

STATE OF CONNECTICUT
DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
OFFICE OF RESPONSIBLE DEVELOPMENT

ENVIRONMENTAL ASSESSMENT CHECKLIST

Date: 8/23/11	Staff Contact: Nelson Tereso
Municipality: Windham	Project Name: Windham Hospital Expansion
Funding Source: Urban Act	State Funds: \$8,400,000
Type of State Agency Review	Stage 1 <u> X </u> Stage 2

This assessment is being conducted in conformance to the Department's Environmental Classification Document to determine CEPA obligations. *Note: environmental remediation is a positive environmental impact, but not a CEPA activity.*

The DECD is providing a grant-in-aid in the amount of \$8,400,000 to Windham Hospital for the development of an on-campus Medical Office Building of 29,840 square feet on two levels with adjacent parking of approximately 150 spaces. The project will play a valuable strategic role in enhancing the Hospital's ability to recruit and retain physician practices and to provide functional space for them. The new building will provide space that promotes operating efficiency as well as advances patient convenience and care coordination. Additionally, the Medical Office Building will further develop and integrate the Hospital's campus and make it more of a destination thereby enhancing Windham Hospital's image and that of its local medical network. This project is important not only for the future success of Windham Hospital as a vital healthcare provider and patient safety net, but also to enhance the region's economic performance.

RCSA sec. 22a-1a-3 Determination of environmental significance (direct/indirect)

- 1) *Impact on air and water quality or on ambient noise levels –*
 - a) *Air Quality – N/A*
 - b) *Water Quality – N/A*
 - c) *Noise – N/A*
- 2) *Impact on a public water supply system or serious effects on groundwater, flooding, erosion, or sedimentation.*
 - a) *Water Supply – N/A*
 - b) *Groundwater – N/A*
 - c) *Flooding – N/A*
 - d) *Sedimentation – In order to protect any wetlands and watercourses adjacent to the site, strict erosion and sediment controls should be employed during construction.*
- 3) *Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows – It is recommended that a certified soil scientist perform a reconnaissance of the site in order to confirm that there are not any areas which would be regulated as wetlands or watercourses as defined by section 22a-38 (15) and (16) of the Connecticut General Statutes (CGS), respectively.*

- 4) *Disruption or alteration of an historic, archeological, cultural or recreational building, object, district, site or surroundings – N/A*
- 5) *Effect on natural communities and upon critical species of animal or plant and their habitats: interference with the movement of any resident or migratory fish or wildlife species – The Natural Diversity Data Base, maintained by DEEP, contains no records of extant populations of Federally listed endangered or threatened species or species listed by the State, pursuant to section 26-306 of the CGS, as endangered, threatened or special concern in the project area. This information is not the result of comprehensive or site-specific field investigations. Consultation with the Natural Diversity Data Base should not be substituted for on-site surveys required for environmental assessments. The extent of investigation by competent biologist(s) of the flora and fauna found at the site would depend on the nature of the existing habitat(s). If field investigations reveal any Federal or State listed species, please contact the DEEP Geologic & Natural History Survey at 860-424-3540.*
- 6) *Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact – N/A*
- 7) *Substantial aesthetic or visual effects – N/A*
- 8) *Consistency with the written and/or mapped policies of the statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency – The site is listed as a Regional Center in the Conservation & Development Policies Plan for Connecticut.*
- 9) *Disruption or division of an established community or inconsistency with adopted municipal or regional plans – N/A*
- 10) *Displacement or addition of substantial numbers of people – N/A*
- 11) *Substantial increase in congestion (traffic, recreational, other) – N/A*
- 12) *A substantial increase in the type or rate of energy use as a result of the action – The Department typically recommends that the new and renovated facilities be designed and constructed incorporating energy efficiency requirements encouraging the building to be LEED[®] certified.*
- 13) *The creation of a hazard to human health or safety – N/A*
- 14) *Any other substantial impact on natural, cultural, recreational or scenic resources - N/A*

Recommendations:

The issues/concerns raised by State agencies are related to compliance with water quality, storm water management, erosion control and indirect project impacts, etc. Based on all of the comments received, it is recommended that an EIE is not warranted for this project but that the following state agency coordination is initiated as part of the project:

DEEP: The CT Departments of Energy & Environmental Protection has completed Stage I Site Review of the above referenced project. The following recommendations are submitted:

1. A permit is required for the discharge of stormwater from construction sites The Permitting & Enforcement Division has issued a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* that will cover these discharges. For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to the Department prior to the initiation of construction. A stormwater pollution control plan,

including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the Department. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. The project shall adhere to the *Connecticut Guidelines for Soil Erosion and Sediment Control*. If no review is conducted by the town or written approval is not provided, the permittee must register with the Department. For further information, contact the division at 860-424-3018. A copy of the general permit as well as registration forms may be downloaded at: [Construction Stormwater GP](#).

2. The Natural Resources Conservation Service's Soil Survey does not depict any wetland soils within the project area. It is recommended that a certified soil scientist perform a reconnaissance of the site in order to confirm that there are not any areas which would be regulated as wetlands or watercourses as defined by section 22a-38 (15) and (16) of the Connecticut General Statutes (CGS), respectively. Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the CGS. Many local agencies have established setback or buffer areas and require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements.
3. The generation, handling, storage, tracking, transportation, treatment and disposal of biomedical waste (BMW) generated during the administration of medical care is regulated under section 22a-209-15 of the Regulations of Connecticut State Agencies (RCSA). A BMW Management Plan must be written for each facility and contain policies and procedures for the segregation, mixture, treatment, and disposal of BMW. Any person in the business of transporting BMW must obtain a BMW transporter permit issued by the DEEP pursuant to RCSA section 22a-209-15(g). The regulation is available on-line at: [Solid Waste Regulation](#). Additional information concerning BMW may be found on-line at: [Biomedical Waste](#).
4. DEEP strongly supports the use of low impact development (LID) practices such as water quality swales and rain gardens for infiltration of stormwater on site. Key strategies for effective LID include: managing stormwater close to where precipitation falls; infiltrating, filtering, and storing as much stormwater as feasible; managing stormwater at multiple locations throughout the landscape; conserving and restoring natural vegetation and soils; preserving open space and minimizing land disturbance; designing the site to minimize impervious surfaces; and providing for maintenance and education. Water quality and quantity benefits are maximized when multiple techniques are grouped together. Consequently, we typically recommend the utilization of one, or a combination of, the following measures:
 - the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas,
 - the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs and parking lots),
 - the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface,
 - if soil conditions permit, the use of dry wells to manage runoff from the building roofs,
 - the use of vegetated roofs (green roofs) to reduce the runoff from buildings,

- proper treatment of special activity areas (e.g. loading docks, covered maintenance and service areas),
 - the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation, and
 - providing for pollution prevention measures to reduce the introduction of pollutants to the environment.
5. Traditional stormwater systems collect stormwater as rapidly as possible and quickly shunt it from upland areas to receiving waterbodies. This has resulted in widespread and significant pollution problems from both the materials picked up by the stormwater as it flows over developed land surfaces (non-point source pollution). The latest emphasis in stormwater management is to try to minimize changes between pre- and post-development runoff rates and volumes by utilizing on-site retention and to pretreat discharges to remove total suspended solids, oils, greases, nutrients, pathogens and floatable debris. The Department's standard recommendation concerning stormwater management which follows should be observed, as appropriate.

Appropriate controls, designed to remove sediment and oil or grease typically found in runoff from parking and driving areas, should be included in any stormwater collection system to be installed or upgraded at the site. Non-structural measures to dissipate and treat runoff are strongly encouraged, including infiltration using pervious paving or sheetflow from uncurbed pavement to vegetated swales, water gardens or depression storage areas. The Department recommends a stormwater management treatment train approach. Such a system includes a series of stormwater best management practices (BMPs) that target the anticipated pollutants of concern. For example, parking lot runoff would be expected to contain petroleum hydrocarbons, heavy metals, sediment, organic material (leaves/grass clippings) and seasonally elevated temperatures. Potential structural stormwater BMPs include, but are not limited to, catch basin inserts, gross particle separators, deep sump catch basins fitted with passive skimmers, and/or detention/retention basins having adequate pre-treatment. For larger sites, a combination of structural and non-structural BMPs are typically most effective and practical. If more than 1 acre of pavement drains to a common discharge point, a hydrodynamic separator, incorporating swirl technology, circular screening technology or engineered cylindrical sedimentation technology, is recommended to remove medium to coarse grained sediments and oil or grease. The treatment system should be sized such that it can treat stormwater runoff adequately. The Department recommends that the treatment system be designed to treat the first inch of stormwater runoff. Upon installation, a maintenance plan should also be implemented to insure continued effectiveness of these control measures.



CONNECTICUT DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
OFFICE OF ENVIRONMENTAL REVIEW
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To: Nelson Tereso - Project Manager
DECD - Office of Responsible Development, 505 Hudson Street, Hartford, CT

From: David J. Fox - Senior Environmental Analyst **Telephone:** 860-424-4111

Date: August 19, 2011 **E-Mail:** david.fox@ct.gov

Subject: Windham Hospital, Willimantic

The Department of Energy & Environmental Protection has received the CEPA Notice of Scoping for construction of a medical office building at the Windham Hospital campus in Willimantic. The following commentary is submitted for your consideration.

The Natural Resources Conservation Service's Soil Survey does not depict any wetland soils within the project area. It is recommended that a certified soil scientist perform a reconnaissance of the site in order to confirm that there are not any areas which would be regulated as wetlands or watercourses as defined by section 22a-38 (15) and (16) of the Connecticut General Statutes (CGS), respectively. Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the CGS. Many local agencies have established setback or buffer areas and require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements.

In order to protect any wetlands and watercourses adjacent to the site, strict erosion and sediment controls should be employed during construction. The *Connecticut Guidelines for Soil Erosion and Sediment Control* prepared by the Connecticut Council on Soil and Water Conservation in cooperation with the Department is a recommended source of technical assistance in the selection and design of appropriate control measures. The 2002 revised edition of the Guidelines, published as DEP Bulletin 34 may be obtained at the DEEP bookstore, either by telephone 860-424-3555 or online at: [DEEP Bookstore](#).

Traditional stormwater systems collect stormwater as rapidly as possible and quickly shunt it from upland areas to receiving waterbodies. This has resulted in widespread and significant pollution problems from both the materials picked up by the stormwater as it flows over developed land surfaces (non-point source pollution). The latest emphasis in stormwater management is to try to minimize changes between pre- and post-development runoff rates and volumes by utilizing on-site retention and to pretreat discharges to remove total suspended solids, oils, greases, nutrients, pathogens and floatable debris. The Department's standard recommendation concerning stormwater management which follows should be observed, as appropriate.

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For additional guidance, consult the *Connecticut Stormwater Quality Manual*. The manual provides guidance on the measures necessary to protect the waters of the state from the adverse impacts of post-construction stormwater runoff. The manual is available on-line at: [Stormwater Manual](#).

The Department strongly supports the use of low impact development (LID) practices such as water quality swales and rain gardens for infiltration of stormwater on site. Key strategies for effective LID include: managing stormwater close to where precipitation falls; infiltrating, filtering, and storing as much stormwater as feasible; managing stormwater at multiple locations throughout the landscape; conserving and restoring natural vegetation and soils; preserving open space and minimizing land disturbance; designing the site to minimize impervious surfaces; and providing for maintenance and education. Water quality and quantity benefits are maximized when multiple techniques are grouped together. Consequently, we typically recommend the utilization of one, or a combination of, the following measures:

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The effectiveness of various LID techniques that rely on infiltration depends on the soil types present at the site. According to the Natural Resources Conservation Service's Soil Web Survey (available on-line at: [Web Soil Survey](#)), the soils in the project area vary in their suitability for various stormwater management practices. Charleton & Chatfield complex soils, are somewhat suitable for pervious pavement but least suitable for filtration practices, while Sutton fine sandy loam is least suitable for both pervious pavement and filtration practices. However, infiltration practices may be suitable at this site. Soil mapping consists of a minimum 3 acres map unit and soils may vary substantially within each mapping unit. Test pits should be dug in areas planned for infiltration practices to verify soil suitability and/or limitations. Planning should insure that areas to be used for infiltration are not compacted during the construction process by vehicles or machinery. The siting of areas for infiltration must also consider any existing soil or groundwater contamination.

The Department has compiled a listing of web resources with information about watershed management, green infrastructure and LID best management practices. It may be found on-line at: [LID Resources](#)

Stormwater discharges from construction sites where one or more acres are to be disturbed require a permit pursuant to 40 CFR 122.26. The Permitting & Enforcement Division has issued a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* (DEP-PERD-GP-015) that will cover these discharges. For projects disturbing five or more acres, registration describing the site and the construction activity must be submitted to the Department prior to the initiation of construction. A stormwater pollution control plan, including measures such as erosion and sediment controls and post construction stormwater management, must be prepared. For sites where more than 10 acres will be disturbed, the plan must be submitted to the Department. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing stormwater management measures. For construction projects with a total disturbed area between one and five acres, no registration is required as long as the project is reviewed by the town and receives written approval of its erosion and sediment control measures and it adheres to the *Connecticut Guidelines for Soil Erosion and Sediment Control*. If no review is conducted by the town or written approval is not provided, the permittee must register with the Department. For further information, contact the division at 860-424-3018. A copy of the general permit as well as registration forms may be downloaded at: [Construction Stormwater GP](#).

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section 22a-209-15 of the Regulations of Connecticut State Agencies (RCSA). A BMW Management Plan must be written for each facility and contain policies and procedures for the segregation, mixture, treatment, and disposal of BMW. Any person in the business of transporting BMW must obtain a BMW transporter permit issued by the DEEP pursuant to RCSA section 22a-209-15(g). The regulation is available on-line at: [Solid Waste Regulation](#). Additional information concerning BMW may be found on-line at: [Biomedical Waste](#).

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The Department typically recommends that the new and renovated buildings be designed and constructed incorporating energy efficiency requirements. One way to accomplish this is to require the building to be LEED[®] certified. LEED[®] (Leadership in Energy and Environmental Design) is a green building rating system developed by the U.S. Green Building Council that is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. In addition to promoting energy efficiency and renewable energy, LEED[®] promotes sustainable site planning, safeguarding water and water efficiencies, conserving materials and resources, and improving indoor environmental quality. Additional information can also be found at: [Green Building Council](#).

The project is not within the 500-year flood zone on the community's Flood Insurance Rate Map. The site is within a Regional Center in the *Conservation & Development Policies Plan for Connecticut, 2005 - 2010*.

Thank you for the opportunity to review this project. If there are any questions regarding these comments, please contact me.

cc: Robert Hannon, DEEP/OPPD