

## CONNECTICUT DEPARTMENT OF

## **ENERGY & ENVIRONMENTAL PROTECTION**

## OFFICE OF ENVIRONMENTAL REVIEW

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**To:** Mark Hood - Project Manager

DECD - Office of Financial & Technical Review, 505 Hudson Street, Hartford, CT

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

Date: March 20, 2014 E-Mail: david.fox@ct.gov

**Subject:** East Haven Industrial Park

The Department of Energy and Environmental Protection has received the Notice of Scoping for proposed state funding for development of an industrial park at 420 Bradley Street in East Haven. The following comments are submitted for your consideration.

The Natural Resources Conservation Service's soil survey shows that the western portion of the project area is dominated by regulated wetland soils, specifically Raypol silt loam and Rayhnam silt loam. The conceptual lot layout appears to avoid wetland areas. Existing wetlands and watercourses at the site should be delineated by a certified soil scientist. Any development, including both buildings and access roadways, should avoid regulated areas to the maximum extent practicable. Unavoidable impacts should be mitigated and buffer areas established to further protect wetlands and watercourses.

Any inland wetlands or watercourses at the site are regulated by the local inland wetlands agency, pursuant to section 22a-42 of the Connecticut General Statutes (CGS). Many local agencies have established setback or buffer areas that require review and approval of activities within these upland areas adjacent to wetlands or watercourses. The local agency should be contacted regarding permit requirements.

The area to be developed is predominantly Holyoke-Rock outcrop complex a highly erodible soil. In order to protect wetlands and watercourses on and 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 DEEP is a recommended source of technical assistance in the selection and design of appropriate control measures. The 2002 revised edition of the Guidelines is available online at: <a href="Erosion Control Guidelines">Erosion Control Guidelines</a>. A *Low Impact Development Appendix* to the Guidelines has been prepared to provide specific guidance on low impact development techniques. It is also available on-line at: <a href="LID Appendix">LID Appendix</a>.

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:

- 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.

The effectiveness of various LID techniques that rely on infiltration depends on the soil types present at the site. The Holyoke-Rock outcrop complex is rated as least suitable for its capacity for stormwater management practices involving wet or dry basins, pervious paving or infiltration. Cheshire-Holyoke complex in the northern portion of the site is rated as somewhat suitable for pervious paving and dry basins. 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, regardless of project phasing, require a permit from the Permitting & Enforcement Division. The General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (DEEP-WPED-GP-015) 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. A goal of 80 percent removal of total suspended solids from the stormwater discharge shall be used in designing and installing post-construction stormwater management measures. The general permit also requires that post-construction control measures incorporate runoff reduction practices, such as LID techniques, to meet performance standards specified in the permit.

The construction stormwater general permit dictates separate compliance procedures for Locally Approvable projects and Locally Exempt projects (as defined in the permit). Locally Exempt construction projects disturbing over 1 acre must submit a registration form and Stormwater Pollution Control Plan (SWPCP) to the Department. Locally Approvable construction projects with a total disturbed area of one to five acres are not required to register with the Department provided the development plan has been approved by a municipal land use agency and adheres to local erosion and sediment control land use regulations and the CT Guidelines for Soil Erosion and Sediment Control. Locally Approvable construction projects with a total disturbed area of five or more acres must submit a registration form to the Department. This registration shall include a certification by a Qualified Professional who designed the project and a certification by a Qualified Professional or regional Conservation District who reviewed the SWPCP and deemed it consistent with the requirements of the general permit. The SWPCP for Locally Approvable projects is not required to be submitted to the Department unless requested. 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.

No portion of the project area is within the 100-year flood zone on the community's Flood Insurance Rate Map. The portion of the site outside of wetland soils, which are also statewide important farmland soils, is a Priority Funding Area in *Conservation & Development Policies: The Plan For Connecticut, 2013-2018*. The portion with wetland/farmland soils is a Balanced Priority Funding Area.

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. Also, be advised that this is a preliminary review. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site. 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.

Water and sewer service is available on Bradley Street, with presumably adequate capacity to serve development of the size proposed. This should be confirmed with the South Central Connecticut Regional Water Authority and the Greater New Haven Water Pollution Control Authority.

Thank you for the opportunity to review this proposal. If you have any questions concerning these comments, please contact me.

cc: Robert Hannon, DEEP/OPPD