
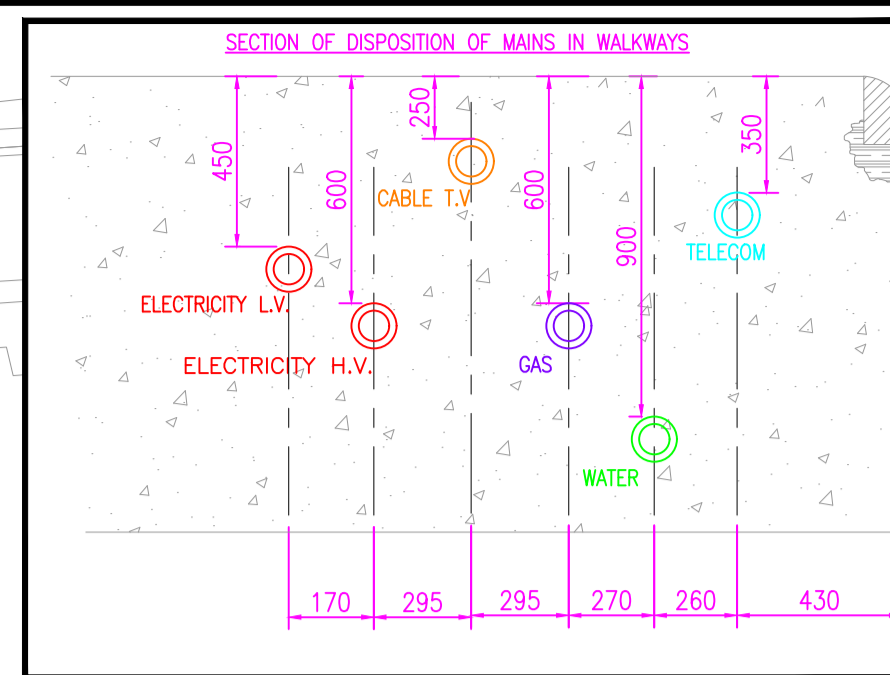
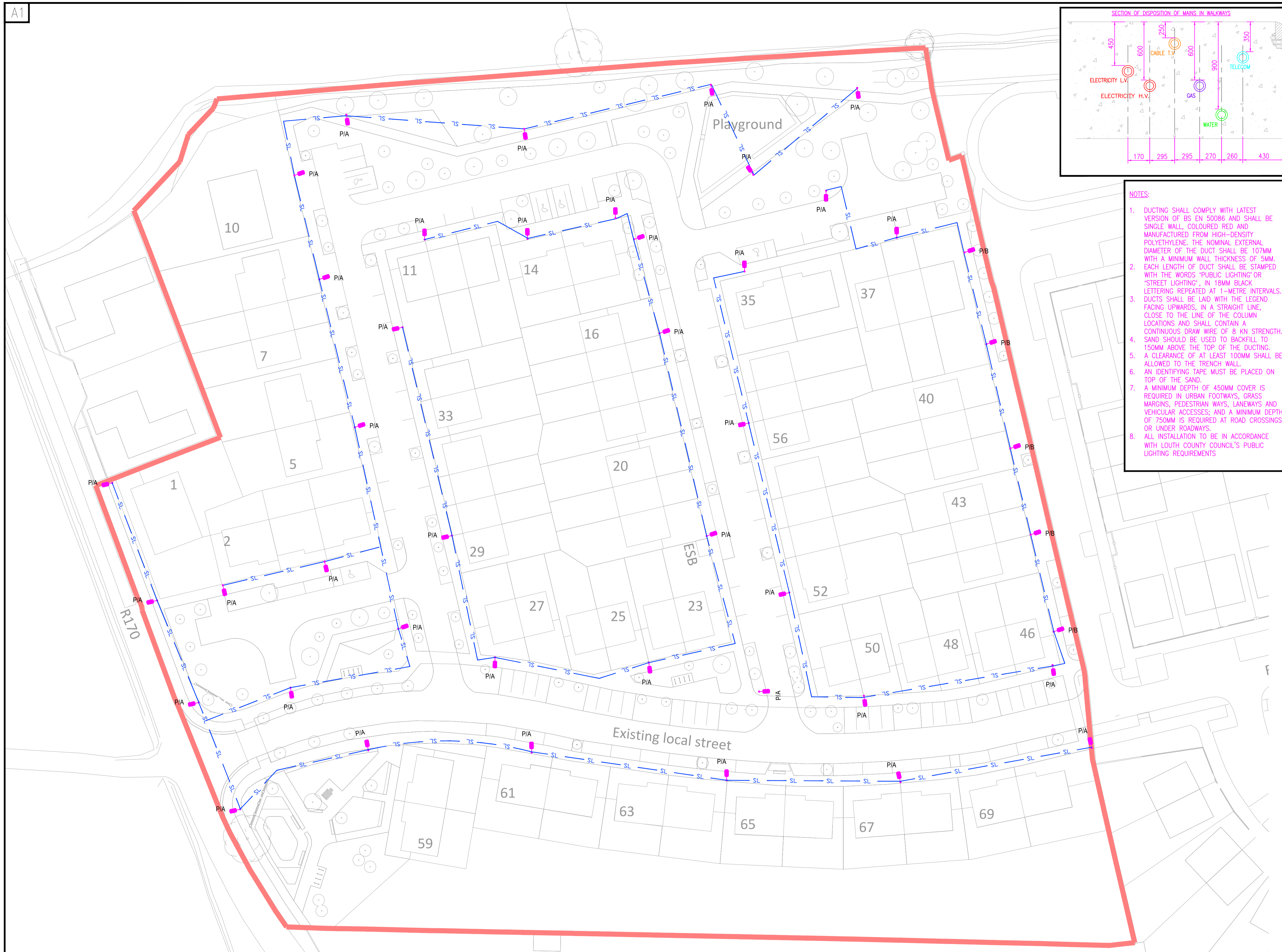


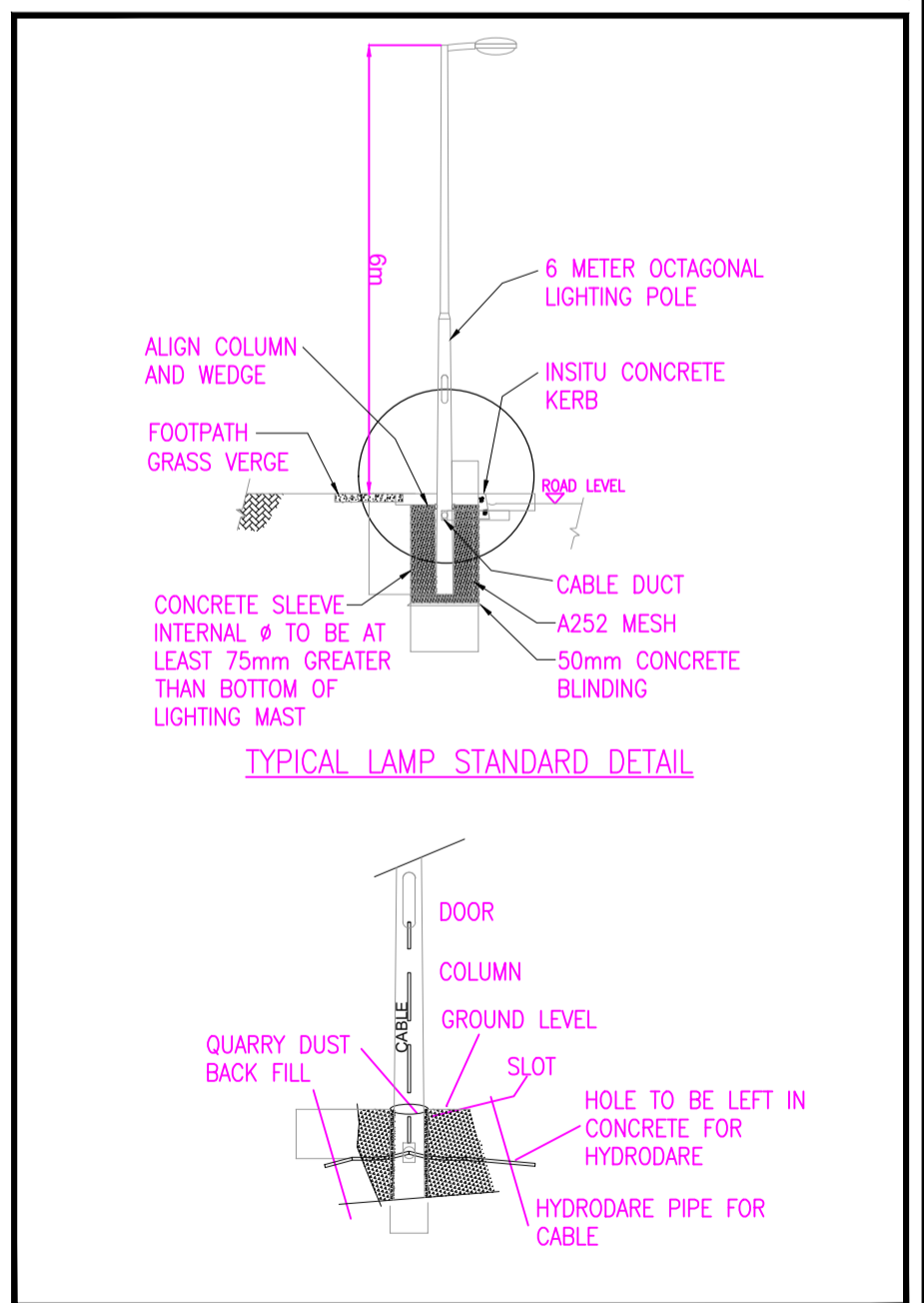
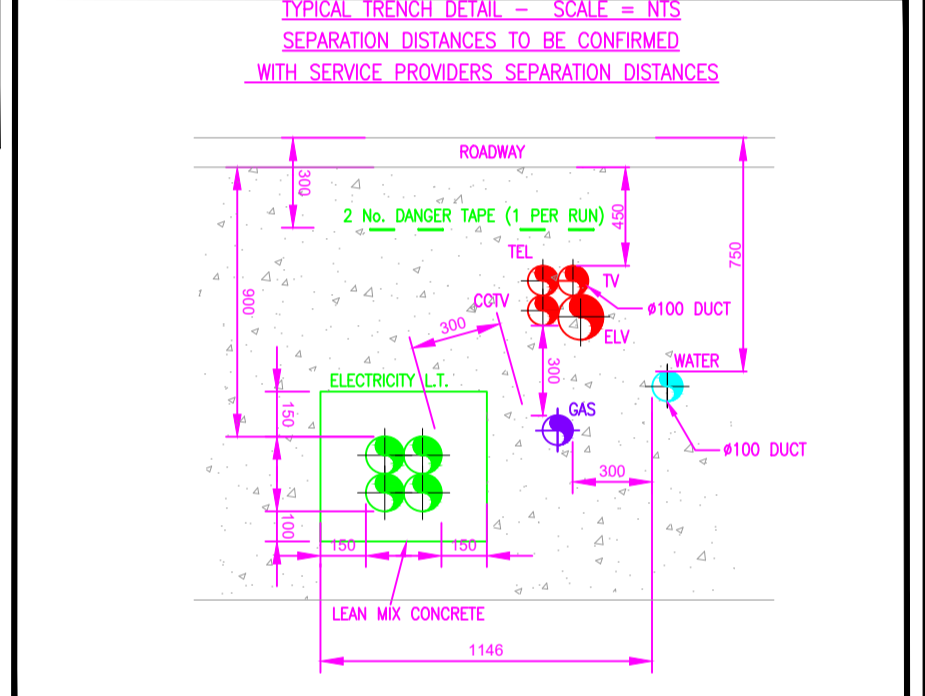
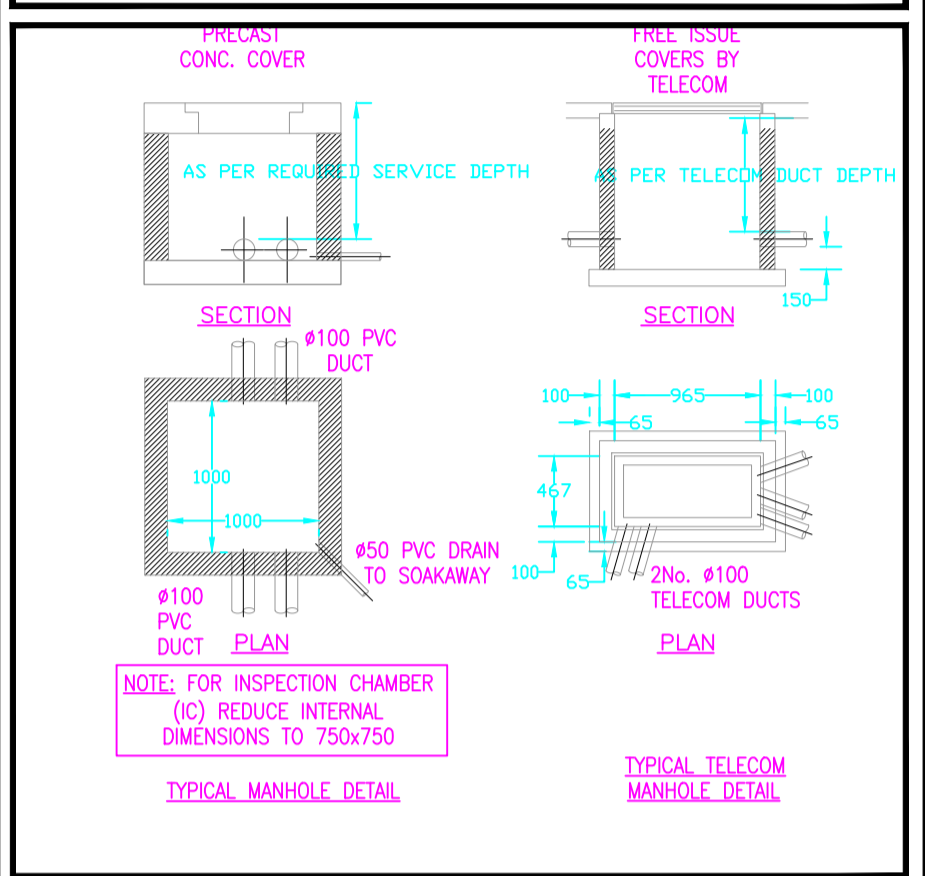
HAYES HIGGINS PARTNERSHIP		 <small>HAYES HIGGINS PARTNERSHIP</small>				Dwg.Cat: Electrical			
Address: The Arches, Gas House Lane, Kilkenny City Tel: 056-7764710 Fax: 056-7723223 E-mail: info@hhp.ie						Signed:			
DRAWING / DOCUMENT REGISTER & ISSUE SHEET									
Project: 55No. Social Housing Units at Ravel, Dunleer, Co. Louth				Issue Date and Revision No.				Sheet: 1 of 1	
Job No. 23ME012		Day 21 05 12 09 Month 11 03 03 04 Year 23 24 24 24							
Drawing/ Document No.		Drawing / Document title		Scale		Rev			
ME-1000(C)		Proposed Public Lighting Layout		1:400 @ A1		P1 P2 P3 P4			
Specifications									
Site Specific Electrical Specification									
General Electrical Specification									
Electrical Datasheets									
Electrical BCAR Requirements									
Copies issued to:				Number of Copies :					
CLIENT Louth County Council		1	1	1	1				
ARCHITECT									
QS									
C&S									
PSDP									
Purpose of Issue									
FOR INFORMATION		I	I	I	I				
FOR APPROVAL									
FOR TENDER									
CONTRACT ISSUE									
FOR CONSTRUCTION									
ELECTRONIC		E	E	E	E				
PAPER									
<small>*** Purpose of Issue: I = Information, A = Approval, T = Tender, CI = Contract Issue, C = Construction, E = Electronic, P = Paper</small> <small>*** P1, P1, C1 : Designates Drawings and/or Revisions Issued</small>									



LEGEND

- SL — EXTERNAL LIGHTING DUCT #100mm (RED)
- SL — EXISTING LIGHTING DUCT
- P/A LED LANTERN, 22W, 3400lm, 4000K, DW50 DISTRIBUTION ON 6m POLE
- P/B LED LANTERN, 22W, 3400lm, 4000K, DX70 DISTRIBUTION ON 6m POLE
- E EXISTING LUMINAIRE
- ⊗ MANHOLE FOR DRAWING WIRES, ACCESS AND MAINTENANCE.
- ⊗ ESB MINIPILLAR "n"
- ⊗ PL MICROPILLAR "n"

- NOTES:**
- DUCTING SHALL COMPLY WITH LATEST VERSION OF BS EN 50086 AND SHALL BE SINGLE WALL, COLOURED RED AND MANUFACTURED FROM HIGH-DENSITY POLYETHYLENE. THE NOMINAL EXTERNAL DIAMETER OF THE DUCT SHALL BE 107MM WITH A MINIMUM WALL THICKNESS OF 5MM. EACH LENGTH OF DUCT SHALL BE STAMPED WITH THE WORDS "PUBLIC LIGHTING" OR "STREET LIGHTING", IN 18MM BLACK LETTERING REPEATED AT 1-METRE INTERVALS.
 - DUCTS SHALL BE LAID WITH THE LEGEND FACING UPWARDS, IN A STRAIGHT LINE, CLOSE TO THE LINE OF THE COLUMN LOCATIONS AND SHALL CONTAIN A CONTINUOUS DRAW WIRE OF 8 KN STRENGTH. SAND SHOULD BE USED TO BACKFILL TO 150MM ABOVE THE TOP OF THE DUCTING.
 - A CLEARANCE OF AT LEAST 100MM SHALL BE ALLOWED TO THE TRENCH WALL.
 - AN IDENTIFYING TAPE MUST BE PLACED ON TOP OF THE SAND.
 - A MINIMUM DEPTH OF 450MM COVER IS REQUIRED IN URBAN FOOTWAYS, GRASS MARGINS, PEDESTRIAN WAYS, LANEWAYS AND VEHICULAR ACCESSES; AND A MINIMUM DEPTH OF 750MM IS REQUIRED AT ROAD CROSSINGS OR UNDER ROADWAYS.
 - ALL INSTALLATION TO BE IN ACCORDANCE WITH LOUTH COUNTY COUNCIL'S PUBLIC LIGHTING REQUIREMENTS



Referenced drawings

Dwg No.	Dwg Title

Issue register

Rev.	Date	Description	Dwn.	Chkd.	Appvd.
PI	21/11/23	INFORMATION	HP	BC	BC
P2	05/03/24	INFORMATION	HP	BC	BC
P3	12/03/24	S179A	HP	BC	BC
P4	09/04/24	S179A	HP	BC	BC

NOTES:

- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, C&S ENGINEERS DRAWINGS & SPECIFICATIONS.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT BUILDING REGULATIONS.
- DO NOT SCALE - WORK TO FIGURE DIMENSIONS ONLY.





Drawing Title: **PROPOSED PUBLIC LIGHTING LAYOUT**

Date: 21/11/23 Scale: 1:400@A1 (1:800@A3)

Drawn By: H.P. Checked By: B.C. Approved By: B.C.

Client: **LOUTH COUNTY COUNCIL**

Job Description: **DUNLEER HOUSING**

Project No: 23ME012 Drawing Ref: ME-1000(C) Rev: P4

Drawing Title: **A.3.4 S179A**



Gas House Lane, Kilkenny.

DATE: 9 April 2024
DESIGNER: HHP
PROJECT No: 23ME012
PROJECT NAME: Dunleer



Design:
Lighting Classes according to EN13201:2015:
- Residential: P4
($5 < E_{av} < 7.5$; $E_{min} = 1$; $MF = 0.8$)

Outdoor Lighting Report

PREPARED BY: Hayes Higgins Partnership
Gas House Lane
Kilkenny

email: info@hhp.ie
Tel.: 056 7764710

Layout Report

General Data

Dimensions in Metres Angles in Degrees
Grid Origin 8.0m x 482.6m
Area 235.7m x 179.0m
Sample Spacing 1.49m x 1.49m

Luminaires

Luminaire A Data

Supplier	
Type	BGP615 DW50
Lamp(s)	LED-HB 4S/740
Lamp Flux (klm)	3.40
File Name	Luma Micro_BGP615_DW50_3400_20LED_330mA_4S_CLO L90_NW.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	616.7, 39.5, 0.0
No. in Project	39

Luminaire B Data

Supplier	
Type	BGP615 DX70
Lamp(s)	LED-HB 4S/4000k
Lamp Flux (klm)	3.40
File Name	Luma Micro_BGP615_DX70_3400_20LED_330mA_4S_CLO L90_NW.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	328.4, 277.9, 0.0
No. in Project	5

Layout

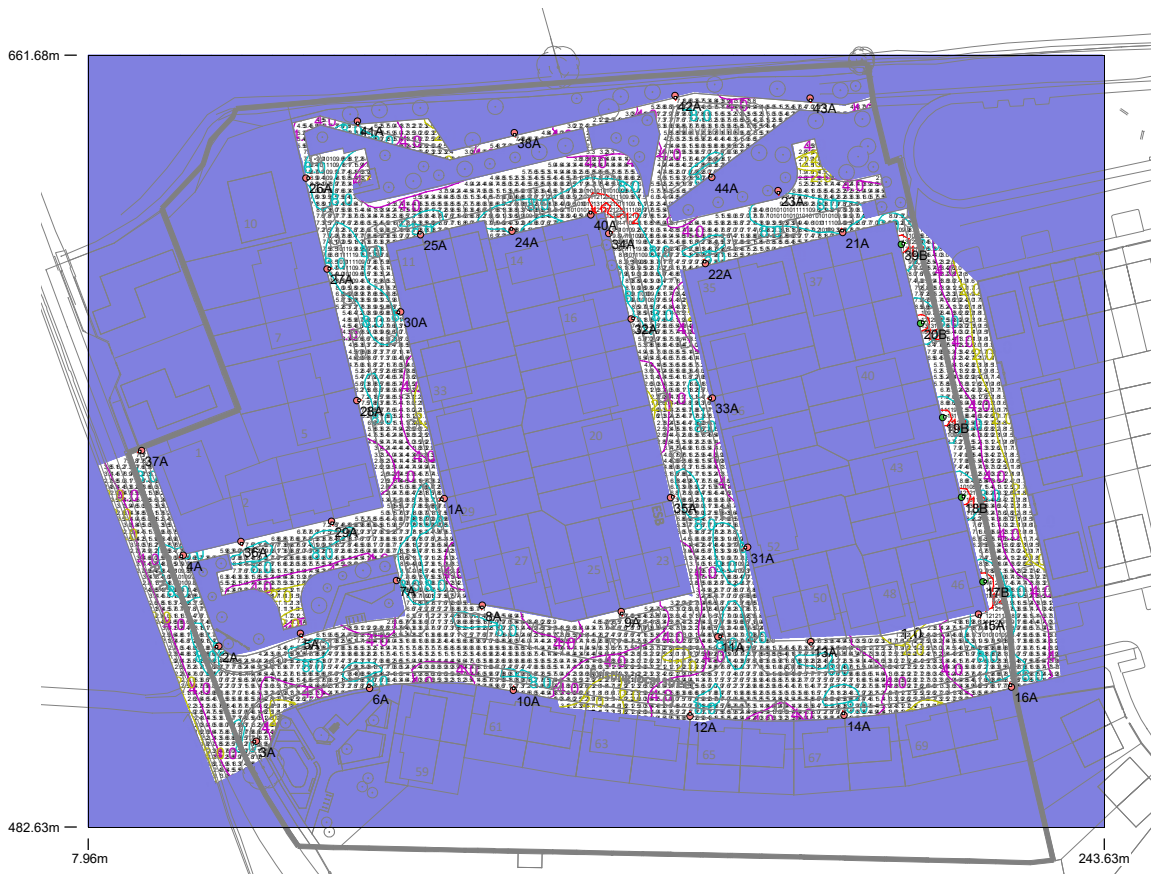
No.	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	90.46	558.84	6.00	191.00	0.00	0.00	0.50			
2	A	38.23	524.68	6.00	198.00	0.00	0.00	0.50			
3	A	46.95	502.63	6.00	191.00	0.00	0.00	0.50			
4	A	30.00	545.73	6.00	209.00	0.00	0.00	0.50			
5	A	57.20	527.64	6.00	288.00	0.00	0.00	0.50			
6	A	73.19	514.88	6.00	105.00	0.00	0.00	0.50			
7	A	79.41	539.87	6.00	18.00	0.00	0.00	0.50			
8	A	99.30	534.16	6.00	264.00	0.00	0.00	0.50			
9	A	131.58	532.70	6.00	287.00	0.00	0.00	0.50			
10	A	106.57	514.38	6.00	86.00	0.00	0.00	0.50			
11	A	153.97	526.85	6.00	4.00	0.00	0.00	0.50			
12	A	147.54	508.42	6.00	90.00	0.00	0.00	0.50			
13	A	175.50	525.71	6.00	275.00	0.00	0.00	0.50			
14	A	183.19	508.61	6.00	104.00	0.00	0.00	0.50			
15	A	214.37	532.08	6.00	295.00	0.00	0.00	0.50			
16	A	222.02	515.17	6.00	112.00	0.00	0.00	0.50			
17	B	215.46	539.55	6.00	15.00	0.00	0.00	0.50			
18	B	210.45	559.18	6.00	20.00	0.00	0.00	0.50			
19	B	206.10	577.63	6.00	20.00	0.00	0.00	0.50			
20	B	200.96	599.50	6.00	20.00	0.00	0.00	0.50			

Layout Continued

No.	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
21	A	182.89	620.53	6.00	106.00	0.00	0.00	0.50			
22	A	151.05	613.34	6.00	106.00	0.00	0.00	0.50			
23	A	167.95	630.25	6.00	277.00	0.00	0.00	0.50			
24	A	106.26	620.89	6.00	106.00	0.00	0.00	0.50			
25	A	84.99	620.01	6.00	104.00	0.00	0.00	0.50			
26	A	58.46	633.14	6.00	0.00	0.00	0.00	0.50			
27	A	63.34	612.12	6.00	8.00	0.00	0.00	0.50			
28	A	70.25	581.57	6.00	10.00	0.00	0.00	0.50			
29	A	64.40	553.64	6.00	288.00	0.00	0.00	0.50			
30	A	80.40	602.19	6.00	197.00	0.00	0.00	0.50			
31	A	160.86	547.58	6.00	191.00	0.00	0.00	0.50			
32	A	133.82	600.53	6.00	18.00	0.00	0.00	0.50			
33	A	152.67	582.20	6.00	189.00	0.00	0.00	0.50			
34	A	128.62	620.31	6.00	17.00	0.00	0.00	0.50			
35	A	142.99	559.06	6.00	18.00	0.00	0.00	0.50			
36	A	43.34	548.90	6.00	290.00	0.00	0.00	0.50			
37	A	20.37	570.03	6.00	209.00	0.00	0.00	0.50			
38	A	106.77	643.71	6.00	280.00	0.00	0.00	0.50			
39	B	196.49	617.81	6.00	20.00	0.00	0.00	0.50			
40	A	124.53	624.65	6.00	106.00	0.00	0.00	0.50			
41	A	70.36	646.38	6.00	280.00	0.00	0.00	0.50			
42	A	143.98	652.30	6.00	280.00	0.00	0.00	0.50			
43	A	175.34	651.73	6.00	280.00	0.00	0.00	0.50			
44	A	152.56	633.29	6.00	120.00	0.00	0.00	0.50			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	5.90
Emin	1.04
Emax	13.72
Emin/Emax	0.08
Emin/Eav	0.18