SOLID FOUNDATIONS: HOW DESIGN AND COLLABORATION DRIVE A SAFETY CULTURE

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INTRODUCTION

Collaboration can be broken down into component parts , **the ‘3Cs’**

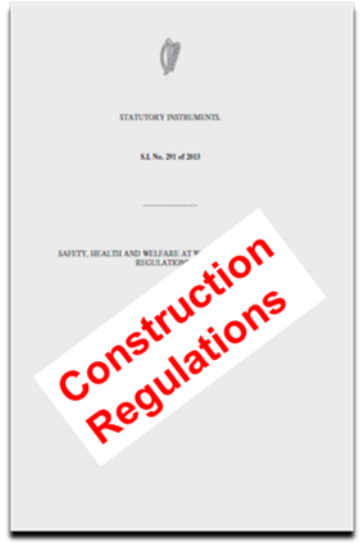
- **C**oordination
- **C**ooperation
- **C**ommunication

All three are essential to effective design risk management.

Looking at the requirements of legislation regarding the 3Cs and how a good safety culture can contribute to the overall success of a project

LEGISLATIVE REQUIREMENTS

Design



In carrying out work related to the design of a particular project, a designer shall promptly provide in writing to the PSDP or PSCS, whichever is appropriate, all information -

a) about the project that is known to the designer regarding particular risks…..

b) regarding the nature and scope of the project to the extent necessary to enable the project supervisor to comply with these Regulations,

c) about the project that is necessary for that project supervisor to prepare the safety file, and

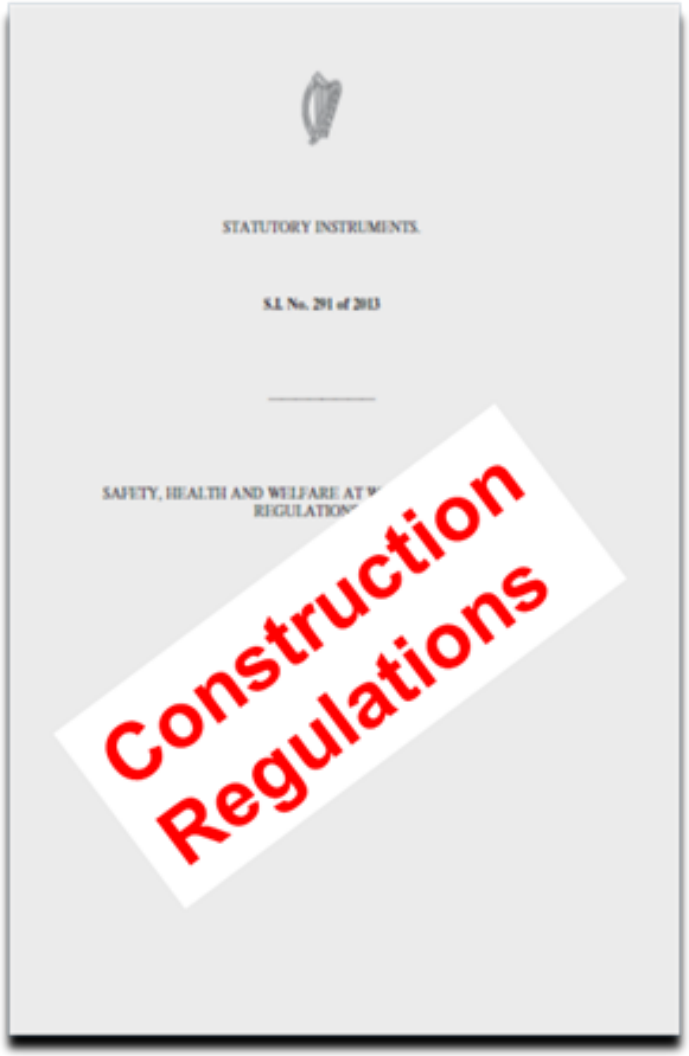
d) that is known to that person and is necessary to ensure, so far as is reasonably practicable, the safe construction of the design for the project.

Non-standard design, not obvious, particular phasing

Communication

Design

- In carrying out work related to the design of a particular project, a designer shall—
  - co-operate with the project supervisor for the design process or the project supervisor for the construction stage, as appropriate,…..
  - co-operate with other designers, as appropriate……
  - comply with all directions from the project supervisor for the design process or the project supervisor for the construction stage……



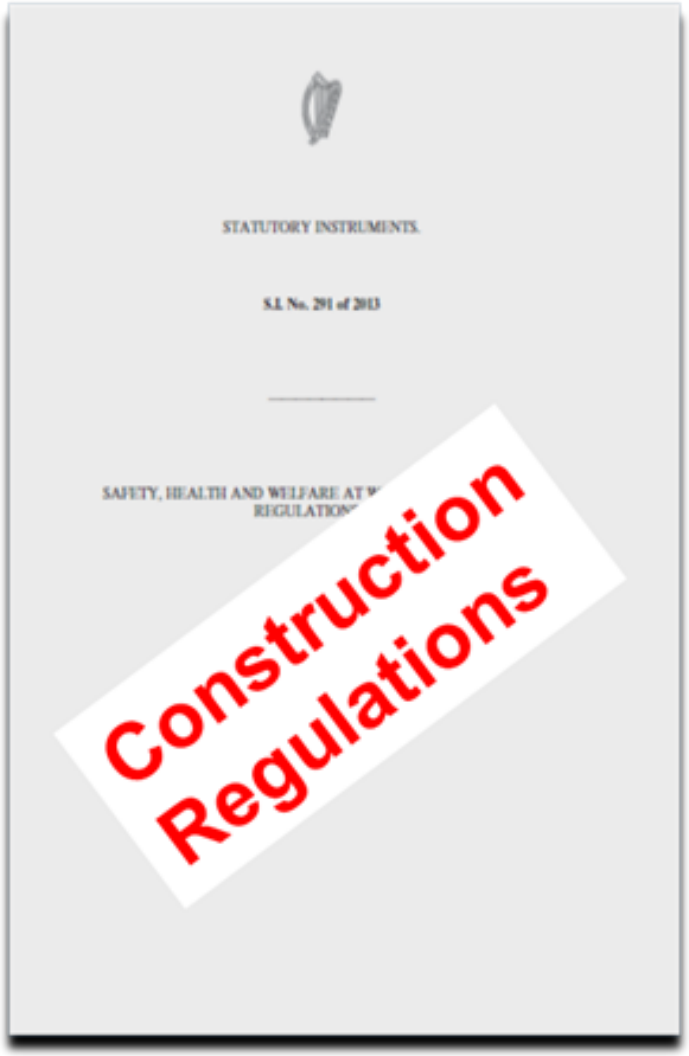
Cooperation

PSDP

The project supervisor for the design process shall –

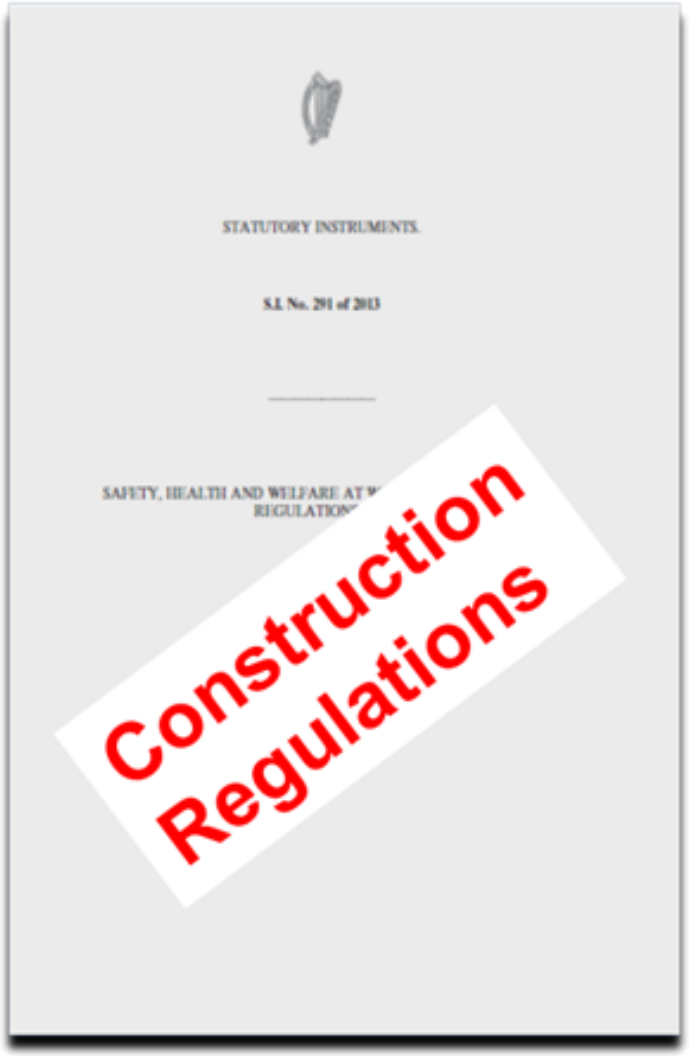
- take account of the general principles of prevention during the various stages of the design and preparation of a project, in particular –
  - when either, or both, technical or organisational aspects are being decided,….
- organise co-operation between designers on the same project and, so far as is reasonably practicable, ensure co-ordination of their activities in relation to the design of the project with a view to protecting the safety, health and welfare of persons involved in construction work."

Coordination



CLIENT

A client shall co-operate with the project supervisor for the design process and the project supervisor for the construction stage, as appropriate, including in relation to the time required for the completion of the project and by providing information to enable the relevant project supervisor to comply with these Regulations.



Communication

PSDP / DESIGNER PRE-CAST BEAMS 2006 CASE

A construction company was fined a total of €25,000 by the Circuit Court.

…….a large beam fell, injuring three workers during the building of a bridge.

The company pleaded guilty to failure as the project supervisor design stage to identify in the preliminary health and safety plan the risk of potential instability of large pre-cast beams used in the construction and

failure to ensure that the supports and other fixings provided to prevent a structure from collapsing were designed, installed and maintained to withstand stress and strains placed on them.

The company was fined €12,500 on each charge and ordered to pay €25,000 in costs.

Communication

SAFETY CULTURE

"The way we do things around here"

Safety Culture refers to the collective mindset, values, and practices within an organization that prioritise safety in daily operations. It goes beyond compliance with regulations and influences how employees think about, approach, and act on safety-related matters.

Safety culture is the element of organisational culture which is concerned with the maintenance of safety and compliance with safety standards

What does collaboration look like?

Collaboration can be broken down into component parts , the ‘3Cs’

- **C**oordination
- **C**ooperation
- **C**ommunication

What does collaboration look like?

No one size fits all

- ***C**oordination*
- ***C**ooperation*

***C**ommunication*

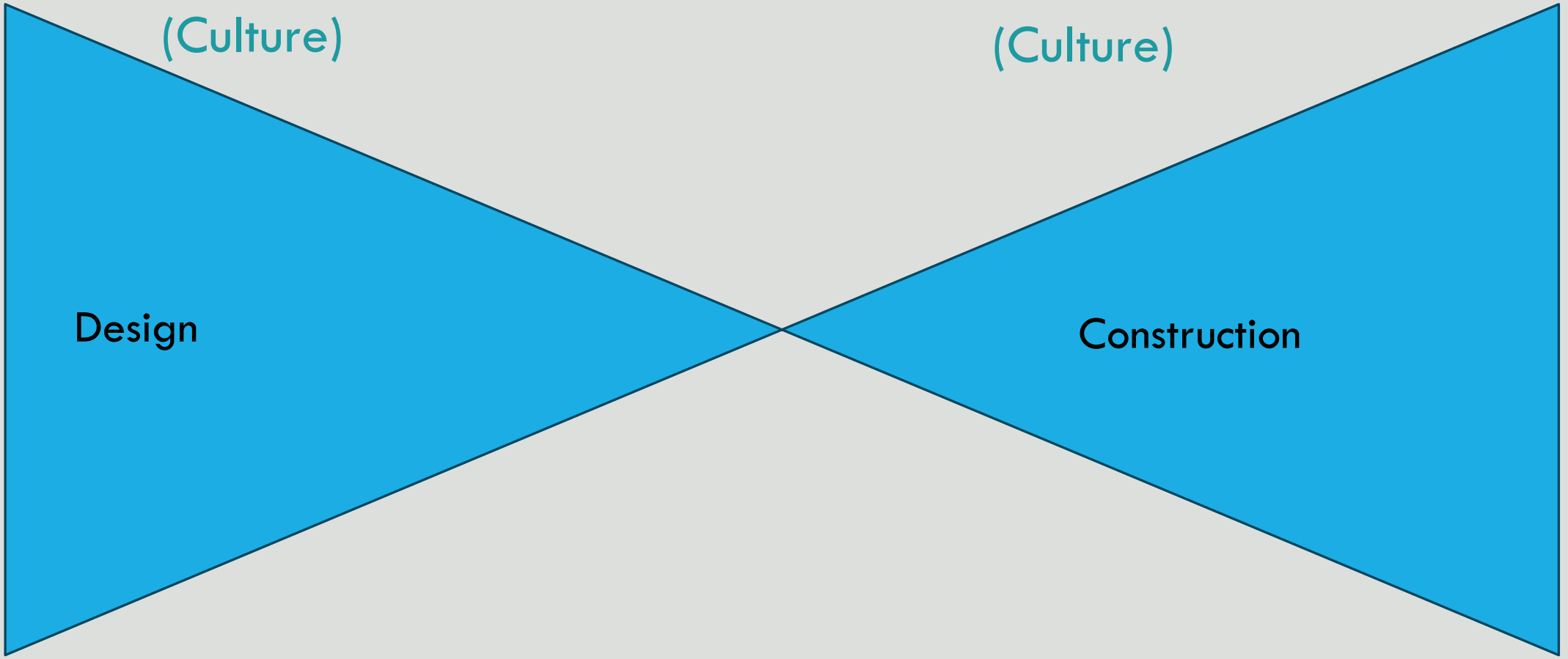
PSDP to

‘be satisfied that the design process addresses the need to eliminate hazards and control risks’

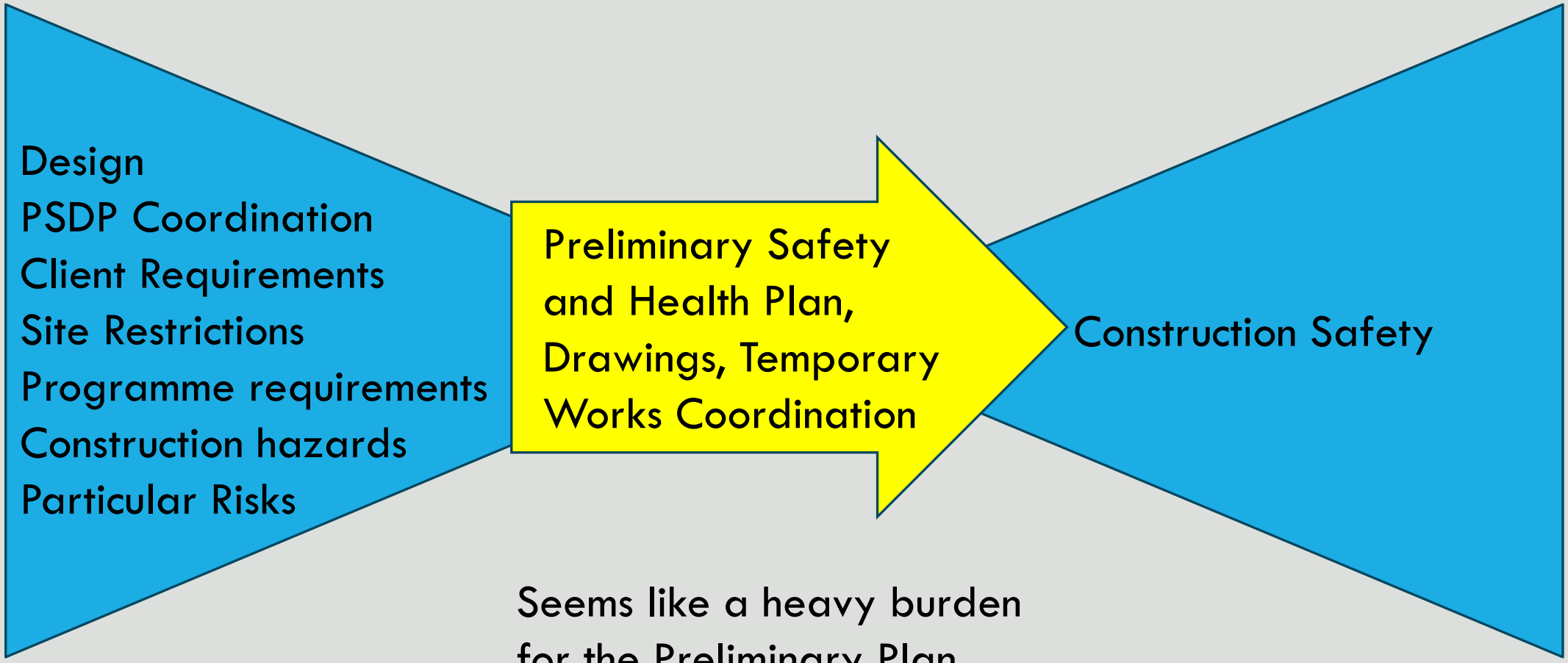
Coordination

What we do here (Culture)

What we do here (Culture)

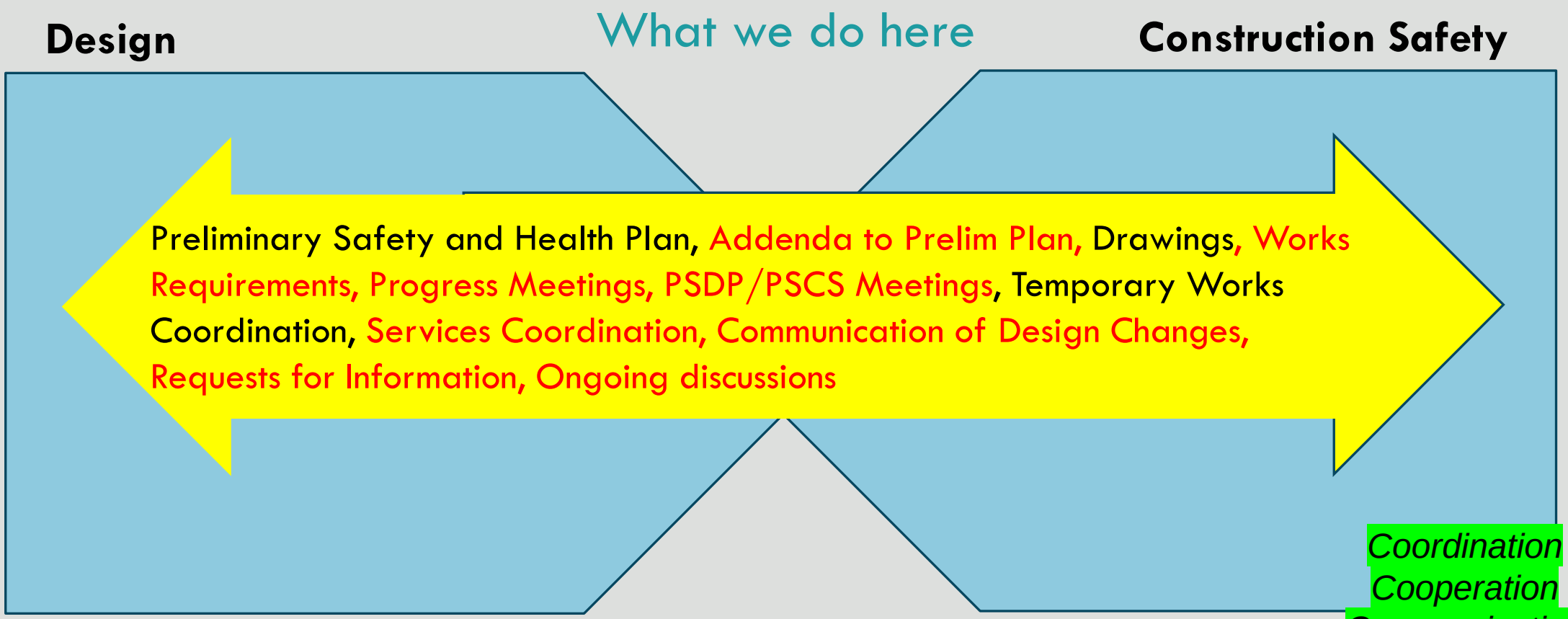


Link between Design and Construction – a basic safety culture



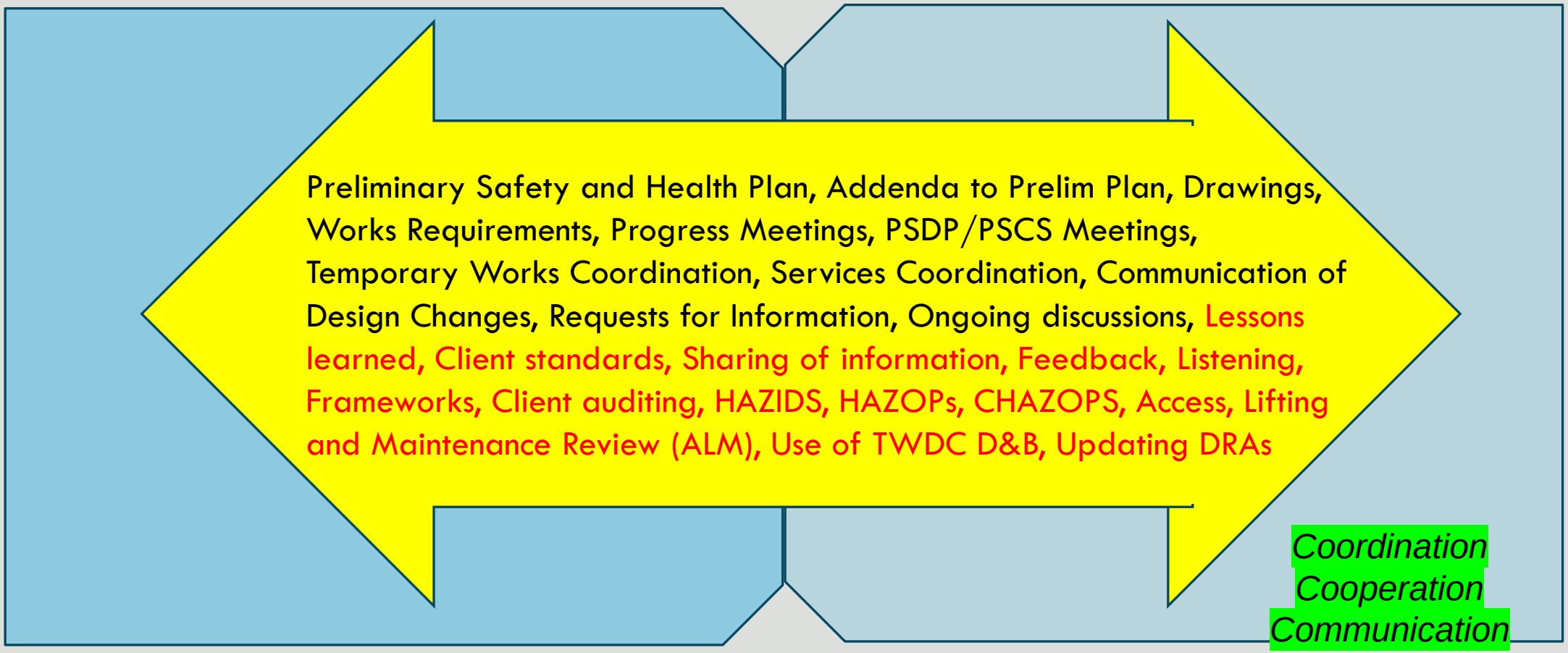
Seems like a heavy burden for the Preliminary Plan

Link between Design and Construction – a better safety culture



Link between Design and Construction – an excellent safety culture

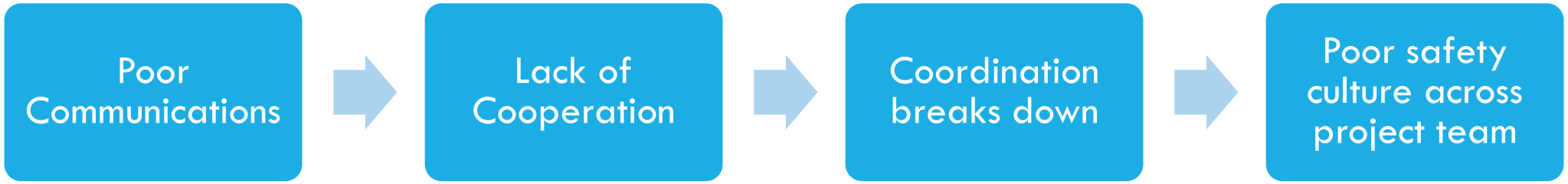
Design What we do here **Construction Safety**



WHAT CAN GO WRONG IF THERE ISN'T APPROPRIATE COLLABORATION AT DESIGN STAGE

1. Constructability issues – contractors unaware of particular construction requirements
2. Future maintenance unhappy with design
3. Appearance of lack of attention to safety issues during design sets a poor tone

GOOD COMMUNICATION IS IMPORTANT



- Contractual issues
- Poor tone
- Never ending
- Always written

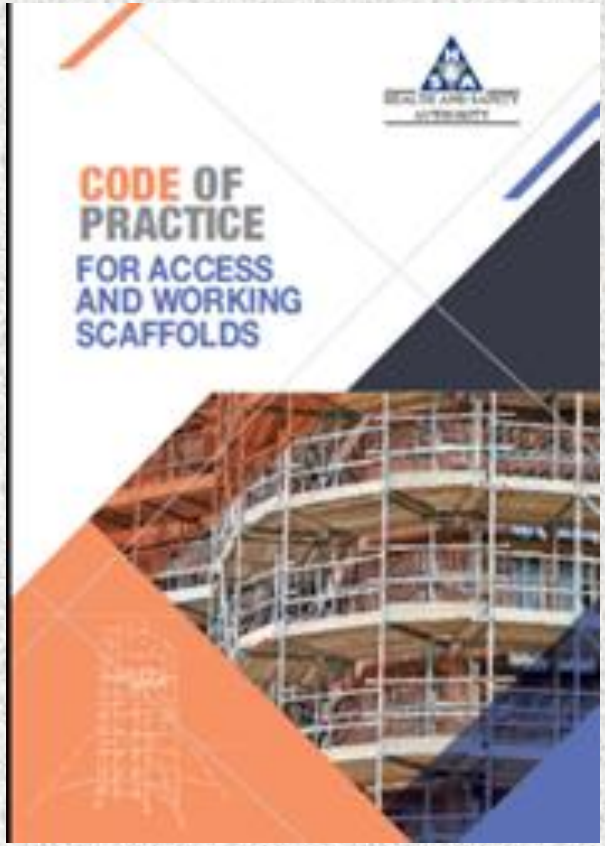
Strike a balance

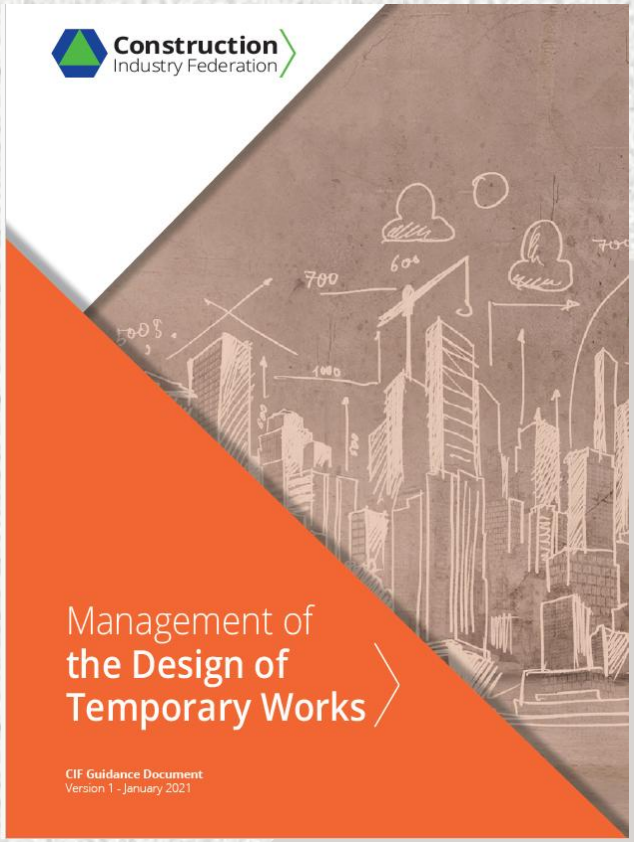
TEMPORARY WORKS COORDINATOR

‘For larger projects, particularly where the scaffolding will be complex and involve support from the permanent building structure, a Temporary Works Co-ordinator (TWC) should be appointed to assist the Project Supervisors in carrying out their duties.’

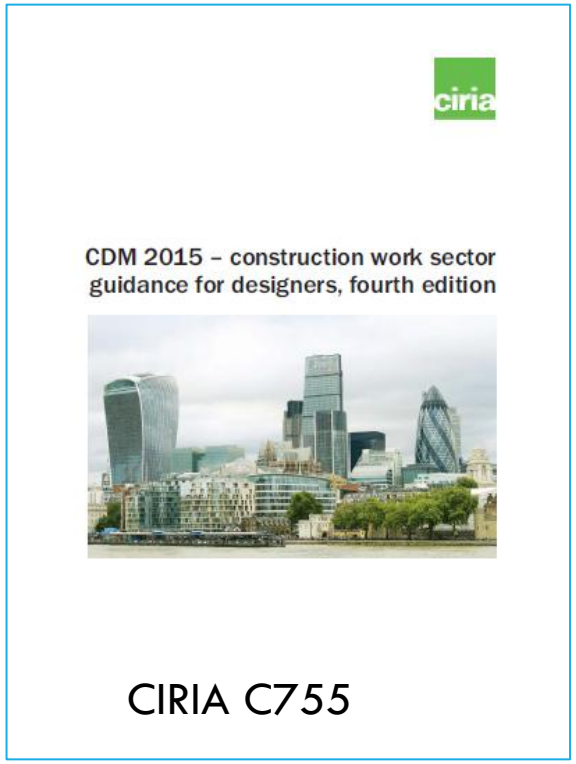
Scaffolding CoP

Well worth having on a lot of projects. Increases the knowledge and the collaboration. Protects the workers.





Good References



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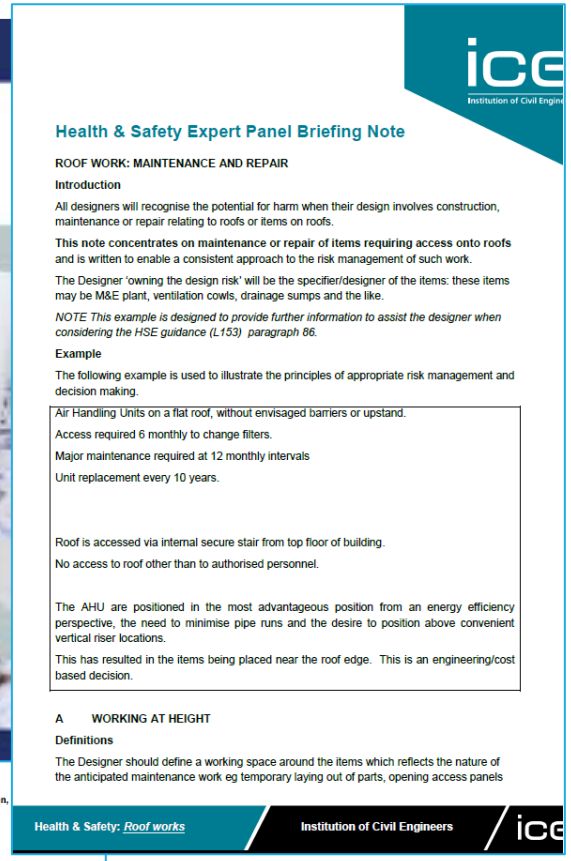
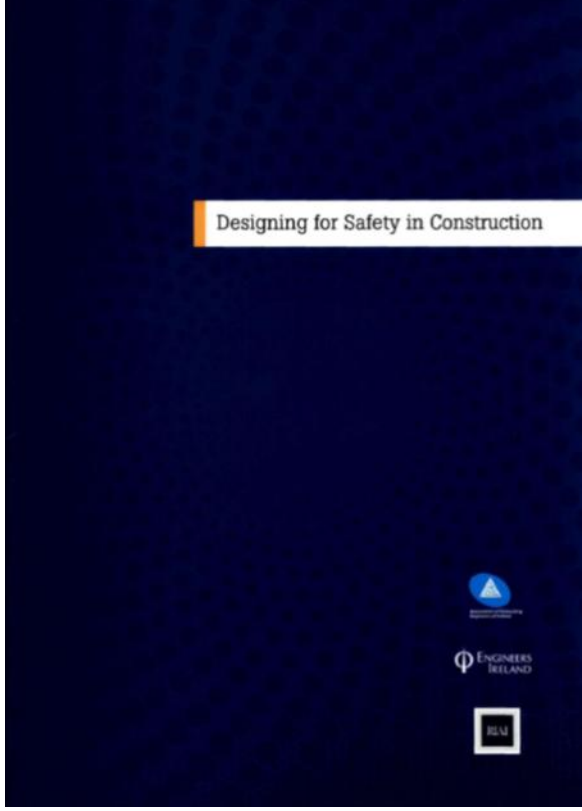
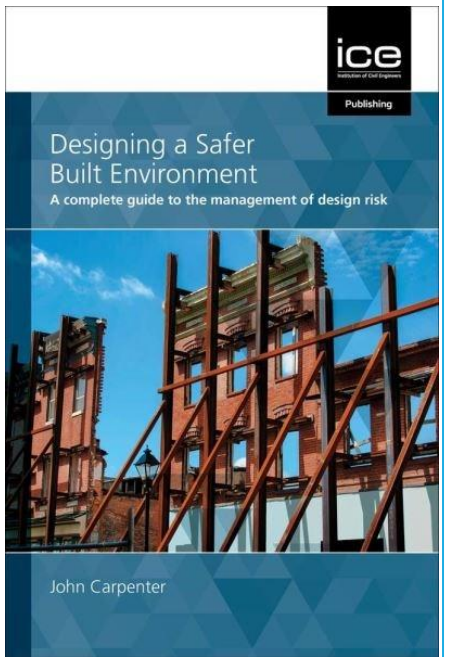
HSE UK L153







CIRIA C686