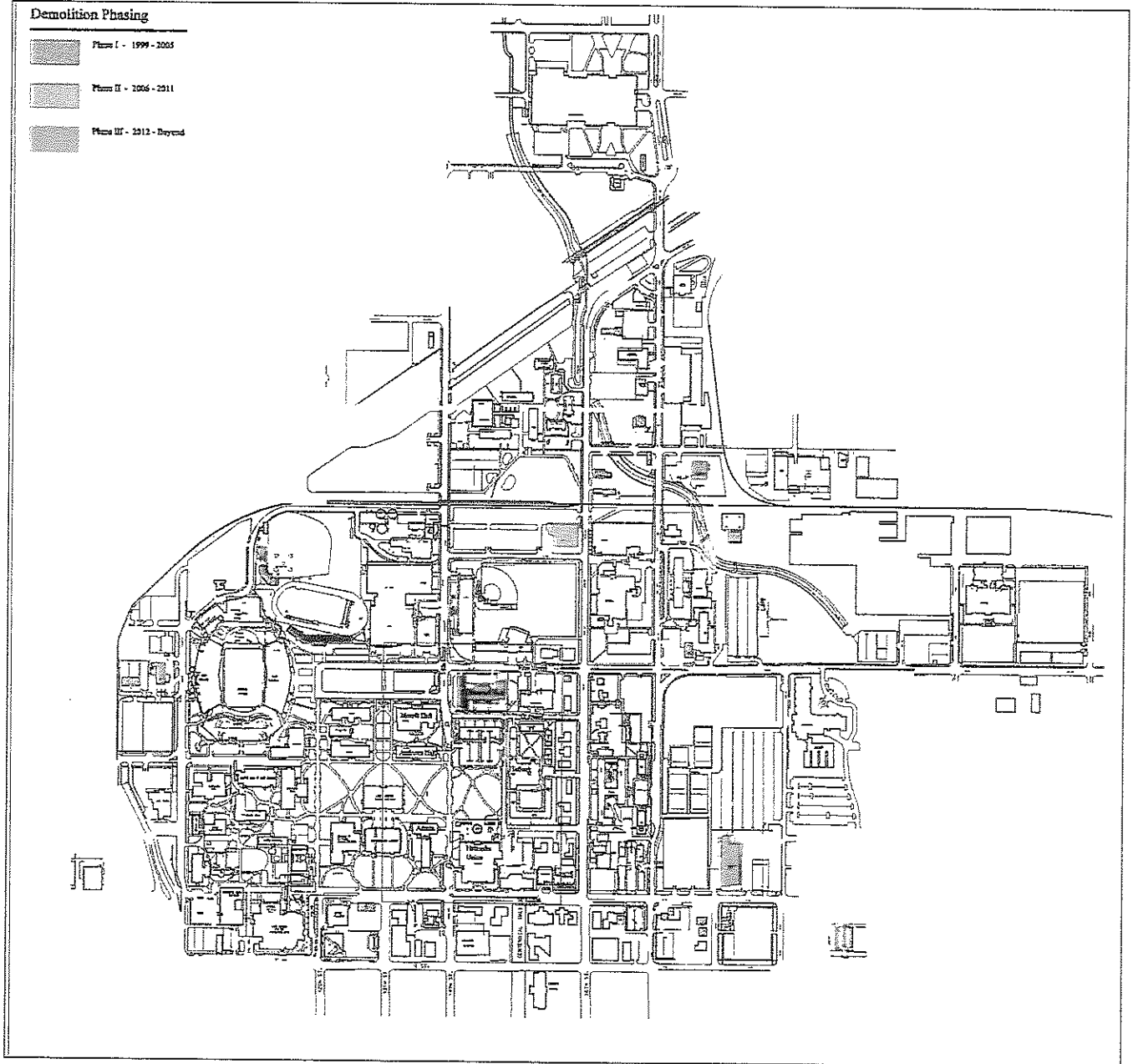
1. University Center	16. Student Center	31. Student Center 2 & 3 Phasing
2. Student Center	17. Student Center	32. Student Center 3 & 4 Phasing
3. Student Center	18. Student Center	33. Student Center 4 & 5 Phasing
4. Student Center	19. Student Center	34. Student Center 5 & 6 Phasing
5. Student Center	20. Student Center	35. Student Center 6 & 7 Phasing
6. Student Center	21. Student Center	36. Student Center 7 & 8 Phasing
7. Student Center	22. Student Center	37. Student Center 8 & 9 Phasing
8. Student Center	23. Student Center	38. Student Center 9 & 10 Phasing
9. Student Center	24. Student Center	39. Student Center 10 & 11 Phasing
10. Student Center	25. Student Center	40. Student Center 11 & 12 Phasing
11. Student Center	26. Student Center	41. Student Center 12 & 13 Phasing
12. Student Center	27. Student Center	42. Student Center 13 & 14 Phasing
13. Student Center	28. Student Center	43. Student Center 14 & 15 Phasing
14. Student Center	29. Student Center	44. Student Center 15 & 16 Phasing
15. Student Center	30. Student Center	45. Student Center 16 & 17 Phasing
16. Student Center	31. Student Center	46. Student Center 17 & 18 Phasing
17. Student Center	32. Student Center	47. Student Center 18 & 19 Phasing
18. Student Center	33. Student Center	48. Student Center 19 & 20 Phasing
19. Student Center	34. Student Center	49. Student Center 20 & 21 Phasing
20. Student Center	35. Student Center	50. Student Center 21 & 22 Phasing
21. Student Center	36. Student Center	51. Student Center 22 & 23 Phasing
22. Student Center	37. Student Center	52. Student Center 23 & 24 Phasing
23. Student Center	38. Student Center	53. Student Center 24 & 25 Phasing
24. Student Center	39. Student Center	54. Student Center 25 & 26 Phasing
25. Student Center	40. Student Center	55. Student Center 26 & 27 Phasing
26. Student Center	41. Student Center	56. Student Center 27 & 28 Phasing
27. Student Center	42. Student Center	57. Student Center 28 & 29 Phasing
28. Student Center	43. Student Center	58. Student Center 29 & 30 Phasing
29. Student Center	44. Student Center	59. Student Center 30 & 31 Phasing
30. Student Center	45. Student Center	60. Student Center 31 & 32 Phasing
31. Student Center	46. Student Center	61. Student Center 32 & 33 Phasing
32. Student Center	47. Student Center	62. Student Center 33 & 34 Phasing
33. Student Center	48. Student Center	63. Student Center 34 & 35 Phasing
34. Student Center	49. Student Center	64. Student Center 35 & 36 Phasing
35. Student Center	50. Student Center	65. Student Center 36 & 37 Phasing
36. Student Center	51. Student Center	66. Student Center 37 & 38 Phasing
37. Student Center	52. Student Center	67. Student Center 38 & 39 Phasing
38. Student Center	53. Student Center	68. Student Center 39 & 40 Phasing
39. Student Center	54. Student Center	69. Student Center 40 & 41 Phasing
40. Student Center	55. Student Center	70. Student Center 41 & 42 Phasing
41. Student Center	56. Student Center	71. Student Center 42 & 43 Phasing
42. Student Center	57. Student Center	72. Student Center 43 & 44 Phasing
43. Student Center	58. Student Center	73. Student Center 44 & 45 Phasing
44. Student Center	59. Student Center	74. Student Center 45 & 46 Phasing
45. Student Center	60. Student Center	75. Student Center 46 & 47 Phasing
46. Student Center	61. Student Center	76. Student Center 47 & 48 Phasing
47. Student Center	62. Student Center	77. Student Center 48 & 49 Phasing
48. Student Center	63. Student Center	78. Student Center 49 & 50 Phasing
49. Student Center	64. Student Center	79. Student Center 50 & 51 Phasing
50. Student Center	65. Student Center	80. Student Center 51 & 52 Phasing
51. Student Center	66. Student Center	81. Student Center 52 & 53 Phasing
52. Student Center	67. Student Center	82. Student Center 53 & 54 Phasing
53. Student Center	68. Student Center	83. Student Center 54 & 55 Phasing
54. Student Center	69. Student Center	84. Student Center 55 & 56 Phasing
55. Student Center	70. Student Center	85. Student Center 56 & 57 Phasing
56. Student Center	71. Student Center	86. Student Center 57 & 58 Phasing
57. Student Center	72. Student Center	87. Student Center 58 & 59 Phasing
58. Student Center	73. Student Center	88. Student Center 59 & 60 Phasing
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64. Student Center	79. Student Center	94. Student Center 65 & 66 Phasing
65. Student Center	80. Student Center	95. Student Center 66 & 67 Phasing
66. Student Center	81. Student Center	96. Student Center 67 & 68 Phasing
67. Student Center	82. Student Center	97. Student Center 68 & 69 Phasing
68. Student Center	83. Student Center	98. Student Center 69 & 70 Phasing
69. Student Center	84. Student Center	99. Student Center 70 & 71 Phasing
70. Student Center	85. Student Center	100. Student Center 71 & 72 Phasing

Special Features and Open Spaces

- 1. Student Center
- 2. Student Center
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- 99. Student Center
- 100. Student Center



6. Demolition Diagram



7. Project List – By Phase

See following pages.

University of Nebraska - Lincoln
1998 Campus Master Plan Update
City Campus Project Phasing and Status

Building or Project (Estimated Cost Where Available) (1)	Approved									Not Approved				Notes
	LB 1100 (2)	1999-2001 CCBR (3)	Capital Campaign (4)	Site Projects (5)	Athletics Projects (6)	Parking Projects (7)	Other Projects (8)	AVMIS Proposals (9)	Site Proposals (5)	Athletics Proposals (6)	Parking Proposals (7)	Other Proposals (9)		
City Campus Phase II 2006-2011														
14th Street Parking Garage Phase II										X				
Cook Pavilion Remodeling (\$2,000,000)									X					
Devaney Center Gymnastics/Wrestling Addition (\$4,000,000)									X					
Devaney Center Natatorium Improvements (\$5,700,000)									X					
Devaney Center Strength and Throwing Addition (\$3,000,000)									X					
East Quad Recreation Fields/Courts														
Mall and Distribution Services Building (1820 R Street) Demolition												X		To clear R&D Quad/angle for future development.
Memorial Mall Phase II									X					Campus Master Plan recommendation.
New Tennis Facilities (\$2,500,000)										X				Possible joint venture project.
Proposed Mixed-Use Development 19th and Q Streets									X					To clear site for recreation fields.
Reunion Building Demolition												X		
New Soccer Complex (\$5,000,000)									X					
New Softball Complex (\$5,000,000)									X					
South Stadium Office Building Remodel (\$12,500,000)														
City Campus Phase II 2012-Beyond														
Carpenter Paper Building Demolition												X		Site for West Stadium Plaza development.
Conversion of University-owned Greek Houses to Other Housing Uses												X		
Proposed Development 17th and Vine Streets Including Property Acquisition												X		Future building site.
R&D Buildings on East Quad													X	
South Parking Garage Phase II											X			
West Stadium Plaza Improvements Including Property Acquisition										X				

Notes:

- (1) Some cost estimates are preliminary and subject to change.
- (2) Projects included in the deferred maintenance initiative (LB 1100) funded by the Nebraska Legislature.
- (3) Projects included in the University of Nebraska Capital Construction Budget Request for the 1999-2001 Biennium.
- (4) Projects targeted in the University of Nebraska Foundation Capital Campaign.
- (5) Street, landscape and other site improvements (Approved or Proposed).
- (6) Projects to be funded by the Athletic Department (Approved and Proposed).
- (7) Major garage and surface parking improvements (Approved and Proposed).
- (8) Proposals included in the Antelope Valley Major Investment Study.
- (9) Other funding sources or funding sources to be determined.

University of Nebraska - Lincoln
1998 Campus Master Plan Update
City Campus Project Phasing and Status

Building or Project (Estimated Cost Where Available) (1)	LB 1100 (2)	1999-2001 CCBR (3)	Approved					Not Approved					Notes		
			Capital Campaign (4)	Site Projects (5)	Athletics Projects (6)	Parking Projects (7)	Other Projects (8)	AVMIS Proposals (8)	Site Proposals (5)	Athletics Proposals (6)	Parking Proposals (7)	Other Proposals (9)			
City Campus Phase I 1999-2005															
14th Street Parking Garage (\$13,860,000)															To replace lost surface parking. For Memorial Mall, pending mutually satisfactory purchase and relocation agreement. For Memorial Mall.
Acquisition of Alpha Chi Omega Property															
Acquisition of Sigma Alpha Mu Property															
Athletic Performance Center (\$50,000,000)															Total building renovation. Permits extension of Memorial Mall.
Avery Hall Renovation (\$10,778,000)	X														Biological Sciences research initiatives. In the Antelope Valley corridor.
Bancroft Hall Demolition (Included in Lyman/Bancroft Replacement)	X														In the Antelope Valley corridor. Required to construct Athletic Performance Center.
Beadle Center West Wing Construction															
Boathouse Demolition															
Body Shop Building Demolition															
Buck Belzer Field Relocation (Off-Campus)															
Building Demolitions for Visitor Center/Ross Film Theatre				X											
Chemical Engineering Building				X											
City Campus Entrance Improvements (Signage)															
City Campus Hazardous Materials Facility (\$1,100,000)				X											
City Campus Indoor Track Improvements (\$3,000,000)															
Devaney Center New 5,000 Seat Arena (\$10,700,000)															
Devaney Center Video Screens and Fan Improvements (\$8,000,000)															
East Stadium Plaza Improvements															
Ed Weir Track Renovation (\$2,000,000)															
Former Food Stores Renovation for Printing and Mail Distribution															
Georesources Building Demolition															
Hamilton Hall Renovation (\$12,125,000)															
Honors Dormitory															
Inventry (Conoco) Building Demolition															
Kauffman Residential Academic Center (\$14,300,000)															
Love Library North Addition (\$18,000,000)															
Love Library South Renovation (\$12,685,000)															
Lyman and Bancroft Hall Replacement Building (\$10,560,000)															
Lyman Hall Demolition (Included in Lyman/Bancroft Replacement)															
Memorial Mall Phase I															
Memorial Stadium -- East Stadium Remodel (\$5,000,000)															
Memorial Stadium -- Grass Practice Fields (\$1,200,000)															
Memorial Stadium -- Hall of Fame (\$3,000,000)															
Memorial Stadium -- North Stadium Improvements (\$20,000,000)															
Memorial Stadium -- Stadium Turf Replacement (\$1,000,000)															
Morrill Hall Renovation for Exhibits															
Nebraska Union Renovation and Addition															
Que Place Addition															
Richards Hall Renovation (\$8,564,000)															
Seaton Hall ADA Modifications and Renovation (\$998,600)															
Security Mutual Building Renovation for Journalism (\$8,600,000)															
Sheldon Art Gallery Expansion (\$9,000,000)															
South Parking Garage Phase I															
Temple Building Addition (\$2,398,400)															
Texaco Building(s) Demolition															
Transfer of UNL Land for Antelope Valley Projects															
Transportation Services Building Demolition															
Transportation Services Building Replacement															
Union Mall Renovation															
University Terrace (TKE House) Renovation															
Utility Improvements															
Vine Street Parking Garage															
Visitor Center and Ross Film Theatre (\$9,312,000)															
W Street Recreation Field and Court Improvements															

B. East Campus

1. Introduction

The East Campus Master Plan, similar to City Campus, strives to enhance the existing campus character and create a framework for future development for the next 20 or 30 years.

Names used to describe proposed mall, plazas, walks, drives and open spaces are used for locational value in this Master Plan and do not represent official names. The naming of these facilities will require review and approval procedures outlined in the University of Nebraska Policy for Naming Facilities.

The open, agrarian character has been enhanced by removing most vehicular circulation and parking from the campus core. Loop road circulation will be complete with the addition of the missing west link. Access to the Student Union has been improved with the addition of a new Union Mall, similar in character to the historic East Campus Mall. A new ceremonial south entry off Holdrege Street provides strong organizational structure to the existing "front yard" area. Additionally, a new east entry has been provided linking the loop road with 48th Street. Existing campus open spaces remain intact with Maxwell Arboretum expanding to the north. Some loss of agricultural research plot land will occur with construction of the relocated north entrance and new east entrance.

Several new building projects are planned for East Campus and have been located in the core areas without sacrificing important open spaces.

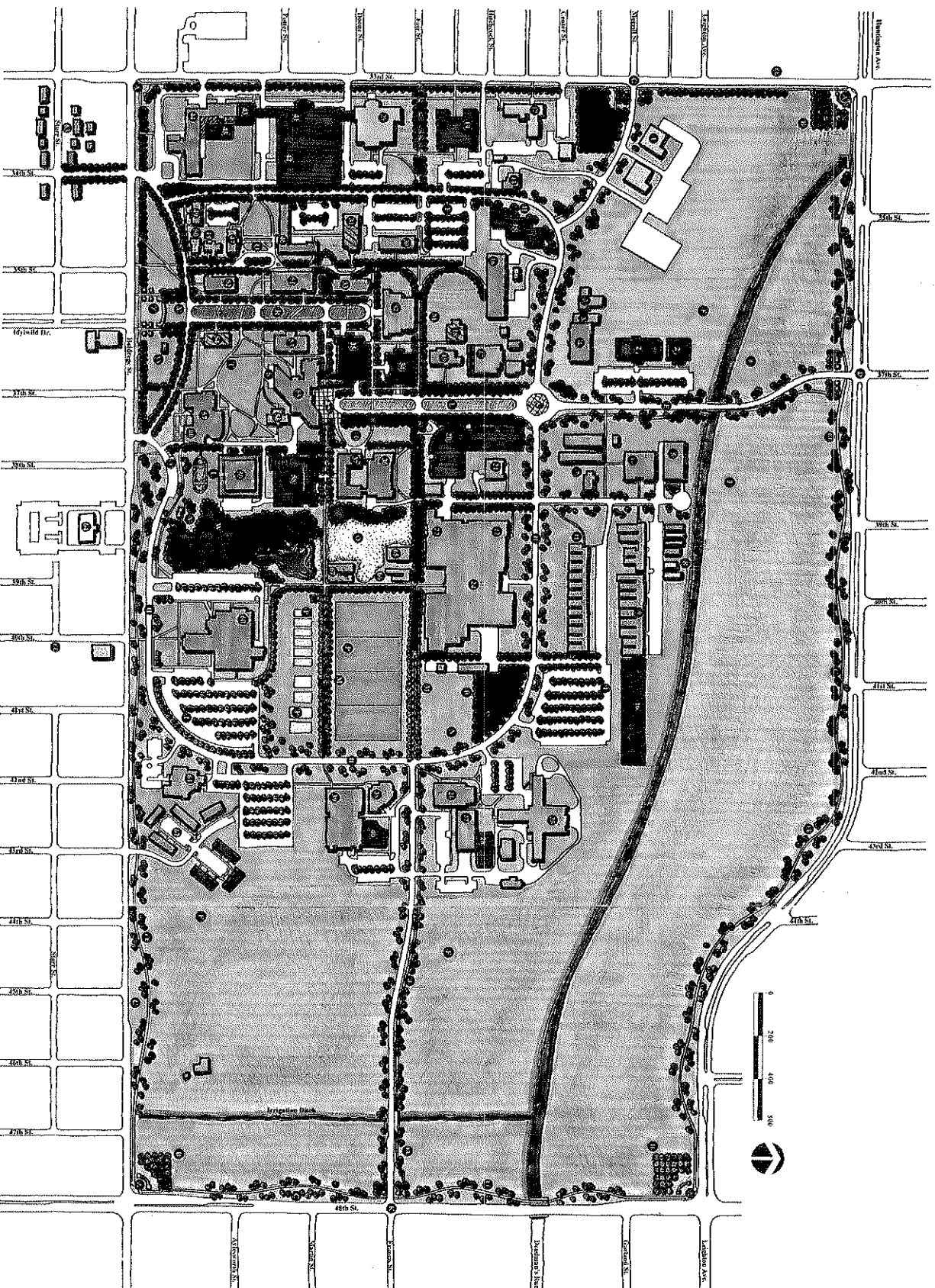
2. East Campus Master Plan

See following page.



Color Key

-  Existing University Buildings
-  Existing University Buildings to be Reconstructed
-  Proposed University Buildings
-  Existing Private Buildings



Facilities

- 1 Nebraska Game and Parks
- 2 Proposed Ag replacement
- 3 Faculty Services
- 4 Environmental Health and Safety
- 5 Ag warehouse No. 2
- 6 Stewart Seed Lab
- 7 Poultry Husbandry complex
- 8 Forestry Services storage
- 9 Plant Pathology greenhouse
- 10 Proposed replacement greenhouse
- 11 Plant Science greenhouse
- 12 Pushing Armory
- 13 Conservation and Survey annex
- 14 Proposed future office building
- 15 Proposed library storage
- 16 Biological Systems engineering lab
- 17 Heating plant and proposed addition
- 18 Tractor museum
- 19 Service building
- * 20 Proposed Natural Resources Building
- 21 Center for Semiarid Agroforestry
- 22 Harvel Baker Hall
- 23 Lardell West Lab
- 24 Animal Science complex
- 25 Animal Science facility
- 26 Plant Science facility
- 27 Vet Basic Science Lab
- 28 Proposed addition to Veterinary Diagnostic Lab
- 29 Nebraska Educational Telecommunications Center
- 30 Ruth Staples Child Development Lab
- 31 Proposed rehab. Activities building to undeveloped future use
- 32 L.W. Chase Hall
- 33 Ruth Laverton Hall
- 34 Proposed office/research building
- 35 Proposed parking garage
- 36 Plant Science Hall
- 37 Kelm Hall
- 38 Welington Courtroom (Law College)
- 39 McCollum Hall (Law College)
- 40 Proposed addition to Law College
- 41 Proposed National Center for Information Technology in Education (NICE)B
- 42 Proposed parking garage
- 43 Proposed Division of Continuing Studies office space
- 44 Harold Nebraska Center for Continuing Education
- 45 Proposed addition to Nebraska Center
- 46 Burr Residence Hall
- 47 Fedra Residence Hall
- 48 Family Resource Center
- 49 Love Hall
- 50 Interior Design Studio
- 51 Home Economics
- 52 Agricultural Hall
- 53 Plant Industries
- 54 Ag Communications
- 55 Nebraska Bee Union
- 56 Miller Hall
- 57 Food Industry complex
- 58 Proposed Recreation Center
- 59 C.V. Thompson Library
- 60 College of Dentistry
- 61 Barkley Memorial Center
- 62 University Park Apartments
- 63 Colonial Terrace Apartments
- 64 Varner Hall
- 65 Plant Science Teaching Greenhouse
- 66 Insectary
- 67 Foreign Research Lab

* LRI/WR designed maintenance projects

Special Features and Open Spaces

- A Corner identification marker (proposed)
- B Tree grove (proposed)
- C Streetscape image zone (proposed)
- D North entry (proposed)
- E North entry drive (proposed)
- F Agricultural field
- G West entry
- H Loop Road (west section proposed)
- I Proposed or enlarged parking lot
- J East entry (proposed)
- K East entry (proposed)
- L East Union Mall (proposed)
- M Major E - W pedestrian way
- N Animal Science Field
- O Maxwell Arboretum/Pratie Expansion
- P Recreation field and courts (proposed)
- Q Bus stop
- R East Campus Mall
- S Union Plaza (proposed)
- T Union Meadow
- V Union Garden
- W Maxwell Arboretum
- X Pond and wetlands (proposed)
- Y South entry drive (proposed)
- Z Campus identification sign and features (proposed)
- AA The Fench
- BB Visitor Center in dairy store (proposed)
- CC Visitor parking (proposed)
- DD Proposed memorial
- EE Existing or proposed bikeway

MASTER PLAN

BAHR VERMEER & HAECKER · EDAW

11.18.98

3. Master Plan Recommendations

a. Edges

East Campus is a well-defined area bounded on the south by Holdrege Street, 48th Street on the east, Huntington Avenue on the north, and 33rd Street on the west.

The existing, wide landscaped zone or “front yard” on Holdrege Street is recommended to expand east along Holdrege Street to 48th Street, then north along 48th Street to Huntington Avenue and west along Huntington Avenue to 33rd Street. It is intended that this zone be treated as a linear park, 50 to 75 feet wide, with generous lawns and plantings and a meandering pedestrian walk/bikeway. 33rd Street would continue to be treated as an urban streetscape corridor with the addition of street trees where they are missing.

b. Entrances/Gateways

Entries to East Campus will include design elements similar to those found on City Campus so that a consistent University image is created.

The main entry will continue to be on Holdrege Street. However, the entry drive has been reconfigured into a graceful sweeping curve. The center of this ceremonial area, adjacent to Holdrege Street will contain a low sign wall to enhance the academic campus image. Visitors would be directed to this entry and a recommended new Visitors Center combined with the Dairy Store in the Food Industry Complex.

The new east and north entries, as well as the existing west entry to East Campus would receive smaller versions of the main entry sign wall. Appropriate landscaping would also be included at each entry. It should be noted that the north entry off Huntington Avenue has been relocated to the west to align with 37th Street and the new Union Mall.

In addition to the signs at each entry, monuments are recommended at each corner of East Campus to further identify the University and enhance character and image. Shade tree groupings, possibly to resemble an orchard, are also recommended at each corner.

c. Ceremonial Open Spaces

The most important open space on East Campus will continue to be the historic East Campus Mall. Other significant open space will be created with the construction of Union Mall just north of the Nebraska East Union and the front yard area contained between the new south entry drive and Holdrege Street.

The historic mall will be enhanced by the removal of parking along its entire length. Vehicular traffic will still be permitted to provide drop-off opportunities as well as providing visitors a chance to experience the heart of East Campus. The formal rows of oak trees along each side contribute significantly to the ceremonial quality of this space. However, the bermed planting area at the north end, south of Chase Hall, as well as the two trees planted in the lawn area near the midpoint, detract from the overall visual quality and should be removed. Low planting beds including flowers at each end of the mall, near Chase Hall and adjacent to the new ceremonial entry drive, may be appropriate.

The new Union Mall is envisioned as a formal space very similar to the historic mall. It will provide much needed visibility and direct access to the Union. Formal rows of shade trees and pedestrian walks should flank both sides.

The front yard area discussed above is both a ceremonial open space due to its size—over four acres—and a gateway entry. The historic site containing the re-created Perrin Porch is also located here. This area will remain intact with the exception of the reconfigured entry drive and the addition of the sign wall discussed previously.

d. Active Recreation Open Spaces

Recreational sport athletic fields and courts are proposed to be relocated to the area between the Dental School and the Animal Sciences Complex, just west of the loop road. This area is currently occupied by parking lots and the existing tennis courts. Parking has been relocated to the northeast corner of the loop road and an expanded Dental School lot.

e. Passive Recreation Open Spaces

East Campus has many open space areas suitable for passive recreation activities. The largest of these is the area known as Union Meadow, south of the Union and northwest of the Food Industry Complex. This area should remain as open

space. However, the view corridor west to the historic mall should be opened up. The lawn areas adjacent to Burr and Fedde Residence Halls also provide opportunities for volleyball, frisbee, etc. Additionally, both malls provide significant lawn areas, 2½ acres combined. The value of passive recreational open spaces needs to be recognized and preserved as campus tree and shrub plantings are developed.

f. Gardens and Arboretum

East Campus has a well established landscape and a long history of arboretum and botanical garden development. Maxwell Arboretum, a wonderful asset to East Campus, is part of this history. Its mature tree specimens should be preserved and additional plants added where needed. It is recommended that arboretum plantings expand to the north occupying an additional 4¾ acres with a new pond and wetlands planting and enhanced prairie. Another botanical garden development area is the perimeter park discussed previously in the "Edges" section. This area would add another 15 acres to the campus botanical garden and arboretum. A new area could also be developed west of a proposed Tractor Museum when the Tractor Testing Site is phased out. This 1½ acres could also serve as an outdoor exhibition area. For more information regarding campus gardens, please refer to Master Plan, University of Nebraska-Lincoln, Botanical Garden and Arboretum, prepared in September 1996.

g. Building Settings

Foundation planting should be provided on all sides of campus buildings allowing them to sit gracefully on the land. Special attention should be given to all building entries, particularly those facing the Malls. These entries should be treated as "front porches" with seat walls, plantings, lights, and benches providing opportunities for small informal gatherings.

Additional gathering spaces are recommended for the Union. The north entry should be developed as a plaza anchoring the south end of Union Mall and could contain a large sculpture or campanile/clock tower in addition to seating opportunities and decorative lighting. A patio or deck could also be developed on the south side of the Union providing outdoor dining opportunities.

h. Building Additions/Renovations and New Construction

East Campus will also see a major amount of renovation/new construction stemming in part from the passage of LB1100 and also because of future needs. As previously noted, the Hardin Center renovation and additions, Law Library renovation and addition, Library Central Storage facilities, Natural Resources Complex, the Nebraska Center for Information Technology, and the renovation of the Tractor Test facility for use as a museum to name a few.

Planning goals for improving parking and access to the East Campus Union—the most intensely used meeting place on East Campus—has led to the recommendation to develop an entrance drive/mall north of the Union in conjunction with the construction of a parking garage adjacent to the Union and also the East Campus historic mall. Significant change is planned for recreational facilities on East Campus with the recommendation of constructing a new recreation center north of C.Y. Thompson Library on the site of the former Bio-chem building. The Bio-chem building will be removed as part of the Natural Science Complex construction. Expanded and enhanced recreational fields are planned for a location to the east of the proposed recreation facility.

As part of the Master Plan development, the timing and phasing of projects was analyzed with the assistance of IRP, UNL Facilities Management, and the Campus Master Plan participants. As a result, phased development plans and maps have been prepared. These are included in the Master Plan, along with a detailed listing of all Master Plan projects broken down by phase of implementation.

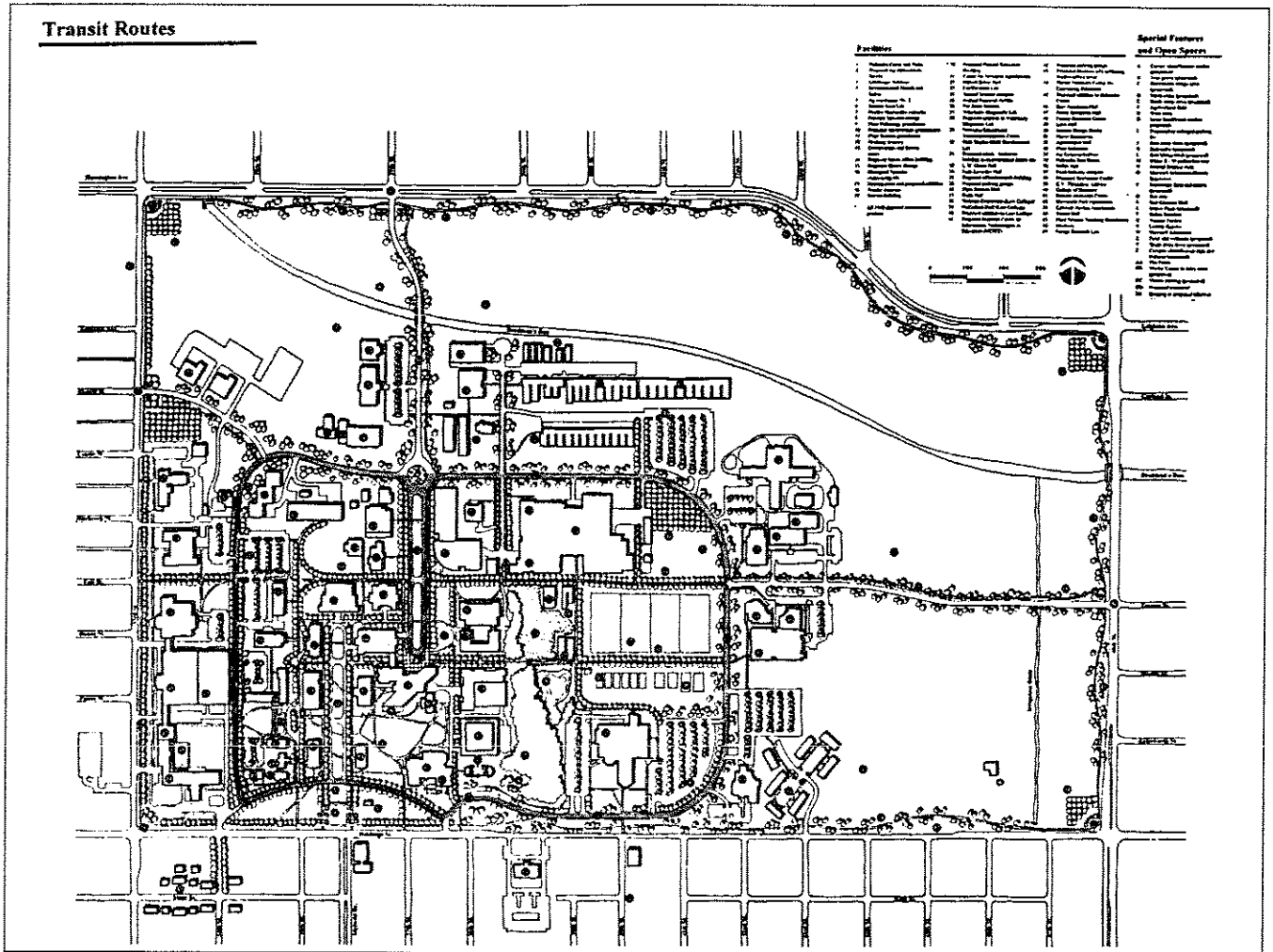
Also included is a comprehensive list of Master Plan projects and the time frames for their implementation. This list is located in Chapter VI *Projects and Cost Estimates*.

i. Vehicular and Transit Systems

East Campus will become more pedestrian friendly with the elimination of all through traffic. This is quite easily accomplished since most of a loop road circulation system is already in place. The remaining section of loop road on the west can be constructed when the Tractor Test track facility is phased out. The elimination of through traffic will also include the elimination of all large surface parking lots in the East Campus core. A system of new or expanded surface lots adjacent to the loop road and an enhanced shuttle bus

system will facilitate access to the campus core areas. In addition, several small surface parking areas remain intact to continue to serve their special functions. Appropriate vehicular access and parking must be provided for those who are mobility impaired. Due to the high volume of visitor traffic to the Nebraska East Union, a new parking garage is recommended to be located just northwest of the Union, between and accessed from both malls. This structure could also have a pedestrian bridge connecting directly into the Union.

Automobile traffic will be allowed on both malls as stated above. A traffic circle is recommended where Union Mall intersects the loop road to facilitate vehicular movement. This would also provide the opportunity for a water feature or sculpture location. Transit vehicles will also be allowed on the malls as well as several of the existing internal streets. Refer to the transit routing diagram for recommended transit routes serving East Campus.



Service and emergency access will continue as it does currently with the addition of the west loop connection and Union Mall. Delivery vehicles should be limited to service access areas and not allowed on pedestrian only walks.

All new, reconfigured, or expanded surface parking lots should be developed with linear planting islands containing trees, shrubs, and lawns separating each bay of parking. The edges of these lots should also be buffered with plantings to screen objectionable views.

j. Pedestrian Circulation

Pedestrian circulation on East Campus will be greatly enhanced due to the elimination of some through traffic. The existing street grid will become formal pedestrian corridors similar to City Campus and several will also allow

transit vehicles. These corridors should be formally planted with rows of shade trees along both sides. The addition of benches, lighting, and special paving should also be considered along with the removal of all curbs.

All other pedestrian walks on East Campus may be developed as formal or informal depending on location and use. The addition of benches, decorative lighting, and special paving should be considered, where appropriate.

k. Bicycle Circulation

Several city of Lincoln bicycle routes currently provide access to East Campus. Another new bikeway, the MOPAC, is being developed as discussed in the City Campus section. The MOPAC will connect to East Campus at 40th Street and Holdrege Street.

Separate bike routes are provided adjacent to each entry drive allowing access into the campus core. Rules and regulations should be strictly enforced to insure pedestrian safety. Bicycle dismount zones might also be considered for areas of high pedestrian activity such as around the Union. Bicycle racks could be provided on transit vehicles and secure storage provided at key locations on campus such as the new parking garage adjacent to the Union.

l. Sculpture, Water Features, Memorials

There are several existing sculptures located on East Campus; however, significantly less than City Campus. The program on City Campus should be extended to East Campus with installations at gathering places, activity centers, or along walks. A specific location for a large piece is recommended at the south end of the new Union Mall adjacent to the Union. If a clock tower is not chosen for this location, another sculpture could be located in the center of the traffic circle at the north end of Union Mall.

Currently there are no water features on East Campus except for the water channel through Maxwell Arboretum. The rural character of this campus would seem to exclude typical urban type features; however, the traffic circle discussed above would be a possible location for a formal fountain providing a distinctive image element. A small pond is recommended in Maxwell Arboretum, as previously discussed.

Several of the proposed major campus elements offer opportunities for memorials or recognition of alumni, donors, or other benefactors, such as Union Mall, the center of the traffic circle, or the plaza north of the Union. Other opportunities for donor recognition are the numerous benches around the campus, sculpture, heritage groves in the perimeter park, individual trees, or engraved pavers in the plaza areas. In addition, a special memorial area has been designated northeast of the Union and west of Keim Hall.

m. Site Furnishings

The site furnishing recommendations for City Campus should also be applied to East Campus. Benches should be placed along major pedestrian corridors and in plaza areas. Umbrella tables and chairs could be provided on the new dining patio south of the Union. Planters containing flowers could be placed in high activity areas such as plazas and building entries. A consistent bollard design for both campuses should be used wherever vehicular control is an issue.

n. Lighting

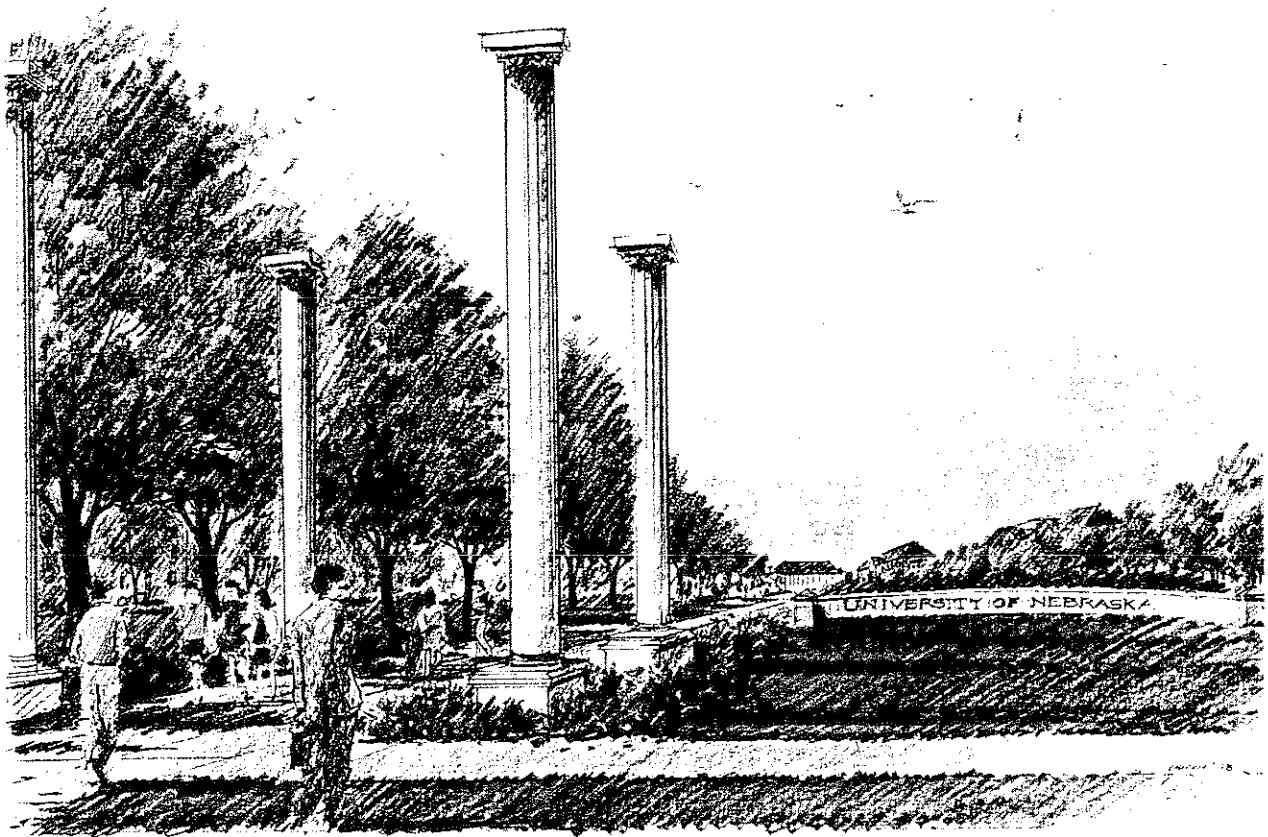
The lighting recommendations for City Campus should also be applied to East Campus.

o. Signs

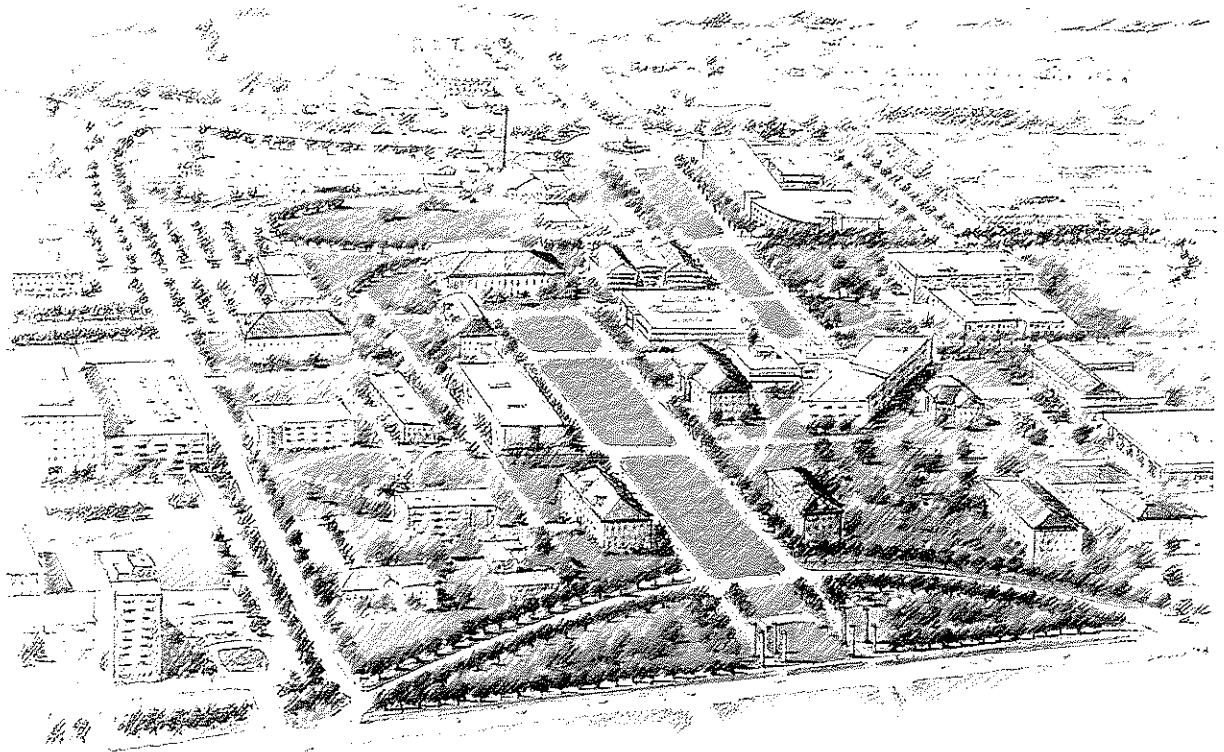
The sign system recommendations for City Campus should be implemented on East Campus.

4. Character Sketches

See following pages.



East Campus – Identification sign and character elements.



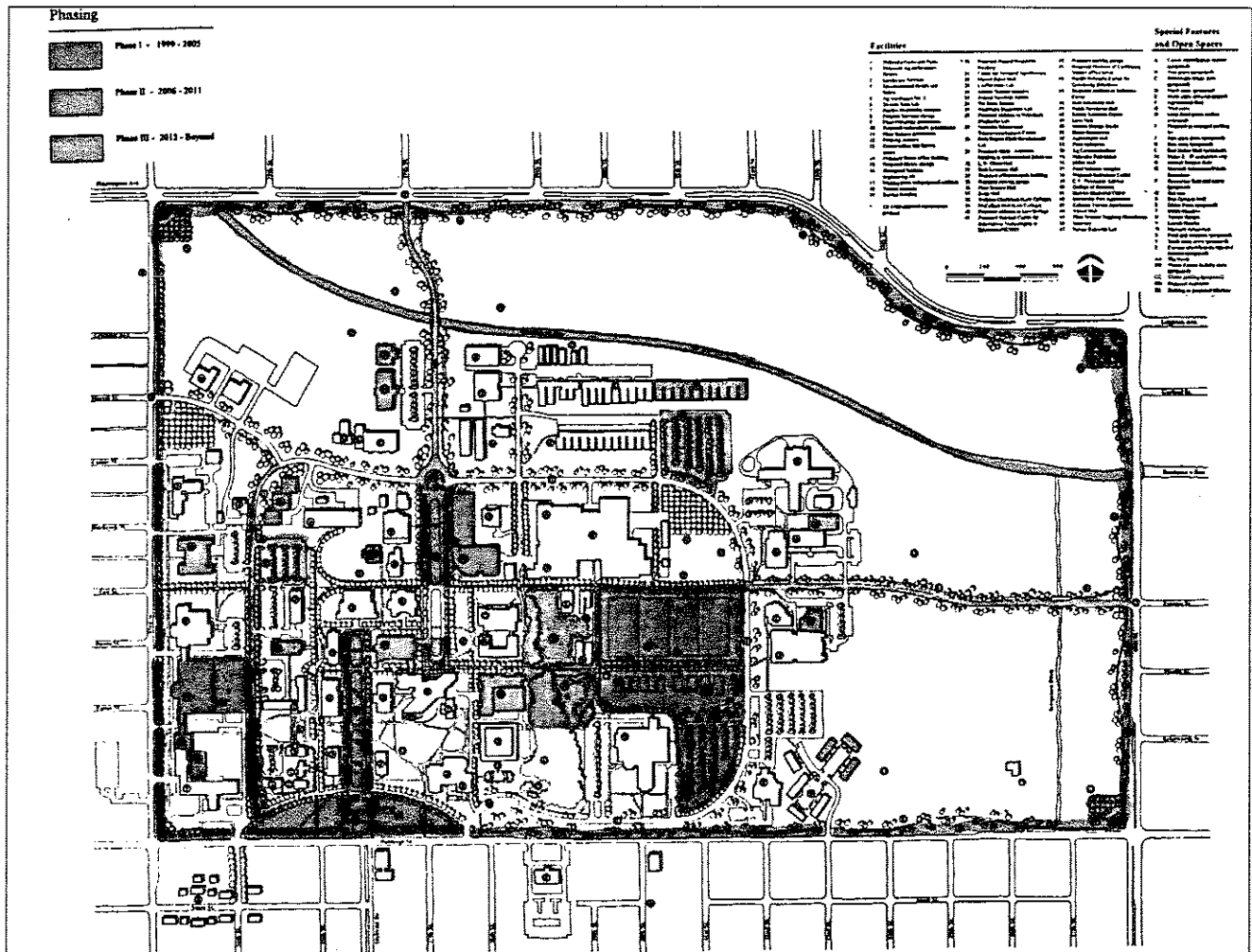
East Campus – Central campus looking north.

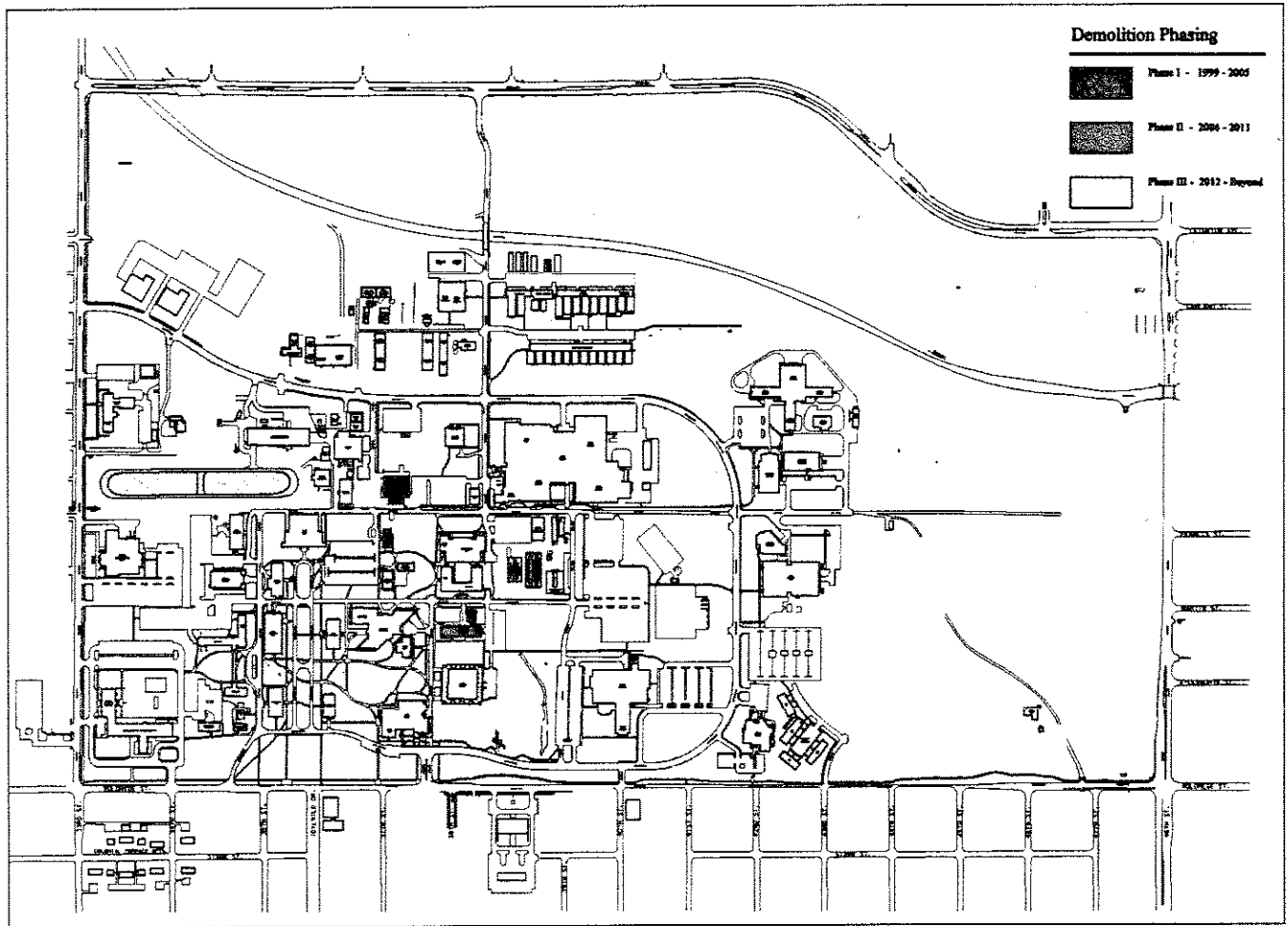


East Campus – Fair Street pedestrian corridor.

5. Phasing Diagrams

The attached diagrams denote the timing and phasing of the projects identified in the East Campus Master Plan. A series of three (3) six-year phases are utilized. Facility demolition and new construction phasing diagrams are included, along with a complete listing of projects for each of the Master Plan phases.





6. Demolition Diagram

7. Project List – By Phase

See following pages.

University of Nebraska - Lincoln
1998 Campus Master Plan Update
East Campus Project Phasing and Status

Building or Project (Estimated Cost Where Available) (1)	LB 1100 (2)	1999-2001 CCBR (3)	Approved					Not Approved				Notes			
			Capital Campaign (4)	Site Projects (5)	Athletics Projects (6)	Parking Projects (7)	Other Projects (8)	AVMIS Proposals (8)	Site Proposals (9)	Athletics Proposals (6)	Parking Proposals (7)		Other Proposals (9)		
East Campus Phase I 1999-2005															
Additional Chiller Capacity (Utility Plant)															
Deadman's Run Improvements	X													X	Bank stabilization and erosion control.
East Campus Perimeter Park Improvements															Campus Master Plan recommendation.
East Campus South Entrance Improvements															Campus Master Plan recommendation.
Hardin Center Renovations and Additions															
Law Library Renovations and Addition (\$6,813,700)					X										
Library Central Storage Facility Phase I (\$3,390,000)															
Livestock Judging Pavilion Demolition	X														
Loop Road Extension Phase I															
Natural Resources Complex Phase I (\$6,555,000)	X														
Natural Resources Complex Phase II															
Nebraska Center for Information Technology															
Proposed Native American Memorial															
Renovation for Tractor Test Museum															
Union Mall Phase I															
Utility Improvements															
East Campus Phase II 2006-2011															
Animal Science Molecular Biology Facility															
Construction of New Parking Lots on Loop Road															
East Campus Recreation Center															
East Campus East Entrance Improvements															
East Campus Parking Garage															
East Campus Recreation Field Improvements															
Former Biochemistry Building Demolition (Included in Nat Res Phase I)															
Historic Mall Improvements															
Library Central Storage Building Phase II (if required)															
Renovation of Former Activities Building (if required)															
Union Mall Phase II															
Union Plaza (South)															
East Campus Phase III 2012-Beyond															
Building Demolitions for North Entrance Drive															
Completion of East Campus Union Mall															
Completion of Loop Road															
East Campus North Entrance Improvements															
Horticulture Teaching and Wheat Greenhouses (East of Keim Hall) Demolition															
Kesselbach Lab Demolition															
Library Central Storage Facility Phase III (if required)															
Maxwell Prairie/Arboretum Expansion															
Natural Resources Building Demolition															
New Office Building in SW Sector															
Replacement Building for Natural Resources Hall and Kesselbach Lab															
Replacement Buildings for New North Entrance															
Replacement Greenhouses															
Tractor Test Track Demolition															
Water Resources Laboratory Demolition															

Notes:

- (1) Some cost estimates are preliminary and subject to change.
- (2) Projects included in the deferred maintenance initiative (LB 1100) funded by the Nebraska Legislature.
- (3) Projects included in the University of Nebraska Capital Construction Budget Request for the 1999-2001 Biennium.
- (4) Projects targeted in the University of Nebraska Foundation Capital Campaign.
- (5) Street, landscape and other site improvements (Approved or Proposed).
- (6) Projects to be funded by the Athletic Department (Approved and Proposed).
- (7) Major garage and surface parking improvements (Approved and Proposed).
- (8) Proposals included in the Antelope Valley Major Investment Study.
- (9) Other funding sources or funding sources to be determined.

V. Master Plan Concepts Extended Campuses

A. Introduction

The scope of this Master Planning project did provide for the development of preliminary concepts for the UNL Extended Campuses. The scope of work did not include an intensive participatory master plan process of the Extended Campuses as was accomplished for City and East Campuses. As such, the following Master Plan concepts for the Extended Campuses are to be considered “works in progress.” The concepts presented are preliminary in nature and it is recommended that a continuation of the process developed for City and East Campuses be applied to the Extended Campuses to develop comprehensive broad-based Master Plans.

The UNL Extended Campuses includes West Central Research and Extension Center, located near North Platte, Panhandle Research and Extension Center located at Scottsbluff, Northeast Research and Extension Center located at Norfolk, South Central Research and Extension Center located near Clay Center, and the Agricultural Research and Development Center near Mead.

B. Process and Data Collection

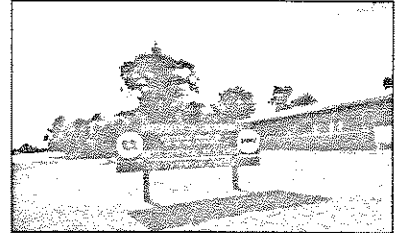
The process for the preparation of the Master Plan concepts for the Extended Campuses included information gathering and analysis of Campus needs and two focus work sessions with Directors from each of the campuses and representatives of IANR. The extended campus Directors provided the planning team with information and needs for the Extended Campuses including campus goals, traffic patterns, adjacent uses, natural physical features, topography, hydrology, landscape assets, campus organization, campus markers and signage, architectural features, functional needs and utilization, space needs summary, ADA inventory, and facilities needing immediate repairs. The planning team met with each campus Director and representatives from IANR and surveyed each campus with the aid of maps, photographs and analytical data provided by each Director.

This information was reviewed and analyzed with campus Directors and IANR and preliminary Master Plan concepts for each of the campuses were prepared. At the end of this Chapter is a listing of projects for each of the Master Plan Phases, as well as preliminary design guidelines prepared to assist all campuses with design issues as improvements and development continues.

These guidelines are preliminary in nature and should be expanded and adapted to each campus' needs as the planning process proceeds for the Extended Campuses.

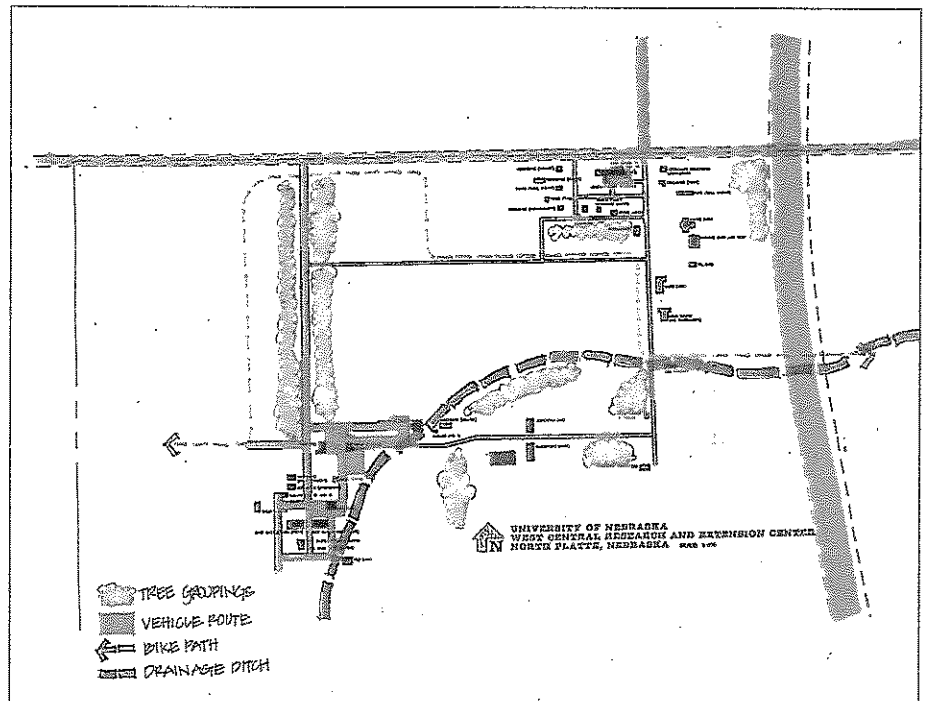
C. West Central Research and Extension Center, North Platte

The West Central Research and Extension Center (WCREC) is located near North Platte, Nebraska. It is the largest research and extension center, including 1,870 acres of land owned by the University and 146 acres under private ownership. The campus includes 45 separate structures, including the 13,340 SF headquarters building constructed in 1955. The campus also includes 9 residences, five garages, four barns and 25 various support buildings totaling an additional 132,800 SF with construction dating back to the early 1900's. These acreage figures do not include the Gudmundsen Sandhills Lab (GSL) facilities also under the purview of the WCREC. The Gudmundsen facility includes 12,817 acres and 16 buildings totaling 53,381 SF.



- Traditional methods and media are used for much of the information; however, an increasing emphasis is being placed on Distance Education. It is our vision to create through education a regional citizenry with enhanced quality of life and economic well being. Our Distance Education delivery will enhance extension programming. Additional opportunities are providing affordable learning opportunities using on-site and technological means to access traditional education, specialized training and traditional extension programming in our program areas.
- One goal of WCREC is to provide a positive image as a “Front Door” to the University of Nebraska in west central Nebraska.
- As a district headquarters, WCREC goals also reflect the need to maintain, improve and expand the facilities that support the research and educational goals of the University faculty and the Center.

2. Campus Issues and Analysis



a. Traffic patterns

- Access to WCREC is via Highway 83 to a network of internal asphalt and gravel roads. The existing network of roads will handle current traffic loads with an adequate maintenance program.
- Additional traffic load is anticipated on the internal roadways due, in part, to the development of the Nebraska Plains Higher Education Center, and may necessitate additional parking and road resurfacing. The bike path, that currently utilizes the infrastructure, may need to be rerouted as the internal traffic increases.
- Road improvements are also needed at GSL Ranch to reach the far east pastures. This will require some maintenance equipment or a budget to fund these services.

b. Adjacent uses

- The area surrounding the campus consists of farmland, residential development to the west, and the Mid Plains Community College Campus to the north. The existing impacts on the immediate surrounding area

are: chemical usage on fields to control weeds and pests, undesirable odors, from swine and feed lot manure. Any expansion undertaken by the University must enhance its educational abilities and must not adversely affect the neighboring community. Future development must consider adjacent uses as the area surrounding the campus continues to become more urban.

c. Natural physical features

- The WCREC campus contains many interesting natural features worth retaining and reinforcing. One site is a natural learning area established at the center. This is a small woodland interpretive trail which allows visitors to see how natural processes work in woodland settings. Another important feature is a walking and bike trail that extends through North Platte and into the campus. The path/trail brings many visitors to campus which helps develop positive interaction between the community and campus.
- There are also other natural features available for development including portions of woodlands arboretum which have become overgrown. Further management of these areas would be necessary if included in the natural/interpretive features programs on campus.

d. Topography

- The WCREC campus includes a varied and mixed topography. The campus extends from the south edge of the South Platte River Valley (elevation 2820 ft above MSL) south through dissected loess hills to the Dryland Farm on the upland surface (elevation 3020 ft above SML). Total relief across campus for north-south is slightly over 200 ft. Most campus buildings are located in the valley with elevations varying from 2820 ft in the vicinity of the Snyder Building to 2850 ft near the feed mill and cattle facilities. Although the Dryland Farm is at an average elevation of 3000 – 3020 ft, canyons almost 100 ft wide dissect the upland surface. The level valley land is used for intensive irrigated agricultural research, the dissected hills for grazing and the Dryland Farm for non-irrigated agricultural research.



e. Hydrology

- The WCREC campus is located in the heart of the High Plains aquifer, entirely underlain by the Ogallala formation. Average annual precipitation is approximately 19 inches. Depth to water varies from 10-25 ft in the valley to 160 ft on the Dryland Farm. In the valley, 20-30 ft of saturated alluvial gravels overlie at least 450 ft of sands, gravels, sandstones, and siltstones of the Ogallala formation. The irrigation wells at the WCREC are all approximately 200 ft deep and each is capable of easily pumping 600gpm with a maximum of 1000 gallons/minute. Even with such extensive saturated thickness, groundwater levels are higher to the south and groundwater moves southwest to northeast across the WCREC land towards the South Platte River.
- Nebraska Public Power District's reservoir, Lake Maloney, its outlet canal and forebay (all on the upland to the south of the WCREC) have since 1935 stored and transmitted surface water to the North Platte hydro plant before returning it to the south Platte River and diversion to the Central Nebraska Public Power and Irrigation District system. Leakage from the NPPD system has been responsible for the water level rising at the WCREC observation well from 20 ft in 1937 to 19 ft in 1995.
- The weather station at the Dryland Farm has monitored precipitation since 1907. Atmospheric chemistry has been monitored since 1986 at the National Atmospheric Deposition Program site (NE99) located on the Dryland Farm. The rain since 1996 has been very slightly mineralized and has had an average pH of approximately 5.6, characteristic of rainfall in remote areas, even though trace amounts of atrazine have been detected.
- The drinking water at the WCREC, pumped from the Ogallala formation, although hard, is of otherwise excellent quality but no longer dependable as aging water lines fail.

f. Landscape assets

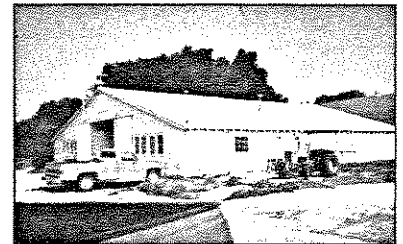
- The WCREC has a large, unique collection of natural and planted features. A special distinction was made on September 18, 1981, as the Glenn Viehmeyer Arboretum was established. Because of the age of many of the trees, some new plantings began in the Arbo-

return about 10 to 15 years ago. In order to maintain the integrity of a very successful Arboretum, extensive maintenance, removal and new planting will need to continue. About 27 hazardous trees will need to be removed this winter season. The Viehmeyer Arboretum provides a mechanism to maintain an environment to show proper care and maintenance of plant material to the citizens of the state of Nebraska.

- The Center receives high visibility because it is adjacent to Highway 83, a major north/south route through Nebraska. It is essential that the Center keep a well-maintained facility. With nearly 15 acres of groomed lawns, an underground, automated irrigation system is needed for the turf grass areas and to aid lawns and the Arboretum to show proper care and maintenance to the citizens and visitors of the state.

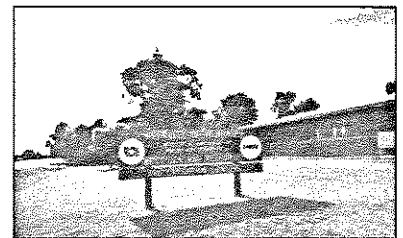
g. Campus organization

- The WCREC campus contains many distinct areas including an administrative area, residential areas, farm building zones, and agricultural plots. The campus is entered from the northeast corner via Highway 83.
- The organization of the campus is functional and somewhat efficient. The administrative zone is adjacent to the main entrance and is properly placed for visitors and staff using the administration building. The remainder of the facilities are organized along internal roads leading to the south to the main agricultural plot and agricultural buildings.
- Future construction and siting of buildings should respect this basic organization by placing similar functions within the existing zones if at all possible.



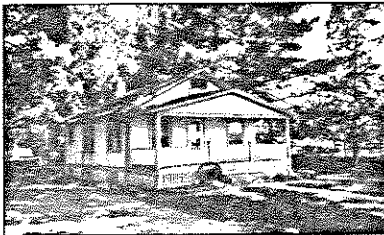
h. Campus markers and signage

- Identification of the campus occurs for visitors along Interstate 80 and also along 83 with typical Department or Roads signage. The visitors are led to the northeast corner of campus where a campus identification sign is located north of the administration building. These signs are typical of extended campuses and consist of wood board signage which is routed with the logo and painted. Within the campus there is no signage identifying each of the different buildings.



- It is recommended that improving the quality of signage on the campus be provided beginning with the main entry sign. A sign of more substantial character reflecting the “front door of the University” should be implemented on all campuses. Also signage standards and a hierarchy of signage, both directional and identification signage, should be implemented which would mark individual buildings used by visitors.

i. Architectural features



- The WCREC, established in the early 1900's is comprised of a variety of architectural styles and dates of construction. Existing buildings on campus consist of masonry administrative building, numerous wood frame residences, wood frame agricultural buildings/barns, and contemporary metal agricultural buildings. Many of the residences appear to have been built in the 1910's and 1920's. Several of these units have been rehabilitated, others show signs of deferred maintenance. Several of the residences and agricultural buildings are unique in architectural style and may be significant historically. These historic residences along with the historic utilitarian buildings have a positive impact the character and feel of this campus. The Dairy Barn and the Horse Barn are of particular architectural interest. The age of the structures as well as their siting creates the character of a small community within the campus boundary.
- As repairs and renovations are planned and implemented, particular attention needs to be given to retaining the integrity of these structures, if possible.



j. Space and facility needs summary

A brief review of the current building conditions was provided by the campus Director. The following space needs/condition analysis summarizes the current and future needs.

- A majority of the existing structures are in fair condition, but continued maintenance is needed for their long-term usage.
- Additional space will be required as the Nebraska Plains Higher Education Center expands. Facility needs include additional classrooms, offices, restrooms, student lounge, and student library.

- Additional machine storage is necessary and could be met through renovation of existing structures.
- The existing parking building for motor pool vehicles does not meet current parking needs. The 1940's structure does not accommodate modern vehicles.
- For a detailed list of capital projects, please refer to Chapter VI.

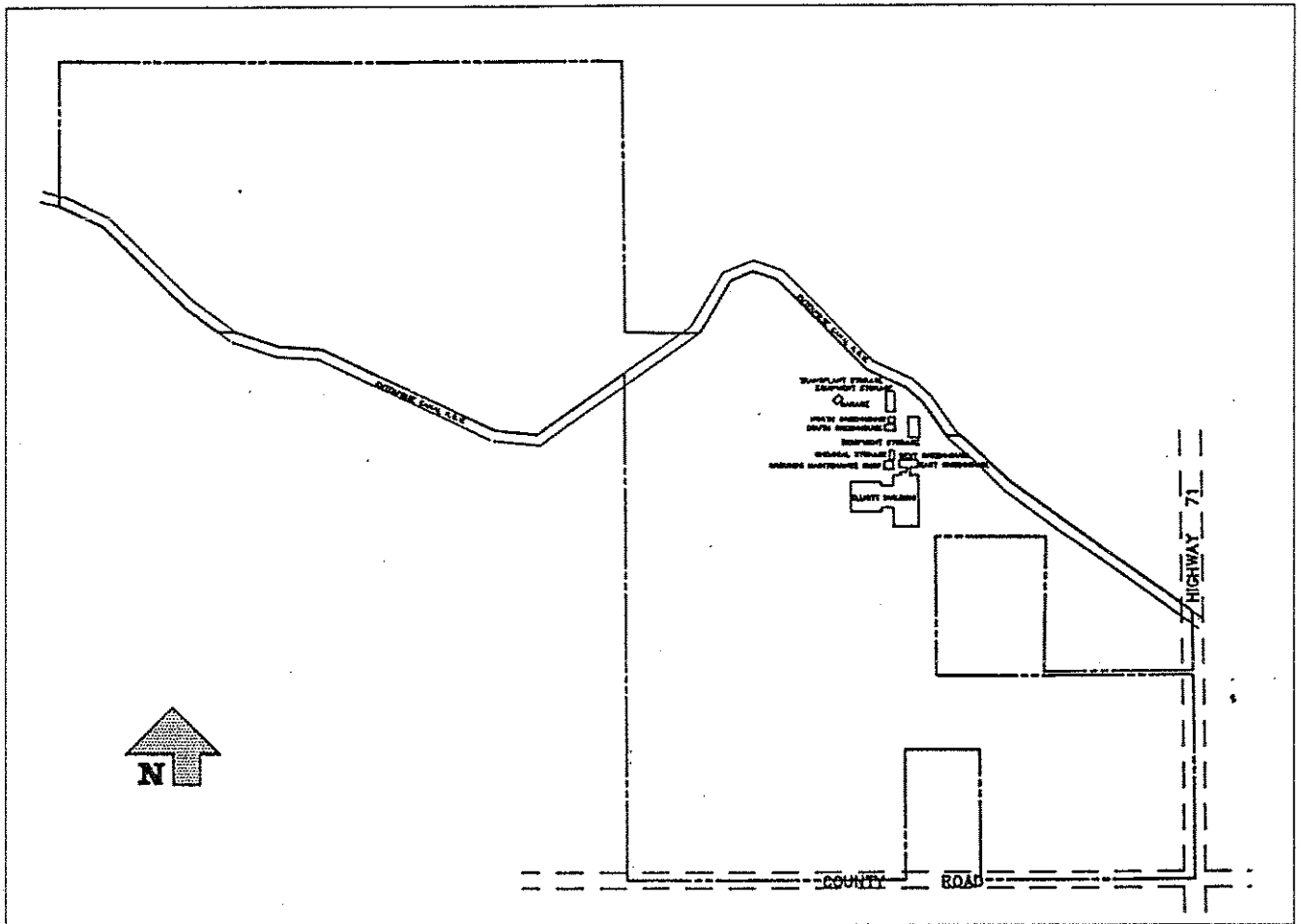
k. Other repairs/projects needed

- Water System
- Main phone line station side
- Roofs on several buildings
- Tree removal of damaged trees that pose harm or danger
- Asphalt roads – resurfacing of damaged roadways
- Upgrade fuel storage.
- Addition to the bunk house to accommodate women at the Gudmundsen Facility.
- Improvements of main house at the Gudmundsen Facility.
- Expand lab and office space at GSL.
- Add cattle working facility at GSL.

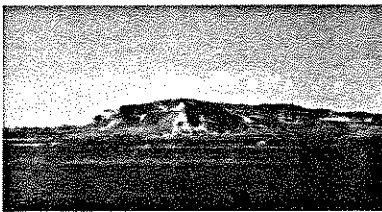
l. ADA inventory/needs

- ADA survey has not been completed for the campus. According to the Director, the Headquarters Building has ADA approved main entrances, bathrooms and office access.
- ADA retrofits also needed for Veterinary Science and office annex.

D. Panhandle Research and Extension Center,



Scottsbluff



The Panhandle Research and Extension Center (PHREC) facilities are located on four sites in the Nebraska panhandle. The PHREC is housed in the Elliott facility located on the northwest corner of Scottsbluff. The 66,450 SF headquarters structure, built in 1966, is located on 204 acres. This site also includes four service/storage buildings with an additional square footage of 11,600 SF. The Scotts Bluff Agricultural Lab, is located four miles northwest of Scottsbluff, in Mitchell and includes 18 structures, including four houses, Panhandle Research Feedlot, the Veterinary Diagnostic Lab, the Food Processing Plant, and various livestock and machinery storage structures. The Sioux Experimental Range is located 12 miles northwest of Scottsbluff. This 560-acre facility is primarily rangeland,

with very few buildings, the land is not owned by the University. The fourth site is located five miles north of Sidney, Nebraska. The buildings on this facility are of military construction, erected in the 1930's. Three primary buildings at this location include an office, shop and machine storage.

1. Campus goals

Because of the location, PHREC is closely connected to the clientele they serve and they are uniquely positioned to respond to the needs of our clientele. Consequently, the mission of the Panhandle Research and Extension Center is two-fold:

- Conduct problem-solving research for Nebraska Panhandle constituents and extend that and related information via Cooperative Extension programs.
- Deliver the resources of the entire University of Nebraska system to Panhandle residents via distance education.

The research and extension programs are led by interdisciplinary teams of specialists and educators who efficiently utilize the physical resources of the PHREC to conduct visionary work on high priority issues. The Panhandle Learning Center, a division of PHREC, has established local and state-wide leadership for the development and delivery of distance education programs.

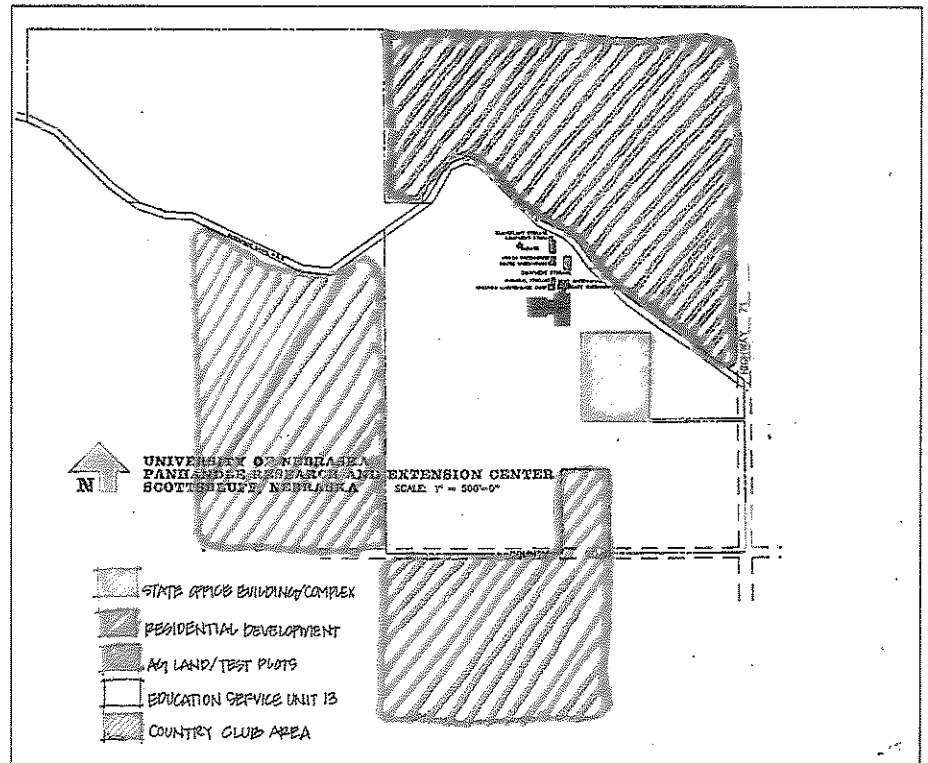
PHREC's goal is to develop and sustain the agriculture, environment, business, families and communities of western Nebraska. Continuous updating of physical facilities, equipment and programs is needed to accomplish this mission.

2. Campus Issues

a. Traffic patterns

- Daily utilization of the Elliott facility includes 120 employees and 150 nursing students during most of the year. Field days yield the highest traffic, drawing over 400 people. The site generally has adequate parking and access for the programs of the facility.
- Traffic loads at the other facilities are generally small and manageable with current facilities.

- The parking facilities at the Elliott facility, because of their age and intense usage are in serious need of repairs.

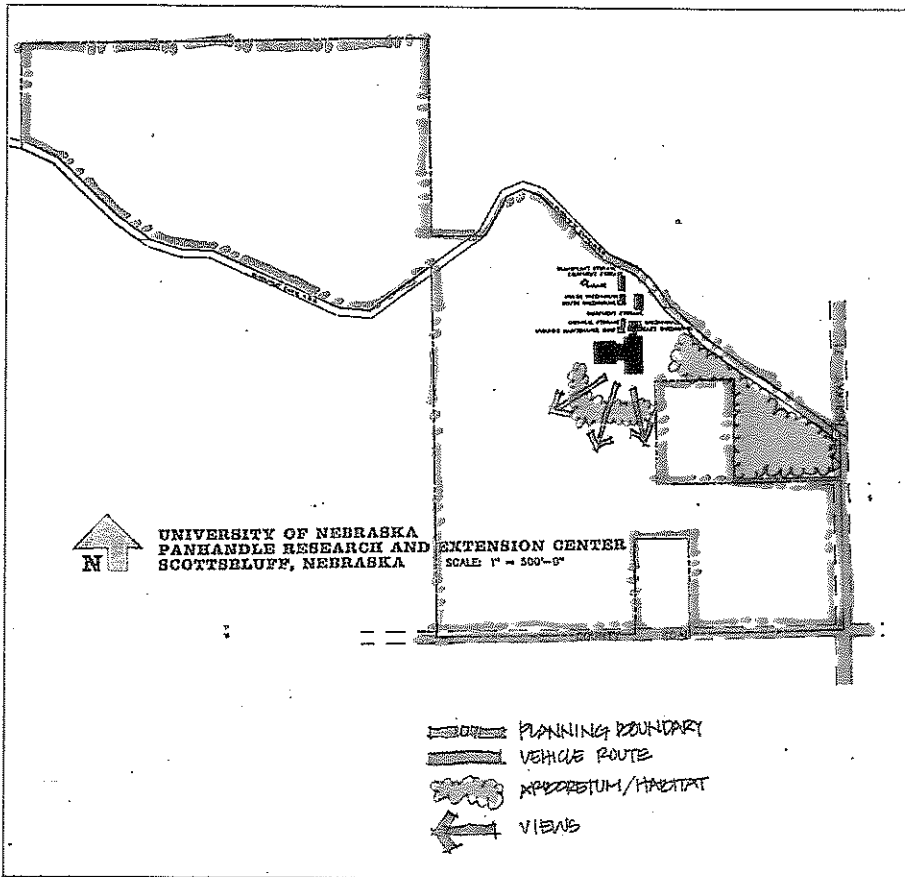


b. Adjacent uses

- The PHREC is located on the northwest corner of Scottsbluff. Some metropolitan expansion and development is occurring in the direction of the facility expansion, while not impacting the Elliott facility, does impact the research plots surrounding the facility. Increased development also brings concerns about pesticide usage, tractor noise and other issues. The PHREC is working to integrate low impact farming practices to their unit to minimize the impact on adjacent properties.
- The other facilities are located in rural sites with no potential for urban encroachment.

c. Natural physical features

- There are no unusual physical features on any of the land associated with PHREC. There are significant views from the Elliott facility south to the Scotts Bluff



National Monument, worth preserving.

d. Topography

Generally the land at all PHREC locations is basically flat or slightly rolling farm/pasture land. Consequently, there are no significant topographical features or limitations to development.

e. Hydrology

The water table surrounding the Elliott facility at Scottsbluff is shallow (<50 feet) which presents potential groundwater contamination issues. Because the Elliott fa-

cility is connected to the city water and sewage, there is little water contamination potential from the building itself.

Groundwater near the Scotts Bluff Ag Lab is sequestered in the Brule formation which makes that water difficult to locate and recover. Water supply for the Diagnostic Laboratory, Food Processing Center and the residences is currently an important health and safety issue that needs attention. The current water supply at SBAL does not meet minimum drinking water standards. Consequently, residents and employees are provided bottled water for consumption. Irrigation water at SBAL is provided by the irrigation canal system.

Groundwater under the High Plains Ag Lab is suitable for office and personnel use.

Groundwater under the Sioux Experimental Range is adequate for livestock.

f. Landscape assets

The Elliott facility is surrounded by the D.A. Murphy Arboretum. One of the most significant Arboretums in western Nebraska, the Arboretum houses a variety of plant material particularly suited to the region. Each year over 500 students, teachers and other visitors participate in formal educational programs in the Arboretum.

Both the Elliott facility and the Harris facility (SBAL) provide a magnificent view of the Scotts Bluff National Monument, a National Historic Site. This view should be preserved in all construction/renovation efforts as it is a great feature which gives character to the Campus.

g. Campus organization

The Panhandle Research and Extension Center campus organization is unique as it is physically located on four separate sites. Discussion of the four different campuses follows:

Elliott Facility, Scottsbluff

The PHREC is housed in the Elliott facility or the old Hiram Scott College on the northwest corner of the city of Scottsbluff. The Elliott facility is co-located with the State Office Complex. The State of Nebraska Office Complex is located south and east of the Elliott building. The

organization of the campus is functional and efficient. Parking is placed conveniently for visitors and staff and directly adjacent to the entrances of the facility. Support facilities including greenhouses and equipment storage are located directly north of the Elliott facility with agricultural plots located directly west and south of the facility.

Future construction and siting of buildings should respond to the basic existing configuration. Access and circulation to the facilities must be considered closely and should be improved wherever possible. Views to the south to the Scotts Bluff Monument are also an important ingredient in siting and locating new buildings and additions. The views to the Monument are very spectacular and must be preserved if at all possible.

Scotts Bluff Ag Lab

The Scotts Bluff Ag Lab is located near Mitchell and is organized around a grouping of residences at the south central portion of the site. These residences are surrounded to the east and north by support buildings and facilities including barns, maintenance sheds, shops, and parking.

The organization of the campus appears to be functional and efficient. Zoning for the facilities is also appropriate. Future construction and siting of buildings should respect this basic organization by placing similar functions within the existing zones if at all possible.

Sioux Experimental Range

This facility is primarily range land facilities with very few buildings.

High Plains Ag Lab

Buildings on the High Plains Ag Lab are located within an old military ordinance base. These facilities were constructed in the 1930's and 1940's during the mobilization efforts for World War II. The campus organization, as a result, is based on the military base organization and planning—utilizing long, linear organization with well spaced facilities fronting access roads.

The office building is quite a distance from the shop and mechanical storage facilities. The organization appears to be functional and operating well. Future construction and siting

of buildings should respect the basic organization by placing and aligning facilities with the basic existing organization if possible.

h. Campus markers and signage

Identification signage for the Elliott facility is comprised of a large, redwood-stained sign in the shape of the state of Nebraska which is located on Highway 71. This sign identifies both the State Office Complex and the UNL facility. Visitors are then led into the site and to other redwood directional signs. Most of these signs are adequate except the signs that direct visitors to either the State Office Complex or the University Complex. These signs tend to be somewhat confusing and mislocated. Signage also locating of the Elliott facility is another issue that should be addressed in any signing effort at the campus. As remodeling of the entryway and front door proceeds, improved signage strategy should be incorporated into the remodeling effort.

Signage at the other three facilities is similar to the PHREC facility and other Research and Extension Center facilities and consists of redwood stained signage. The signage is adequate but is in need of repair and maintenance.

It is recommended that the quality of signage on all of the PHREC campuses be improved. A sign of more substantial character reflecting “the front door of the University” should be implemented on all campus facilities. Also signage standards and a hierarchy of signage, both directional and informational, should be implemented which would mark individual buildings used by visitors.

i. Architectural features

- The Elliott facility was originally constructed as the Hiram Scott College which was donated to the University in 1974. The two-story building is characterized by expression of its structure in white stucco/concrete with brick and glass infill panels. The flat roof building is institutional in character.
- Existing buildings at the Scotts Bluff Ag Lab comprise a variety of architectural styles and dates of construction. All of the existing buildings consist of wood-framed residences, wood-framed agricultural buildings/barns and contemporary metal agricultural style buildings. The residences appear to have been constructed in the early 1900's.

- The High Plains Ag Lab facilities, noted previously, consist of 1930's and 1940's military buildings. These buildings are generally brick masonry with simple gable, sloping roofs composed of metal or shingles. The painted brick facilities are plain, straight-forward, and very utilitarian.
- As renovations and repairs are planned and implemented, particular attention needs to be given to integrating new facilities or additions with the existing structures. While no historic or architecture significant structures appear at these sites, the goal of visually unifying and enhancing the campus and agricultural nature of the facilities is important.

j. Space and facilities needs summary

A brief review of the existing building conditions was provided by the Campus Director. The following summarizes the current and future needs. General condition of current structures:

Panhandle Research and Extension Center

- Elliott Building – general condition of building is good; several maintenance needs are pending (overhang ceiling, atrium windows). East roofing membrane will need to be replaced in the next five years.
- Pesticide Storage Building – general condition is good, need to plug floor drains and install containerized drain system to meet regulatory stipulations.
- Machinery Storage Building – general condition is good.
- Shop Building – general condition is good.

Scotts Bluff Ag Lab

- Lionel Harris Building – general condition is good.
- Residences – minor maintenance (painting, recaulking, etc.) needed, buildings could be weatherized to be more energy efficient.
- Potato Cellar – structural condition is good, exterior painting needed.
- Shop – general condition good.
- Machinery Storage – general condition good.

- Dairy Barn – dilapidated structure; should be demolished.
- Feedmill – renovated in 1995; general condition good.
- Beef Cattle Working Facility – renovated in 1996; general condition good.

High Plains Ag Lab

- Office – need ADA access and bathroom; exterior needs paint. Project underway to close in north walkway; funds are in place to complete project. Projected completion date is 1999.
- Shop – exterior needs paint, steel doors need to be removed and either replaced or walled in.
- Machinery Storage – roof needs replacement and exterior requires paint.
- Pesticide Storage – work in progress to develop Pesticide Storage facility from military surplus trailer. Funds in place for this project. Projected completion date, 1998.

Capital Construction Plans

- Front Door/Administrative Office Renovation (Elliott Facility) – An agreement is in place to move the Scotts Bluff County Cooperative Extension Office to the Elliott Facility. This will require renovation of the front of the Elliott Facility to clearly identify the entrance and a major remodeling of the administrative office area. Current status – funds (\$200,000) have been committed from IANR/Cooperative Extension. A preliminary cost estimate is being prepared by Facilities Management. Design and engineering phases should be initiated soon with construction to begin in April, 1999. Projected completion date is late 1999.
- Replace potable water and septic systems at Scotts Bluff Ag Lab. Current water well is shallow; cistern is in disrepair and both are contaminated with undesirable micro-organisms. Recent water analysis (June 1998) failed minimum standards for drinking water. The drain field and connecting pipelines for the current septic system are failing. In addition, the current drain field does not meet state code. Estimated cost - \$200,000.

- Parking lot renovation (Elliott Facility). The east parking lot is deteriorated and requires resurfacing. The south parking lot is deteriorated and requires resurfacing with special attention to the base. Estimated cost - \$40,000.
- Replace roof of Machinery Storage Building and refurbish exterior walls of Machinery Storage and Shop (HPAL). Current roof is leaking which affects the machinery stored in the building as well as the physical integrity of the building. This project has been identified as the priority roofing project for the Panhandle since 1994. Exterior walls are rapidly deteriorating. Either paint or siding is needed soon to maintain the integrity of the building. Current status – request has been identified to IANR. Estimated cost - \$90,000.
- Remodel classrooms and distance education capability (Elliott Facility). The Panhandle Learning Center provided the inaugural distance learning classroom in the state of Nebraska. This classroom was the impetus for an expanding distance education program for the entire state. Because this classroom was constructed in 1991, the equipment is now antiquated. In addition to this classroom, there is a definable need to expand distance learning access to all classrooms in the Elliott Facility as well as upgrade those classrooms for teaching effectiveness (lights, ceilings, acoustics). Included in this project is a significant computer network upgrade for the building. Current status – project identified in 1998 with a projected cost of \$200,000.
- Panhandle Learning Facility (Elliott Facility). Currently, there is no Panhandle facility that can accommodate large scale teaching/demonstration activities that might include machinery or livestock and integrate electronic technology. Such a facility located at the Panhandle Research and Extension Center would serve a wide Panhandle region and further position the University of Nebraska as the premier provider of need-based educational programs. Current status – project is still in conceptual stage. Projected cost - \$2 million.

k. ADA inventory

A formal ADA inventory of Panhandle facilities has not been conducted. Perusal of ADA requirements of

PHREC administration suggest that the following projects should be considered:

Elliott Facility

- Retrofit elevator controls and telephone
- Install second ADA assisted door opener
- Install ADA drinking fountain
- Install ADA door hardware and wheel chair platform in auditorium

Lionel Harris Facility (SBAL)

- Retrofit door hardware
- Retrofit restrooms for accessibility

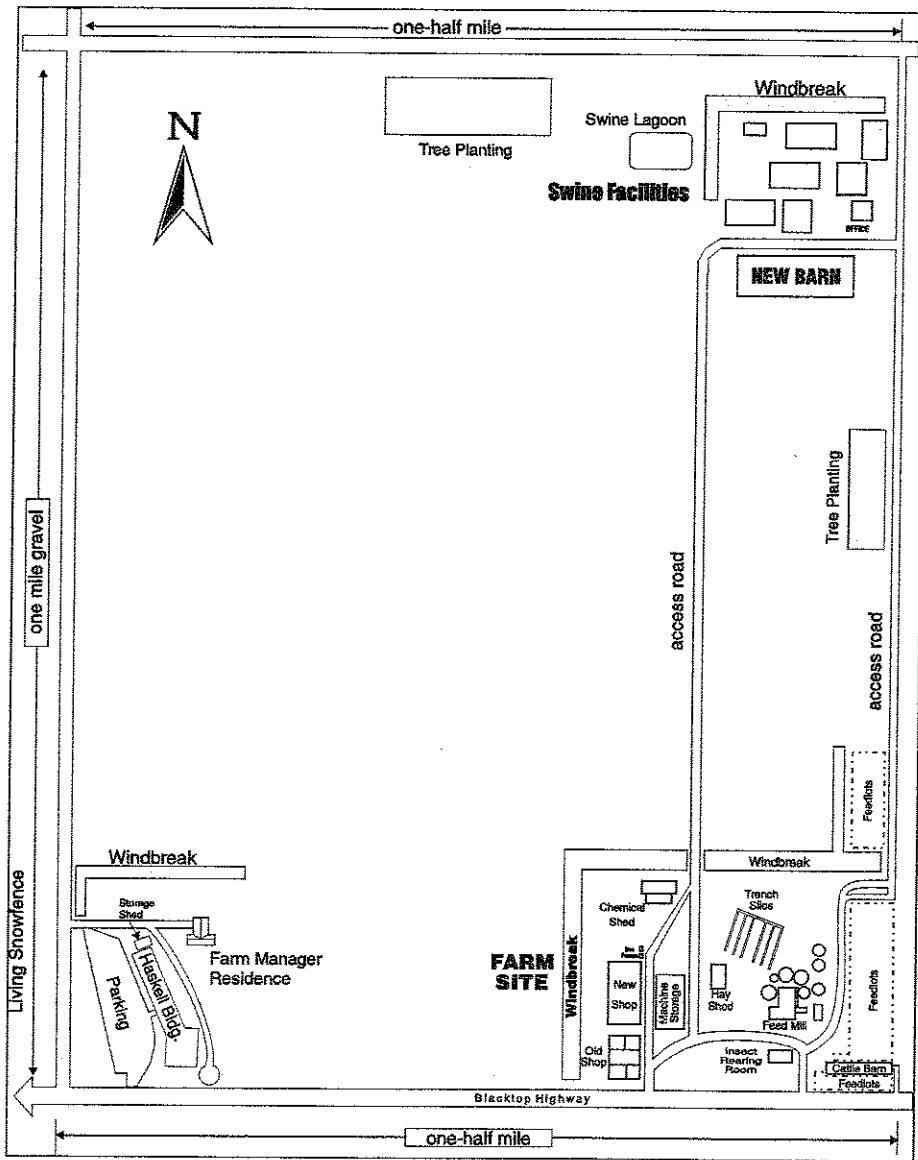
HPAL Office

- Construct ADA access ramp and retrofit door and hardware
- Construct ADA bathroom

E. Northeast Research and Extension Center, Concord



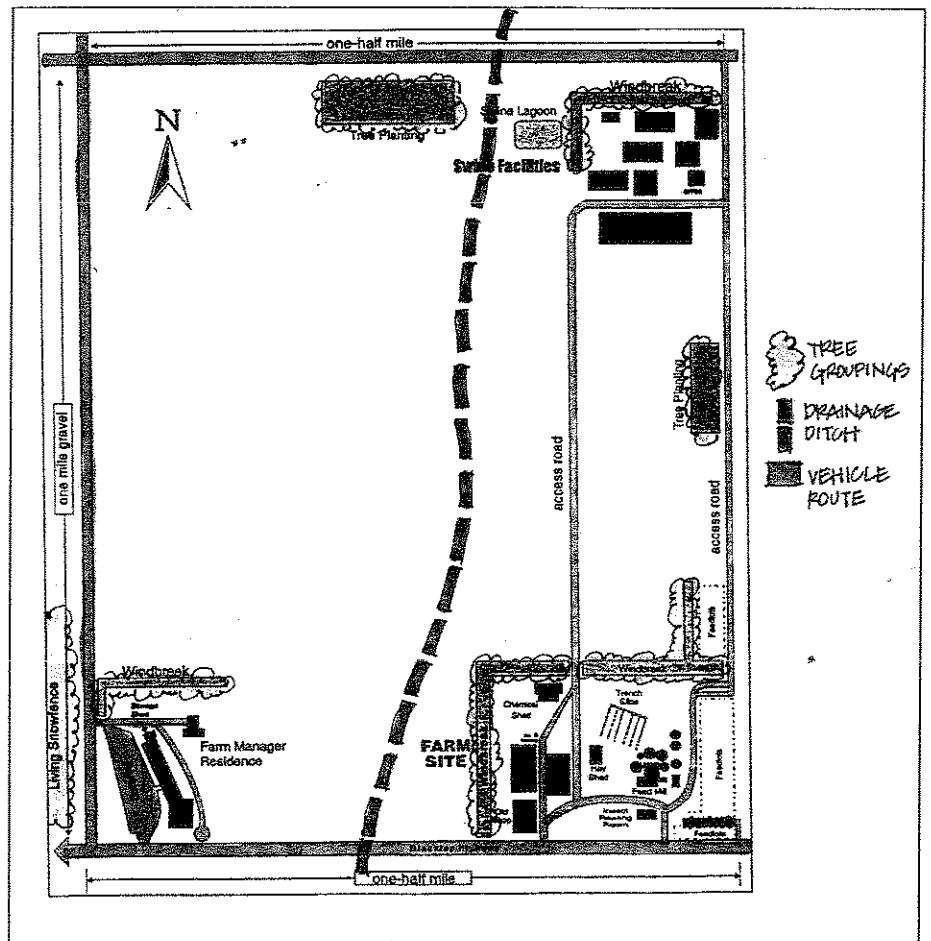
The Northeast Research and Extension Center (NEREC) is located in Norfolk, Nebraska. The unit is divided into two locations, the administration, is located in leased office space in the Lifelong Learning Center on the Northeast Community College Campus, in Norfolk, NE. The building is owned by the Northeast Community College. The second location is the Haskell Agricultural Laboratory, located 1 ½ miles east of Concord, Nebraska. The Haskell Agricultural Laboratory, located in Dixon County, includes 320 acres, plus an additional 160 acres not owned by the University. The 10,500 SF main building constructed in 1964, houses most of the office and laboratory functions of the facility while nine additional support farm related buildings provide an additional 37,200 SF. In addition, a shop/storage facility has recently been constructed.



1. Campus goals

- Extend the resources of the University through life-long learning, helping people put knowledge to work. Focusing on the learner though relevant, highly visible educational efforts supported by quality research and demonstrations.
- Emphasize distance and extended education to the place bound learner.

2. Campus Issues



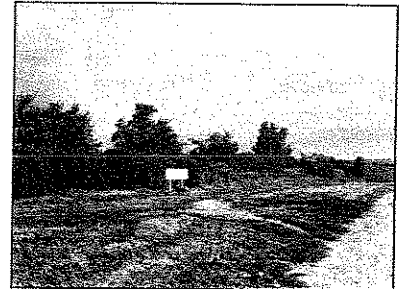
a. Traffic patterns

- The Haskell Agricultural Laboratory and the facilities used for research and demonstration are separated by a hard surface state highway and creates a danger when operating slow moving and large farm equipment across the highway.
- The Haskell building is located at the crest of a hill and vehicles exiting or entering the parking lot onto or from the state highway do so with limited visibility and some danger
- Traffic and parking at the farmstead is somewhat difficult. Some of the buildings are sited too close together to allow passage of large tillage equipment.

There are no designated equipment or vehicle parking areas.

b. Adjacent uses

- Haskell Ag Lab is located in a rural setting, a distance away from any large communities. The facility is surrounded by crop-land and is currently not impacted by development of any kind. The community of Concord (population approximately 100) is 1 ½ miles from the facility.



c. Natural physical features

- A permanent drainage ditch bisects the land base. Due to land tiling and other situations above the land base, this ditch has constant running water.

d. Topography

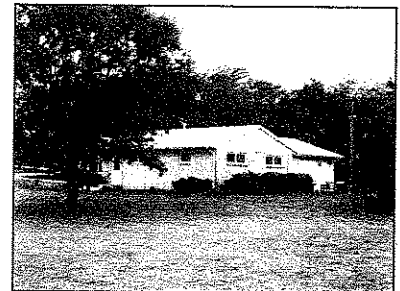
- The Haskell Laboratory Facility 360 acres are characterized by a gently rolling landscape.

e. Hydrology

- A concern related to hydrology at the Haskell facility relates to an existing well recording a nitrate-N content level exceeding the MCL for drinking water.

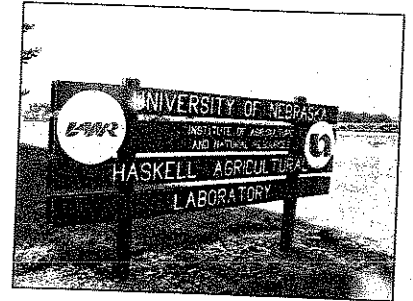
f. Landscape assets

- Areas around the Haskell building and the Farm Manager's residence have been designated as a part of the Statewide Arboretum system.



h. Campus markers and signage

- The existing markers and signage are located along 466 Road. These signs are consistent with the IANR signs throughout the state.
- Signage improvements are recommended to provide greater visibility of the facility along the highway as well as along the county road along the west edge of the facility.



i. Architectural features

- The Haskell Agricultural Lab is comprised of a variety of structures. The Haskell building and the manager's residence are partially brick, most of the other structures are light frame construction, clad in either metal or wood siding.

j. Space and facility needs summary

Current needs include a renovation of the Haskell Building. 1990 Facilities audit information categorizes the physical condition as undesirable for its present utilization and requiring a moderate amount of work. The building has continued to decline since this assessment. The primary focus is to upgrade labs, offices and support space addressing numerous deficiencies throughout the building. The existing parking lots for this building are also in need of major repair. Cost is estimated at \$600,000.

For a detailed list of capital projects, see the section later in this chapter.

k. ADA inventory

- Through previous ADA inventories restroom accessibility in the Haskell Lab has been identified as an issue. Planned renovations include accessibility modifications for this building.

l. Immediate repairs

- The farm manager's residence is in need of replacement windows.
- The Haskell building windows need to be repaired.

F. South Central Research and Extension Center, Clay Center

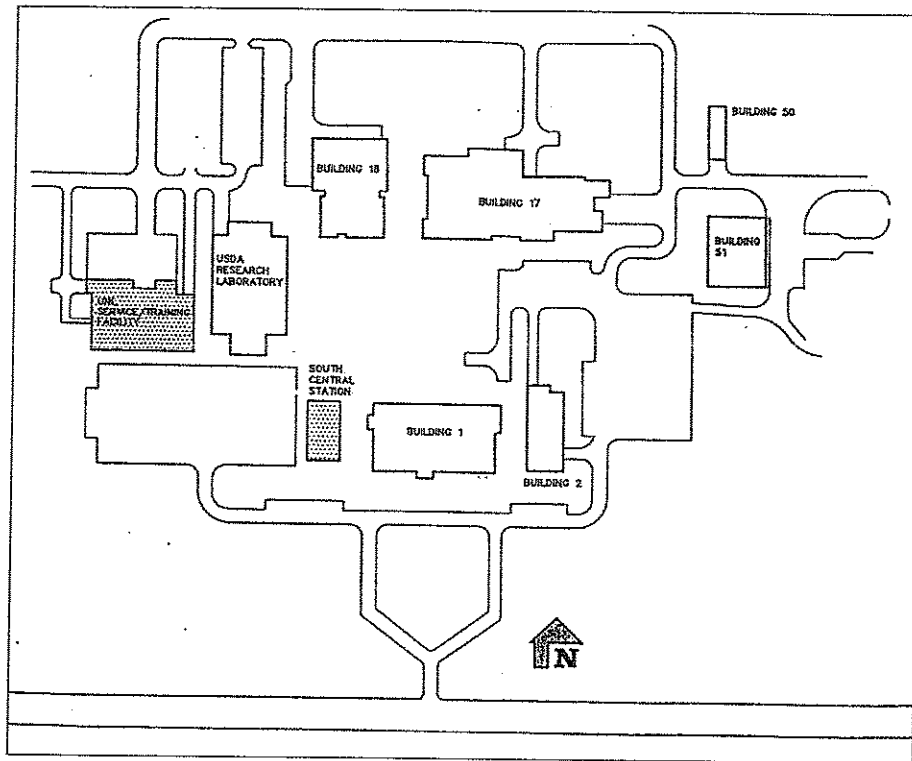


The South Central Research and Extension Center (SCREC) is located near Clay Center and consists of 641 acres; the land is not owned by the University. The 12,200 SF headquarters building constructed in 1977, is located on property owned by MARC (Meat Animal Research Center). Three remotely located farm buildings occupy an additional 11,600 SF.

Also located at the SCREC is the University of Nebraska Great Plains Veterinary Education Center, a 21,157 sf building housing research, teaching, and service programs conducted by IANR Veterinary and Biomedical Sciences faculty. This center provides a training program of excellence in food animal medicine in cooperation with Kansas State University College of Veterinary Medicine and also provides specialized training for other veterinary medicine students nationwide on a space available basis. In addition, USCA scientist at the RLH U.S. Meat Animal Research Center.

1. Campus goals

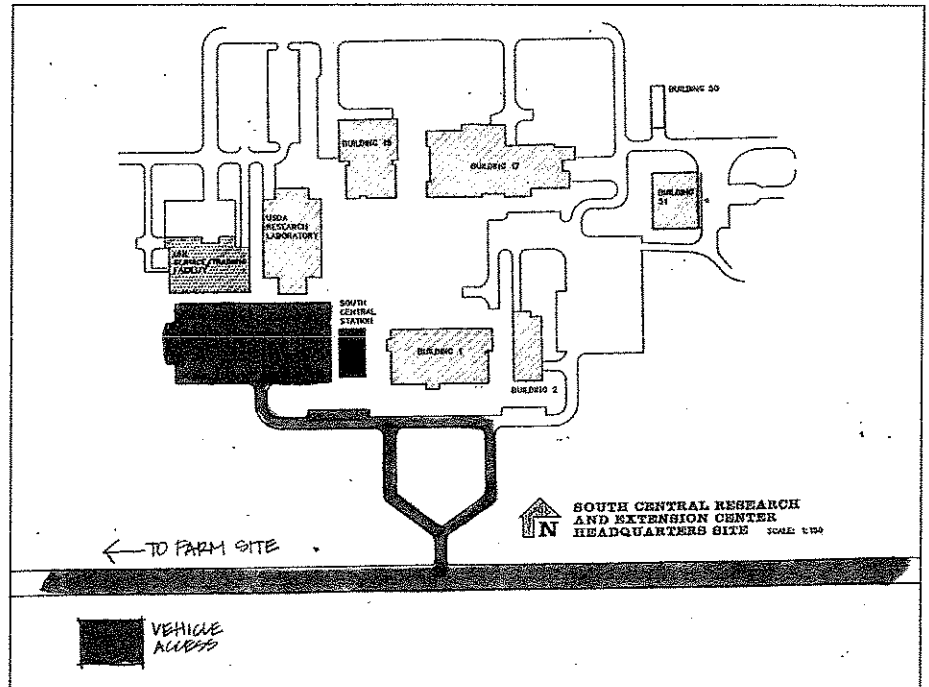
- Provide information, programs and research relevant to the needs of the citizens of South Central Nebraska.
- Serve as district headquarters for Cooperative Extension and the Agriculture Research Division. Provide 480 acres for research on crops and irrigation practices.



2. Campus Issues

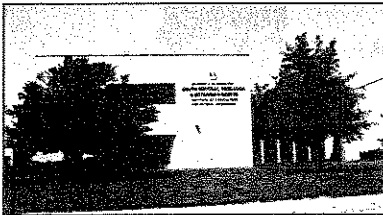
a. Traffic patterns

- Due to the rural location of the farm site, and shared parking at the MARC site, parking is not an issue.
- Traffic has not been an issue at either location.



b. Adjacent uses

- The SCREC owns the headquarters building and the property is owned by MARC. The lease on the land will expire in 2006. Expansion of this facility would need the approval of MARC officials and would need to be consistent in style with the existing character of the MARC campus.
- The farm site is located in a rural setting, surrounded by agricultural land.

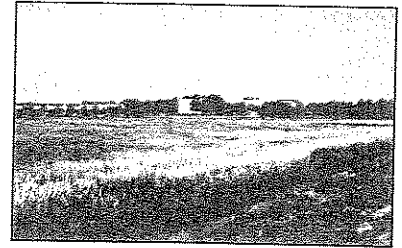


c. Natural physical features

- The headquarters building, located on the MARC campus is set in an open prairie. The young trees planted on the campus by MARC 20 years ago are a valued asset. When considering alterations or additions to the facilities, these trees should remain.

d. Topography

- The facility is located in a very open flat prairie. The land is owned and maintained by MARC personnel, the development of the topography is under their pur-view.



e. Hydrology

- There are no notable issues related to hydrology.

f. Landscape assets

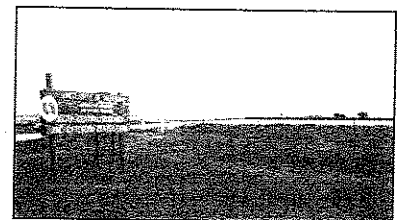
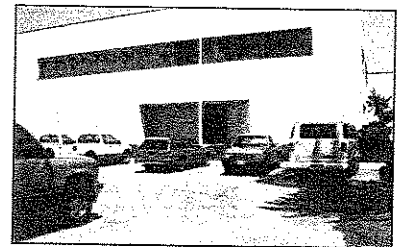
- Wind breaks and informal tree plantings are considered assets of the site, these plantings are maintained by the MARC personnel.

g. Campus organization

- The farm site is organized around a loop road. The site consists of three buildings: pesticide storage, farm storage, and farm services building.

h. Campus markers and signage

- There is a need for improved signage at the MARC location. Because it is primarily a MARC campus, the facility is often not recognized as the University of Nebraska.
- Signage is needed at the entrance of the MARC campus. There is currently no University of Nebraska signage at the highway.
- Building signage needs to be improved. The current signage is too small to inform people from the sidewalk or parking lot of the building identity.
- Signage at the farm site is consistent with that of other IANR facilities across the state.



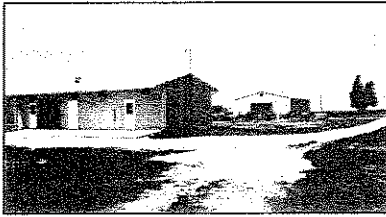
i. Architectural features

- The buildings on the MARC campus are predominately two story with a buff/blonde brick material and are flat roofed with a simple rectangular shape.
- The farm service buildings at the remote farm site are frame construction with metal siding. All buildings on the site are painted yellow and white. The simple rec-

rangular buildings have gable type standing seam metal roofs.

j. Functional needs and utilization

- The SCREC consists of four buildings:
- The headquarters building houses an auditorium, conference room, kitchenette, break room, supply store-room, building services, men and women's restrooms, reception area, offices, offices and administration area, library, and labs.
- The Pesticide Building contains the chemical storage area, small work area and a small equipment storage area.
- The Farm Storage Building is used for the storage of large equipment.
- The Farm Services Building includes an office, lunch-room, men and women's restrooms, computer work-room and shop area.



k. Space and facility needs summary

- There is a need for a plant pathology diagnostic greenhouse in the next few years. The proposed site would be at the farm site, south of the existing equipment storage shed. The minimum greenhouse size would be 20'x40'. The preferred size would be 30'x60'.
- For a detailed list of capital projects, please see Chapter VI.

l. ADA inventory

- A recent ADA inventory identified the following modifications are needed: addition of an elevator, installation of an entrance ramp, enlargement of the entry way, modification for accessible restrooms, door hardware and drinking fountain, and installation of automatic doors.

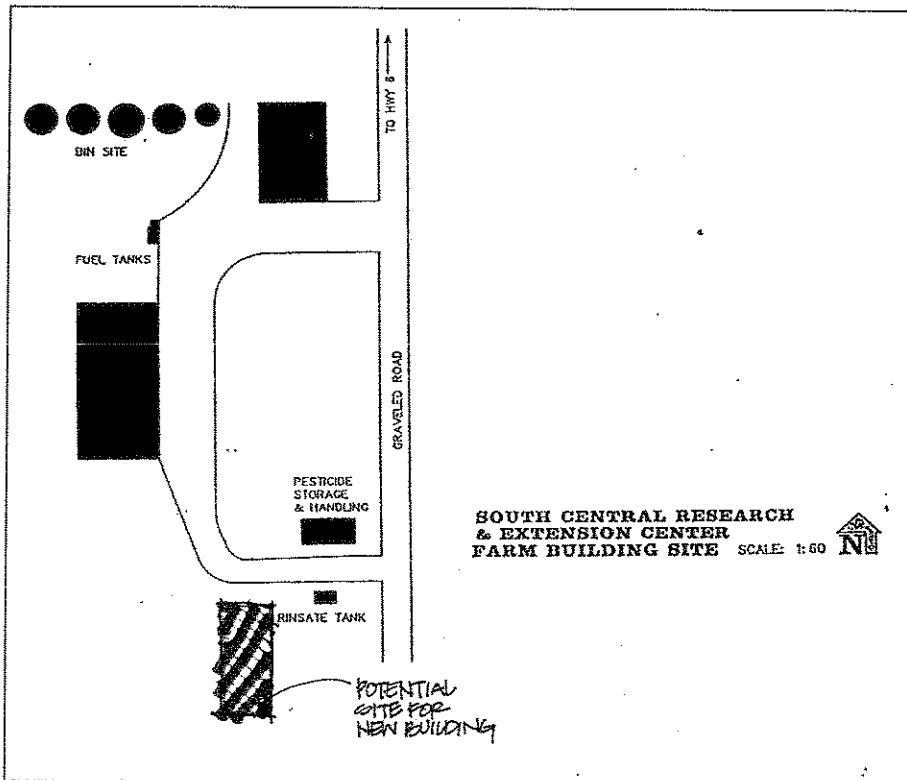
m. Immediate repairs

Repair of laboratory sink -- leaks to lower level.
Replacement of 20+year old A/C
Window repair/replacement
Roof replacement

- Sidewalk and driveway repair/replacement
- Completion of the equipment storage remodel
- Second story walkway repair
- Handrail installation at north entry
- Replacement of wall dividers in conference room.
- Renovation of exhaust hoods in laboratories.

n. Additional Issues

No information provided.



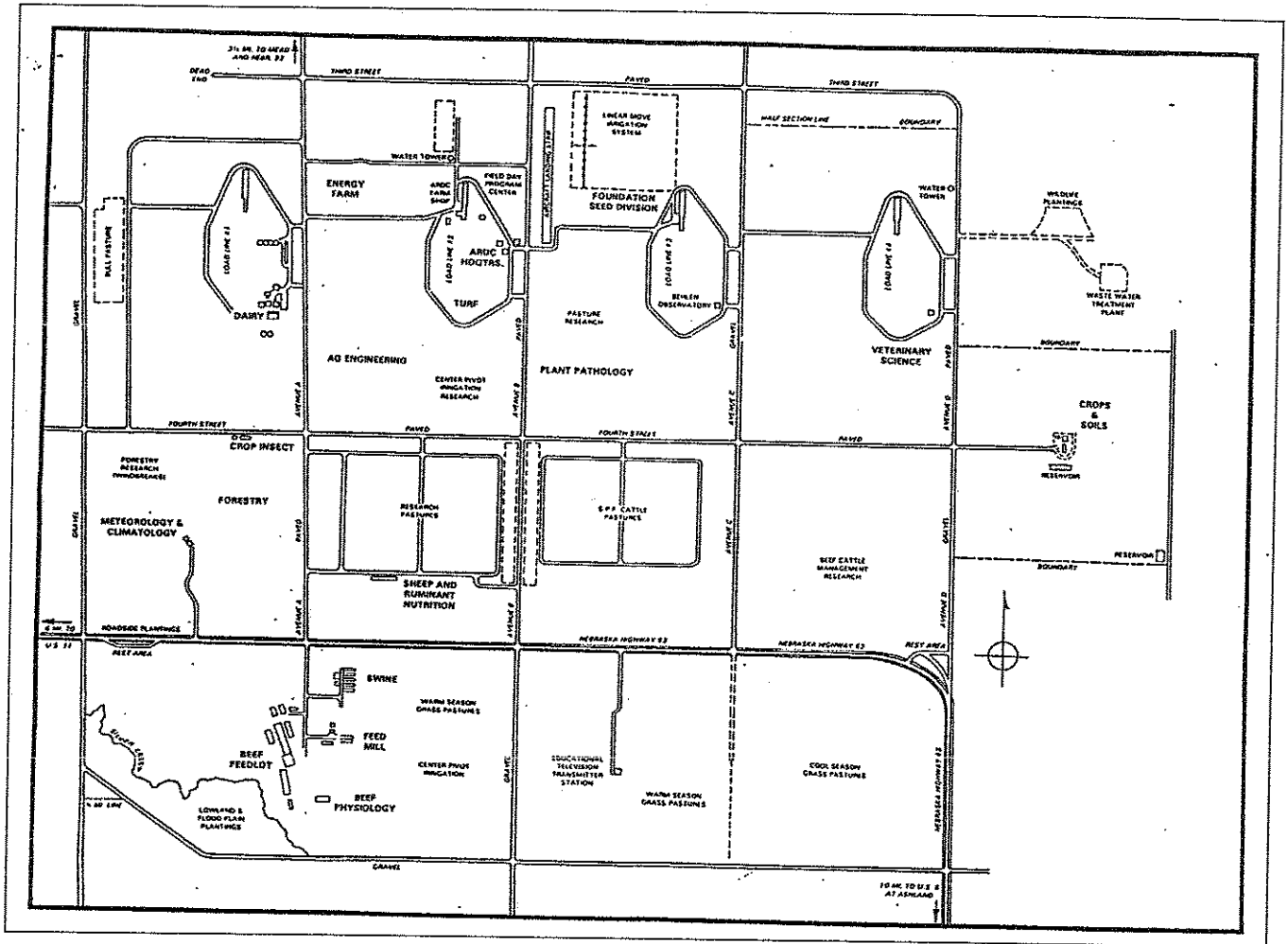
Concept map identifies potential location of new structure. Care should be taken when locating new structure to provide room for machinery access between buildings.

3. Concept Plan

This plan identifies a potential site for a plant pathology diagnostic greenhouse. Further study needs to be done when programming the building.

G. Agricultural Research and Development Center, Mead

The Agricultural Research and Development Center (ARDC) is located approximately 45 minutes west of Omaha and 45 minutes north of Lincoln, the largest cities in Nebraska. The ARDC is a major research and education facility of the University of Nebraska Institute of Agriculture and Natural Resources (IANR). It serves as the primary site for field-based research involving 90 faculty and 150 graduate students in nine IANR Departments. The ARDC consists of approximately 9,500 acres (3,846 hectares) of which 5,000 acres (2,024 hectares) are in row crops. Forty percent of the row crops are irrigated. The balance of the 9,500 acres is predominately in cool and warm season pasture. Over 5,000 domestic farm animals used for research and teaching reside on the ARDC. There are a total of 106 buildings at the Mead facility including the recently construction 23,000 sf headquarters building. The majority are generally of a farm-support function such as machine storage. The total area of all buildings and storage is 562,700 sf. Many of the unused military structures of World War II era are scheduled for demolition and are not included in totals.



1. Campus goals

The scope and diversity of ongoing research projects on the ARDC combine to make the ARDC one of the most unique research facilities in the United States. This size and diversity offers many research opportunities in integrated systems research and provides the opportunity for the ARDC to meet emerging research and educational priorities. Due in part to the location of the ARDC, there is an opportunity to extend programming to a large portion of the urban population of the State of Nebraska. It is vital to the future of the agricultural industry and the State of Nebraska that the increasing urban population understand and have an appreciation for production agriculture.

2. Campus Issues and Analysis

a. Traffic patterns

Traffic patterns within the borders of the ARDC are impacted by University and non-University traffic. Running through the ARDC are 5 miles of State Highway, 3½ miles of Saunders County Hard-surfaced roads, 9½ miles of ARDC maintained hard-surfaced roads, and 10½ miles of gravel-surfaced roads, all of which are open to public travel. Several additional miles of gravel-surfaced roads are maintained to provide service to research areas on the ARDC. During the summer of 1998, Saunders County converted County Road 6 from a gravel-surfaced road to a hard-surfaced road. This road runs north/south along the eastern-most side of the ARDC. The addition of this road and a possible housing corridor to the east of the ARDC are expected to significantly increase traffic around and through the ARDC in the future. This may require discussions with Saunders County regarding development of an east/west road to reduce increased traffic on Road H through the ARDC.

b. Adjacent uses

Expansion outside of the borders of the ARDC is not currently planned. Any expansion effort could increase negative public relations issues that already exist. These issues revolve around the amount of land in Saunders County that is not on the tax roles due to public ownership. The ARDC consumes 9,500 acres in Saunders County, making the University of Nebraska the largest landowner in the county. The cities of Omaha and Lincoln own over 1,000 acres each that contain well fields to supply water to those municipalities. The Nebraska National Guard has over 2,000 acres in the county that are utilized for training activities. In total, these entities have removed a significant amount of land from the property tax roles, causing concern from local taxpayers and elected officials.

Saunders County is experiencing a great deal of development pressure on its agricultural land due to urban sprawl from Omaha and Lincoln. This development is strongly supported by the business community and elected officials. It is strongly opposed by most farmers. Negotiations are underway regarding zoning that would allow this development in certain areas that are currently zoned agricultural. One of these development zones is proposed just east of the ARDC. The area surrounding the ARDC is currently

and will continue to be zoned for agricultural use under this plan. It is possible, however, that future plans could place housing developments on the borders of the ARDC. This could cause a massive relocation of small plot activity, especially in the Crops and Soils Area on the ARDC. This relocation would be very costly. An alternative to relocation would be to purchase a "buffer" zone around some of the small plot activities.

c. Natural physical features

The ARDC is situated in the Todd Valley of Saunders County, one of the most productive agricultural areas of the world. The defining features of the Todd Valley include a flat landscape, high clay content soil overlying a very prolific underground aquifer. The ARDC does contain small pockets of sandy, sloping ground that should not be developed for facility use to maintain a diversity of options for research purposes.

Section 35 in the southwest corner of the ARDC is an area that contains several unique environments. Silver Creek enters and exists the ARDC in this section. Along the banks of Silver Creek are natural riparian zones containing a diversity of vegetation. The section contains several wetlands, sub-irrigated meadows, managed forest areas, a beef cattle feedlot, a center pivot irrigation system and the Research and Education Building. Future plans include trail and wetland development in this section.

d. Topography

Due in part to the areas of flat topography, the ARDC has several areas that are poorly drained. Flat land makes channeling runoff water difficult. The heavy clay content soil reduces water infiltration rates further compounding the problem.

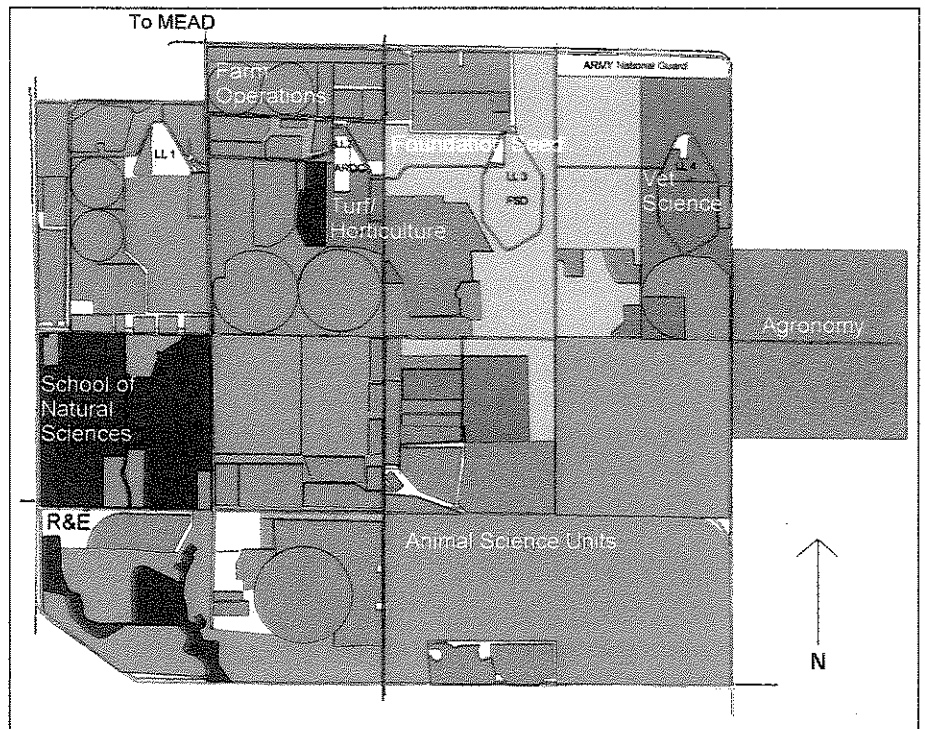
e. Hydrology

The groundwater under most of the ARDC is contaminated due to past activities associated with the Ordnance Plant. The groundwater contains levels of RDX (Royal Defense Explosive), TNT (trinitrotoluene), TCE (trichloroethene) and their by-products that are above regulated limits. This contamination has resulted in a major portion of the ARDC being included in an EPA Superfund Site. Currently, the ARDC utilizes a combination of bottled

water and carbon-filter units to ensure potable drinking water supplies for staff and visitors. Future developments could include the ARDC becoming part of a rural water district. This could be more cost effective than operating our current municipal system.

f. Landscape assets

Landscape assets are numerous on the ARDC. There are several managed forest areas, seed orchards and shelter belts on the ARDC. The John Seaton Anderson Turfgrass and Ornamental Area contains hundreds of different species of trees, grasses and ornamental plantings. Application to make this area part of the State-wide Arboretum is currently being considered. Landscaping around the Research and Education Building is currently being developed to enhance the aesthetic quality of the outside of the building and to provide an educational opportunity for visitors to the building.



g. Campus organization

h. Campus markers and signage

- There is a need for more dynamic and substantial signage throughout the facility. The current signage is not as prominent as it needs to be for vehicle or pedestrian traffic.
- Way finding needs to be improved. Provisions should be made to clearly direct the visitors into areas that are public and restrict them from the private areas. This would both enhance the safety for the public and help to preserve the integrity of the research plots.

i. Facility needs

- The following are the long-term facility needs for ARDC General. These needs include the assumption that economic pressures will force the further consolidation of facilities and services on the ARDC.
- For a detailed list of capital projects, please see the section later in this Chapter VI.

Replacement of the dairy milking parlor

This project would replace the current obsolete facility with a greatly needed modern facility with a new free-stall parlor, housing for dry stock and young, a new waste treatment system, and demolition of existing obsolete dairy facilities are included. Cost is estimated at \$2,400,000.

Replace phase 1, 2, and 3 swine buildings

This project would replace the existing swine buildings for gestation, farrowing and surgery with a modern two or three stage facility including capability for nursery and finishing. The existing buildings are currently older than the expected useful life for facilities of this type and normal deterioration is causing excessive maintenance costs. The existing buildings are also obsolete with respect to current production practices. A new waste handling system is also required. Cost is estimated at \$5,000,000.

Pesticide/seed storage

The ARDC needs a bulk non-heated pesticide/seed storage area encompassing approximately 3,000 square feet. Adjacent to this area will be a 1,200 square-foot heated area with two sinks, emergency shower, safety equipment and

clothing storage, and an area where a small amount of carry-over chemicals can be stored for the winter. It is envisioned that this would be one divided building. These areas should meet the necessary requirements for ventilation, containment, explosion protection, and other requirements. This building should be located in the LL#2 area and could be much larger if it is determined that other departments on the ARDC would utilize it.

Bulk equipment/facilities shop(s)

A new building or extensive remodeling of existing facilities is needed to accommodate larger equipment and relocation of existing facility shops into one area. An area of approximately 15,000 square feet is needed that would have the ability to be heated, have appropriate lifts and hoists, a welding area, an office, woodworking area, painting area, small project work bench and supply storage. This building would be in the LL#2 area or in current LL#2 buildings.

If existing structures are remodeled to accommodate this shop area, then remodeling of other areas would need to take place in order to increase efficiency of machinery and equipment storage.

Grain storage

Additional grain storage of approximately 20,000 to 60,000 bushels may be needed if certain management change scenarios come to fruition. If a new feed mill is constructed at a new site, consideration should be given to the construction of a 200,000 bushel grain storage and handling system, including conveying, drying, and a scale in conjunction with the feed mill project.

Research "hub" shop, office and machinery storage

If certain management change scenarios come to fruition, a need will exist to build a Research "Hub" Shop and Machinery Storage. The shop would be approximately 10,000 square feet with a minimum of six work bays. It would be equipped similar to the bulk equipment shop. Machinery storage of approximately 20,000 square feet would be needed to store most of the research machinery and equipment. An office facility would be needed in conjunction with this facility. These facilities would be located in a central location that is best suited to serving the research needs on the ARDC. Included with these facilities

may be much smaller buildings located very close to research projects, if needed.

Roads

The ARDC maintains approximately ten miles of hard surfaced roads and over 20 miles of gravel roads. Most of these roads are county-designated roads that are open to the public. Funding for maintenance of the hard surfaced and gravel roads is not adequate to maintain the roads in a suitable condition. Funding for resurfacing the hard surfaced roads has only been accomplished through special funding from the Vice Chancellor's Office. A permanent source of maintenance and resurfacing funds, such as is provided on East and City Campuses, is needed to ensure the roads can be maintained in a safe condition. Currently, we are in need of approximately seven miles of resurfaced roads to ensure that total failure of the current hard surfaced roads does not occur.

Municipal water delivery system

The Municipal Water Delivery System at the ARDC consists of two 100,000 gallon elevated water storage tanks, over twenty miles of 12" to 8" mainline pipeline, several miles of smaller service lines and 11 water wells. Most of this infrastructure was constructed in 1942 by the Federal Government. Maintenance of this system is not adequate as it is funded by revolving accounts. The replacement cost for this system is well over \$2½ million.

It is possible that a rural water system may be developed in Saunders County during the next five years. If this occurs, the ARDC could conceivably receive all of its potable water from this district. This would probably reduce the need to maintain many of the wells on the current system. However, the distribution system or an alternative one would need to be maintained/developed to continue the delivery of potable water throughout the 9,500 acre ARDC. The cost of developing the infrastructure to enable tapping into this rural water distribution system could be several thousand dollars.

j. Other repairs/projects needed

There are several leaking roofs on the ARDC. These areas include Load Line #1, Bay B; Load Line #2-9; Load Line #3-9; Load Line #4, Bay D; Agronomy Storage Buildings; Agrometeorology Office; and Entomology Office.

Several miles of ARDC owned hard-surfaced roads are in need of resurfacing.

A drainage ditch running through Section 35 is eroding and is in need of bank stabilization.

Several buildings of cement block construction on the ARDC have deteriorated to the point that rain water comes into the buildings. This is mostly due to a deterioration of the mortar between the blocks. A program to point and tuck the blocks in these buildings or place siding over them is needed.

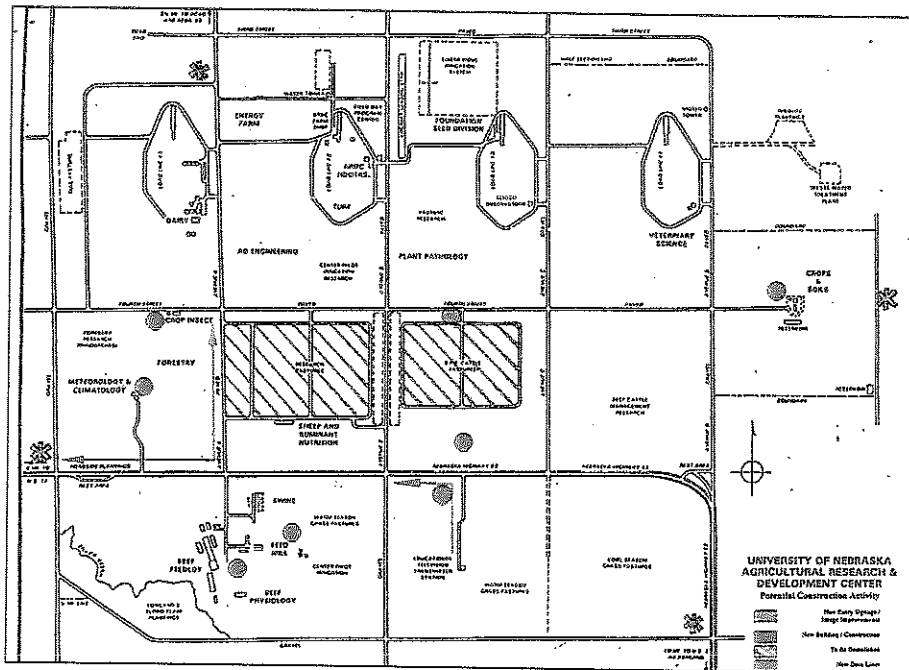
The ARDC currently operates a waste water treatment plant. This plant is scheduled to cease operation on June 29, 2001. Before this date, several septic systems with leach fields will need to be installed to replace this loss. The waste water treatment plant will need to be demolished after this date.

Changes in potable water treatment requirements and other water quality issues may necessitate a major change in the water treatment and distribution system at the ARDC. Possible solutions include joining a rural water district and replacement and redesign of the current system. Either solution is likely to be costly.

k. ADA inventory/needs

An ADA inventory has not been done for all facilities at the ARDC. It has been done for the public access facilities on the ARDC.

3. Concept Plan



ARDC Concept Plan shows potential building sites and demolition locations and locations for signage and data communication upgrades. Further study is recommended for the master planning of this campus.

H. Southeast Research and Extension Center, Lincoln

The Southeast Research and Extension Center (SREC) is located on UNL's East Campus. For information dealing with this location see the East Campus section of the Master Plan Document.

I. Listing of Projects

See following page.

University of Nebraska
1998 Campus Master Plan Update
City Campus Project Phasing and Status

Building or Project (Estimated Cost Where Available) (1)	Approved			Not Approved		
	LB 1100 (2)	1999-2001 CCBR (3)	Capital Campaign (4)	Site Proposals (5)	Parking Projects (6)	Other Proposals (7)
Extended Campuses Phase I 1999-2005						
Greater Nebraska Projects						
WCREC - Snyder Building Renovation (\$1,105,000)	x					
WCREC - Snyder Building Addition (\$750,000)						x
NEREC - Haskell Building Improvements (\$600,000)						x
SCREC - Plant Pathology Greenhouse (\$180,000)						x
SCREC - Headquarters Building Improvements (\$475,000)						x
ARDC - Replace Dairy Milking Parlor (\$2,400,000)						x
ARDC - Replace Phase 1,2 & 3 Swine Buildings (\$5,000,000)						x
PHREC - Panhandle Extended Education Project (\$200,000)						x
Roadway & Parking Improvements(\$700,000)				x	x	
Extended Campuses Phase II 2006-2011						
Greater Nebraska Projects						
PHREC - Panhandle Learning Facility (\$2,000,000)						x
ARDC - Pesticide/Seed Storage (\$380,000)						x
ARDC - Bulk Equipment/Facility Shop (\$950,000)						x
ARDC - Water Distribution (\$3,000,000)				x		
Extended Campuses Phase III 2012-Beyond						
Greater Nebraska Projects						
To Be Determined						
Notes:						
(1) Some cost estimates are preliminary and subject to change						
(2) Projects included in the deferred maintenance initiative (LB 1100) funded by the Nebraska Legislature.						
(3) Projects included in the University of Nebraska Capital Construction Budget Request for the 1999-2001 Biennium.						
(4) Projects targeted in the University of Nebraska Foundaion Capital Campaign.						
(5) Street, landscape and other site improvements.						
(6) Surface parking improvements.						
(7) Other funding sources or funding sources to be determined.						

J. Design Guidelines

The following brief guidelines have been prepared to assist the Extended Campuses with ongoing maintenance and new construction with the goal of improving and creating a unified, pleasing, yet functional, campus environment. These should be revised and expanded, as necessary, if a more detailed master planning effort is undertaken in the future.

Scale/Proportion

The design of new buildings should be in keeping with the scale of existing structures. Additions to existing buildings should acknowledge the scale and proportion of the existing structure in the design.

Building Placement

New buildings or additions should be located in alignment with existing structures where practical and should be located in zones of similar function. Care should be taken to preserve the layout of the existing campus roadways and alignments. Service to buildings should be a priority as well as clearances for machinery maneuverability.

Material Palette

Materials should be consistent with existing where practical. Additions should match existing material palettes and colors. New construction should utilize materials that complement or are consistent with materials in the use zone. Choose construction materials and systems for long-term maintenance performance and durability.

Facade Elements

New construction should consider the fenestration of existing buildings. Window patterns and door openings should relate to existing structures when possible. Additions should incorporate similar architectural details, such as eave details, window trim and mullion patterns.

Orientation

Buildings should be oriented to provide the greatest solar benefit. Fenestration should be designed to gain full advantage of natural light, ventilation and passive solar benefit.

Entries

Entries should be easily identifiable and be located in relationship to pedestrian pathways and circulation systems.

Landscape Elements

Major public structures should incorporate landscape features to help delineate and reinforce main entries. Existing arboretums and natural features worthy of preservation must be protected from encroachment of facilities, etc.

Signage

A complete signage system should be developed for the Extended Campuses as a whole. A hierarchy of signage should be utilized. Large directional signs should direct traffic from major highways, with smaller signs at minor roads which comply with the Department of Roads standards. The main campus entry must contain a well positioned sign marking the entrance. Within the campus, each public structure should incorporate building signage to guide and welcome visitors.

Appendix

STRATEGIC PLAN

University of Nebraska-Lincoln

A Work in Progress

VISION STATEMENT

The object of the University of Nebraska-Lincoln, as expressed in the University's charter of 1869, is to afford to the inhabitants of the state the means of acquiring a thorough knowledge of the various branches of literature, science, and the arts, and to prepare students for productive lives in agriculture, engineering, business and the professions.

We envision the University as a community of scholars engaged in continuous learning and the creation of new knowledge, whose campus is the entire state of Nebraska, whose textbook is the world and the universe beyond it. Our community embraces all cultures and nations, studies the past in order to serve in the present and to prepare for the future. We seek the truth for its own sake.

We are a community that assists students in forming personal ethical and value systems that will guide their lives and enable them to be good citizens in a free and democratic society.

We envision a mission of educational outreach and service to all of the people of the state, building Nebraska's economy and contributing to the quality of life in the state and beyond.

STATEMENT OF PURPOSE

The University of Nebraska-Lincoln seeks to fulfill the charge stated in its charter of 1869 "...to afford to the inhabitants of the state the means of acquiring a thorough knowledge of the various branches of literature, science, and the arts," and to fulfill its responsibilities as a land-grant university. This charge guides the formation of our entire agenda, expressed in our three principal missions of 1) teaching and learning; 2) research, scholarship and creative activity; and 3) outreach and public service. The 9/29/95 Board of Regents policy statement on The Relationship of Teaching, Research and Service at the University of Nebraska reaffirms that agenda.

The University of Nebraska-Lincoln continues to place a high priority on undergraduate education, building on recent bold initiatives that promote academic quality and excellence. These initiatives will be complemented by nation-

ally and internationally competitive graduate and professional programs. We will continue to provide an environment that is conducive to the growth and development of students and ensures that all students have the opportunity to succeed.

We seek to keep Nebraska's best in Nebraska and to attract the nation's and world's best. -The University of Nebraska-Lincoln dedicates itself to an intensified program of recruitment for academically talented and gifted students and to programs that support the retention of all students. The current Honors Program will be enhanced, creating a community of young scholars and outstanding faculty working together.

The vibrant research and creative community at UNL energizes the learning environment for undergraduate, graduate, professional and non-traditional students in Nebraska. As a Carnegie Foundation Research I university whose faculty are increasingly recognized nationally and internationally for their scholarship and creative activity, UNL will help Nebraska retain its best and brightest students. In research, faculty and students will continue to create new knowledge which can be applied to address challenges faced by our communities, our state, our nation and the world. Through research and creative activity, UNL will advance areas of knowledge and culture essential for human fulfillment, and support Nebraska by maintaining a competitive edge in the world marketplace. This will help attract new residents and businesses to Nebraska.

We will seek excellence in a select number of research, professional and graduate programs and enable them to achieve a level of quality that places them among the top programs in the nation and beyond. This will bring important recognition to UNL as we strive to recruit and retain outstanding faculty, and it will provide positive benefits to the State by strengthening economic competitiveness and enhancing Nebraska's reputation for quality education. Our educational outreach and public service mission is a direct outgrowth of our teaching, research and creative activity, serving the economies and quality of life of all of Nebraska's citizens.

We shall extend our focus from teaching to learning, recognizing that learning is a life-long experience that will take place across the state and beyond in businesses, communities, and homes as well as on our Lincoln campus. We will increase the collaboration of UNL's Cooperative Extension Division, the Division of Continuing Studies, Nebraska Educational Telecommunications, Engineering Extension, and the academic units to support UNL outreach objectives.

The University of Nebraska-Lincoln is committed to enhancing the quality of life in Nebraska by promoting economic development in the state and by providing access to superb artistic and cultural programs. UNL will strengthen its state-wide distribution of human resources and electronic delivery capabilities designed to serve all citizens of Nebraska. The Division of Continuing Studies, Nebraska Educational Telecommunications, the Cooperative Extension Division, and the outreach programs of our colleges and libraries will serve as windows to the resources of UNL. Cooperative Extension Offices and IANR District Research and Extension Centers will serve as hubs that connect Ne-

braska's communities to each other and to appropriate UNL resources. The University will build on Nebraska's national leadership role in distance education and outreach to deliver a broad array of educational, service and cultural programs to every corner of the state and beyond.

The students, faculty, and staff of the University of Nebraska-Lincoln and its visitors must be supported by an environment that encourages intellectual growth and human interaction. The facilities and grounds of our campuses will be functional, safe, accessible, well-maintained, and responsive to the changing needs of our programs and the people we serve. Our campuses will possess a sense of place, beauty and functionality that clearly represents the priorities and aspirations of this institution.

There is an intense competition within the state for resources and nationally for talented faculty, staff and students. We will become more efficient and cost effective in our administrative processes while at the same time, cultivating and nurturing an effective, inclusive and caring campus community. We will emphasize teamwork, shared responsibilities, and goals that cross departmental lines.

Finally, we shall seek to create a culture at UNL that embraces change and innovation, while still valuing our traditions of shared authority and collegial governance. We will utilize new technologies to create efficiencies, recognizing that investments in quality will largely come from the redirection of existing resources.

STRATEGIC AGENDA

The Strategic Agenda of the University of Nebraska-Lincoln supports the broad themes and initiatives presented in its vision statement and statement of purpose, and is designed to link them with the action and budget plans of its units. Although the strategic items are organized according to UNL's three principal missions, they are in many instances interdependent.

Teaching and Learning

- Enhance the Honors Program to serve the needs of exceptionally able undergraduate students. Assist departments and faculty to develop these programs.
- Use the Honors Program, academic scholarships, leadership scholarships, and other opportunities to attract and retain academically and artistically talented students from Nebraska and beyond our state's borders, yielding a student population that is well-prepared to be academically successful at UNL.

- Expand Engineering Programs in Omaha and statewide. Focus on the areas of Computer and Electronics Engineering and Construction-Infrastructure Engineering.
- Improve undergraduate student retention and graduation rates by enhancing the advising of first-year students and by encouraging innovative institutional and collegiate programs aimed at improving student achievement and retention. Pre-professional advising in college advising centers will also be enhanced.
- Enhance opportunities for students to apply academic learning in part-time work settings and through internships, benefiting both students and employers.
- Strengthen the undergraduate program by fully implementing the recently established Comprehensive Education Program for all undergraduate students.
- Broaden undergraduate, graduate and professional learning experiences by expanding discipline-based, multi-disciplinary and international opportunities in research and creative activity.
- Expand the use of technology throughout the curriculum, increase the availability of technologies to faculty and students, and provide faculty development opportunities in the use of new instructional technologies and information resources.
- Utilize effectively and fully the Academy of Distinguished Teachers as advocates of teaching, resources to other faculty, and advisors to the Office of Academic Affairs on matters involving the enhancement of teaching.
- Promote quality teaching and learning through sustained dissemination of the “peer review of teaching” project, and faculty development activities.
- Provide special guidance and development opportunities for graduate students who assist in the teaching of undergraduates to help them develop effective ways of communicating subject matter to and building the skills of our beginning students.
- Establish department/discipline/faculty based strategies to assess student learning and achievements. Respond to the assessment findings during UNL’s planning and budgeting processes.
- Pay particular attention to the needs of older and returning adult students, commuter students, distance learners, students with disabilities, graduate students, minority students and international students.
- Provide multicultural and international content within the curricula that reflects the contributions of all peoples, and emphasizes the impact of global

issues and the emerging international economy. Expand intercultural learning opportunities through work, internships, travel and study abroad.

Research and Creative Activity

- Support interdisciplinary clusters of research and creative excellence that respond to Nebraska's high priority needs.
- Actively work to sustain UNL's national standing as a Carnegie Foundation Research I University.
- Seek increased external support from federal, state (commodity boards, state agencies, and the Nebraska Research Initiative) and private funding sources to enhance UNL's areas of research and creative strength.
- Facilitate the transfer of ideas, processes and technologies to the private sector to expand the state's economic base and its technology and high technology presence while aiding in the sustainability of its natural resources.
- Develop and provide support for nationally and internationally competitive graduate and professional programs in areas of research and creative excellence.
- Expand collaborative research and creative activity across campus units and with other academic institutions, the private sector, and government agencies through the development of selected regional, national and international programs.

Outreach

- Collaborate with state agencies, University of Nebraska sister campuses, other postsecondary institutions, hospitals, schools, museums, artistic and cultural entities, and libraries to bring educational programs and outreach services to schools, employers, communities and homes throughout Nebraska and beyond.
- Expand active partnerships throughout Nebraska to promote economic development and enhance technical assistance programs for the state's industrial and entrepreneurial clientele.
- Serve Nebraska through the delivery of educational programs and applied research that focuses on value-added product development; policy analysis; business management systems; human resources development with special emphasis on children, youth and family; natural resource management; and community revitalization.

- Contribute to the enhancement of Nebraska's economy and quality of life through profitability and sustainable system programs for businesses, farms, ranches, communities, and cities. Develop community awareness and planning to address environmentally related challenges in order to make the state a leader in the establishment and retention of owner-operated farms, small businesses, and quality jobs.
- Enhance the cultural environment of the state through coordination and extension programs of the College of Fine and Performing Arts and its affiliates: the Lied Center for Performing Arts, Sheldon Art Gallery, the Lentz Center for Asian Culture, and the Center for Great Plains Studies; the University of Nebraska State Museum; the Botanical Garden and Arboretum; and other university programs. Encourage partnerships among these programs and public organizations throughout Nebraska.

The Campus Community

- Increase cultural, ethnic, racial, geographical, and gender diversity within the student body, faculty, and staff through continued attention to recruitment, hiring and retention. Foster discussion of diversity inside and outside the classroom. Provide programs and opportunities which enhance experiential learning about other cultures and people.
- Assure that appropriate standards recognizing and rewarding excellence in teaching, research and outreach are maintained.
- Provide competitive salaries and benefits to attract and retain excellent faculty and staff.
- Invest in faculty development to position programs at the leading edge in this era of rapid technological and societal change.
- Enhance opportunities for career advancement for managerial/professional and office/service employees and provide a flexible reward structure that recognizes merit and outstanding service.
- Implement an administrative computing system(s) that meets the management information needs of the campus; provides for personalized and efficient service to students, faculty, and staff; and provides appropriate support and communications linkages among all academic and non-academic units.
- Explore alternatives and make changes in procedures, policies and operations to strengthen quality and effectiveness and to increase efficiency. Maintain a level of funding for library and operating functions that will appropriately support the missions and activities of our students, faculty and staff.

- Complete UNL's information technologies infrastructure by finishing the fiber-optic backbone, rewiring buildings and providing state-of-the-art hardware and software.
- Develop a facilities care plan for the maintenance, improvement and adaptation of existing facilities and infrastructure. Expand the deferred maintenance plan. Work in cooperation with the State to establish a budget that keeps pace with ongoing UNL maintenance requirements and target selected major renovation projects for biennial funding.
- Continue to support the development of the campus environment as a place that combines function with beauty. Recognize the contribution a well-planned and maintained campus will have on our ability to recruit and retain high quality students, faculty and staff. Promote the formal and informal uses of the exterior spaces, plantings, and artwork on campus as learning opportunities outside the classroom.
- Seek federal and state funding and work with the University of Nebraska Foundation to raise private funds for selected high priority programs and construction/renovation projects.
- Maintain excellence in our self-supporting intercollegiate athletic programs, in both team records and the academic achievement of our student athletes. Foster continued interaction of intercollegiate athletics and the campus academic and recreation programs that serve students, faculty and staff.
- Ensure compliance with federal and state standards of accessibility, environmental quality and work place safety in all UNL operations.

I. Addendum #1
July 30, 1999

A. City Campus

I. Introduction

On page IV-2 of the University of Nebraska-Lincoln Master Plan proposal dated December 12, 1998, the fourth paragraph of the introduction states, " Extension of the mall east of 16th Street to the Beadle Center will require acquisition of the Alpha Chi Omega Sorority and the Sigma Alpha Mu Fraternity. Negotiations are underway with Alpha Chi Omega to determine a relocation and acquisition strategy that is satisfactory to the sorority and the university, and the university is holding discussions with the fraternity on the acquisition of its property. The Chancellor has pledged not to exercise the power of eminent domain to acquire the sorority's property. August 1, 1999 has been established as the completion date for the sorority and university to reach a mutually acceptable agreement on the terms of relocating the sorority. If an agreement is not reached by that date, the Alpha Chi Omega Sorority will remain at its present location and the University of Nebraska-Lincoln Master Plan will be amended accordingly."

The Alpha Chi Omega Sorority and the University of Nebraska-Lincoln have not been able to identify a mutually agreeable solution within the time-frame established. This addendum reflects an amendment to the City Campus Master Site Plan. The amendment extends the Vine Street Mall east only to 15th Street. This modification has necessitated several other related site adjustments to the proposed Research and Development (R & D) quadrangle located in the southeast quadrant of the campus, and refinements to the reconfigured Vine Street Mall. The following sections briefly describe those modifications.

2. Modifications to the Master Site Plan.

a. Vine Street Mall (referred to as Memorial Mall in the December 1998 Master Plan)

The Vine Street Mall will be extended east from 14th Street to the west side of 15th Street. At this location the south mall drive will loop north to connect to Vine Street.

b. New Location for Proposed Clock Tower Plaza

The proposed privately funded clock tower plaza will be relocated on axis with the east sidewalk of 14th Street. This alignment will provide an excellent view of the clock tower from both the north and south edges of campus.

c. Esther Kauffman Academic Residential Center

The Kauffman Academic Residential Center building has been shifted so that the north façade is aligned with the north façade of the Seaton Hall. The walks and landscaping in the open space south of the Kauffman site have been redesigned to respond to this shift.

d. Proposed Research and Development Area

The proposed R & D quadrangle has been reconfigured. The two buildings proposed along the north edge of the R&D quad have been moved farther north to align with Vine Street and two possible building sites added directly south of those sites.

e. Proposed Residential Learning Center

The proposed Residential Learning Center will respect the setbacks of Vine Street on the north and the Cather Pound Residence Hall on the east.

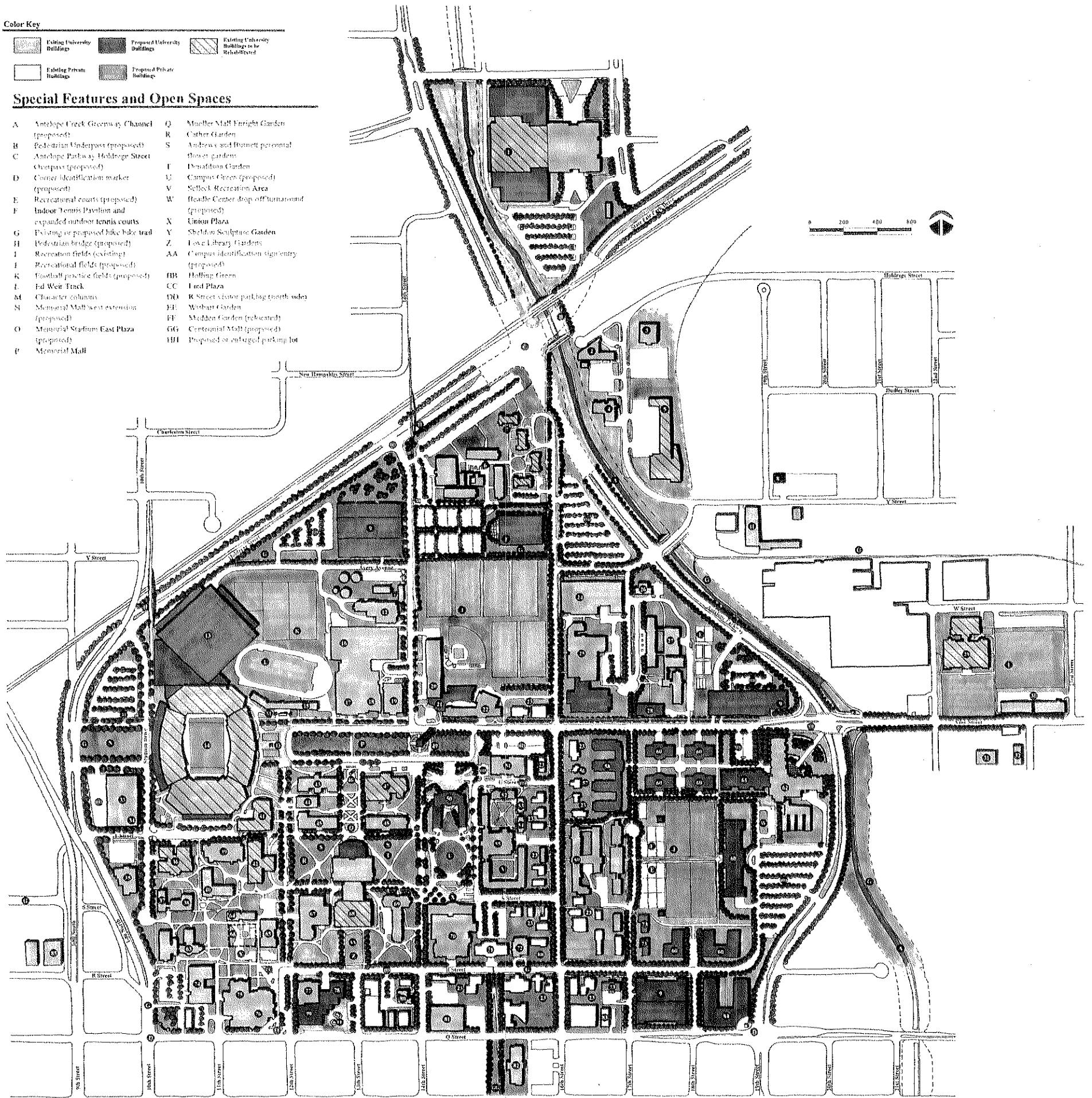
3. Revised City Campus Master Site Plan

The revised Master Site Plan (dated 7-30-99) containing these modifications is included as the fifth page of this addendum. This supersedes the Master Site Plan displayed on page IV-4 of the Master Plan Proposal dated December 12, 1998

Color Key

Special Features and Open Spaces

- | | |
|---|--|
| A Antelope Creek Greenway Channel (proposed) | Q Mueller Mall Enright Garden |
| B Pedestrian Underpass (proposed) | R Cather Garden |
| C Antelope Parkway Holdrege Street Overpass (proposed) | S Andrews and Burnett perennial flower gardens |
| D Corner identification marker (proposed) | T Donaldson Garden |
| E Recreational courts (proposed) | U Campus Green (proposed) |
| F Indoor Tennis Pavilion and expanded outdoor tennis courts | V Sellock Recreation Area |
| G Existing or proposed bike/bike trail | W Beadle Center drop-off turnaround (proposed) |
| H Pedestrian bridge (proposed) | X Union Plaza |
| I Recreation fields (existing) | Y Sheldon Sculpture Garden |
| J Recreational fields (proposed) | Z Love Library Gardens |
| K Football practice fields (proposed) | AA Campus identification signetry (proposed) |
| L Ed Weir Track | BB Holding Green |
| M Character columns | CC Lind Plaza |
| N Memorial Mall west extension (proposed) | DD R Street visitor parking north side |
| O Memorial Stadium East Plaza (proposed) | EE Weisbar Garden (rehabilitated) |
| P Memorial Mall | FF Midden Garden (rehabilitated) |
| | GG Centennial Mall (proposed) |
| | HH Proposed or enlarged parking lot |



M A S T E R P L A N

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Facilities

1 Devaney Sports Center and proposed additions	16 Cook Pavilion	34 Parking Services	52 Seaton Hall	* 68 Love Library and proposed addition
2 University Police Services	17 Coliseum	35 501 Building	53 Benton Hall	69 Canfield Administration Building
3 Landscape Services	18 Sapp Recreation Center	* 36 Richards Hall	54 Fairfield Hall	70 Nebraska Union
4 Maintenance	19 Military and Naval Science	37 Behlen Lab	55 Sellock Quadrangle	71 Nebraska State Historical Society
5 Food Stores, Business, Mail and Distribution Services	20 Mabel Lee Hall	38 Brace Lab	56 Syford House	72 Wick Alumni Center
6 Harper, Schramm, Smith Residence Halls	* 21 Proposed future replacement for Lyman/Bancroft Halls	39 Maister Hall	57 Cornerstone Chapel	73 Proposed future Greek houses
7 Existing Greek Houses to be renovated to future use	22 Henzlik Hall	40 Ferguson Hall	58 Proposed future residential learning center	74 Westbrook Music Building
8 Proposed transportation services replacement	23 Existing Greek houses	* 41 Avery Hall	59 Cather, Pound, Neihardt Residence Halls	75 Kimball Recital Hall
9 Proposed future parking garage (Number not used)	24 Nebraska Hall	* 42 Hamilton Hall and proposed hazardous materials addition	60 Proposed future R & D Building	76 Lied Center for Performing Arts
10 Facilities Management	25 Walter Scott Engineering Center and proposed Chemical Engineering addition	43 Bessey Hall	61 Proposed future addition to Beadle Center	77 Temple Building
11 Utility Plant	26 G.E. Building	44 Oldfather Hall	62 Beadle Center	78 Proposed future Visitor's Center
12 Proposed future athletic performance complex	27 Abel, Sandoz Residence Halls	45 Burnett Hall	63 Architectural Hall	79 Proposed future Mary R. Ross Film Theater
13 Memorial Stadium	28 Proposed undetermined future use	46 Mueller Tower	64 Woods Hall	80 Culture Center
14 Ed Weir Track spectator seating	29 Whittier Building	47 Morrill Hall	65 Sheldon Art Gallery	81 Alexander Building
	30 Vine Street Apartments	48 Andrews Hall	66 Proposed future underground addition to Sheldon Art Gallery	82 College of Journalism
	31 U Street Apartments	49 Proposed future clock tower	67 CBA (Business Administration)	83 Credit Union
	32 Husker Hall	50 Esther L. Kauffman residential center		84 Proposed future mixed use development or parking
	33 Stadium Drive parking garage	51 University Health Center		85 University Press warehouse

* LB 1100 deferred maintenance projects