

## IPD Final Report Form: poor example

Candidate name:	M S Engineer			
Membership number:		Date of report:		
Core objective:	2.1 - Conceptual Design			
Standard achieved (Candidate MUST indicate standard)	A	K	E	B ✓
Please indicate below how you have achieved at least the minimum standard citing specific examples from projects you have worked on				
<p>I have gained the ability through experience of conceptual design on various projects, not only to appraise the best solution in terms of structure but to work with the design team to find the best integrated solution to meet the needs of the particular project.</p> <p>This has been done through conceptual design discussions with the design team on subjects such as visual appearance, thermal mass, acoustics, buildability, air tightness, cost and the possibilities of integration of structure and service schemes to provide both energy and/or cost savings.</p> <p>The conceptual design is a key element of every tender when the best value for the project is sought from designers and contractors. An inappropriate design may lead to concerns regarding its viability as a structure or other health and safety issues.</p> <p>Any design should respond to the client's requirements in terms of cost, aesthetics and use.</p>				
Mentor's comments (if applicable): Agreed				
Mentor's signature:			Mentor's name (print): M Entor	

Continue on separate sheet if necessary. Photocopying of form is permitted.

The information provided within this IPD final report form is neither specific enough nor personal to the candidate. It is very general in nature as it does not refer to any specific projects the candidate has worked on.

Although the candidate attempts to state how they have achieved the necessary standard of the objective, there is insufficient specific information provided for a proper judgement to be made. The lack of detail provided is likely to make the Interview somewhat tougher as the reviewers probe the candidate for the information they require.

Although the candidate's mentor has taken the time to read and sign-off the IPD final report form, the comment provided does not benefit the candidate. The reviewer's would prefer to see positive, informative statements being made by mentors.

\*Please note that mentor's comments/signatures are only compulsory for candidates following the individually managed route. However, mentor's comments are also welcomed from those candidates who have been mentored whilst following the retrospectively or accredited training scheme routes.

## IPD Final Report Form: average example

Candidate name:	M S Engineer			
Membership number:		Date of report:		
Core objective:	2.1 - Conceptual Design			
Standard achieved (Candidate MUST indicate standard)	A	K	E	B ✓
Please indicate below how you have achieved at least the minimum standard citing specific examples from projects you have worked on				
<p>I have been responsible for the production of conceptual schemes for numerous projects – new builds as well as refurbishments/extensions – in particular structural steel against reinforced concrete and masonry against timber framed structures.</p> <p>I have also prepared options for safely constructing retaining walls by either a bored piled retaining wall or a sequenced traditional reinforced concrete retaining wall. These projects involved both the superstructure and foundation options for tenders/contractor pricing.</p> <p>Refer to the following within my portfolio of work:</p> <ul style="list-style-type: none"> <li>• Hancock Bridge strengthening</li> <li>• Burj Al Qatan</li> <li>• Cable-stayed bridge over Dnepr river</li> <li>• Arch dam</li> </ul>				
Mentor's comments (if applicable):				
I confirm that M S Engineer has undertaken the tasks detailed above to a standard of Ability. This can be confirmed within the portfolio of work.				
Mentor's signature:			Mentor's name (print):	
			M Entor	

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Although the candidate has provided some specific information about the activities they have been involved in which contribute to this objective, the level of detail is insufficient.

The candidate should have provided specific information under the projects mentioned as well as providing references to where these projects are located in the supporting documentation that has been submitted.

The comments provided by the mentor are at least positive but they lack specific detail and could be made more personal which would help the reviewers in assessing the candidate's ability.

\*Please note that mentor's comments/signatures are only compulsory for candidates following the individually managed route. However, mentor's comments are also welcomed from those candidates who have been mentored whilst following the retrospectively or accredited training scheme routes.

## IPD Final Report Form: good example

Candidate name:	M S Engineer			
Membership number:		Date of report:		
Core objective:	2.1 - Conceptual Design			
Standard achieved (Candidate MUST indicate standard)	A	K	E	B ✓
Please indicate below how you have achieved at least the minimum standard citing specific examples from projects you have worked on				
<p>During my career I have displayed a strong ability to conceive viable alternate structures as per the client's brief. In so doing I take into account the costs, aesthetics, materials, durability and construction methods of the project. An ability in Conceptual Design has been demonstrated in the following projects; references refer to the portfolio of work where more detailed information can be found including comparisons of different materials, designs etc:</p> <ul style="list-style-type: none"> <li>• Ultrasonicated honey processing plant, Devon <ul style="list-style-type: none"> <li>o Ref: Section 2.1.1</li> <li>o £2.2 m, 2 storey, masonry/fabricated steel structure</li> <li>o Complications included: <ul style="list-style-type: none"> <li>– the site being on a significant gradient</li> <li>– close proximity of river – required construction of retaining walls</li> <li>– ground investigation showed that ground bearing pressure was not sufficient to use traditional foundations</li> <li>– ground improvement required through use of piled foundations</li> <li>– close proximity of major road – required construction of retaining walls and removal of existing derby retaining wall as client wished the plant to be built 2 m below the road level. Options for removing derby wall were presented to the client and a contiguous retaining wall constructed to support both</li> </ul> </li> </ul> </li> <li>• (Replacement) Arch Bridge, River Isar, Munich <ul style="list-style-type: none"> <li>o Ref: Section 2.1.2</li> <li>o £1.5 m, 2 storey (railway and two-lane roadway), steel bridge, three arch 250 m span</li> <li>o Replacing a historic bridge which had been rendered unsafe due to an impact by a ferry</li> <li>o Improvements to the original design were possible: <ul style="list-style-type: none"> <li>– steel replaced concrete due to quicker construction and lower weight demands</li> </ul> </li> </ul> </li> </ul>				

- structural system improved by making all arches externally statically determinate. This was achieved by tying the arches throughout the bridge deck
- Exhibition centre, Liverpool
  - o Ref: Section 2.1.3
  - o £125 m, 4 storey (with mezzanine), precast concrete/fabricated steel structure
  - o Complications included:
    - client requested no columns within the main 36 m<sup>2</sup> exhibition hall
    - structural steel truss used as economically viable and met the height requirements
    - numerous staircases and ramps, which were all treated as individual structures within the overall design
    - a combination of support systems (bearing walls, beams, hanging walls, etc) were used
    - flexibility of ground floor (main) exhibition hall – utilised a braced steel transfer frame with the floor beams using UC sections; beam deflection analysis was essential to assess the deflection from the dead load of the precast structure of the floors above

**Mentor's comments (if applicable):**

Whilst acting as M S Engineer's mentor for the last four years, a significant improvement in conceptual design ability has been apparent. Initially M S Engineer gained significant ability in designing 'traditional' structures but after only a short period of time was encouraged to undertake the design of more complex and challenging structures. M S Engineer clearly relishes the challenges posed in designing more complicated structures or where there are underlying problems which must be surmounted for the project to succeed. An innovative approach can be seen in the foundation design (in which they have become something of an office expert) for the honey processing plant and the flexible use ground floor of the exhibition centre.

I would not hesitate to assign major and challenging projects to M S Engineer as I have every confidence that sufficient ability in conceptual design will be demonstrated to ensure that the project is a success.

<b>Mentor's signature:</b>	<b>Mentor's name (print):</b> M Entor
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This is a strong IPD final report form as it provides a general introductory paragraph detailing how the candidate approaches conceptual design. It then gives detailed information, related to specific projects, justifying the candidate's belief that they have met the standard expected of the core objective. This candidate has also provided references to the portfolio of work so that the reviewers can quickly and easily find the information they are looking for.

The candidate's mentor has given positive and specific comments and clearly takes the role of mentor seriously. By describing the candidate's development and skills, albeit briefly, the mentor has provided the reviewer's with an insight which may otherwise be unavailable to them; this will assist them as they begin the process of assessing the candidate's standard in this core objective.

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