

## **17. CONSISTENCY WITH PORTLAND TECHNOLOGY PARK DESIGN GUIDELINES**

A set of Design Guidelines was developed for Portland Technology Park in 2012. These guidelines were prepared for the City of Portland by Scott Simons Architects and Woodard & Curran. The goal of the Design Guidelines was to establish a set of standards associated with buildings and architecture, open space, energy and environmental requirements to create a cohesive physical environment within the Technology Park. The drawings included with this report include site plans, landscaping plans, and architectural plans that show the proposed LCE 4 development. Also attached to this sections are renderings showing a representation of the proposed building and site. The proposed development of LCE 4 will follow the Design Guidelines as follows.

### **17.1 DEVELOPMENT GOALS**

The City of Portland has identified that the goal of the Portland Technology Park is to create a “forward thinking, low impact, and environmentally friendly Technology Park development.” The proposed development will meet this goal as outlined herein by exemplifying innovative design, durable materials, and high performance building principals.

#### **17.1.1 Design Quality**

Scott Simons Architects has a long track record of designing innovative buildings, with projects regularly winning awards for both design and performance. The success of our design process has been refined over twenty years by consciously listening to clients and closely involving them in a collaborative approach with the whole design team.

#### **17.1.2 Durability**

The materials to be used in this project include metal panel, cementitious panels, and thermally treated wood. All materials are essentially maintenance free with the exception of the thermally treated wood. The thermal treatment improves the stability of the wood and enhances the decay resistance and longevity of its lifespan.

#### **17.1.3 Energy/Environmental Performance**

The project is designed to significantly outperform energy code requirements, as well as meet or exceed the goals of the Portland Technology Park for energy use for heating, cooling, and lighting.

### **17.2 SITE DESIGN**

#### **17.2.1 Design Relationship to Site**

As demonstrated throughout this Section, the proposed project is compatible with the following components of the Portland Technology Park Design Guidelines and will therefore be unified relative to other building developments and common areas within the park:

- Building Design Standards;
- pedestrian and vehicular circulation plans;
- design of open spaces;
- drainage;
- topography;
- vegetation; and
- preservation of natural features.

Integration of open spaces and natural features have been achieved by incorporating outdoor amenities for the benefit of users of the site, such as outdoor seating areas and trash and recycling receptacles.

## **17.2.2 Stormwater Management and Site Design**

The Stormwater Management and Site Design utilizes low impact development (LID) strategies to mimic the existing site hydrology by limiting piped infrastructure, limiting increases to the steepness of site grades, and maximizing surface stormwater conveyance and treatment through the use of gravel wetlands. The design consists of curb cuts with surface flow to sediment forebays leading into gravel wetlands in place of traditional closed drainage systems. Impervious cover will be reduced by utilizing reduced parking dimensions (8 feet, 2 inches x 18 feet). The proposed gravel wetlands have also been designed to manage post-development runoff rates, as described in Section 12 of this Report.

A Tier 2 NRPA Permit Application was submitted on May 11, 2011, and approval was granted in April of 2012 for the Portland Technology Park; a minor revision to this application has been submitted for the proposed work associated with LCE 4. The proposed Site has been designed to minimize impacts to wetlands. The total wetland impact anticipated for the entire Technology Park has not been increased by the layout changes required for the proposed LCE 4 development.

## **17.2.3 Materials or Wastes**

There will be both a designated trash dumpster and recycling dumpster in an enclosed area away from the building and the Technology Park road. Access to the dumpster will be via the parking lots. No materials or wastes shall be deposited on any area of the site in such form or manner that they may be transferred beyond the lot boundaries by natural causes or forces. The Patrons-Oxford Insurance Company will contract with a waste management service to collect and remove waste and recyclables. All materials will be transported and disposed of by a licensed processing or disposal facility in accordance with applicable laws and regulations. Patrons-Oxford Insurance Company will also implement a pollution prevention program, including sweeping of paved areas.

As with any construction project, the proposed construction will generate construction, demolition, and land-clearing debris. The contractor(s) for the construction work will be fully responsible for handling all waste generated by the project and for managing and disposing of it in accordance with Maine Solid Waste Management Regulations - 06-096 CMR 400-409. The contractor(s) will be bound by contract to dispose of all materials in full accordance with applicable Maine regulations and approval of the City of Portland. All efforts will be made during construction to minimize waste and to recycle.

Construction debris will be transported to a waste management facility licensed to accept the waste materials. Trees cleared will either be harvested and sold, ground down to create erosion control mix for onsite applications, or disposed of at an approved facility. Stumps will be disposed of at an approved facility and no stumps, refuse vegetation or other debris created by clearing or construction operations will be disposed of onsite. All material which might cause fumes or dust, or constitute a fire hazard if stored out-of-doors, shall be stored in enclosed containers.

## **17.2.4 Soil Erosion and Sediment Control**

An erosion and sedimentation control plan has been developed for the Site, which includes the latest Maine DEP approved erosion and sediment control measures to reduce pollution from construction activities. Frequent, documented inspection of erosion and sediment control measures during construction shall be required in accordance with local and state regulations. This is described in more detail in Section 12.

## **17.2.5 Traffic**

LCE 4 has been designed with a smaller footprint and smaller parking lot than originally identified as part of the Technology Park design, resulting in traffic that is equal to or less than the originally approved design. Further discussion of traffic can be found in Section 12 of this report.

### **17.2.6 Parking Lots**

Patrons Oxford anticipates 60-65 permanent employees, with a small provision of transient employees from the parent company. The proposed parking lots have been designed with respect to site access, building access, and landscape qualities. Parking spaces have been designed to reduce impervious surface by utilizing reduced parking dimensions (8 feet, 2 inches x 18 feet). Shade will be provided via landscaping to reduce heat islands and minimize impact on microclimate. Further discussion of parking can be found in Section 12 of this report.

### **17.2.7 Sidewalks**

The proposed project includes internal site sidewalks along portions of the driveway and parking lots that transition to larger terrace areas around major building entrances. These sidewalks have been designed to provide safe egress and enhance the building entrance. Handicap accessible ramps have been provided at crossings and at the designated handicap parking spaces to provide ADA accessibility.

### **17.2.8 Bicycle Racks**

Bicycle parking has been provided in accordance with City Standards to encourage reduction in pollution and land development impacts from automobile use. A total of 7 bicycle racks, each providing space for two bicycles will be provided in the rear of the building near the anticipated employee entrance area.

## **17.3 EXTERIOR LIGHTING**

The exterior lighting strategy is in accordance with the Design guidelines. The lighting fixture used for the roadway and parking areas is the same fixture associated with the design of the Technology Park. Wall-mounted light fixtures will be installed on the back wall of the building and at entrance doors on end walls. Additional lighting at the entrance of the building is recessed in the building's overhang to illuminate the entrance as well as eliminate any light trespass to the sky or outward to the site. Additional site lighting is limited to certain occupied areas and pathways with bollard type fixtures that illuminate downwards and out with a short throw to limit the impact on nocturnal environments. A photometric plan showing that the proposed site lighting will not have significant impact on the surrounding environment is attached.

## **17.4 SIGNAGE**

Signage will be located both in the front of the building, as well as the west side of the building visible from the highway. Material choice will be in line with the building's exterior materials. Branding and signage design is currently ongoing, and permit applications for signage will be filed separately.

## **17.5 LANDSCAPING**

The landscape plan for LCE 4 has been developed in response to the existing site condition and the proposed architecture. The existing site is currently wooded with wetlands throughout it. This landscape plan uses predominately native plant species to re-naturalize the project area and seamlessly stitches the new building into this wooded environment. The landscape architect has met with Jeff Tarling, the City of Portland's Arborist to discuss the proposed landscaping for the site.

The landscape plan can be divided into distinct zones; a building zone, parking area zone, gravel wetland zone, and rain garden zone. While these zones have distinct functions, the plant material within each of the zones overlaps to unify the parts of the project area into a complete whole. To add to this unification effort, a native conservation seed mix is carried throughout the project area.

Within the building zone there is a front and back terrace and front arrival/drop-off area that includes native trees and shrubs, and perennials for accent. The parking lot zone includes various trees in the parking islands and shrubs and

ornamental grasses as an understory to minimize the visual impact of the parking areas. The gravel wetland and the rain garden zones utilize wet-loving plants to naturalize these elements.

## **17.6 BUILDING DESIGN STANDARDS**

The proposed building conforms to the building standards set forth in the Portland Technology Park Design Guidelines as outlined below.

### **17.6.1 Building Massing and Form**

The Building Massing and form is a subtle shift of the rectangular footprint to better utilize its southward orientation for day-lighting purposes. The roof clerestory of the building filters natural light into the central double height volume in the building.

### **17.6.2 Zoning Standards**

A narrative discussing the zoning standards associated with the proposed project is provided in Section 6 of this Report. The project will conform to all applicable standards, except as noted in Section 6.

## **17.7 BUILDING ENVELOPE**

### **17.7.1 Exterior Siding**

Exterior siding will consist of Thermally Treated Wood, Metal Panels, and Cementitious Wall Panels.

### **17.7.2 Windows**

Windows will consist of thermally broken aluminum storefront system that meets or exceeds the Design Guidelines.

### **17.7.3 Entrances**

The primary entrance is located on the street-side of the building under an overhang for protection against the elements. Vestibules with inner and outer sets of doors are used at the primary entrances.

### **17.7.4 Roofs**

The building has both flat and sloped roofs. Roofs are pitched a minimum of ¼-inch per foot and covered with single-ply membrane. Membrane roofing SRI values are being reviewed against current best practice recommendations.

### **17.7.5 Exterior Trim and Detailing**

All Trims and details will be executed to match and/or enhance the exterior materials.

## **17.8 ENERGY & ENVIRONMENTAL STANDARDS**

### **17.8.1 Building Materials**

The proposed building is designed to utilize renewable resources and minimize embodied energy by use of a heavy braced wood frame for the primary structural system.

### **17.8.2 Exterior Envelope Thermal Performance**

The thermal performance of the exterior envelope is designed to exceed the standards set forth in the Design Guidelines.

### **17.8.3 Water Conservation**

Low flow plumbing fixtures will be used throughout. All stormwater runoff, including roof runoff, will be diverted into new and existing gravel wetlands on site.

### **17.8.4 Shading Devices and Ventilation**

Excessive solar gains will primarily be managed through the specification of high SHGC glazing, and highly efficient mechanical ventilation systems with energy recovery will be utilized for fresh air delivery.

### **17.8.5 Lighting**

LED fixtures will be used throughout the building.

### **17.8.6 Mechanical Systems**

Mechanical systems are designed to meet or exceed the standards set forth in the design guidelines.

### **17.8.7 Alternative Energy**

If budget allows, solar photovoltaic panels are proposed on the south-facing roof.

## **17.9 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES**

The layout of the site has been designed to provide a safe environment for employees who use the site on a daily basis as well as occasional visitors.

### **17.9.1 Physical Features**

Walkways and exterior patios provide greater visibility and surveillance opportunities throughout the site.

### **17.9.2 Lighting**

Exterior Lighting meets or exceeds standards set forth in the Design Guidelines and has been designed with perceptual quality and safety in mind.

### **17.9.3 Mechanical Surveillance Systems**

Surveillance systems will be present at the primary building entries; further extents are still under review.

### **17.9.4 Access Management**

Site access is routed by the building's primary entrance to both facilitate way-finding and to help provide for site oversight and control. The single driveway entering the property passes by the main entrance, allowing for a visual of all vehicles entering and exiting the property.

### **17.9.5 Orientation and Wayfinding**

Other than the primary signage at the entrance of the building site, the site organization and building form convey a clear and distinct entry sequence to the building by focusing on the two main building entrances. Parking will be assigned and a reserved set of visitor parking spots will be labeled. Internal way-finding will be facilitated by clear views to the central double height space as well as room signage.

### **17.9.6 Mechanical Access Control**

Keycard access will be utilized at all doors in effect 24 hours a day, seven days a week. Access for the public will be granted through a video/intercom communication system to a designated individual within the building.

### **17.9.7 Territorial Reinforcement**

The single site entrance, building siting, and the location of the public entrances and parking work together to define public, semi-public, and private spaces in the site development. Public and private spaces are further clarified through the delineation of the site design and use of materials.

### **17.10 ATTACHMENTS**

- Architectural Renderings
- Lighting Photometric Plan







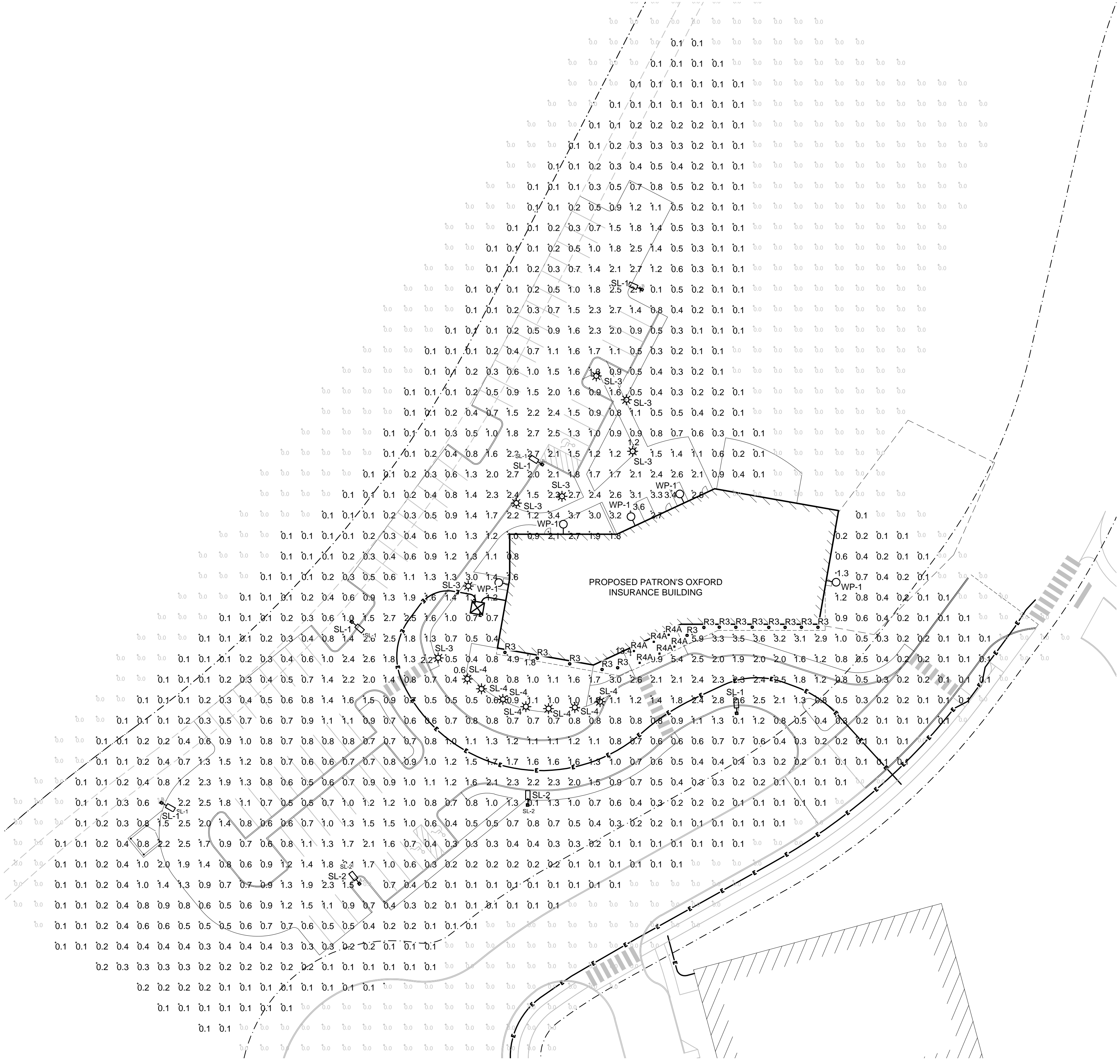




N:\Projects\2016\15023 - Patrons Oxford Insurance Building\00 Drawing Files\15023\_Electrical\_Site Lighting\_Oct 02, 2015 - 12:37pm

LUMINAIRE SCHEDULE								
TYPE	DESCRIPTION	MFR	CATALOG SERIES NUMBER SEE NOTE 1	MOUNTING	VOLTS	LAMP		KEY NOTES
						WATTS	TYPE	
SL-1	POLE LIGHT	HOLOPHANE	LEDG-120-35-L2	30' POLE	120		LED ARRAY 3500K	
SL-2	POLE LIGHT	HOLOPHANE	LED-120-35-L3	30' POLE	120		LED ARRAY 3500K	
SL-3	43" HIGH BOLLARD	LOUIS POULSEN	FLINDT-B	GROUND	120	15	LED ARRAY 3000K	
SL-4	DECORATIVE BOLLARD	HUNZA LIGHTING	TG/L-RU-3	GROUND	120	7	LED ARRAY 3000K	
WP-1	LED WALLPACK	LUMARK	XTOR5A-N	20'-0" AFG	120	84	LED ARRAY 3500K	
R3	RECESSED LED WITH FROSTED GLASS	SHAPER	340-4-DL-LED835/1/25HO-CYF-DMR7	RECESSED	120	24.9	LED ARRAY 3500K	
R4A	4" SQUARE LED DOWNLIGHT	IRIS	P406TAT-RA4X4-MH4LED-15-V935	RECESSED	120	14.4	LED ARRAY 3500K	
<b>NOTES</b>								
1	NOTE THAT THESE NUMBERS ARE NOT COMPLETE CATALOG #S. PROVIDE ALL REQUIREMENTS ON SCHEDULE, NOTES, SPECS, AND DRAWINGS COMBINED.							

PARK & DRIVE ILLUMINATION STATISTICS				
AVERAGE	MAXIMUM	MINIMUM	AVG/MIN RATIO	MAX/MIN RATIO
1.24 FC	3.1 FC	0.2 FC	6.20	15.50

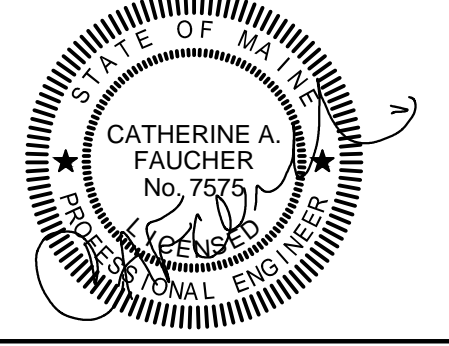


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Cad File: 14023\_ES-100.dwg



PROJECT NAME:  
**PATRONS OXFORD OFFICES**  
PORTLAND TECHNOLOGY PARK  
RAND ROAD, PORTLAND, ME

SEAL:

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REVISION:	DATE
1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE

DATE OF ISSUE: Oct 02, 2015  
PROJECT NUMBER: 2105-0100 Patrons Oxford  
STATUS: Issued for permitting  
NOT FOR CONSTRUCTION

**PROPOSED SITE LIGHTING PLAN**

**ESL-100**

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A1 PROPOSED SITE LIGHTING  
1"=30'-0"