

**Luminaire Schedule**

Project: Spencer Dock Blocks 1&2  
Client: Ronan Group

Issue Date	Revision	Comments	Issued By
05/09/2018	C01	Contract Issue	CJ
09/11/2018	C02	Contract Issue	CJ
15/11/2018	C03	Contract Issue	CJ
<b>29/05/2019</b>	<b>C03</b>	<b>Contract Issue</b>	<b>CJ</b>

**1. GENERAL**

The luminaire Schedule shall be read in conjunction with the detailed design drawings, Axiseng specification and MOLA/OMP schedules and drawings.

The electrical contractor shall confirm the manufacture & model number prior to placing orders as listed below is in accordance with the description and design intent of the specification.

Where samples are requested in the following schedules, the cost shall be incorporated within the Tender Offer.

**2. INSTALLATION**

The Contractor shall recognise the manufacturers installation instructions. All associated costs shall be included in the tender offer. Where the installation deviates from the manufacturers instructions details shall be included within the following schedules

Where luminaires require additional supports/ suspensions, including secondary steelwork then the tender offer shall be inclusive of the same. Suspended ceilings shall not be relied upon for supporting luminaires.

Where modular luminaires are installed within a suspended ceiling grid the luminaire shall have secondary supports to structural elements above. Where suspended ceiling tiles require to be cut to accept luminaires then a plywood backboard shall be installed above the cut tile and supported from the suspended ceiling grid. The exact mounting position and suspension height shall be agreed on site prior to installation.

All luminaires shall be supplied with lamps unless otherwise stated. All fluorescent lamps shall be high frequency, triphosphor with a colour temperature of 4000K unless otherwise stated and manufactured by Philips, Osram, GE or Sylvania.

Where luminaire dimensions and cut-out dimensions are provided then these are for tendering purposes only, the Electrical Contractor shall be responsible for providing details of cut-out dimensions for construction.

**3. PROTECTION**

All equipment shall be supplied with adequate means of protection to ensure its preservation during transportation to site and any subsequent storage prior to installation.

**4. EMERGENCY LIGHTING**







Where emergency luminaires are not supplied with an integral LED charging indicator light, a remote flush mounted LED kit shall be installed adjacent to the luminaire.



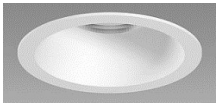




**5. ALTERNATIVE LUMINAIRES**



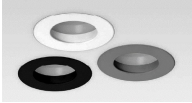
Alternative luminaire proposals shall be submitted with the Tender Offer as an addendum to a specification compliant offer. The acceptance of alternatives shall be at the discretion of Axiseng. Where alternatives are offered and accepted, the Contractor shall undertake all lighting calculations associated with alternative proving the performance will be equivalent to the specified luminaire.








**6. DALI COMPATIBLE**







All luminaires in landlord and open plan areas, shall be DALI compatible and be supplied complete with relays, adaptors and all necessary connections to facilitate connection to a Daylight lighting system

Ref	Location	Luminaire Description	Manufacture & Model Ref	Control Gear	Lamps Type	Luminaire Dimensions	Luminaire Image
A	Plant Areas	An IP65, dust and moisture resistant LED luminaire. Electronic, fixed output control gear. Class I electrical. Canopy: light grey Polycarbonate (PC). Diffuser: Polycarbonate (PC) with linear prisms. Toggles: stainless steel. For surface or suspended mounting. Quick-fix brackets supplied for surface mounting. Mounting kits for conduit, chain suspension and catenary suspension are available as accessories. Complete with 4000K LED. <b>SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Thorn - AquaForce II LED. Code: 96241871 / E3	LED - ON/OFF	61.8W LED, 6400lm, 4000K	1600mm (L) x 147mm (W) x 118mm (H)	
B	Car Park	Surface Mounted Low Profile IP65 anti-corrosive luminaire, Polycarbonate housing and diffuser, c/w driver and Emergency	LED Parksave by Veelite. Code: 3PSL1050L / Em	LED Driver	53W LED, 5235lm, 4000K	1200mm (L) x 140mm (W) x 90mm (H)	
B2	Car Park	Surface Mounted Low Profile IP65 anti-corrosive luminaire, Polycarbonate housing and diffuser, c/w driver and Emergency	LED Parksave by Veelite. Code: 3PSL1050L / Em	LED Driver	64W (6260lm) LED	1200mm (L) x 140mm (W) x 90mm (H)	
C	Landlord Circulation Areas/Staircores	Recessed downlight Echo 137 LED with LED (Light Emitting Diode) system power: 14W, luminous flux of luminaire 1400lm, 3000K, warm white, CRI >83, 230V, direct light emission, housing in aluminium, facet brilliant polished reflector in polycarbonate, wide beam, (F) Flood, with ceiling trim white, passive cooling, with separate electronic control gear, ON/OFF <b>Protection class I, IP20 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Regent - Echo 137 LED. Code: 1001.1908	LED - ON/OFF	14W LED, 1400lm, 3000K	Ø 152mm x 100mm	
D	Landlord Staircores	Ceiling and wall mounted luminaire Torino LED with LED (Light Emitting Diode) system power: 32W, luminous flux of luminaire 2900lm, 3000K, warm white, CRI >80, MacAdam 3, 230V, direct-indirect light emission (84%/16%), emission, opal diffuser in synthetic material for homogenous light diffusion, shadow less luminaire body, invisible screw cover encloses luminaire, ceiling or wall mounting possible, integral electronic control gear, compatible both ON/OFF and dimmable digital DALI <b>Protection class I, IP40 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Regent -Torino LED. Code: 1003.3945	LED - ON/OFF	32 W 3000K LED	Ø 450mm x 96mm	
F	Apartment Utility & Store Rooms	Ceiling and wall mounted luminaire Torino LED with LED (Light Emitting Diode) system power: 24W, luminous flux of luminaire 2900lm, 3000K, warm white, CRI >80, MacAdam 3, 230V, direct-indirect light emission (84%/16%), emission, opal diffuser in synthetic material for homogenous light diffusion, shadow less luminaire body, invisible screw cover encloses luminaire, ceiling or wall mounting possible, integral electronic control gear, compatible both ON/OFF and dimmable digital DALI <b>Protection class I, IP40 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Regent -Torino LED. Code: 1003.3948	LED - ON/OFF	24W LED, 1500lm, 3000K	Ø 600mm x 96mm	

G	Landlord Circulation Areas/Amenity Areas	Gimbal recessed spotlight Kronos Power Trimless LED with LED (Light Emitting Diode) power: 35W, luminous flux of luminaire 3000lm, 3000K, warm white, 230V, direct light emission, square housing, integral electronic control gear, dimmable digital DALI, Protection class II, IP20 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Regent - Carda. Code: 1022.2206	LED - DALI Dimmable	28 W LED, 3000lm, 3000K	156mm x 156mm swivel movement 360 ° tilt movement 30 °	
H	Amenity Areas	Recessed directional spotlight Mino LED with LED (Light Emitting Diode) system power: 14W, luminous flux of luminaire 800lm, 2700K, warm white, CRI >90, 230V, direct light emission, luminaire housing in aluminium, with ceiling trim, silver, wide beam 36°, integral electronic control gear, dimmable digital DALI, contained in scope of delivery, embedding housing to be ordered separately, Protection class II, IP20, SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Regent - Mino LED	LED - DALI Dimmable	14W, 2700K LED	Ø 82mm x 94 mm tilt movement 12 °	
J	Toilet Areas	Recessed downlight Novo Round LED inner ring set back, with LED (Light Emitting Diode), system power: 23 W, luminous flux of luminaire 1800 lm, CRI >90, 3000 K, warm white, SDCM 3, L80 (B50) 50'000h, RG 0 - no risk, 230 V, 600 mA, direct light emission, housing in die-cast aluminium, with ceiling trim, white, RAL 9016, with reflector, operating unit included in delivery, DALI, Protection class II, IP44 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Regent - Novo Round LED. Code: 2002.3799	LED - DALI Dimmable	23 W LED, 1800lm, 3000K	Ø 185mm x 100mm	
K	Amenity Lounge and Breakout Seating Areas	Pendant Lucente Deco luminaire c/w lamp and optional colour finish glass diffusers. Available in all colours SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Lucente Deco. Code: 1114448	DIMMABLE/ON/OFF	-	Ø 405mm x 330mm - 1550mm Suspension	
K1	Amenity Lounge and Breakout Seating Areas	Tom Dixon - Etch Shade Brass SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Tom Dixon - Etch Shade Brass	DIMMABLE/ON/OFF	60 W Energy Saving Lamp	Ø 500mm x 275 mm (H)	
K2	Block 1&2 Entrance Lobby	Pendant Lobby SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Jason Miller Modo Glass Chandelier Large	ON/OFF	-	Large: 1070mm (L) x 800mm (H), 15 HEADS	
K3	Amenity Lounge and Breakout Seating Areas	Wall mounted Pendant to be installed on cantilever bracket. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Fagerhult Lighting - Abell	LED - ON/OFF	-	Ø 490mm x 340mm	

L	Amenity Lounge and Breakout Seating Areas	Gimbal recessed spotlight Kronos Power Trimless LED with LED (Light Emitting Diode) power: 70W, luminous flux of luminaire 6000lm, 3000K, warm white. 230V, direct light emission, square housing, 2 unit, housing for recessed installation without ceiling trim, black, reflector in steel sheet, wide beam, (F) Flood, (FWHM) 36°, integral electronic control gear, dimmable digital DALI, contained in scope of delivery Protection class II, IP20 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Regent - Kronos Power Trimless LED	LED - DALI Dimmable	70 W 3000K LED	302mm x 156mm swivel movement 360 °, tilt movement 30 °	
M	Apartments/Amenity Areas	5m High brightness LED reel. Concealed strip lighting SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Lumistrip Pro LED	LED - ON/OFF	24W 3000K LED	5000mm x 12.8mm x 8mm	
P	Apartments	Recessed directional spotlight Iseo LED with LED (Light Emitting Diode) system power: 10W, luminous flux of luminaire 670lm, 3000K, warm white, CRI >80, MacAdam 3, 230V, direct light emission, in die-cast aluminium, with ceiling trim, silver, wide beam 38°, luminaire part adjustable 2x13.5°, integral electronic control gear, dimmable with leading-edge control or trailing edge phase Protection class II, IP20 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Regent - Iseo LED. Code: 1021.1711	LED - ON/OFF	10W LED, 670lm, 3000K	Ø 90mm x 76 mm tilt movement 13.5°	
Q	Landlord Lobby Corridors	Recessed LED Strip. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	30 LED/m SUPREME Series SAMSUNG LED CRI80+ Available from Fibre LED	LED - ON/OFF	LED 10W/m	-	
R	Corridors/Over Apartment Doors	Recessed LED Downlight, system power: 3W, luminous flux of luminaire 187lm, 3000K, warm white, aluminium powder coated with opal polycarbonate diffuser. IP65 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	ROXO - Sense LED. Code: 90062.L103.E	LED - ON/OFF	3 W LED, 187lm, 3000K	Ø 53mm x 47 mm	
S	Aparthotel Entrance	IP65 Pendant, Cast aluminium, aluminium and stainless steel - Safety glass Reflector made of pure anodised aluminium, system power: 3W, luminous flux of luminaire 1800lm, 3000K, warm white. IP65 SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Bega Pendant. Code: 66 593	LED - ON/OFF	26 W LED	Ø 190mm x 320mm	
CR	Apartments	Ceiling Rose	-	-	-	-	

EX1	Overdoor at Final Exits	Protection class IP 65 Cast aluminium, wall mounted luminaire. Complete with 3 hour Emergency Power Pack. <b>SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Bega IP65 Wall Luminaires shielded on one side	LED - ON/OFF	4.3W LED colour temperature optionally 3000 K or 4000 K	-	
EX2	Balcony and Roof Gardens	Protection class IP 65 Cast aluminium, wall mounted luminaire. <b>SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING</b>	Bega IP65 Wall Luminaires shielded on one side	LED - ON/OFF	16.8W LED colour temperature optionally 3000 K or 4000 K	-	
EX4	Landscape	IP67, Class I, IK10+. Stainless steel construction including PCS hardware. Silicone rubber gasket. Safety glass lens; max. load 5 tonnes. Factory-sealed termination chamber complete with cable gland and 1.5 m of flexible PVC free cable. Cable gland with spiral cable bending protection. Integral EC electronic converter in thermally separated compartment. 'No tool' removable gear/reflector tray. CAD-optimised optics for superior illumination and glare control. OLC_R_One LED Concept. Factory installed LED circuit board. Gimbal mounted, 355° rotatable and 20° tiltable.	WE-EF 185-7592 ETC Inground LED 6W 3K	-	6W LED, 738lm, 3000K	Ø 160mm x 195mm	
EX5	Landscape	IP67, Class I, IK10+. Stainless steel construction including PCS hardware. Silicone rubber gasket. Safety glass lens; max. load 5 tonnes. Factory-sealed termination chamber complete with cable gland and 1.5 m of flexible PVC free cable. Cable gland with spiral cable bending protection. Integral EC electronic converter in thermally separated compartment. 'No tool' removable gear/reflector tray. CAD-optimised optics for superior illumination and glare control. OLC_R_One LED Concept. Factory installed LED circuit board. Gimbal mounted, 355° rotatable and 20° tiltable.	WE-EF 185-2658 ETC Inground LED 18W 3K	-	18W LED, 2217lm, 3000K	Ø 160mm x 195mm	
EX6	Landscape	<b>Recessed IP 67 LED Luminaire for ground and soffit, 800kg static weight resistance, elegant linear, complete with 24V driver and Frosty polycarbonate Diffuser</b>	<b>External inground landscaped areas, Soffit Recess, Stone Areas</b>	<b>FibreLED. FLStripline WD IP Linear LED</b>	<b>FL3528-LED Chip NICHIA, Warm White 3000K.</b>	<b>Up to 3000mm L x 30mm W x 54mm D</b>	
EX7	Landscape	Class I, IK10. Marine-grade, die-cast aluminium alloy. 5CE superior corrosion protection including PCS hardware. Silicone rubber gasket. Polycarbonate main lens. Two cable entries. Factory installed LED circuit board. Integral EC electronic converter.  A pre-installation blockout is available and recommended for mounting in concrete walls.	WE-EF 133-0323 SVO Steplight LED 6W 3K	LED - DALI Dimmable	6W LED, 807lm, 3000K	250mm x 92mm x 108mm	
EX8	Landscape	Spacing between spot centres: 800mm. Handrail Lighting. Light distribution direct Recessed Spotlight Safety Screen IP66/IK10 One-sided asymmetric beam, wall thickness from 1.5 mm Handrail round	<b>WILA PUCK ASYMETRIC 1.4 LED 3K. Mp1201003-70-30</b>	LED - DALI Dimmable	1W /LED, 119lm, 3000K	-	

EX9	Street Lighting	Pole mounted with 2no fittings as per the following: Type A – 27W for the street/road. Type B – 16W for the pathway. c/w nema 7 pin socket 5m mounting - pathway, 8m mounting main road. S/P Ratio 1.47	A) CREE XSPM A type 2SH, 3.73klm, 27w CLO. B) CREE XSPM A type 210, 2.04klm, 16w CLO. Astrotek	-	-	-	
E	Landlord Circulation & Amenity Areas	Recessed round profile 3W LED downlight. Body made of aluminium with matt white finish with 130 degree reflector. Recessed luminaire for self contained non-maintained luminaire. Fully recessed control equipment with a 3mm lamp head resting above the ceiling surface. Constant current charger to provide full recharge of batteries within 24 hours. Designed to fit into a 38mm or 1.5" diameter hole. LED indication of correct charger function. Lead time 3 weeks. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Ventilux HALO HANM3/LED/3W	-	CREE 3W LED 180 lumens	Ø 45mm x 31mm	
EB	Plant Areas	Self-contained IP65 LED Emergency Bulkhead suitable for outdoor and wet environments SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Ventilux - SKY LUX 9 WATT LED	-	9W LED	368mm x 150mm x 102mm	
E1	Landlord Circulation & Amenity Areas	Recessed directional emergency LED exit sign with 3 hour integral battery for maintained mode, central testing emergency lighting function. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Ventilux - Stylux Recessed RSTM3/LED	-	10W LED	360mm x 160mm	
E2	Plantrooms/Back of House Areas	IP42 Surface wall mounted directional emergency LED exit sign with 3 hour integral battery for maintained mode, central testing emergency lighting function. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Ventilux - Exlux EXM3/LED	-	10W LED	430mm x 200mm x 60mm	
E3	External Areas	IP65 Surface wall mounted directional emergency LED exit sign with 3 hour integral battery for maintained mode, central testing emergency lighting function. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Ventilux - Weatherproof Exit WPM3/LED/EXIT	-	20W LED	368mm x 150mm x 102mm	
E4	Landlord Circulation & Amenity Areas	Wall Mounted Reflective directional emergency exit sign. SAMPLE REQUIRED FOR ARCHITECT'S APPROVAL IN ADVANCE OF ORDERING	Stewart Superior Viking Direct	-	-	300mm x 150mm	