

ENVIRONMENTAL IMPACT EVALUATION

*Prepared in accordance with the
Connecticut Environmental Policy Act*

Eastern Connecticut State University 2008 Campus Plan Update

*Willimantic and Mansfield, Connecticut
DCS Project No. BI-RW-295*



MARCH 5, 2013

Sponsoring Agency:
*State of Connecticut
Board of Regents for Connecticut
State Colleges and Universities*

Participating Agencies:
*State of Connecticut
Eastern Connecticut State University &
Department of Construction Services*

*Prepared by:
Department of Construction Services
Environmental Planning*

Project: Eastern Connecticut State University 2008 Campus Plan Update

Project Number: BI-RW-295

Location: Willimantic and Mansfield, Connecticut (See Appendix A)

Sponsoring Agency: Board of Regents for Connecticut State Colleges and Universities

Participating Agencies: Eastern Connecticut State University and the Department of Construction Services (DCS)

Date: March 5, 2013

EIE Distribution List:

CT Department of Energy and Environmental Protection
CT Council on Environmental Quality
CT Office of Policy and Management
CT State Historic Preservation Office
Willimantic and Mansfield Town Clerk Offices
Mansfield and Willimantic Public Libraries

Send comments to:

Keith Epstein, AIA
Director of Capital Projects
Connecticut Board of Regents
61 Woodland Street
Hartford, Connecticut 06105
Fax: 860-493-0059
Email: epsteink@ct.edu

With copy to:

Jeff Bolton, Supervising Environmental Analyst
Department of Construction Services
165 Capitol Avenue, Room 482
Hartford, Connecticut 06106
Phone: 860-713-5706
Email: jeffrey.bolton@ct.gov

Appendices:

<i>Appendix A</i>	Figure 1: General Location Figure 2: Existing Site Conditions Figure 3: Campus Master Plan Figure 4: Fine Arts Instructional Center
<i>Appendix B</i>	Campus Master Plan List of Projects
<i>Appendix C</i>	Initial Environmental Review
<i>Appendix D</i>	Campus Subwatershed Maps
<i>Appendix E</i>	Southern Wetland Photos
<i>Appendix F</i>	Early Public Scoping Notices and Related Material

Summary:

The following two documents detail the proposed action at Eastern Connecticut State University (“Eastern”):

- *Program for the Master Plan Report prepared by Paulien & Associates Inc. May 2008. This document is referred throughout this Environmental Impact Evaluation (EIE) as the Program”.*
- *The Eastern Connecticut State University Campus Master Plan prepared by Symmes Maini & McKee Associates dated October 2008. This document is referred to as “the Plan” throughout this EIE.*

The educational space needs of the University were analyzed and recommendations were made in the May 2008 Program for the Master Plan Report. The Plan is part of an update to the master plan first prepared in 1992 and revised in 1997. The Plan is a baseline for future campus development and funding requests to the Board of Regents. The Plan update for Eastern is a guide for incremental growth that responds to stated needs, planned expansions, and changes in facilities needs.

Eastern is comprised two campuses: the Main Campus, located south of Route 6; and the Mansfield Campus which consists of athletic facilities, located north of the Route 6 (see Figure 1).

The full Plan can be viewed online here: <http://www.ct.gov/dcs/cwp/view.asp?a=4224&Q=520014&PM=1>

I. Proposed Action Description

The Plan is a ten-year comprehensive physical development plan to enhance the academic, residential, and community life of the campus. It identifies new building and renovation projects that should be made by the target year 2017; with the understanding that all projects may not be accomplished over the ten-year period. For location and description of the capital improvement projects under the Plan, see Appendices A and B.

The Plan’s advantage is that it provides Eastern the flexibility to shift the priority of projects or their related sequence of construction if unexpected fluctuations in state bond funding and/or Connecticut Health and Educational Facilities Authority (CHEFA) financing occur or if new public, grant, or private funding sources for specific projects are secured in the future.

New construction is proposed for both the Main and Mansfield campuses. Under the Plan, new building locations

and massing seek to enhance the existing campus and to create new quadrangles and linked exterior spaces throughout the University. Circulation, parking and infrastructure improvements are emphasized with new development.

II. Purpose and Need

Eastern engaged in an extensive strategic planning process that focused on developing a vision- and values-driven proposal for the University’s future. The educational space requirements were analyzed and recommendations were made in the Program.

The tabulated campus-wide and specific academic and administrative space requirements are based on target goals with respect to estimated enrollment, staff increases, and other relevant academic program data. The detailed analysis in the Program document used the year 2007 as the base year and 2017 as the target year.

Based on the projected increase of student enrollment, there is a demand for more student housing, classroom space, expanded sports facilities, improvements to pedestrian and vehicular circulation and increased parking.

The Plan addresses the facility requirements needed to accommodate projected program growth and other University needs through 2017. The Plan addresses a number of common challenges facing modern university campuses, including new academic emphases, the needs of a residential population, enrollment growth, parking, pedestrian and vehicular circulation, and building maintenance.

The projected target year for on-campus full-time equivalent (FTE) students is 4,589, a 5.1% increase over the base year, although growth percentages vary by school. The analysis illustrates deficits of varying degrees in most of the academic schools and administrative units during the base year. With the exception of the departments categorized as School of Arts & Sciences, Academic Affairs, and Institutional Advancement, all have deficits in space requirements for the target year.

Currently, Eastern has approximately 1,088,800 assignable square feet (ASF) of existing space. Several departments will be able to relocate due to the recent completion of the Science and Public Safety Buildings and when the new Fine Arts Instructional Center is completed; thereby vacating existing space. The space available will be primarily in Goddard Hall, Media Hall, Webb Hall, Winthrop Hall, and Shafer Hall. Several buildings have been or are proposed for demolition, including the former Public Safety Building, 372 High Street, 264 High Street, the Low-Rise Apartments and Eastern Hall; therefore, these are not included in the target

year space. The net target year existing space is approximately 1,110,900 ASF.

The guideline generated a need for 1,252,202 ASF of space in the base year, which includes Inactive/Conversion Space. This is a deficit of 163,331 ASF (-15% of existing base year space). The target year guideline illustrates a need of 1,337,797 ASF; a deficit of 307,929 ASF (-30%). Tables 1 and 2 defines Eastern’s space needs

**TABLE 1
FALL 2007 (BASE YEAR)**

Total Student FTE = 4,366: Total Student Head Count = 5,137

College/Unit	Existing ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic ¹	219,188	261,269	(120,229)	(85%)
Administrative ²	842,470	990,933	(153,869)	(18%)
Inactive/Conversion Space	12,282			
Other	14,931			
TOTAL³	1,088,871	1,252,202	(163,331)	(15%)

**TABLE 2
FALL 2017 (TARGET YEAR)**

Total Student FTE = 4,589: Total Student Head Count = 5,400

College/Unit	Master Plan ASF	Guideline ASF	Surplus/ (Deficit)	Percent Surplus/ (Deficit)
Academic ¹	236,921	281,957	(45,036)	(19%)
Administrative	792,947	1,055,840	(262,893)	(33%)
Inactive/Conversion Space	66,163			
Other	14,931			
TOTAL	1,110,962	1,337,797	(307,929)	(30%)

1. Includes General Purpose Classrooms, Lounge Space, Collaborative Learning Space, and the new Science Building
2. Includes the new Public Safety building
3. Inactive/Conversion Space consists of space being vacated as the result of new facilities being constructed.

III. Description of the Environment of the Project Area

Eastern is located in Willimantic, Connecticut, on one main campus, with a small portion of the campus separated to the south by the Kramer building owned by the Town of Willimantic. A second campus is located ¼ mile north of the Main Campus in Mansfield. The Mansfield Campus annex contains most of the University's athletic fields and facilities. The Eastern main campus is accessible from Route 6, between Routes 32 and 66. It is located in an urban residential area with several area schools nearby, approximately one-quarter mile from the center of town.

The Eastern campus currently includes 182 total acres, with the Mansfield Campus making up 73 of those acres (see Figure 2). The main portion of the campus is defined by High, Windham and Prospect streets, with three public schools on the south, east and west sides. To the north is a residential neighborhood and undeveloped woodland with wetland features. There are five internal campus roads for

vehicular circulation. The campus is characterized primarily by rolling topography and is north-south in orientation. Access to campus is by car, and around campus is by walking or shuttle bus. The Mansfield Campus is characterized by athletic fields with dedicated parking, and undeveloped land that is primarily vegetation and wetlands. Access to the Mansfield Campus is by car or shuttle. Pedestrian access is possible but lacks amenities, such as lighting and signage.

Expansion of the campus is somewhat constrained by the ability to acquire property and by surrounding natural features including steep slopes and wetlands.

See the attached Initial Environmental Review (IER) in Appendix C and Section Two of the Plan for additional information pertaining to the environmental setting of Eastern.

IV. Description and Analysis of Reasonable Alternatives and Available Sites

a. Proposed Action (“Preferred Alternative”): According to the Plan, the Preferred Alternative is comprised of the elements and configurations that best reflected needs and goals of the University. The Preferred Alternative was derived from a series of concept alternatives and optimized to meet the needs of Eastern through the planning period.

The Preferred Alternative proposes major vehicular circulation reorganization, an element that was consistently proposed in all concept alternatives. This reorganization allows for creation of formal campus spaces and the development of a pedestrian circulation system. Portions of Eastern Road and Charter Oak Road are proposed for removal to allow for uninterrupted green space and pedestrian circulation. Vehicular circulation is organized around the perimeter of the campus.

New quadrangles and recreation space are proposed within the campus core. This involves relocating surface parking, strategically placing new buildings and building expansions to define a series of connected green spaces for a pedestrian-friendly campus.

For more detailed information see Appendices A and B and Section Six of the Plan.

b. Campus Master Plan Concept Alternatives: Three “Concept Alternatives” were evaluated to meet the programmatic and space needs of Eastern. For details on each alternative, see Section Five of the Plan. The major difference between these three concepts is the location of the new Fine Arts Instructional Center. The siting of this proposed building does not pose any significant

environmental impacts under any of the alternatives; therefore, these alternatives do not avoid, minimize, or mitigate any impacts associated with the Preferred Alternative. Furthermore, the Board of Regents and Eastern have judged these alternatives to be inferior to that of the Preferred Alternative based upon a variety of factors including facility synergies, vehicular and pedestrian safety, and environmental impacts.

c. No-Action (No-Build) Alternative: Under the No-Build Alternative, the University would not meet its needs in the Base or Target Years as defined in the Plan. Under baseline year (2007), Eastern already has a deficit of 163,331 ASF. The space deficit is 307,929 ASF in the target year (2017). The No-Action alternative therefore negatively impacts Eastern's core values and mission. Eastern would not be able to build on its existing strengths of the campus or work to enhance the identity and image of the University that supports its public liberal arts mission. Eastern's increased need to focus on academic enterprise in addition to providing on-campus residential life experiences would not be realized. This in turn would negatively affect the future of Eastern and the extensive community it supports in the region and State.

Environmental impacts that may be avoided by not providing a campus build-out according to the Plan include: stormwater, wetlands, traffic, demolition and visual impacts associated with historic structures, increase in public water supply and sewer usage, commitment of state funds, and construction related impacts.

d. Controlled and Reasonably Available Sites: Other than the existing campuses within Windham and Mansfield, the Board of Regents and Eastern do not have available sites for the Plan that are under its control, care, and custody. However, alternative sites within the existing campus were evaluated through the master planning process as described previously.

Due to the existing need for renovations, improvements, and replacement of campus buildings and facilities, and to the limited options for acquisition of additional property for campus expansion, no reasonably available off-site locations were identified in the Plan that could achieve its goals and objectives. At this time, there are no other reasonably available sites for the Board of Regents that would meet the purpose and need for Eastern.

V. Potential Environmental Impacts

Based on the IER, substantive comments received during the early public scoping process, and the preparation of the EIE, the following topic areas were determined not to have potentially significant impacts and therefore are not discussed in further detail in this EIE per the Regulations of

Connecticut State Agencies Section 22a-1a-7(c), unless otherwise noted:

- Air Quality
- Noise
- Water Resources (include floodplains, floodways, stream channel encroachment lines)
- Groundwater Quality and Resources (i.e. Aquifer Protection Area, Public/Private wells)
- Coastal Resources (if applicable)
- Endangered, Threatened, or Special Concern Species or Habitats
- Fish and Wildlife, Habitats, and Ecosystems (natural areas i.e. ecologically significant/sensitive areas)
- Visual Resources (aesthetic and scenic resources)
- Agricultural Lands and Soils
- Pesticides, Toxic or Hazardous Materials
- Energy (Use and Conservation)
- Public Health and Safety
- Consistency with State Environmental Equity Policy

Based on the above reviews and assessments, the following topic areas are the focus of this EIE due to their level of potential impact(s):

- Stormwater Management
- Wetlands
- Traffic
- Water Supply and Sewer Capacity
- Surrounding Land Uses and Neighborhood
- Historic Sites, Districts, and Archeologically Sensitive Areas
- Consistency with State Plan of Conservation and Development
- Construction Related Impacts

Each of these topics, impacts, and potential mitigation measures are discussed below.

a. Stormwater Management

A Campus Stormwater Master Plan (SWMP) is being developed by Milone & MacBroom Inc. and the draft report (July 2012) and can be found at: <http://www.ct.gov/dcs/cwp/view.asp?a=4224&Q=520014&PM=1>

The draft SWMP evaluated on-site drainage systems, overall drainage patterns and base and target year runoff rates. The draft SWMP recommends improvements to the drainage system to ensure the campus improvements do not impact downstream properties.

Stormwater from Eastern's main campus discharges to two watercourses via two primary outfalls: the northern portion of the campus drains to Arboretum Brook while the

southern portion drains to a tributary of the Willimantic River. The majority of the campus, approximately 77%, discharges north to Arboretum Brook, which is a tributary of the Natchaug River.

A small area in the southeast corner of the campus is located outside either of the above referenced watersheds. This approximately 5.04-acre area contains a portion of Windham Street Extension, the Knight House, Counseling Services, Institute of Sustainable Energy, the Honors House, and associated driveways. This portion of the campus drains overland to Prospect Street and eventually to an unnamed tributary of the Willimantic River. Street drainage in Prospect Street also discharges to this culvert. The entire subwatershed discharging runoff from east of the culvert to the culvert structure is 11.37 acres.

The northern 77% of Eastern’s main campus within the Natchaug River drainage basin (CT Department of Energy and Environmental Protection [DEEP] #3208-02-1-L1) includes the parking garages and several of the large parking lots. All runoff discharges directly to the brook through a single outfall located at the northwest corner of the campus. The watercourse flows northward under Route 6 to its confluence with Conantville Brook approximately 2,900 feet downstream of the outfall. Conantville Brook discharges to Sawmill Brook approximately 5,700 feet downstream of this confluence at the southern edge of Eastern’s athletic complex property.

Overall, the Plan improvements result in the net loss of approximately 5.26 acres of impervious cover within the watershed and, therefore, a reduction of impervious coverage value for the Arboretum Brook watershed. The Plan also calls for the rearrangement of many of the sidewalks and quadrangle formations in addition to new lawn/landscape areas. Most notable is the proposed removal of the Eastern Road vehicular access through the center of the campus.

The southern 23% of the campus located in Willimantic River drainage basin (CT DEEP #3100-00-4-R2) drains to a culvert at Prospect Street through a combination of piped systems and open channel. In addition to a portion of the campus, the watercourse flowing under Prospect Street receives runoff from Quarry Street, Mansfield Avenue, Handfield Avenue, Monticello Street, Summit Street Extension, and Ivanhill Street. Eventually, this watercourse empties to the Willimantic River, approximately 2,000 feet south of Eastern.

A major stormwater management goal for Eastern is to maintain or improve current flows for all future improvements by incorporating low-impact development (LID) techniques where applicable to mitigate increased flows from proposed campus improvements. Full buildout

conditions result in a decrease in total impervious coverage due to inclusion of recreation areas, increased lawn areas, replacement of parking lots with parking garages, and improved internal pedestrian mobility via the removal of central campus roads. Table 3 below presents overall peak flows under 2007 and 2017 conditions for the various subwatersheds on campus and the amount of flow reduction needed to maintain current year peak flows once the Plan is implemented. Subwatershed maps are included in Appendix D.

TABLE 3
Summary of 1% Annual Chance Storm Event Peak Flows by Watershed (cubic feet per second)

Watershed ID	2012	2017	Reduction to Maintain 1984 Flows
Arboretum Brook			
10	14	14	0
20	131	131	0
30	57	56	-1
33	246	237	-9
Prospect Street Culvert			
50	154	154	0
51	24	23	-1
52	28	27	-1
55	2	3	1
60	61	61	0
Windham and High Streets			
70	14	14	0
80	11	11	0
90	12	12	0
100	14	14	0
200	2	2	0

The flow reductions for the Prospect Street culvert and Arboretum Brook subwatersheds can easily be achieved through LID strategies.

The draft SWMP recommends specific improvements within the campus to ensure that downstream properties are not impacted as a result of the proposed improvements. Future site design plans and requirements will be required to be consistent with the final SWMP and any associated DEEP Flood Management Certification conditions of approval.

b. Wetlands

Wetlands on the main campus are located in the northwest corner (Arboretum Wetlands) and in the southern portion near the corner of Prospect and Birch Streets (South Wetland). The Arboretum Wetlands, which are wooded and consist of approximately 6.2 acres, are located approximately 30 feet to the northwest of the existing parking garage. As described in the Draft SWMP, detention basins located below two existing parking garages discharge to a tributary that flows through the Arboretum wetlands.

Previous Eastern Master Plan EIEs have adequately documented the Arboretum Wetlands in terms of their function and values and since there are no anticipated impacts proposed to this wetland system, no mitigation is being proposed.

The South Wetland is a small remnant of a larger area that was nearly eliminated by filling and development prior to 1969. Appendix E includes location and photographs of this wetland. The wetland covers approximately 0.3 acres, and contains a small stream that originates from two 24-inch diameter culverts approximately 200 feet north of Prospect Street (see Draft SWMP for drainage details). The wetland is composed of one wetland class, Deciduous Wooded Swamp. It is dominated by red maple, with grey birch, red oak, and elm forming a mostly closed canopy. The thick shrub layer consists of flowering dogwood and large specimens of wild rose, raspberry, and poison ivy. The stream is characterized by small pools and riffles. This open channel/wetland area does not possess the quality function and values of more intact and larger wetland systems.

Under the Plan, the Westside Parking Garage ("PGW") would have a direct impact to the South Wetland. Based on the conceptual layout in the Plan, the entire wetland area (0.3 acres) would be filled or significantly modified. While this is not a high quality wetland system, impacts to this wetland system will be avoided to the extent possible during the design phase.

Any work or construction activity within the inland wetland areas or watercourses that cannot be avoided will be regulated by the Inland Water Resources Division of DEEP pursuant to section 22a-39(h) of the Connecticut General Statutes.

There are potential impacts to the wetland systems due to stormwater runoff and discharge. However, as discussed under the Stormwater Management discussion, mitigation is proposed to reduce water quality/quantity and potential erosion impacts.

There would be no other potential impacts to wetlands as a result of the Plan; therefore no mitigation is proposed, except as noted above with regards to the South Wetland and SWMP.

c. Traffic

The sponsoring and participating agencies will be submitting an Administrative Decision Request to the Office of State Traffic Administration (OSTA) for projects to be initiated within the next five years (Phase I). The Administrative Decision will be a modification to the State Traffic Commission Certificate 1250-D (police station), granted to Eastern in July 17, 2007 for a total of 1,704,515 gross square

feet and 3,115 parking spaces. The following represents the discussion on the Phase I projects and traffic impacts:

1. Facility Maintenance Storage Building (6,000 GSF): This project will consolidate storage of maintenance equipment and supplies that are currently stored in various locations across campus. The proposed project will centralize storage near the existing Facilities Management Building. No additional traffic generation will result from this building.
2. Locker Room and Field Support Facility (7,800 GSF): This project is to allow existing athletic teams and programs to store and use an enclosed facility at the Sports Complex in the Mansfield campus. This will reduce students and athletic support staff from transferring and storing equipment back and forth from the main campus to the sports complex. No additional traffic generation will result from this project. In fact, vehicular trips between campuses should be reduced since equipment will be stored near the fields as a result of this project rather than needing to be transported for each practice session and game.
3. Fine Arts Instructional Center Program (119,012 GSF): Currently, the departments of Visual Arts and Performing Arts are located in Shafer Hall on the south campus with a small amount of space in Beckert Hall. The departments currently have a deficit of 45,683 ASF according to guidelines established in the Program. The Akus Gallery, currently has 3,417 existing ASF located in Shafer Hall, with a deficit of 2,163 ASF. Shafer Hall does not provide an adequate amount or quality of space required for the programs in these departments. Renovation and expansion are not feasible for this type of space.

A new Fine Arts Instructional Center is proposed to house all the space for both departments in the target year space guidelines. The new building will be centrally located along High Street and will enhance Eastern as a public liberal arts university. The location of the Fine Arts Instructional Center near the Student Center provides additional amenities and structured parking.

The Fine Arts Instructional Center will include General Purpose space, Akus Gallery, Performing Arts space and Visual Arts space totaling 88,593 ASF. General Purpose space includes a lobby, a 600 seat auditorium (note: the original number of seats proposed in the Plan called for 900-1,000; however since the design as started, the current number is 600), instructional space, and administration and building services. Performing Arts space includes a 350-seat theater, black box for 150, theater instructional support, and music instructional

support. Visual Arts space includes studios and computer labs.

As these are existing programs that are currently housed on the main campus and art courses are already provided by the University; no new influx of students are anticipated beyond that of the overall growth rate. While the auditorium will hold events, the anticipated timing for events would be held outside of peak traffic hours on evenings and weekends.

There will be a reduction in parking spaces due to the location of the proposed Fine Arts building. For the overall Plan implementation, the total number of parking spaces on campus is expected to be 3,470, an increase of 968 spaces over existing conditions.

Future impacts associated with projects beyond the Phase I projects will be assessed on a project-by-project basis, since traffic conditions can change beyond a five year horizon. Therefore, a full assessment of traffic impacts associated with full build-out is not prudent or reasonable at this time. However, the proposed parking garages will require a traffic and parking study to account for parking space needs and potential traffic impacts and mitigation.

The projected target year on-campus FTE for Eastern is 4,589 students, a 5.1% increase over the base year, although growth percentages vary by school. As the Plan is implemented and new buildings are constructed OSTA review will be required to determine if off-site roadway or intersection improvements are needed to support the campus expansion. If OSTA requires such improvements, the sponsoring and participating agencies will evaluate alternatives and implement improvements accordingly.

d. Water Supply and Sewer Capacity

Water Supply

Windham Water Works (WWW) provides potable water to Eastern. WWW operates a large public water utility in Windham and southern Mansfield that has a single surface water supply source (the Willimantic Reservoir). Withdrawals from the reservoir are authorized by a diversion permit.

Eastern tracks monthly water and sewer usage and this information was used to estimate the projected quantity under the Plan. The estimated quantities were tied to the FTE by assessing the number of gallons per year per FTE (“g/yr/FTE”) for the following years 2008, 2009, and 2010. This generated an average of 1,043 g/yr/FTE. For conservative purposes and in coordination with the WWW, the estimate was rounded up to 1,100 g/yr/FTE.

Based on the Plan’s projected 2017 FTE population of 223, the estimated gallons per year increase is 245,300.

Based on this analysis and verification from WWW (see Appendix F), there will be adequate supply to provide potable drinking water to Eastern through the 2017 planning period and no mitigation is proposed at this time.

Sewer

Wastewater from Eastern is discharged into the Windham wastewater collection system at several locations and conveyed to the Windham Water Pollution Control Authority (WWPCA) treatment facility located on Main Street in Windham. The existing plant has a design capacity of 5.5 million gallons per day.

In order to assess the potential impacts or the WWPCA’s ability to treat estimated flows under the Plan, it is assumed that 100 percent of the increased potable water estimated would be discharged to the sanitary sewer system. The WWPCA has verified it has adequate capacity available within the system to treat the estimated additional flow under the 2017 build out.

WWW and WWPCA also noted the potential assessment/connection fees for new additions/buildings would be charged \$150 per square feet of new building. These would be paid out of project funds.

e. Surrounding Land Uses and Local Plans

The Main campus is zoned R-6 Residence/Professional Office, according to the Town of Windham, Zoning District Map, Effective Date 11/15/12. The Pigeon Road neighborhood and areas to the north and east of campus are zoned Residence (R-4) District. Areas adjacent to the south of campus are zoned Neighborhood Preservation Residence (NPR-1 and NPR-2) Districts. Windham Zoning Regulations (as revised November 15, 2012 and corrected February 12, 2013) allow residential and office uses under the R-6 District, as well as uses associated with educational institutions, including off street parking facilities.

The Mansfield campus is zoned “I” Institutional Zone and a portion of the campus piece around Eaton’s Pond is identified as a Flood Hazard Zone (“FH”) on the Town of Mansfield’s Zoning Map. The uses on this portion of the campus are consistent with the Town’s Zoning Regulations. According to the Town’s 2006 Plan of Conservation and Development “Planned Development Areas” map, the Mansfield campus is identified for “Medium to High-Density Institutional/Mixed Use,” and the Flood Hazard Zone is displayed for reference only. Thus, the uses of this portion of the campus are in keeping with the Town of Mansfield’s Plan of Conservation and Development.

The Windham Region Land Use Plan of 2010 (the 2010 Land Use Plan) published by the Windham Region Council of Governments serves as a guide for regional planning purposes. The Eastern campus, within both Willimantic and Mansfield, is mapped within the “Willimantic Regional Center” on the 2010 Land Use Plan. According to the 2010 Land Use Plan, Regional Centers have the highest development densities and existing utilities, public infrastructure and services that make intensive land use most efficient and appropriate. For these reasons, these areas are the highest priority for all forms of redevelopment and development. Eastern is classified under the Willimantic Regional Center, one of two distinct Central Areas with Public Utilities.

The 2010 Land Use Plan focuses on nine regional goals pertaining to development, housing, employment, heritage, environment, and transportation. The goals support infill development in areas with existing infrastructure, and energy efficient development that does not degrade water quality or threaten wildlife habitats. All proposed projects under the Plan are consistent with these goals of the 2010 Land Use Plan and local zoning.

Mitigation measures are unnecessary due to no expected adverse impacts.

f. Historic Sites, Districts, and Archeologically Sensitive Areas

Below is a list of buildings identified as historic places at Eastern or believed to have historic significance.

- Knight House
- 182 High Street
- 176 High Street
- Grant House
- Burr Hall
- Beckert Hall
- Noble Hall
- 333 Prospect Street

The southern portion of the main campus is located within the Prospect Hill Historic District (see Appendix F). According to the National Register of Historic Places Nomination documentation, the district’s historic focus is on the architectural character of several hundred buildings and structures. Some of these structures are directly adjacent to the Beckert Hall and Shafer Hall block across High Street in between Prospect and Valley Streets.

The Connecticut Environmental Policy Act requires the State Historical Preservation Office to determine whether or not an undertaking sponsored by another agency may have an effect on cultural resources, which include historic,

engineering, architectural, archaeological and landscape assets.

The demolition of the Knight House would have a direct impact under the Plan. The construction of the South Parking Deck (“PDS”, see Figure 3) along the High Street portion of the property could have an indirect visual impact on the historic structures across High Street.

At this point in time, there are no immediate plans to initiate the design for either of these parking structures (PDK and PDS); however early planning and coordination with the State Historic Preservation Office will occur. Some of the potential mitigation measures for the Knight House may include, avoidance of demolition, photo documentation, architectural assessment/documentation, and documentation of no feasible or prudent alternatives to demolition. Possible mitigation measures for the South Parking Deck (PDS) structure may include extensive landscaping along High Street, architectural façade treatments, or less massing of the structure towards High Street.

g. Consistency with State Plan of Conservation and Development

State Plan of Conservation and Development (C&D Plan) (Office of Policy and Management [OPM], 2005) is a statement of the State's growth, resource management, and public investment policies and is designed to guide the planning and decision-making processes of the state using a balanced response to human, environmental, and economic needs in a manner which best suits the future of Connecticut. The C&D Plan provides a Locational Guide Map that identifies eight land categories. Each category has associated development and conservation strategies and priorities based on the area’s character of development, social structure, economic base, natural conditions, and public service facilities.

All of the main campus is located within the Regional Center category with portions within a historic district, and the Mansfield campus is located within a Growth Area according to the current Locational Guide Map (2005). Regional Centers encompass land areas containing traditional core area commercial, industrial, transportation, specialized institutional services, or facilities of intertown significance, and meet specific criteria regarding minimum population density and qualities of housing and income level. Regional Centers are considered a development priority 1, which is the “highest priority for affirmatively supporting rehabilitation and further development toward revitalization of the economic, social, and physical environment” of these areas. The wetland areas of campus are considered Preservation Areas. The State Action Strategy for Preservation Areas is to “foster the

identification of significant resource, heritage, recreation, and hazardous areas of statewide significance and advocate their protection by public and quasi-public agencies in their planning and investment decisions. Avoid support for structural development except as directly consistent with the preservation values.” These areas are designated a Conservation Priority of 2.

The Mansfield campus is located within a Growth Area, which contains “lands near Regional Centers or Neighborhood Conservation Areas that provide the opportunity for staged urban expansion generally in conformance with municipal or regional development plans.” These areas are supported under the C&D Plan as development priority 3 (high) for “concentration of new growth that occurs outside of Regional Centers and Neighborhood Conservation Areas into specified areas capable of supporting large-scale, mixed uses and densities in close relationship to the Regional Centers”.

At the present time, the C&D Plan is in the process of being updated by OPM. The proposed Locational Guide Map identifies a variety of land categories. Each category is based upon a number of factors that describe the area’s character of development, social structure, economic base, natural conditions, and public service facilities.

Almost all of the main campus is located within a Regional Center and a Priority Funding Area with 3-4 Criteria, and the Mansfield campus is located within a Balanced Priority Funding Area according to the most recently updated draft of the Locational Guide Map (2013). A few small isolated areas within the main campus are identified as Balanced Priority Funding Area. The proposed implementation of the Plan is consistent with Growth Management Principle #1 of the Draft State Plan of Conservation and Development, “Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure.”

With the exception of the following direct and indirect impacts -- demolition of historic structure (Knight House); potential visual impacts associated with the South Parking Deck (PDS) located within the Prospect Hill Historic District; the proposed West Parking Deck (PGW) impacting the South Wetland; and water quality -- the Proposed Action is consistent with the current and proposed State Plan of Conservation and Development and Locational Guide Map. The Plan is primarily consistent because the proposed projects are located within Eastern’s campus, they will be supported by existing infrastructure and will be constructed on sites that support “infill” development on the campus.

However, each of these potential impacts will go through regulatory review and approval prior to implementation. In addition, as noted before, mitigation measures are being proposed as part of this EIE.

h. Construction Related Impacts

Temporary construction related impacts are anticipated. Specific protections will be incorporated into the design plans for each project on a case by case basis, but general principles for handling construction impacts are as follows:

Air Quality: Temporary, insignificant impacts to air quality from vehicular emissions, construction equipment, and dust may likely result from construction related activities. The potential for these will be minimized through the use of proper soil erosion and sediment controls to control dust and adherence to DCS’s contract specifications controlling diesel emissions.

Noise: During construction of the Plan facilities, there would be short-term increases in noise levels in and around the construction site. While temporary noise impacts are unavoidable, their impact will be minimized by limiting work hours to between 7:30 AM and 6 PM Monday through Friday and from 8 to 4 PM on Saturdays.

Transportation: During construction, there would be a temporary increase in truck traffic near the site and at streets and intersections surrounding the University. If necessary, temporary traffic controls will be provided in the form of appropriate traffic barriers or police. Traffic controls will follow the principles developed by the Connecticut Department of Transportation for Maintenance and Protection of Traffic.

Solid Wastes and Recycling: Construction activities would result in the temporary generation of additional solid waste due to site preparation (including the removal of soil and demolition debris), utility relocation, and construction material packaging and waste. The disposal location will be selected based on the type of waste material generated for each project. Efforts will be made to add specific contract language to maximize, the extent feasible, the diversion of construction and demolition (C&D) waste from landfills by incorporating recycling and reuse of C&D material.

Stormwater: Excavation of a site for construction and utility relocation would increase the potential for erosion and sediment transport during wet weather periods while bare earth is exposed on the site. Project plans for each site improvement will include soil erosion and sediment control plans. These will be developed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Energy: Construction-related energy usage would produce a one-time energy demand including the energy utilized in the production and installation of construction materials.

VI. Unavoidable Adverse Environmental Impacts

With the exception of the demolition of the historical Knight House and the South Wetland, there are no “unavoidable adverse environmental impacts” associated with implementation of the Plan. However, as noted before, during design and regulatory coordination, adverse impacts may be avoided. The Knight House will be documented in accordance with requirements of the State Historic Preservation Office prior to demolition and the information filed on the state archives.

VII. Irreversible and Irrecoverable Commitment of Resources

The following is a summary of the non-recoverable resources associated with construction and operation of the Plan when implemented.

Operation of the new facilities proposed as part of the Plan would use water and generate waste above and beyond what is currently generated. However, because many of the facilities would be LEED® certifiable or meet State High Performance Building Standards, water use and waste generation would be reduced. For example, the use of greywater return systems may be employed and water-saving fixtures would be installed.

During the construction phase, additional water would be used for dust control and other construction-related needs.

Energy: Construction and operation of the facilities associated with the Plan would require non-recoverable energy expenditures. However, energy efficient systems would be explored during the design in order to meet LEED® criteria or High Performance Building Standards

Economic Resources. The estimated construction cost for the Plan is \$497 million (2007 dollars). There are also operational costs associated with each of the facilities. The construction and operation costs are borne by Connecticut tax payers and University students.

VIII. Cost Benefit Analysis

It has been estimated that the total cost for implementing the Plan would be approximately \$496,800,000 (SMMA, 2008). Projects would be paid for by either CHEFA or General Obligation Bond funds. Both sources are borne by the taxpayers of Connecticut and student tuitions.

Economic benefits would be realized for the Towns of Windham and Mansfield, the region and the State of Connecticut. The economic impacts of the projects encompass several components including jobs, earnings and

output that are realized as either direct or indirect consequences of construction and operation.

The construction of projects will increase jobs throughout the implementation phases of the Plan in the form of design and other technical professionals, contractors and subcontractors. Indirect benefits will occur for vendors and suppliers of these technical professionals.

Earnings, i.e. salaries and wages paid to employees would result in direct and indirect positive benefits to the municipalities and to the communities in which these employees reside.

Besides construction-related employment, there would be an increase in the number of employees at the University with the addition of new facilities. Additional educators, administrative staff and maintenance personnel would be needed. Although there is projected to be only a modest increase in student enrollment, a higher percentage of students would be residing on campus. This will create additional economic benefit to local services in and around campus.

The Towns of Windham and Mansfield would also receive an increase in their Payment in Lieu of Taxes (PILOT) money it receives from the State of Connecticut because the Plan would increase the value of the University.

While the Plan would have a cost of approximately \$497 million, including the non-economic cost of demolition of a historic structure that will be mitigated as noted previously, the benefits would be positive economic activity to the Towns of Windham and Mansfield, the region and the State of Connecticut through increased jobs, earnings and their associated secondary economic effects.

IX. Potential Certificates, Permits, and Approvals

The IER identified the potential permits, certificates, or approvals that may be required for the Plan either on an individual project basis or as part of an overall campus requirement.

~End~