Long Creek Watershed Management District Governing Board Special Meeting  
Agenda – October 21, 2011 – 8:30 a.m. Meeting  
Location: Scarborough Town Hall, Council Chambers A

1. Call to order

2. Roll call

3. 280 Gannett Drive Redevelopment
   
   a. **Port Resources plan modification request.** To review and approve proposed modification to the Long Creek Watershed Management Plan for the Port Resources parcel, located at 280 Gannett Drive, subject to Maine DEP approval of the modification (Attachment A: modification request, supporting documentation, CCSWCD Engineer review).
   
   b. **Budget amendment.** To review and approve proposed amendment ($52,446 credit and/or cash outlay from FY2012 Construction & Maintenance Budget).
   
   c. **Preparation of easement and agreements.** To direct Executive Director to work with Perkins Thompson for the development of necessary easements and maintenance agreements.

4. **Election of new President/Chair.** The Chair of the LCWMD will be leaving her position in Portland and the City of Portland will be appointing a new representative.

5. Public Comments

6. Adjourn
11024

October 17, 2011

Tamara Lee Pinard, Stormwater Program Manager
Cumberland County Soil and Water Conservation District
35 Main Street, Suite 3
Windham, Maine 04062

Application to Long Creek Watershed Management District
Port Resources
Windward Circle Business Park
280 Gannett Drive, Unit 2
South Portland, Maine
Part of South Portland Assessor’s Map 85, Lot 14

Dear Tamara,

As discussed at our October 3, 2011 meeting with you and Chris Baldwin, Port Resources is proposing a new building within the Windward Circle Business Park, an existing office/warehouse condominium project located at 280 Gannett Drive. Port Resources’ new building will be Unit #2 of the Windward Circle Business Park.

On October 11, 2011, the South Portland Planning Board granted unanimous approvals to amend the Windward Circle Business Park to accommodate the proposed changes to the building areas, as well as the common areas, in order to address the construction of the new Port Resources Building and associated site improvements. As part of the deliberations that night, the Planning Board also granted unanimous Site Plan approval for the new Port Resources Building.

There are various Best Management Practices (BMPs) proposed as part of the Port Resources site improvements that are intended to provide water quality enhancements on this property. We are respectfully requesting that the Long Creek Watershed Management District (LCWMD) take ownership of these BMPs.
Windward Circle Business Park

The common areas within Windward include all of the parking, utilities, drainage features and other site elements associated with the overall development. Unit owners purchase the pad area beneath their building and have rights over certain areas outside the building pad area (Limited Common Elements (LCE)).

The only existing unit on the site (Unit #1) is owned by Edward M. Woodin LLC. Unit #1 was constructed prior to the creation of the Windward Circle Business Park in 2006. The proposed Port Resources building is Unit #2. Port Resources is proposing up to a 25,000 sf building. The initial build out of the Port Resources building will be 20,740 sf, with an additional area reserved for a future expansion, which, when built, will bring the entire building area up to 25,000 sf. Given the location and limited area associated with the parking for Unit #3, these parking spaces will be constructed at the time of the site improvements for the Port Resources building. Unit #3’s building will be constructed once this condominium is purchased. No new work associated with Unit #8 (on the easterly side of the property) is proposed at present.

The Windward amendments approved last week include consolidation of several of the building pads such that the following development program is proposed.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Structure Size (max.)</th>
<th>Parking Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1*</td>
<td>5,995 SF (Edward M. Woodin LLC)</td>
<td>16 Spaces plus Loading Area (existing)</td>
</tr>
<tr>
<td>#2</td>
<td>25,000 SF (Port Resources)</td>
<td>156 Spaces (6 Barrier-free)</td>
</tr>
<tr>
<td>#3</td>
<td>6,750 SF</td>
<td>27 Spaces (2 Barrier-free)</td>
</tr>
<tr>
<td>#8</td>
<td>6,000 SF</td>
<td>24 Spaces (1 Barrier-free)</td>
</tr>
<tr>
<td></td>
<td>43,745 SF</td>
<td>223 Spaces</td>
</tr>
</tbody>
</table>

*(Note: at the time of approval of Windward Circle Business Park, Pad #1 was existing, this is the only building currently on the property)*

No amendments were proposed in the area of Unit #8, located on the easterly side of the property. The site design plans address the proposed amendments to the area of Units #2 and #3 and their interface with Unit #1. The proposed improvements are all located on the westerly side of the Windward property.

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St. Clair Associates ~ 34 Forest Lane ~ Cumberland, Maine 04021  
david@stclairassociatesmaine.com  
David's Phone (207) 413-5553  
nancy@stclairassociatesmaine.com  
Nancy's Phone (207) 615-8586
Permitting Background

The approximately 7.31 acre Windward Circle Business Park property (Assessors Map 85, Lot 14) is located in the Long Creek Watershed and is in South Portland’s Light Industrial zone; portions of the site are also subject to the Stream Protection Overlay (SP-2) sub-district.

Windward Circle Business Park (Windward) is located on Lot 14 of the Gannett Drive Business Park (GDBP). GDBP (originally called the Cummings Road Business Park) is a commercial subdivision that originally received local subdivision and MDEP Site Location approval in the late 1980s, with an amendment in 1996.

In 1996, the GDBP project amendments authorized additional lot development and wetland fills in various locations within the GDBP, including Lot 14. These fills were authorized in association with potential development of up to an approximately 66,000 sf commercial building and site improvements on the westerly side of Lot 14. At that time, no improvements were shown on the easterly side of the property.

It is our understanding that since the GDBP Site Location Permit included the authorization to construct a major building and associated site improvements on the westerly side of the property (and addressed the applicable standards for stormwater management at the time of approval), the Maine Department of Environmental Protection (MDEP) considers the Windward improvements on the westerly side of the site (i.e. Units #1, #2 and #3) as previously authorized under the existing permits.

As such, these improvements could be constructed without the need to meet current Chapter 500 Standards. The applicants may seek coverage under the General Permit for Post-Construction Stormwater Discharge in the Long Creek Watershed for the improvements on the westerly side of the Windward parcel. The applicants have included various site elements in order to address Chapter 500 standards.

GDBP Detention Pond

When the GDBP subdivision was originally approved, the standards for stormwater focused on what is now termed the flooding standard. A central detention pond was designed and constructed to collect and detain stormwater from all of the lots within the GDBP. Flows from the Windward site enter directly into the common drainage system for the GDBP which crosses the central portion of the Windward site. The outlet for this existing detention pond is located downstream of the Windward property, northerly of the adjacent CMP corridor.
A site inspection of the area by the LCWMD this summer revealed that the outlet for this detention pond had breached. The GDBP Lot Owners Association is actively pursuing resolution of this matter which may include restoring the outlet area to its original design, or enhancing the design with the addition of features to improve water quality in this area. Based on the most recent meetings with the MDEP, the option to extend detention time to augment downstream base flows is being considered. At a minimum, the pond area will be restored to its original design intent.

**Proposed Best Management Practices**

In an effort to address water quality improvements directly on the site, a series of Low Impact Design techniques have been employed. Water Quality BMP’s are proposed to accommodate the new impervious areas associated with the new parking and access drives for Units #2 and #3, along with the rooftop for Unit #2.

Based on the site soils and groundwater elevations, the most viable BMP alternatives focus on filtration. The project design includes three different types of filtration BMP’s to treat the stormwater before it leaves the developed area.

Please note that these amendments and modifications to the originally approved stormwater management design for Windward do not include any retrofits to provide treatment to the existing building and pavement areas associated with Unit #1. In reviewing the prior drainage plans included as part of the 2006 approval of Windward Circle Business Park, it appears that although there were bioretention cells proposed as part of the prior plan, these improvements did not address the existing Unit #1.

The three types of BMP’s are:

- Roof Dripline BMP-to collect the runoff from the entire roof area of Unit #2
- Grassed Underdrained Soil Filter-two filters collect runoff from the portions of the parking areas and landscaped islands.
- Bioretention Cell-receives flows from the southerly portion of the parking area located to the east of Unit #2. The bioretention cell also receives the overflow from the largest of the two grassed underdrained soil filters described above.

There are two areas that are within the proposed limits of construction that will not formally receive treatment as part of the overall amended drainage plan for this project. One, on the westerly side of the parking area in front of Unit 2, has been designed to flow off the shoulder into a shallow grassed swale that connects into an existing swale along the westerly side of the main access drive.
The second area includes a portion of the east access drive and the interface with the existing Unit #1 (including the addition of a new truck turn around area, as requested by the owner of Unit #1). Runoff from the pavement in this area is directed to a level spreader that will discharge into a short section of existing meadow. The total area of new treated pavement and rooftop, represents approximately 89% of the overall proposed new impervious areas (the truck turn around was added after the original calculations regarding the percentage of new impervious areas that are treated).

The following table summarizes the treatment features and the contributing areas:

<table>
<thead>
<tr>
<th>Treatment BMP</th>
<th>Contributing Area Description</th>
<th>Impervious Area (ac)</th>
<th>Landscaped Area (ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof Dripline BMP</td>
<td>Port Resources (Unit #2)</td>
<td>0.57</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Roof (25,000 sf full buildout)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grassed Underdrained</td>
<td>Subcatchment #2 (North Parking Area)</td>
<td>0.55</td>
<td>.05</td>
</tr>
<tr>
<td>Soil Filter #1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grassed Underdrained</td>
<td>Front Parking Area</td>
<td>0.41</td>
<td>.05</td>
</tr>
<tr>
<td>Soil Filter #2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioretention Cell</td>
<td>Subcatchment #1 (South Parking Area)</td>
<td>0.44</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Treated Area</td>
<td>1.97 ac (imp)</td>
<td>0.17 ac (ls)</td>
<td></td>
</tr>
</tbody>
</table>

As noted, there are some proposed impervious areas that will be built, but will not receive treatment, these can be summarized as follows:

- At westerly entrance to Unit #2 parking: 0.06 ac
- At easterly entrance to Unit #2/3 parking (includes new truck turn around for Unit #1): 0.18 ac

Total Proposed Impervious area*: 2.21 ac

Ratio of Proposed Impervious Area to receive treatment: 89%

Existing impervious area (untreated):
- (Unit #1 rooftop and parking/access/loading): 0.55 ac
- (Unit #8 existing gravel pad area): 0.16 ac

Total Existing: 0.71 ac

Total Impervious area (existing and proposed)*: 2.92 ac

*(this number includes full build out of the Port Resources building, but only 20,740 sf will be initially constructed)
Project Costs

As we have discussed, the water quality system described above has added costs to the overall design and construction of this site. Jim Biskup of Biskup Construction has provided a breakdown of construction costs associated with these features. These costs are summarized below, along with the engineering costs to design these site elements. As we discussed, the construction costs do not include the stormdrain lines and outlet control structures, as it is anticipated that catch basins and stormdrain lines would have been necessary to convey flows to the site outlet, regardless of whether there were provisions for water quality treatment on the site.

Engineering & Design Costs (BMP evaluation, sizing, grading, modeling): $6,480
Landscape Architect Costs (Bioretention Cell Plantings): $1,200
Construction Costs (see breakdown previously provided): $44,766
Total $52,446

Closure

With the submittal of this letter and our prior submittal of supporting plans and drainage calculations to Chris Baldwin, we are respectfully requesting that the Long Creek Watershed Management District Board consider the incorporation of the water quality elements included in the proposed site improvements to augment the LCWMD’s existing improvement plans for the Long Creek Watershed. We look forward to the opportunity to discuss this request with the LCWMD Board on Friday, October 21, 2011.

Again, thank you for your assistance throughout this process, we look forward to hearing from you.

Sincerely,

ST. CLAIR ASSOCIATES

Nancy J. St. Clair, P.E.
Vice President
NJIS:njs
Karen MacDonald
PORT RESOURCES
WATER QUALITY COSTS

BIO CELL FILTERS

Excavation $4,303.00
Under drains $2,948.00
Fabric $1,180.00
Gravel $6,994.00
Media $16,355.00

DRIP EDGE

Stone $6,389.00
Fabric $403.00

LANDSCAPING

Bark Mulch
(3) River Birch
(12) Compacted Red Twig Dogwood
(3) Arrow Wood Viburnem
(2) Shad Bush
(10) Bush Honeysuckle
(6) Dwarf Artic Willow
(10) High Bush Blueberry
(3) Peeperbush $6,194.00

TOTAL $44,766.00
Memorandum

To: Tamara Lee Pinard – Executive Director, LCWMD
From: Chris Baldwin, P.E. – District Engineer, CCSWCD
Date: October 17, 2011
RE: Windward Circle Business Park – 280 Gannett Dive

Pursuant to your request, I have performed a review of the referenced project’s stormwater management plan, construction drawings and erosion and sedimentation control plan prepared by St. Clair Associates. The last revision dates for the respective plans reviewed were September 13, 2011, October 4, 2011 and September 15, 2011.

The project involves the construction of a 25,000-sq. ft. building, approximately 64,000-sq. ft. of parking field and travel way, and approximately 7,500-sq. ft. of landscaped area. The total additional impervious acreage proposed for the new development is 2.21-acres.

There is also an existing 5,995-sq. ft. building, a 6,000-sq. ft. gravel building pad, and approximately 18,000-sq. ft. of associated parking/access/loading located on the parcel. After construction of the proposed Port Resources development, there will be a total of approximately 2.92-acres of impervious (this includes the two buildings, building pad, and all the associated parking and travel ways).

The developer has proposed a series of BMP’s to address water quality associated with a large portion of the newly constructed impervious areas (1.97-acres of the proposed 2.21-acres). The BMP’s include a roof dripline for the building, and two underdrained soil filters and one bioretention cell to treat runoff from parking areas. The BMP’s have all been designed in accordance with MDEP standards.

Flood control for the entire Gannett Drive Business Park will be provided once the downstream detention basin is repaired.

Port Resources also submitted a summary of the add-on costs associated with constructing the water quality improvements (e.g. BMP’s). The costs include the manpower and materials necessary to construct the two underdrained soil filters, the bioretention cell, and the roof dripline, only. The cost is $44,766.00 which will treat 1.97-acres ($22,725/acre impervious treated).

The construction estimate appears reasonable to provide the proposed water quality improvements. Engineering costs associated with the design of the water quality improvements should be expected to be approximately 15% of the construction cost or approximately $6,700.

The Windward Circle Business Park project incorporates stormwater runoff treatment close to the source and flood protection with the rehabilitation of the downstream detention basin. Treatment measures will address stormwater runoff concerns related to channel protection, pollutant removal and cooling. As such this project appears as if it would fit into the intent of the overall watershed management plan.

An outstanding question I have is whether LCWMD can/should require that BMP’s be included in the design of the future expansion of Unit #2 (the currently proposed roof dripline BMP will be need to be relocated around the expansion footprint) and for the development of the gravel building pad at Unit #8 and Unit #3 development.