

JV TIERNEY & CO

MECHANICAL ELECTRICAL & SUSTAINABLE ENGINEERS



SITE LIGHTING REPORT

Library Square Ringsend – Public Realm
Improvement and Library Refurbishment
and Extension

The Tannery
53-56 Cork Street
Dublin D08 P92R
Tel: +353 1 421 4900
Email: mail@jvtierney.ie
Website: www.jvtierney.ie

Library Square Ringsend – Public Realm Improvement and Library Refurbishment and Extension Lighting Report

Rev:	Issue Date:	Prepared By:	Checked By:
1	15/03/2023	RD	MD



Contents

1. Lighting Design Narrative.....	2
Appendix A.....	4
Appendix B.....	5

1. Lighting Design Narrative

The proposed scheme specifically provides for the improvement of the public realm around Ringsend Library, including; the narrowing of the over-wide carriageway on Bridge Street / Irishtown Road and hardening of the sweeping bend; levelling of the square which will be gradually graded over the entire space with restoration of stepped access to the original front door of the Library and a universally accessible access to the new main entrance to the library located on the north facing facade; proposed surface treatment to carry across the road from the west side of the Square to the east side on one level, using a defined palette of materials, thereby creating a greater sense of continuity for pedestrians. Cycle parking and broadening of the square space; creation of public space delineated with planters to the north & east and to include specimen tree planting and appropriate lighting. Some customer parking for retail units & controlled loading bays for businesses. Relocation of bus stop and provision of controlled pedestrian crossing to St. Patrick's Villas giving access Ringsend Park.

The extension and refurbishment of Ringsend Library, providing universal access throughout, expanding and improving the internal environment, refitting the electrical and mechanical infrastructure, improving the building's energy efficiency, and conserving the building's architectural significance, while providing a wider range of services to customers in line with Dublin City Libraries policy objectives.

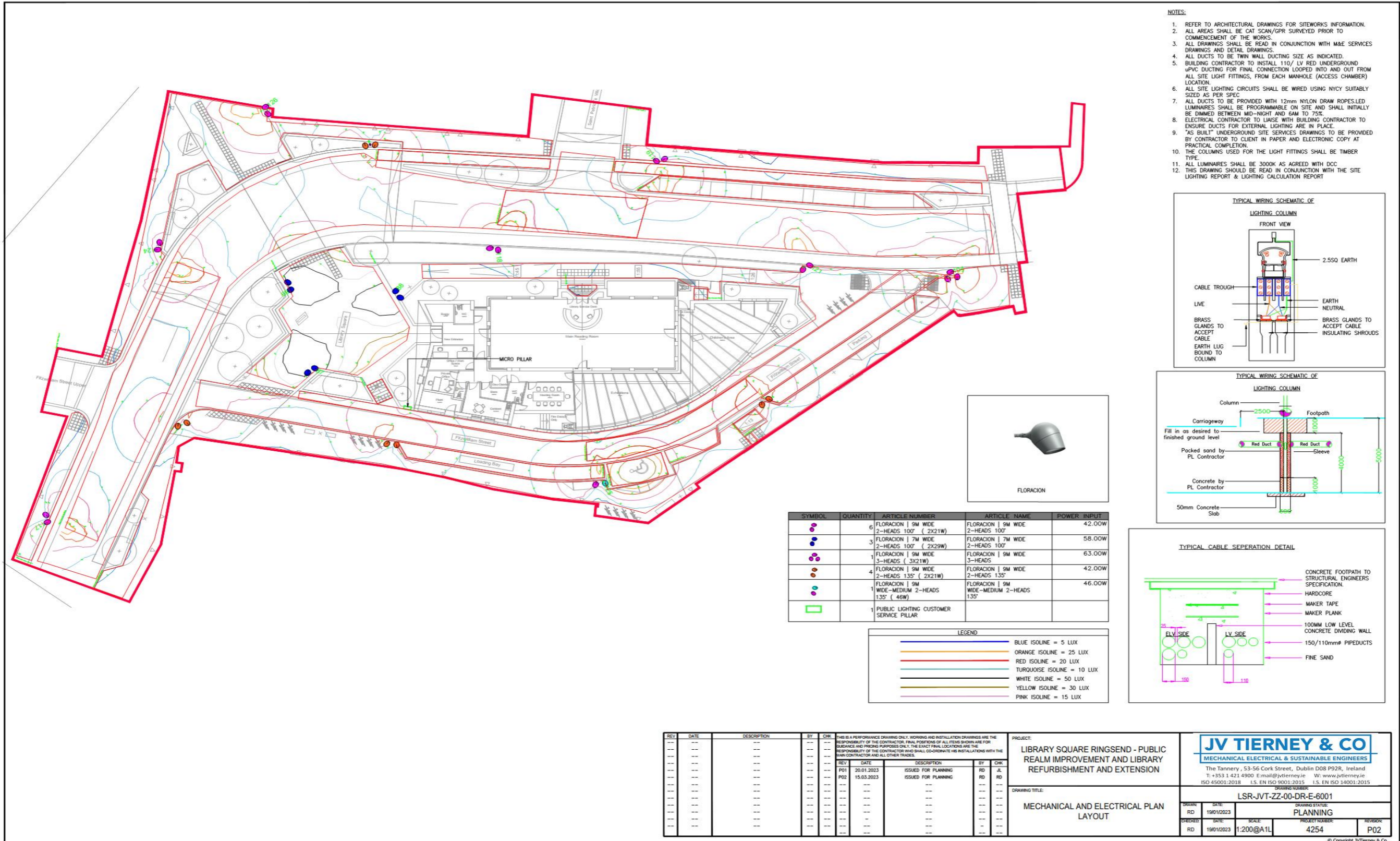
As per the DCC public lighting specification in accordance with I.S. EN 132021-2:2015 & BS 5489-1:2013 pathways and roads should have a minimum light level. Therefore, all walkway areas must be lit to a minimum of P4 lighting class with the calculation surface on the ground in these cases. Moreover, roads will be lit to a minimum of P2 lighting class. These stipulations are achieved throughout as per the site lighting drawing no. LSR-JVT-ZZ-00-DR-E-6001. There are a number of steps and ramps seen throughout the plan, as per Part M, the stairs and ramps on this site must be lit to a minimum level, purpose lighting shall be utilised in these cases not shown on drawing no. LSR-JVT-ZZ-00-DR-E-6001 as it causes uniformity issues. The library square will be lit to 20 lux minimum as this area is considered the approach area to the library which must be lit to 20 lux minimum as per TGD part M.

The selection of lights used within the design can be seen in appendix B, all luminaires chosen are LED type. Moreover, the columns in which the luminaires shall be mounted will be timber, mainly 9m in height but 7m on the central library plaza as indicated on drawing no. LSR-JVT-ZZ-00-DR-E-6001. Note as this library square is considered a place of interest/ landmark area the luminaires and associated columns used in this design are not typical fittings/ columns suggested by DCC's public lighting specification as agreed with DCC. Moreover, the fittings were carefully chosen to ensure glare and light spill is reduced by utilising these directional fittings that possess a cap to reduce glare onto the local residents' buildings (See appendix B).

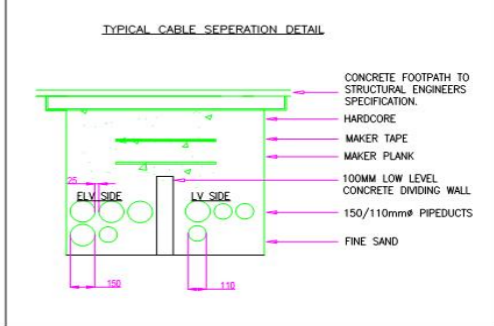
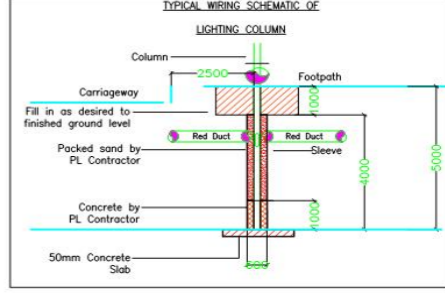
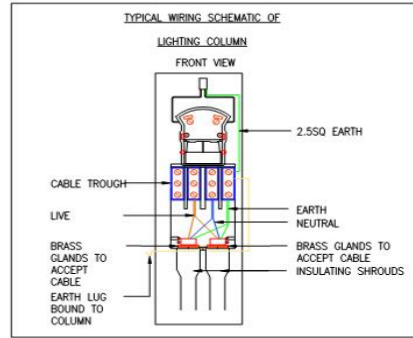
Furthermore, as this is a place of interest/ landmark area, regular planned maintenance of the landscaping will be in place which will be required as a number of the luminaire fittings are located in close proximity of trees.

Considering the amount of lighting fixtures, 1 number of micro lighting pillar are required. The location is/ seen below in appendix A, drawing no. LSR-JVT-ZZ-00-DR-E-6001.

Appendix A



- NOTES:**
- REFER TO ARCHITECTURAL DRAWINGS FOR SITEMWORKS INFORMATION.
 - ALL AREAS SHALL BE CAT SCAN/GPR SURVEYED PRIOR TO COMMENCEMENT OF THE WORKS.
 - ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH M&E SERVICES DRAWINGS AND DETAIL DRAWINGS.
 - ALL DUCTS TO BE TWIN WALL DUCTING SIZE AS INDICATED.
 - BUILDING CONTRACTOR TO INSTALL 110/ LV RED UNDERGROUND UPVC DUCTING FOR FINAL CONNECTION LOGGED INTO AND OUT FROM ALL SITE LIGHT FITTINGS, FROM EACH MANHOLE (ACCESS CHAMBER) LOCATION.
 - ALL SITE LIGHTING CIRCUITS SHALL BE WIRED USING NYCY SUITABLY SIZED AS PER SPEC.
 - ALL DUCTS TO BE PROVIDED WITH 12mm NYLON DRAW ROPES. LED LUMINAIRES SHALL BE PROGRAMMABLE ON SITE AND SHALL INITIALLY BE DIMMED BETWEEN MID-NIGHT AND 6AM TO 75%.
 - ELECTRICAL CONTRACTOR TO LIASE WITH BUILDING CONTRACTOR TO ENSURE DUCTS FOR EXTERNAL LIGHTING ARE IN PLACE.
 - "AS BUILT" UNDERGROUND SITE SERVICES DRAWINGS TO BE PROVIDED BY CONTRACTOR TO CLIENT IN PAPER AND ELECTRONIC COPY AT PRACTICAL COMPLETION.
 - THE COLUMNS USED FOR THE LIGHT FITTINGS SHALL BE TIMBER TYPE.
 - ALL LUMINAIRES SHALL BE 3000K AS AGREED WITH DCC.
 - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE SITE LIGHTING REPORT & LIGHTING CALCULATION REPORT.



SYMBOL	QUANTITY	ARTICLE NUMBER	ARTICLE NAME	POWER INPUT
	6	FLORACION 9M WIDE 2-HEADS 100' (2X21W)	FLORACION 9M WIDE 2-HEADS 100'	42.00W
	3	FLORACION 7M WIDE 2-HEADS 100' (2X29W)	FLORACION 7M WIDE 2-HEADS 100'	58.00W
	1	FLORACION 9M WIDE 3-HEADS (3X21W)	FLORACION 9M WIDE 3-HEADS	63.00W
	4	FLORACION 9M WIDE 2-HEADS 135' (2X21W)	FLORACION 9M WIDE 2-HEADS 135'	42.00W
	1	FLORACION 9M WIDE-MEDIUM 2-HEADS 135' (46W)	FLORACION 9M WIDE-MEDIUM 2-HEADS 135'	46.00W
	1	PUBLIC LIGHTING CUSTOMER SERVICE PILLAR		

LEGEND

	BLUE ISOLINE = 5 LUX
	ORANGE ISOLINE = 25 LUX
	RED ISOLINE = 20 LUX
	TURQUOISE ISOLINE = 10 LUX
	WHITE ISOLINE = 50 LUX
	YELLOW ISOLINE = 30 LUX
	PINK ISOLINE = 15 LUX

<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHK</th> </tr> </thead> <tbody> <tr> <td>P01</td> <td>20.01.2023</td> <td>ISSUED FOR PLANNING</td> <td>RD</td> <td>JL</td> </tr> <tr> <td>P02</td> <td>15.03.2023</td> <td>ISSUED FOR PLANNING</td> <td>RD</td> <td>RD</td> </tr> </tbody> </table>	REV	DATE	DESCRIPTION	BY	CHK	P01	20.01.2023	ISSUED FOR PLANNING	RD	JL	P02	15.03.2023	ISSUED FOR PLANNING	RD	RD	<p>THIS IS A PERFORMANCE DRAWING ONLY. WORKING AND INSTALLATION DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR. FINAL POSITIONS OF ALL ITEMS SHOWN ARE FOR GUIDANCE AND FINISHING PURPOSES ONLY. THE EXACT FINAL LOCATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL CO-ORDINATE HIS INSTALLATIONS WITH THE MAIN CONTRACTOR AND ALL OTHER TRADES.</p>	<p>PROJECT: LIBRARY SQUARE RINGSEND - PUBLIC REALM IMPROVEMENT AND LIBRARY REFURBISHMENT AND EXTENSION</p> <p>DRAWING TITLE: MECHANICAL AND ELECTRICAL PLAN LAYOUT</p>	<p>JV TIERNEY & CO MECHANICAL ELECTRICAL & SUSTAINABLE ENGINEERS</p> <p>The Tannery, 53-56 Cork Street, Dublin D08 P92R, Ireland T: +353 1 421 4900 E: email@jvtierney.ie W: www.jvtierney.ie ISO 45001:2018 U.S. EN ISO 9001:2015 U.S. EN ISO 14001:2015</p> <p>LSR-JVT-ZZ-00-DR-E-6001</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>SCALE</th> <th>PROJECT NUMBER</th> <th>REVISION</th> </tr> </thead> <tbody> <tr> <td>19/01/2023</td> <td>1:200@A1L</td> <td>4254</td> <td>P02</td> </tr> </tbody> </table> <p>© Copyright JV Tierney & Co.</p>	DATE	SCALE	PROJECT NUMBER	REVISION	19/01/2023	1:200@A1L	4254	P02
REV	DATE	DESCRIPTION	BY	CHK																						
P01	20.01.2023	ISSUED FOR PLANNING	RD	JL																						
P02	15.03.2023	ISSUED FOR PLANNING	RD	RD																						
DATE	SCALE	PROJECT NUMBER	REVISION																							
19/01/2023	1:200@A1L	4254	P02																							

Appendix B



This Report was prepared by:

Robert Donnelly

Signed:

A handwritten signature in black ink, appearing to read 'R. Donnelly', written over a horizontal line.

Robert Donnelly, Project Engineer

J.V. Tierney & Co.

Date: 15/03/2023