

Site Conditions and Utilities

Practice Note 1 – Improved knowledge and practices through “Risk Conversations”

1. Purpose

The purpose of this Practice Note is to:

- (a) introduce the practice of ‘**Risk Conversations**’ as a means for dialogue between Government and Industry to encourage improved knowledge and practices toward minimisation of Site Condition and Utility risks on major infrastructure projects;
- (b) indicate the points in the infrastructure project procurement timeline when it would be beneficial for Government and Industry to have these ‘Risk Conversations’ to share knowledge, collaboratively discuss and assess Site Conditions and Utility risks and work together to devise strategies to proactively and efficiently avoid, mitigate, reduce, manage and resolve Site Conditions impacts.

2. Application

This Practice Note:

- (a) encourages Government and Industry to engage collaboratively during the planning and procurement stages of major infrastructure projects with the object of reducing Site Condition and Utility risk.
- (b) In the case of Site Conditions the risk that may arise from the existence of geotechnical conditions, contamination, pollution and/or hazardous materials, artefacts, heritage items and/or valuable finds and man-made conditions that could negatively impact the project during delivery;
- (c) In the case of Utilities the risk that may arise from the existence of known and unknown utilities and adjustment or relocation of these utilities that could negatively impact the project during delivery
- (d) is complemented by, and should be read together with:
 - (i) Site Conditions and Utilities , Practice Note 2 – Managing Unknown Site Conditions and Utilities;
and
 - (ii) Utilities Practice Note 1.

3. Underlying Principles

The principles informing this Practice Note are:

- (a) identifying Site Conditions and Utilities that could impact the delivery of an infrastructure project is an important component of the pre-delivery planning process;
- (b) there are opportunities during the pre-delivery planning process in which Government and Industry can come together to jointly discuss Site Conditions and Utilities;
- (c) early engagement, and early opportunities to identify Site Conditions and Utilities, assess Site Conditions and Utilities risk and formulate both Site Conditions and Utility strategies. This will allow to a higher ability to program and cost Site Conditions and Utilities work and shape the appropriate, fair and reasonable allocation of Site Conditions and Utility risk, thereby better assuring ‘value for money’ and contract profitability;
- (d) where unforeseen site conditions or utilities arise, efficiency of delivery that was relied on for a competitive price is lost and contract profitability is eroded;
- (e) ‘value for money’ diminishes when Government and Industry do not have a common understanding of Site Conditions and Utilities (and the associated risks) and aligned risk strategies; and

- (f) Government and Industry benefit when their attention is focused on proactively identifying, quantifying, avoiding, mitigating and managing Site Conditions and Utilities risk.

4. Key Challenges

Due to the variable nature of Site Conditions and Utilities, many risks are difficult to identify and/or quantify.

Challenges for Government and Industry fall under three main categories:

Challenge 1 – Degree and quality of pre-tender investigations carried out and availability of information

- (a) Site access constraints may not allow Government or Industry to conduct full site investigations, resulting in a lack of information at the planning and tender stages.
- (b) Variability in the quantity and quality of information available in relation to Site Conditions may result in information not being of any value to assess risks.
- (c) Variability in the records available in relation to Utilities may result in information not being of any value to assess risks
- (d) Unreliable information during the planning and tender process can lead to major infrastructure projects exceeding their budget, which impacts all parties.
- (e) Unreliable information amplifies risk and the consequences worsen the later the Site Conditions and Utilities risk materialises.
- (f) Sharing of site information between Government agencies is limited.
- (g) Ability to get information from the Utility Companies during tender is limited.
- (h) Industry may obtain (pay) for more site information which has potential to change the focus of the bid.
- (i) There are fewer problems with factual geotechnical information; the key issue is with the interpretation of the data.

Challenge 2 – Early risk identification and mitigation measures

- (a) It is difficult to obtain time and cost certainty in relation to Site Conditions and Utilities in the planning and tender timeframes.
- (b) This may result in the Government client evaluating proposals based on risk appetite, rather than on the quality of the solution or quality of the team.
- (c) The inability to quantify unknown Site Condition and Utilities risks leads to inadequate contingency allowances by both Government and Industry.
- (d) Industry must balance between pricing competitively and allowing for contingencies.
- (e) Government must balance allowing for contingencies and allocating risk.
- (f) Appropriate capability is crucial to the way Site Condition and Utilities risks are managed.

Challenge 3 – Selection of contract model and allocation of risks

- (a) There can be a mismatch between contractual Site Conditions and Utilities risk allocation, and the ability of the party to which the risk is held or transferred to manage that Site Conditions risk.
- (b) There should be more focus on cost effective ways of avoiding, mitigating and managing Site Conditions and Utilities risks during delivery, e.g. use of technology to identify utilities, submerged rocks; significant regulatory burdens when disposing of asbestos contaminated materials.

5. Risk Conversations during the Infrastructure Project Procurement Timeline

The times at which it is open to Government and Industry to have a Risk Conversation are indicatively shown in the procurement timeline below. This is indicative as the number and timing of Risk Conversations may vary according to the circumstances of particular project. These Risk Conversations could take place via industry engagement forums or market soundings. The Risk Conversations are not intended to commit the Government or Industry to a particular project or process and would be conducted subject to the usual constraints regarding probity and confidentiality.

