



Residential Dark Sky Community Friendly Outdoor Lighting for Katepwa Lake

Issue: Inappropriate outdoor lighting in the community can be invasive and annoying to other community members. Effects can occur up to a kilometre away.

Background:

- There are now many outdoor lighting options with LEDs leading the way.
- Because LEDs are inexpensive to operate, lights are being left on all night.
- Lighting that is allowed to project outward and/or upward is the most disruptive.
- The dominant blue light spectrum of some LED lighting is the most unnatural, those rated at 3000 K or more. Light in the 2700 K range, or warm white, is less blue and is closer to natural light with an amber glow.
- There is a movement called Dark Sky that promotes minimizing light pollution into the night sky, examples of **Acceptable/Unacceptable Lighting Fixtures** can be viewed on the website at: www.darksky.org under Lighting – Outdoor Lighting Basics.

The Dark Sky initiative suggests six guidelines for outdoor lighting:

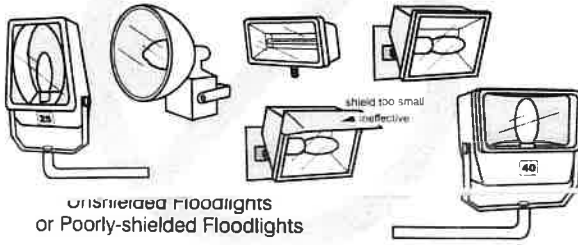
- Always choose fully-shielded fixtures that point their light directly downward (and not sideways)
 - Use “warm white” or filtered LEDs <3,000 K , to minimize blue emissions
 - Look for products with adaptive controls like dimmers, timers and motion sensors
 - Consider dimming or turning off the lights during overnight hours
 - Avoid temptation to over light because of higher luminous efficiency of LEDs
 - Only light to the edge of your own property in the amount required for particular tasks, and not onto the neighbour’s property
- Generally speaking, if lighting is shielded and directed downward, then 90% of the issue is likely solved.

At the June 19, 2018 Regular meeting of Council a resolution was passed for the District to adopt and promote the six guidelines for residential dark sky community friendly outdoor lighting.

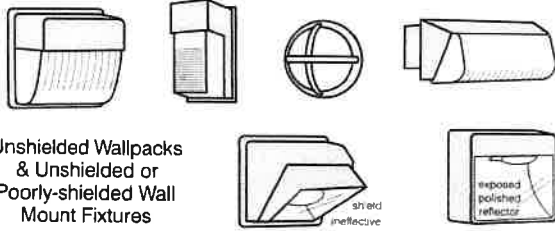
Examples of Acceptable / Unacceptable Lighting Fixtures

Unacceptable / Discouraged

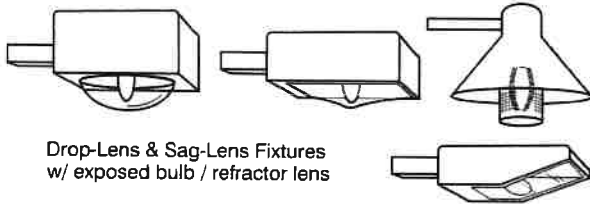
Fixtures that produce glare and light trespass



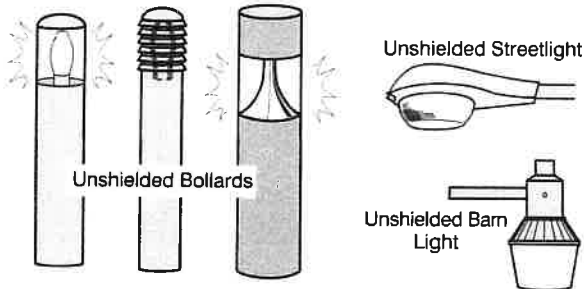
Unshielded Floodlights or Poorly-shielded Floodlights



Unshielded Wallpacks & Unshielded or Poorly-shielded Wall Mount Fixtures



Drop-Lens & Sag-Lens Fixtures w/ exposed bulb / refractor lens

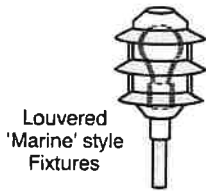


Unshielded Streetlight

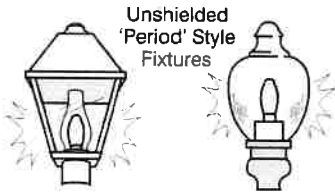
Unshielded Bollards



Unshielded Barn Light



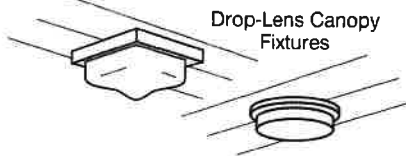
Louvered 'Marine' style Fixtures



Unshielded 'Period' Style Fixtures



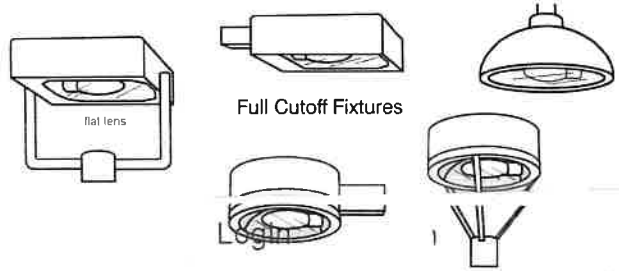
Unshielded PAR Floodlights



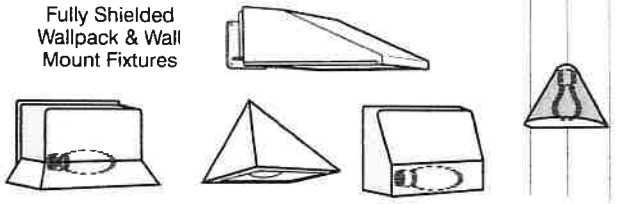
Drop-Lens Canopy Fixtures

Acceptable

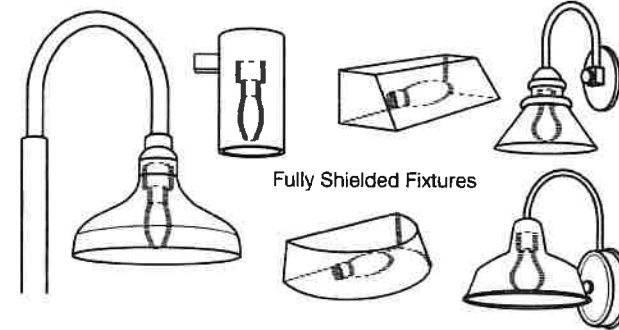
Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



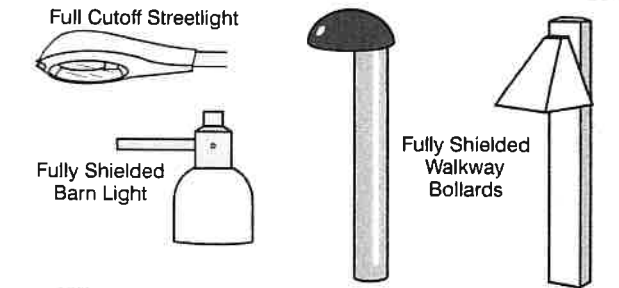
Full Cutoff Fixtures



Fully Shielded Wallpack & Wall Mount Fixtures



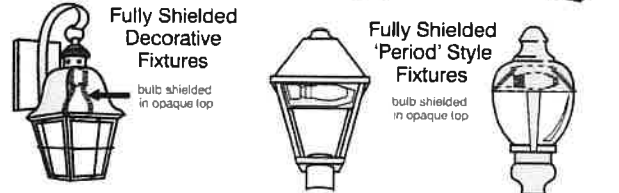
Fully Shielded Fixtures



Full Cutoff Streetlight

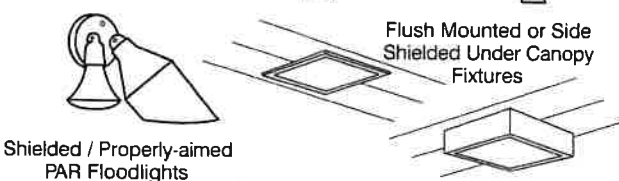
Fully Shielded Barn Light

Fully Shielded Walkway Bollards



Fully Shielded Decorative Fixtures

Fully Shielded 'Period' Style Fixtures



Shielded / Properly-aimed PAR Floodlights

Flush Mounted or Side Shielded Under Canopy Fixtures