ELD Completion Module

Advice for students on completion of Modules A, B & C

Why?

- Certificates of attendance issued after Modules A, B & C
- ELD only awarded:
  1. Completion modules A, B & C **AND**
  2. Completion Module project submitted and assessed as worthy
- Needs to be your own work
- ELD leads to Eng Tech AMILP
- Your employer will expect you to complete the course
- For most, elements will be based on work you are working on or have completed
- Help is available
- You owe it to yourself

Completion Module Report – Suggested Content

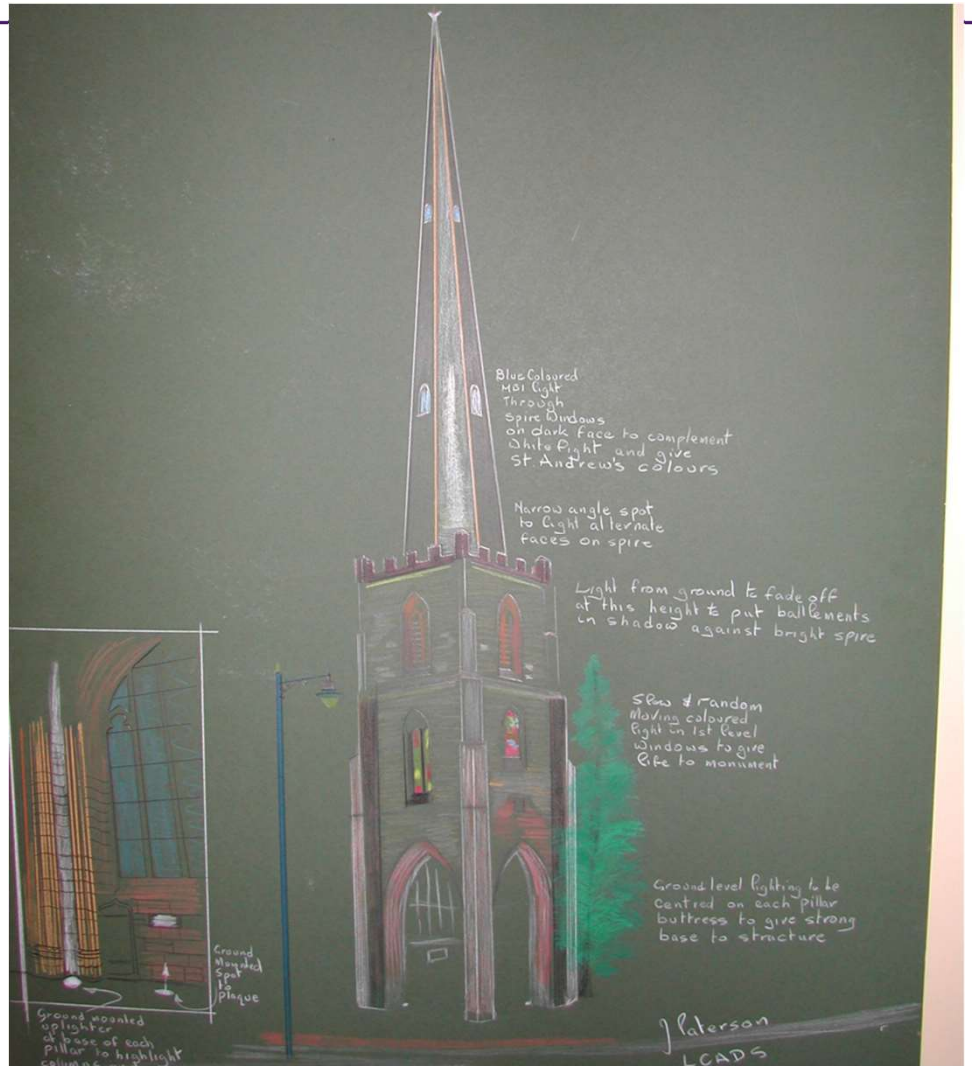
4 Elements
a. A traffic route scheme (luminance)
b. A subsidiary road scheme (illuminance)
c. An area: car park, urban space, sports facility or similar (floodlighting)
d. An architectural scheme: Statue, building or similar (conceptual)

- Elements a, b & c
  - Description of the site
    - Road type, typical usage, destination
    - Traffic volume – car park long/short stay
    - Environmental zone
    - Possibility of obtrusive light
    - Area map, photographs etc.
  - Background & history
    - History of the area
    - Description of properties landscape etc
    - Ecological constraints
    - Why the scheme is necessary
      - Condition, accidents, crime, development etc
- Elements a, b & c (continued)
  - Design philosophy
    - Lighting class/levels – options – why?
    - Equipment – options – why?
    - Energy consumption – options – savings – carbon
    - Obtrusive light statement
    - Scheme costs
  - Indicative design
    - Calculation results in report body
    - Maintenance factor
    - Environmental constraints
    - Departures from standards
  - Conclusion
    - What worked well and not so well?
    - Reflection, what would you do differently next time
  - Bibliography – if appropriate
  - Appendices
    - Scheme drawings
    - Specification
    - Designers risk assessment
    - Calculation reports
    - Cost/carbon calculations

Completion Module Report – Suggested Content

Architectural Element

- Description of the site
  - Existing lighting
  - Reason for installation
- Lighting design concept
  - What are you trying to achieve
  - Viewing angles
  - Who will see it?
- Design levels, colour & modelling
  - What were the options?
  - Why the levels were chosen
- Equipment
  - Description
  - Why it was chosen
  - Alternatives
  - positioning
  - Modelling issues
- Visualisations
- H&S issues
  - Hazzard elimination
  - CDM
- Environmental issues
  - Obtrusive light
  - Upward light
  - Burning hours
  - Likely energy costs
- Maintenance
  - Maintenance requirements
  - Specialist resources
  - Other maintenance issues, requirements or access
- Information for building the scheme, probably in Appendices
  - Drawings
  - Cable calculations
  - Specifications or equipment brochures



Completion Module Report – Assessment

Content – Traffic Route				
	Criteria	**Reviewer 1 Grade**	**Agreed Grade**	**Comments**
1	Identifies and describes design area, the existing lighting and the reason for new lighting			
2	Identifies equipment and reasons why these were chosen			
3	Identifies design levels and reasons why these were chosen			
4	Identifies possible alternatives) and why these were rejected			
5	Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)			
6	Identifies environmental issues, incl. light pollution, energy costs			
7	Identifies on-going maintenance issues			
8	Information for building the scheme (drawings, specification etc.			
9	Calculation results - including lighting levels and cable calculations where necessary. Full results in appendix			
10	Visualisation (descriptive or image)			
11	Underpinning engineering, mathematical principles any long hand calculations)			
Total For Traffic Route Section		#N/A	#N/A	

-
0 - No Evidence
1 - Bad (little evidence)
2 - Poor (some evidence)
3 - Average (reasonable evidenc
4 - Good (above expected evide
5 - Excellent (could not have dor

Completion Module Report – Assessment

Content – Residential Area				
	Criteria	**Reviewer 1 Grade**	**Agreed Grade**	**Comments**
1	Identifies and describes design area, the existing lighting and the reason for new lighting			
2	Identifies equipment and reasons why these were chosen			
3	Identifies design levels and reasons why these were chosen			
4	Identifies possible alternatives) and why these were rejected			
5	Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)			
6	Identifies environmental issues, incl. light pollution, energy costs			
7	Identifies on-going maintenance issues			
8	Information for building the scheme (drawings, specification etc.			
9	Calculation results - including lighting levels and cable calculations where necessary. Full results in appendix			
10	Visualisation (descriptive or image)			
11	Underpinning engineering, mathematical principles any long hand calculations)			
Total For Residential Area Section		#N/A	#N/A	

-
0 - No Evidence
1 - Bad (little evidence)
2 - Poor (some evidence)
3 - Average (reasonable evidence
4 - Good (above expected eviden
5 - Excellent (could not have done

Completion Module Report – Assessment

Content – Floodlighting Architectural				
	Criteria	**Reviewer 1 Grade**	**Agreed Grade**	**Comments**
1	Identifies and describes design area, the existing lighting and the reason for new lighting			
2	Outline design concept			
3	Identifies design levels and reasons why these were chosen			
4	Identifies equipment and reasons why these were chosen. Identifies positioning and modelling issues			
5	Identifies possible alternative(s) and why these were rejected			
6	Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)			
7	Identifies environmental issues, incl. light pollution, energy costs			
8	Identifies on-going maintenance issues			
9	Information for building the scheme (drawings, specification etc).			
10	Calculation results - including lighting levels and cable calculations where necessary. Full results in appendix			
11	Visualisation (descriptive or image)			
12	Underpinning engineering, mathematical principles (any long hand calculations)			
Total For Floodlighting Architectural Section		#N/A	#N/A	

Completion Module Report – Assessment

Content – Floodlighting Area				
	Criteria	**Reviewer 1 Grade**	**Agreed Grade**	**Comments**
1	Identifies and describes design area, the existing lighting and the reason for new lighting			
2	Identifies equipment and reasons why these were chosen			
3	Identifies design levels and reasons why these were chosen.			
4	Identifies possible alternatives) and why these were rejected			
5	Identifies positioning and modelling issues			
6	Identifies H&S issues incl. Hazard Elimination CDM 2007 & M'gt list(s)			
7	Identifies environmental issues, incl. light pollution, energy costs			
8	Identifies on-going maintenance issues			
9	Information for building the scheme (drawings, specification etc).			
10	Calculation results - including lighting levels and cable calculations where necessary. Full results in appendix			
11	Visualisation (descriptive or image)			
12	Underpinning engineering, mathematical principles (any long hand calculations)			
Total For Floodlighting Area		#N/A	#N/A	

Completion Module Report – Assessment

General Structure, Application and Content		
Reviewer 1 Grade	**Agreed Grade**	**Comments**
A) Structure of Report, creativity & referencing		
B) Written expression, definition, style, presentation & readability		
C) Evidence of theory & application of lighting eng. principles		
D) Ability to handle issues & draw conclusions		
-	0	
1 - Superficial relevance & limited comprehension, errors in judgements & misleading summary		
2 - Some relevant issues identified & discussed, shows comprehension, no significant errors or omissions,		
3 - Relevant issues & problems identified & discussed with some analysis, good summary of lessons learne		
4 - Relevant issues & problems identified & discussed with some analysis & synthesis, action plan identifie		

Completion Module Report – Assessment

ELD Completion Project Submission Marking Template with Eng Tech Review 2018

Candidate Name		Candidate Reference	
ILE Reviewer 1	Name	ILE reviewer 2	Name
	Date		Date

Item	Content – Traffic Route	Content – Residential Area	Content – Floodlighting Building	Content – Floodlighting Design 2	General	Total
Reviewer 1 Score	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Agreed Score (As Reviewer 1 Score unless 2nd Required)	#N/A	#N/A	#N/A	#N/A	0	#N/A

Module	Module A (1)	Module B (3)	Module C (2)	COMPLETION		Standard
	Score out of 15	Score out of 15	Score out of 15	Score out of 500		Pass 40% - 59%
Score (should be completed by office)				#N/A	Final Score	Credit 60% - 79%
Individual % Marks	0.0%	0.0%	0.0%	#N/A		Distinction 80%
Weighting	15.0%	15.0%	15.0%	55.0%		Standard Achieved
Total % of final score	0.0%	0.0%	0.0%	#N/A	#N/A	#N/A

General Comments: