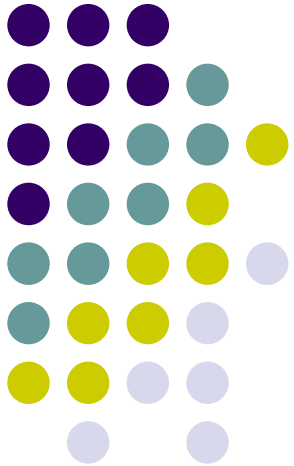
# Riverside Shopping Centre. Hemel Hempstead Architectural Lighting Project

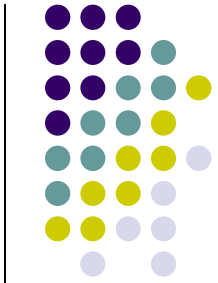
Opened in 2005 Riverside is an exciting £65 million open air shopping development built around the banks of the river that is a shoppers' utopia by day and a buzzing restaurant and café society by night. Riverside will seamlessly extend Hemel Hempstead High Street, complimenting Marlowe's Shopping Centre, built in 1990, and will create a new river-based leisure area for the 80,000 inhabitants of the stunning Hertfordshire town.



# Owners/Contact

- **Joanna Hall**
- Aberdeen Property Investors
- Centre Manager
- Fund Management - Property Services
- 
- Dir +44 1442 229 350
  Mob +44 7795 331 915
  Fax +44 1442 229 351
  Joanna.Hall@aam-gpi.com
- 
- Management Suite
  Unit 27
  Riverside
  Hemel Hempstead
  HP1 1BT

# Main Contractor & Project Managers



- i-vision (UK) Ltd
- Co-ordinator: Joe Lee
- Manager: Geoff Jones

# Designers

- Original Concepts: Darren Orrow INTO LIGHTING LONDON
- Final layouts and control concepts: Geoff Jones i-vision (uk) ltd

# Lighting Programmer

- Tim Matthews
- catford
- LONDON
- +44 208 4611868

Fentura Productions

# Electrical Contractors

- Ray Wescott - Strategic Development Manager ..... Ray.Wescott@fitzpatrick.co.uk

  MEWS Limited
  The Stables, Codham Hall,
  Great Warley, Brentwood,
  Essex, CM13 3JT

  Tel No: 01277 265 400
  Fax No: 01277 227 624
  Mobile No: 07920 507283

- Electrical Project Manager

  **Gavin McKechnie** Gavin.McKechnie@fitzpatrick.co.uk

  **Project Quantity Surveyor**

  Tel ; 01277 265 400

  Fax: 01277 227 624

  Mob: 07747 761 997

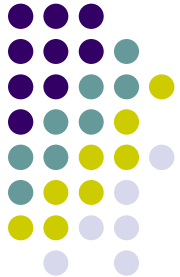
Site Manager

Mike Cable

Tel ; 01277 265 400

Fax: 01277 227 624

# Pre-amble



- The original concepts for providing an exciting feature lighting scheme were designed by Darren Orrow of INTO Lighting back in 2006. Darren commissioned Geoff Jones of i-vision to assist in putting together a scheme utilising the latest in LED technology
- The original areas for consideration were:

  Shop Facades

  Clock Tower

  Monsoon Tower

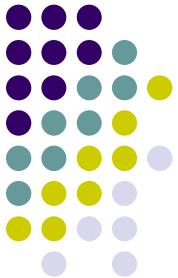
  Office Tower
- Each area was first considered with a ‘conventional’ lighting solution, however when colour change was requested the obvious choice was LED. This choice was also beneficial to the project in terms of the energy efficiency, carbon footprint, maintenance and we believe assisted in the planning application
- Darren Orrow produced computer generated simulations of the areas and in Late 2006 i-vision set up a demonstration showing a number of possible solutions. The demonstration achieved success in demonstrating to the client the versatility of the system

i|VISION

# Aims

- Areas for consideration were:
  - Shop Facades
  - Clock Tower
  - Monsoon Tower
  - Office Tower
- To produce a versatile colour set architectural lighting system that had ‘Hands Free’ Operation.
- To illuminate each of the sections using a light fitting that was concealed and had the ability to project colours and sequences of colour.
- The lighting feature must work with the existing nigh time ambient levels
- The scheme must have an energy focused solution
- Low maintenance

# Project Responsibilities



- i-vision: Design and Project Management
- Ivm Manufacture of LED product
- Mews: Installation management and integration
- i-vision Commissioning
- Tim Matthews: Programming and system configuration

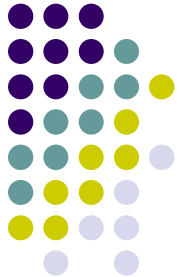
# Project undertaken

- After a number of solutions were put forward it was decided to illuminate the ‘panels’ above the shops on building A, B and C
- To achieve the desired effect each panel was illuminated with 2 Lumos Colour set Linear strips to be located and fixed to the existing canopy
- Building A: 9 off Lumos 1500 Optic Linear IP strip
- Building B: 22 off Lumos 1500 Optic Linear IP strip
- Building C: 23 off Lumos 1500 Optic Linear IP strip
- Each set of 3 linear strips is driven by a Lumos 108 Digital driver.
- Each strip is connected to its driver by a IP-CAT5E cable
- All external wiring was to be Low Voltage (<50VDC)
- The drivers were housed in the upper floor centrally on each Mall frontage and then wired out through trunking to each location

# Control and configuration

- The criteria was to supply a ‘hands off’ solution with internet access for monitoring and editing
- Because of the difficulties of wiring between building a RF DMX solution was to used with 3 units strategically mounted on the canopies
- The units chosen were:
  - HOG PC with X-Keys Macro Keyboard (1) with remote access
  - Wireless Solution RF DMX Units (3)
- The criteria was to supply a ‘hands off’ solution with internet access for monitoring and editing

# Energy Audit



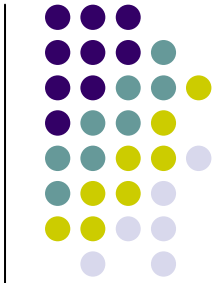
- Building A: Average power 430 Watts
- Building B: Average power 980 Watts
- Building C: Average power 950 Watts
- Control etc: Average power 350 Watts

- The total ‘Average energy’ consumed is 2.7 Kiilowatts which in simple terms relates to 6 Son400 Lamps
- The hourly running cost is a miserly 34.5P per hour and Annually estimated at ONLY £738

- AN EXCEPTIONALLY ENERGY CONSCIOUS SOLUTION

iVISION

# Equipment List



| | | |
|---|---|---|
| • Lumos 1500 Linear RGB LED Optic (40*10) IP rated | (54) | |
| • HOG PC with X-Keys Macro Keyboard | (1) | with remote access |
| • Wireless Solution RF DMX  Units | (3) | |
| • Mews Custom Cable trunk | 180M | |
| • IP Rated CAT 5E Cable: | 900M | |

iVISION

# Results


ivision