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# Design liability for site conditions: unexpected, unforeseeable, unaware?

16 September 2021

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### Introduction





- Risk allocation
- Design Liability
- Unforeseeable ground conditions
- The standard form approach
- Who is the "experienced contractor"?



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#### **Risk allocation**

**Jeremy Glover** Partner, Fenwick Elliott LLP

### Risk – Employer's perspective



- Wants building for lowest possible price in shortest possible time;
- Lip service to effective risk allocation;
- Need for control without responsibility;
- Likes 'idea' of single point responsibility as long as it is not theirs;
- Loves to haggle price to the bone.

### Risk – Designer's perspective



- More interested in the end product than how you get there;
- Stretched on detailing;
- Resist getting muddy on site;
- Thinks cost planning implications for managing change best done by others in team;
- Well aware that fees pared to the bone.

### Risk – Contractor's Perspective



- Wants job/turnover;
- Margins low so always looking for next job and now window shopping;
- Acceptance of design responsibility brings the opportunity to design a structure which can be built more quickly and cheaply by use of the contractor's know how;
- Invariably more a design/builder than just a contractor and does not like the fact they are not left on own to get on with it;
- Not always resourced enough to effectively risk manage pre contract and on the hoof not much better!
- Prepared to fight for entitlements when chickens come home to roost and make up for lost ground on the swings or roundabout.

### **Causes of Claims**



- Howell and Mitropoulos ["Model for Understanding, Preventing and Resolving Construction Disputes, in Groton, 1994"] believe construction problems arise from:
  - Project uncertainty complexity beyond the expectations of the parties etc;
  - Process problems incomplete documentation, unrealistic expectations etc;
  - **People issues** poor communication, lack of responsiveness, unethical behaviour, opportunistic behaviour etc.

### What should happen? In theory...



- Risks should be identified and a conscious decision about managing each major risk should be taken;
- Allocation of risks should be clear, complete and unambiguous;
- The more significant the risk, the greater the need for clarity;
- Contracts should record exactly what the parties intend;
- Where risk allocation is not dealt with expressly, the common law takes a firm view on the allocation of risk...

### What should happen? In theory...



Nael Bunni's four principles for allocating risks:

- Which party can best control the risk and/or its associated consequences?
- Which party can best foresee the risk?
- Which party can best bear that risk?
- Which party ultimately most benefits or suffers when the risk eventuates?



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### Design liability: potential pitfalls

**Kort Egan** Barrister, Gatehouse Chambers

### Introduction



- Design liability;
- The importance of design liability being appropriately passed down the chain;
- The need for clarity in respect of the design obligation(s) imposed.

## **Design liability**





- A party with design liability bears legal responsibility for all or part of the design of a construction/engineering project;
- Typically in a construction project a range of parties including consultants, contractors and subcontractors will bear design liability.

The importance of design liability being appropriately passed down the chain



- A failure to ensure that design liability runs back to back can leave a party with total design liability;
- A lack of certainty as to the allocation of liability can also lead to disputes and further costs being incurred.

The need for clarity in respect of the design obligations imposed



- The precise wording used in the contract is key;
- MT Hojgaard A/S v E.ON Climate and Renewables Robin Rigg East Limited [2017] UKSC 59; [2018] 2 All E.R.22.

# MT Hojgaard v E.ON: Background



- MT Hojgaard ("MTH") was the design and build contractor of the foundations of the Robin Rigg offshore wind farm;
- The windfarm was to be built to the offshore code DNC-OS-J101;
- It was subsequently discovered that connections designed to the code were bound to fail due to a fundamental problem with the code;
- The parties agreed the cost of remedial works but left it to the court to decide which of them should bear the cost.

# MT Hojgaard v E.ON: The Contract



- The general obligations in the Conditions of Contract required the Contractor to design with due care and diligence expected of appropriately qualified and experienced designers;
- In the Technical Requirements it was stated, "The design of the foundations shall ensure a lifetime of 20 years in every aspect without planned replacement."
- Question was whether MTH had warrantied a 20 year lifetime for the foundations or only had to design with due care and diligence

### MT Hojgaard v E.ON: Lower Courts



- Edwards-Stuart J held that MTH was responsible for the rectification work as a result of the breach of the "fitness for purpose" obligation;
- The Court of Appeal allowed MTH's appeal;
- The Court said that the Technical Requirements were "too slender a thread" upon which to hang a finding that MTH had warrantied a 20 year lifetime for the foundations.

### *MT Hojgaard v E.ON:* The Supreme Court



- Lord Neuberger noted that the Contract stated that the requirement to comply with J101 was a MINIMUM requirement;
- Lord Neuberger held that in a situation where two provisions impose different or inconsistent standards or requirements, the more rigorous must prevail and the less rigorous can be treated as a minimum requirement.

#### *MT Hojgaard v E.ON:* The Supreme Court



- Lord Neuberger also rejected the Court of Appeal's conclusion that the Technical Requirement was too slender a thread;
- Lord Neuberger held that the court must apply normal contractual principles;
- It is very difficult to argue that a contractual provision should not be given its ordinary meaning and should instead be given no meaning or a redundant meaning [50].
- Lord Neuberger found that the terms imposed a duty on MTH which involved the foundations having a lifetime of 20 years.

### MT Hojgaard v E.ON: Takeaways



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- MTH was left to argue that E.ON's interpretation was improbable or unbusinesslike;
- The time for ironing out any issues with the contractual wording was prior to the execution of the Contract;
- Important in respect of insurance to make clear the responsibility owed – loss suffered as a result of a fitness for purpose obligation may be uninsured.







- Parties have to give real thought to whether:
- 1. Design liability has been properly allocated throughout the contractual chain and
- 2. The obligations imposed on the parties with design liability are as intended.



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### **Ground conditions**

Jeremy Glover Partner, Fenwick Elliott LLP

# Ground conditions – who takes the risk?



"Expenses incurred for unforeseen difficulties must be considered as being included in the amount of the tender, and the respondent has the legal obligation to execute the contract for the price agreed upon, in the same way as would have been its indisputable right to benefit, if the soil had been more favourable and easier than foreseen."

Taschereau J

R. v Paradis and Farley Inc (1942) S.C.R. 10

# Ground conditions – who takes the risk?



As a starting point:

- In promising to undertake works for a fixed price, the contractor is promising to complete those works even where the works are more difficult or more expensive for the contractor to complete;
- Even where the designs are supplied by the employer;
- There is no implied warranty from the employer that the designs provided are feasible or that the site is fit for the works intended on it;
- The employer is relying on the contractor's professional expertise in determining the buildability of the works;
- Unless of course the contract says otherwise...

# JCT

Majority of JCT Contracts are silent on ground risk;



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- Therefore, in the UK the common law position applies: the risk for unforeseen physical conditions with the contractor;
- Exception is JCT Major Project Construction Contract:

"If the Contractor encounters ground conditions or man-made obstructions in the ground that necessitate an amendment to the Requirements and/or Proposals he shall notify the Employer of the amendments he proposes..." which (if clause 14.2 is stated to apply) "shall be treated as giving rise to a Change to the extent that the ground conditions or man-made obstructions in the ground could not reasonably have been foreseen by an experienced and competent contractor on the Base Date, having regard to any information concerning the Site that the Contractor had or ought reasonably to have obtained."

#### Clancy Docwra Ltd v E.ON Energy Solutions Ltd

- "2.1.7 The Sub-Contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself before the date of this Sub-Contract as to the nature of the ground, the sub-surface and sub-soil, the form and nature of the site, the extent, nature and difficulty of the Sub-Contract Works [...] and in general to have obtained for himself all necessary information as to risks, contingencies and all other circumstances influencing or affecting the Sub-Contract Works
- 2.1.8 Notwithstanding any other provision of this Sub-Contract, the Sub-Contractor shall not be entitled to any extension of time or to any additional payment [...] on the grounds of any misunderstanding or misinterpretation of any matter set out in clause 2.1.7, or his failure to discover or foresee any risk, contingency or other circumstance (including, without limitation, the existence of any adverse physical conditions or artificial obstructions) influencing or affecting the Sub-Contract Works.
- 2.1.9 The Sub-Contractor shall not be released from any of the risks accepted or obligations undertaken by him under the Sub-Contract on the ground that he did not or could not have foreseen any matter which might affect or have affected the execution of the Sub-Contract Works."

## NEC4: compensation event



60.1(12):

The Contractor encounters physical conditions which:

- are within the Site,
- are not weather conditions and
- an experienced contractor would have judged at the Contract Date to have such a small chance of occurring that it would have been unreasonable for him to have allowed for them.

Only the difference between the physical conditions encountered and those for which it would have been reasonable to have allowed is taken into account in assessing a compensation event.

# Unforeseeable Physical Conditions 2017



FIDIC Red Book Sub-Clause 4.12 (Yellow Book is the same):

- The Contractor gives **Notice** to the Engineer "as soon as practicable", "**in good time**" to give the Engineer the chance to investigate the physical conditions before they are disturbed.
- The Notice shall:
  - (i) describe the physical conditions to assist with the investigation,
  - (ii) explain why the physical condition were Unforeseeable and
  - (iii) describe why the physical conditions will have an adverse effect on progress and/or increase the Cost.

# Unforeseeable Physical Conditions 2017



FIDIC Red Book Sub-Clause 4.12 (Yellow Book is the same):

- The Engineer "shall" inspect the physical conditions within 7 days (or longer if agreed).
- Contractor shall comply with any instruction the Engineer may give;

*"If and to the extent* " the Contractor suffers delay, and/or incurs Cost due to the physical conditions *"having complied"* with (i)-(iii) above, and subject to sub-cause 20.2, the Contractor shall been entitled to EOT and/or payment of Cost;

 The Engineer may consider and review whether the physical conditions are similar or more favourable than could reasonably have been foreseen by the Base Date. If so, a reduction could be determined. However, there should be no net reduction in the Contract Price.

### **Definition of Physical Conditions**



• 1999 FIDIC Red Book Sub-Clause 4.12 (Yellow Book is the same):

"physical conditions" means " natural physical conditions and manmade and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions".

• 2017 FIDIC Red Book Sub-Clause 4.12 (Yellow Book is the same):

"physical conditions" means "natural physical conditions and physical obstructions (natural or man-made) and pollutants, which the Contractor encounters at the Site during execution of the Works, including sub-surface and hydrological conditions but excluding climatic conditions **at the Site and the effects of those climatic conditions**".

### **Definition of Unforeseeable**





1999 FIDIC Red Book Sub-Clause 1.1.6.8 (Yellow Book is the same):

*"Unforeseeable"* is defined as being *"not reasonably - foreseeable by an experienced Contractor by the date of submission of the Tender".* 

 2017 FIDIC Yellow Book Sub-Clause 1.1.87 (Red/Silver Books are the same):

*"Unforeseeable"* means *"not reasonably foreseeable by an experienced contractor by the Base Date."* 

"Base Date" means "the date 28 days before the latest date for submission of the Tender."

### What is an experienced contractor?



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"Every experienced contractor knows that ground investigations can only be 100% accurate in the precise locations in which they are carried out. It is for an experienced contractor to fill in the gaps and take an informed decision as to what the likely conditions would be overall"

> Van Oord UK Ltd & Anor v Allseas UK Ltd [2015] EWHC 3074 (TCC)

### What is an experienced contractor?



"The contractor must draw upon its own expertise and its experience of previous civil engineering projects. The contractor must make a reasonable assessment of the physical conditions which it may encounter. The contractor cannot simply accept someone else's interpretation of the data and say that is all that was foreseeable."

Obrascon Huarte Lain SA v Her Majesty's Attorney

General for Gibraltar

[2015] EWCA Civ 712

# *Obrascon:* Site Data and Unforeseeable Conditions



"The real issue on analysis is whether OHL judged by the standards of an experienced contractor would or should have limited itself to some analysis based only on the site investigation report and the Environmental Statement...What was needed and could have been expected from experienced contractors was some intelligent assessment and analysis of why there was contamination there...The very obvious questions which any experienced contractor asks and would have asked, in relation to what was in effect a brown-field site is: what was this site used for before?"

### What is an experienced contractor?

• 1999 Silver Book



- It was not enough for PBS to point to the discovery of asbestos in more granular detail than previous reports had suggested.
- PBS chose not to, or were unable to, call evidence which: *"grappled with the detail of what was found".*

"this was not a case of asbestos being a possibility – it was clear that asbestos contamination was a reality, and potentially at some depth in some places, though the extent of the problem was not clearly delineated."

> PBS Energo AS v Bester Generacion UK Ltd & Anr [2020] EWHC 223 (TCC)

#### Clancy Docwra Ltd v E.ON Energy Solutions Ltd

- The Sub-Contract Works were defined as " the works referred to in the Sub-Contract Agreement and <u>described in the Numbered Documents</u> to be executed as part of the Main Contract Works, including any changes made to such works in accordance with this Sub-Contract."
- The numbered documents included tender clarifications where CDL set out what work was included and what was excluded.
- Therefore the scope of the Works under the Sub-Contract had been modified by the appended documents
- This modification of the allocation of the risk for ground conditions was regardless of an express term of the contract which allocated ground risk to the contractor.

#### [2018] EWHC 3124 (TCC)

### Conclusions

- Consider carefully each and very document that is included within the contract. Where is that document ranked in the order of documents?
- Are the contract terms consistent with all the other contract documents?
- Is there a clear risk allocation?
- Is there a clear definition of the scope of works?
- Remember, in determining whether the contractor is entitled to additional time and money in respect of overcoming unexpected site conditions, it is necessary to consider whether the "additional" work involved was actually part of the original Scope.



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# Thank you! Questions?

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