

IPWEA

“Procurement for Capital Works” Seminar

21<sup>st</sup> May 2014

11:30 – 12:00 Session

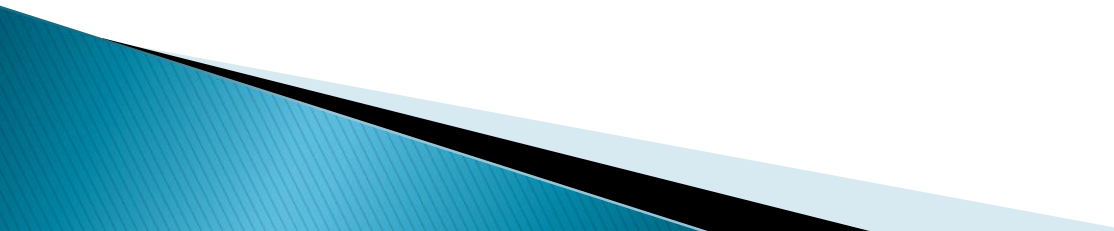
# “Completion Strategy: Starting with the end in mind”

Presented By: Laurice Temple  
Managing Director,

*Construction Management Results*

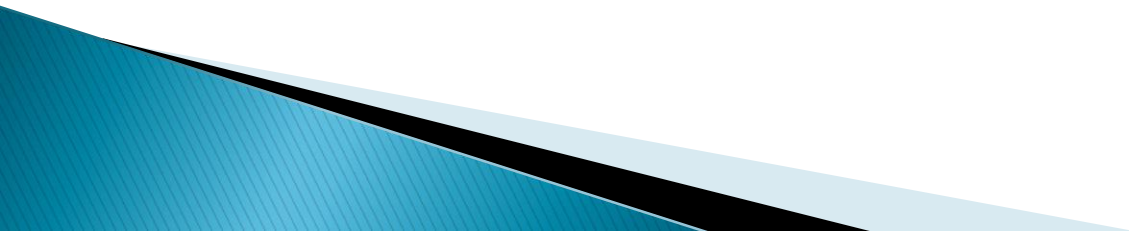


# Today's Outline

- ▶ Outcomes and Expectations
  - ▶ Introductions
  - ▶ Completion Management – What is it?
  - ▶ Project Management – Complexities
  - ▶ The Team
  - ▶ Wrap-up
- 

# Today's Outcomes

- ***Listen:*** To listen from a different perspective
- ***Action:*** To take into consideration some different ideas



# Today's Environment

The screenshot shows a web browser window with the URL <http://sourceable.net/hockey-splurges-50-billion-infrastructure/>. The browser's address bar and tabs show the page title "Hockey Splurges \$50 billion on Infrastructure". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The browser's toolbar includes a search bar, a McAfee security icon, and a Google search button. The browser's status bar shows the Sourceable logo and navigation buttons for Architecture, Construction, Design, Engineering, and Property.

The main content area of the browser displays the article title "Hockey Splurges \$50 billion on Infrastructure". To the left of the article is a sidebar with social media sharing options (Google+, Twitter, LinkedIn, Facebook, Pinterest, YouTube, Tumblr, and Email) and a comment section showing "0 Comments on this story" and a button to "Add your comment to this story". Below the social media options is a small image of a construction site.

The article itself features a large portrait of a man, likely Hockey, and a section titled "Trending Construction News". This section includes two articles: "NSW: WestConnex to Get \$2 Billion in Budget" with 11 shares, and "Three Key Challenges in Effective Project Risk Management" with 19 shares. Below these articles is a section titled "Victoria Splurges \$27 billion on Record".

The Windows taskbar at the bottom of the screen shows the Start button, several application icons (Internet Explorer, File Explorer, Mail, etc.), and the system clock indicating 11:31 PM on 20/05/2014.

# Introductions

## ► Me: Laurice Temple

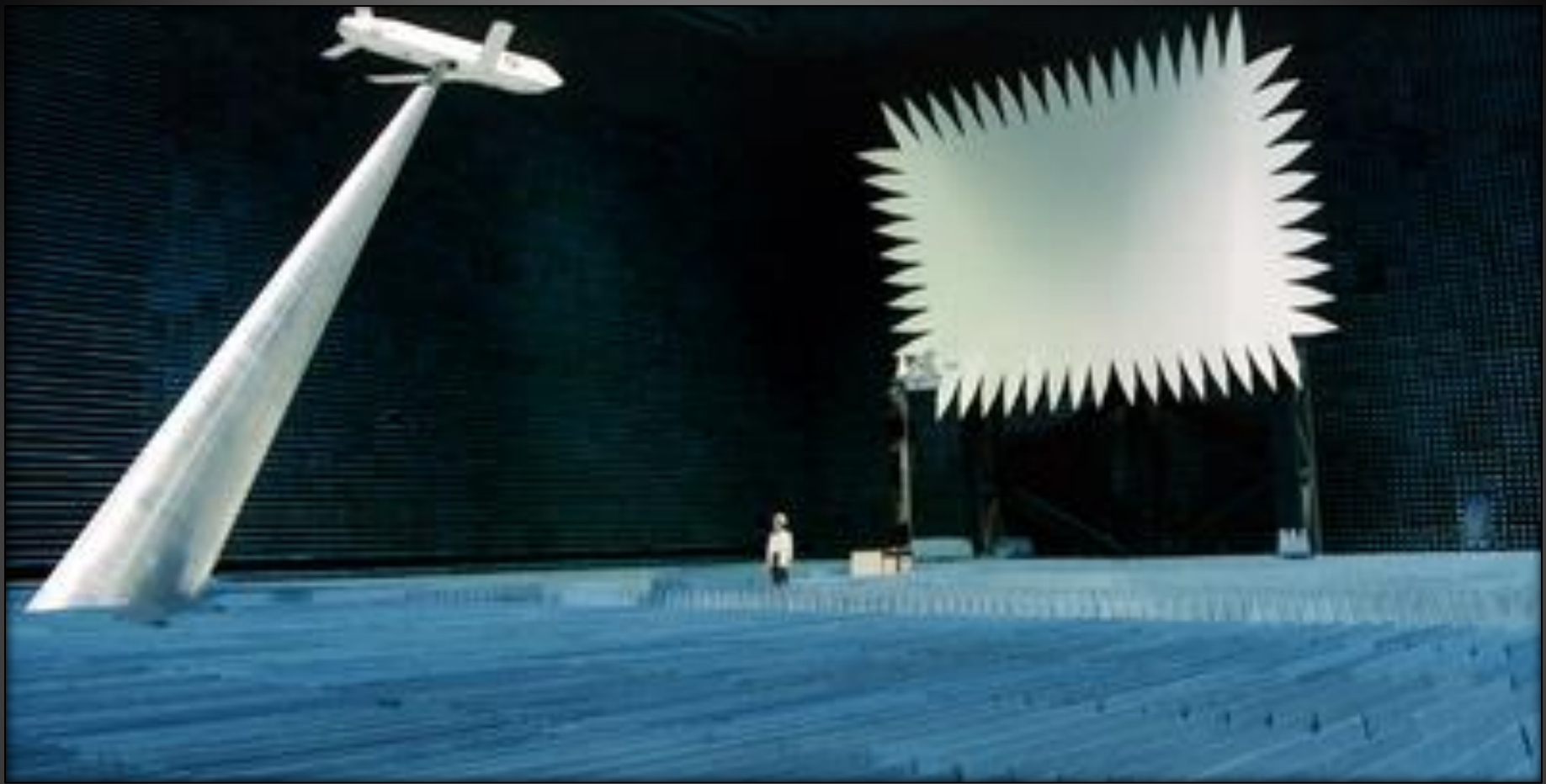
- 25+Years experience in Construction industry
- Worked in 5 countries
  - US, Hong Kong, Singapore, Thailand, and Australia
- Worked in various industries
  - Roads, Railway, Airports, Refinery, Water, Oil & Gas
- Director of my business – a Construction Project Management Consultancy
- CEO of National Association of Women in Construction
- Current Non-Executive Board Director
- Mum







Advanced Photon Source  
Chicago, Illinois, USA



Missile Systems Integration Lab – Anechoic Chamber  
Pt Mugu, CA, USA





# Hong Kong Chemical Waste Treatment Plant

## Tsing Yi Island, Hong Kong





# Hong Kong Airport Core Project

## Hong Kong



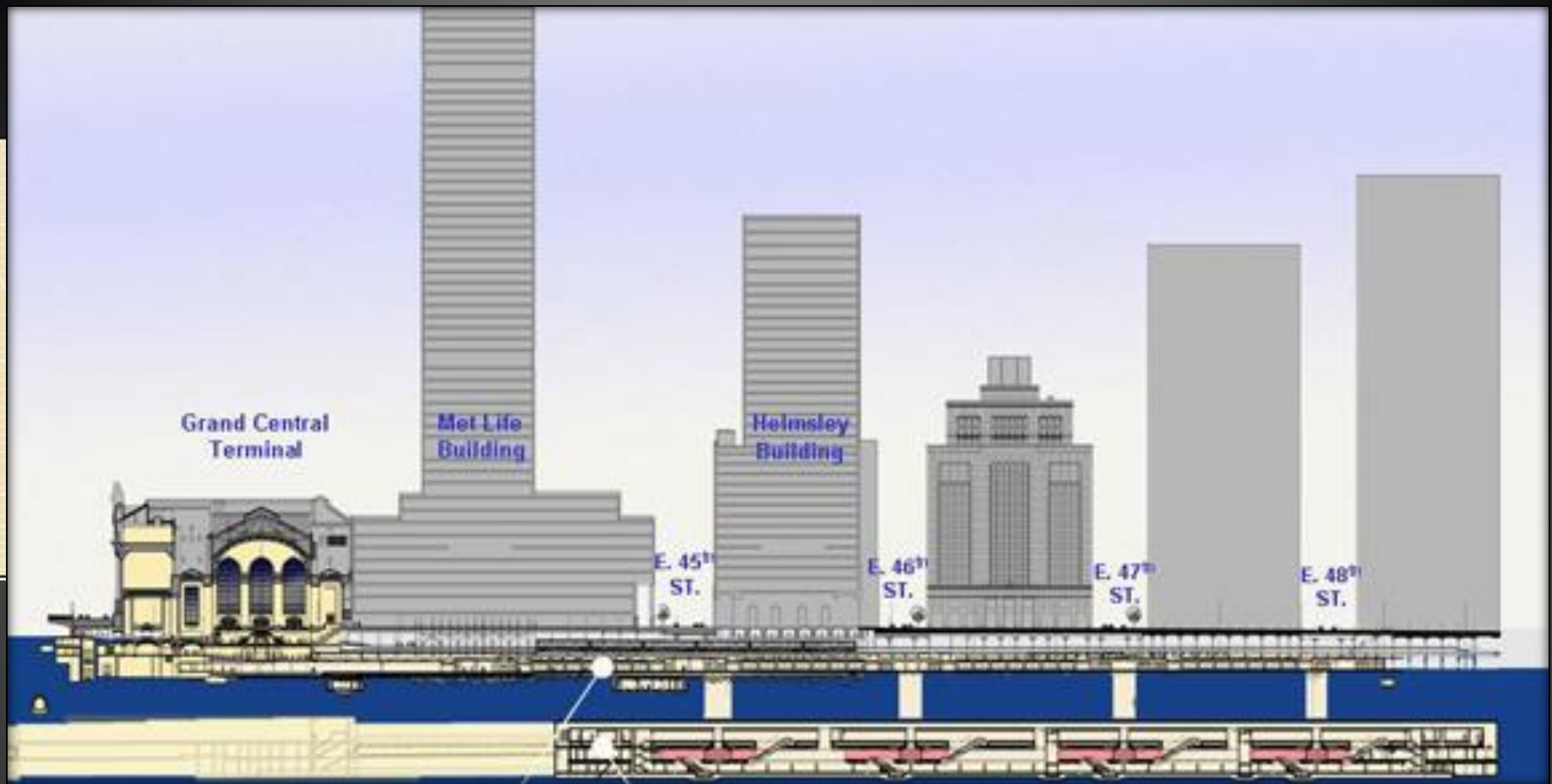


Project Site



## Asphalt Refinery Plant Bangsaphan, Thailand





# East Side Access Project

New York City / Long Island





Morwell River Diversion  
Yallourn Mine, Latrobe Valley





## Eastlink Project Melbourne





## Boggo Road Busway Brisbane



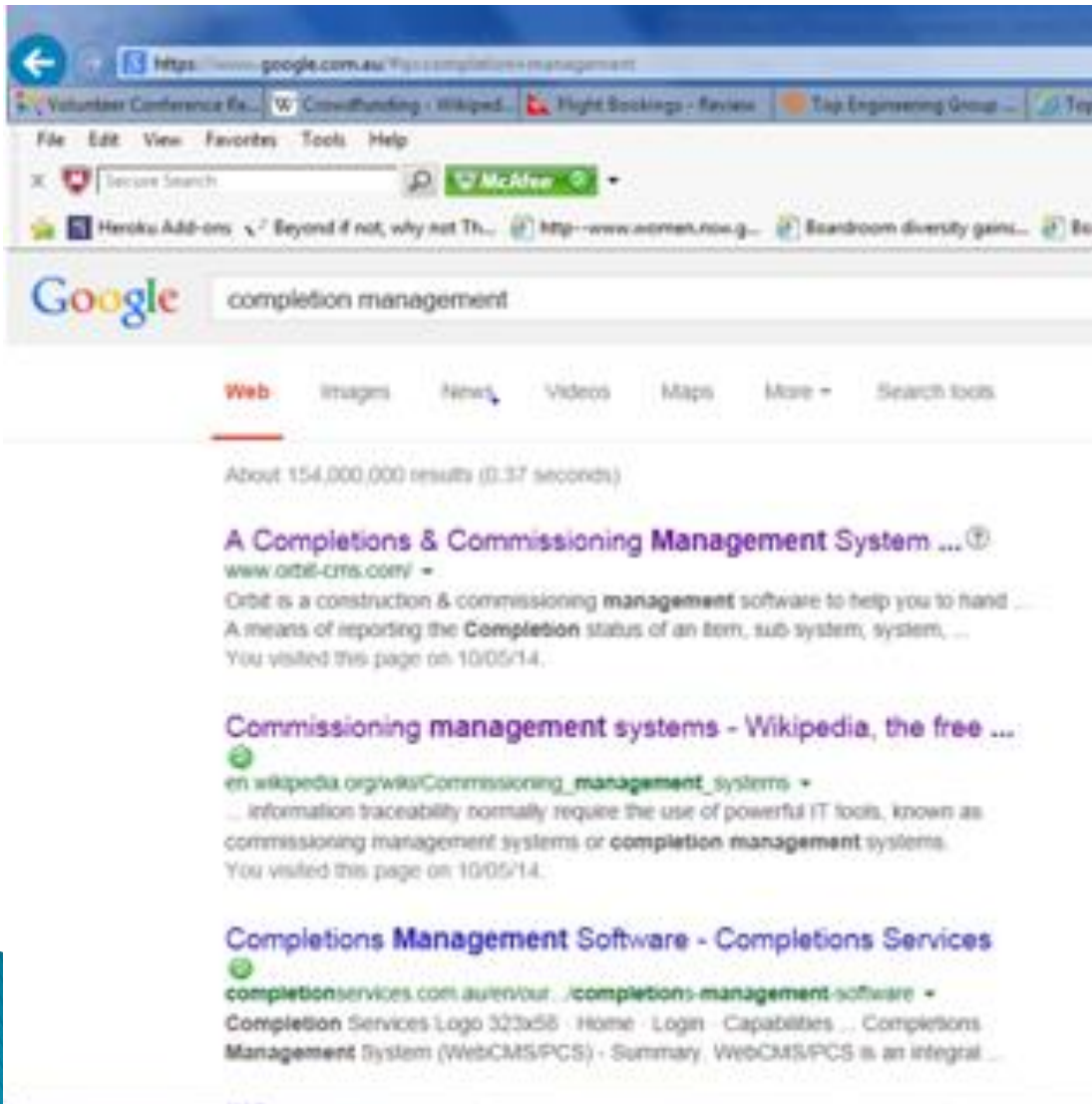
# What is Project Management?

- ▶ **Construction** Project Management is the overall *planning, coordination* and *control* of a project from *inception to completion* aimed at *meeting a client's requirements* in order to produce a functionally and financially viable project that will be completed on time within authorized cost and to the required quality standards. Project management is the process by which a project is brought to a successful conclusion.

*Reference: Wikipedia*




# What is Completion Management?



What it is NOT:

- ▶ A system

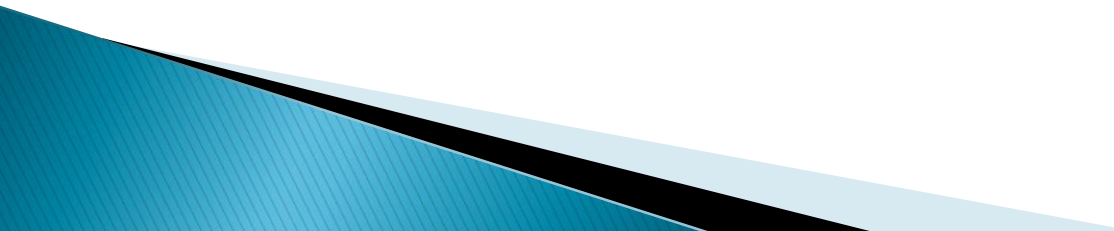
# What is Completion Management?

- ▶ **Completion management** is a philosophy of keeping in mind of the end of the project, starting at inception. This would include:
    - ▶ Tender / Award
    - ▶ Design
    - ▶ Procurement
    - ▶ Construction
    - ▶ Commissioning
    - ▶ Handover
    - ▶ Deliverables
    - ▶ Archiving / Retrieving Documents
- 



# Completion Management – Purpose

*The purpose of the Completion Management (Plan) is to give guidance to relevant project members and external stakeholders regarding the strategies, processes and methods required to manage the final completion and handover (including Defect Liability Period) of both the project(s).*



# Completion Management Plan

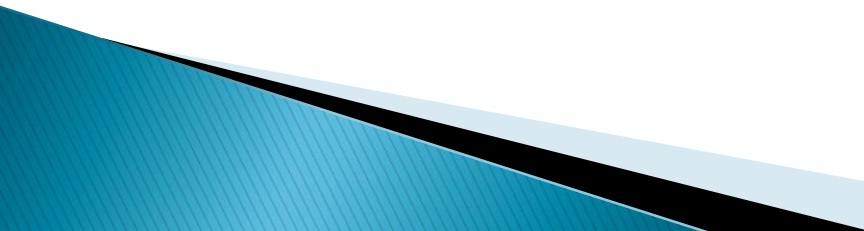
- ▶ **Completion management Plan: example of contents**
  - ✓ Interface with Other Management Plans
  - ✓ Project Completion Deliverables
  - ✓ Land Resumption Plans Survey Documentation
  - ✓ **Project documents – handover**
  - ✓ Operation and Maintenance Manuals / Alliance Records
  - ✓ Alliance Project Records
  - ✓ **O&M Manuals Structure**
  - ✓ **Construction Completion (QA) Documentation**
  - ✓ Document File Structure

# Completion Management Plan – cont.


- Punch lists, Minor Omissions and Outstanding works
- Completion / Archiving Library
- Completion Communication / Meetings
- Completion Issues and Actions Register (CIAR)
- Completion Schedules
- Contract and Target Completion Dates
- Program Completion Schedule
- Construction Completion Schedule
- Pre-commissioning, Commissioning program
- Demobilisation and Close-Out
- *Commercial Close-out Procedure*
- *Demobilisation Procedure*
- *Archiving Documents*
- *Handover to Client Operations*



# Completion Management Plan – cont.

- *Handover of Site*
  - *Opening Plan*
  - Defect Liability / Defects
  - *Appendix*      *Certificate of Practical Completion*
  - Appendix      Completion Key Stakeholders and Approval
  - Appendix      Completion Milestone Schedule
  - Appendix      Completion Documentation Matrix
  - Appendix      Final Certificate of Practical Completion
  - *Appendix*      *As-Built Drawings Procedures*
  - Appendix      Defects Liability Period – Contacts List
- 

# Project Team – Key Team members

- Project Director
  - Project Manager
  - Project Engineers
  - Contracts Management
  - Procurement / Expeditors
  - Safety, Quality, Environment, Community, Risk Managers
  - Project Controls
    - Estimators, Cost, Planning and Scheduling
  - Legal
  - Other
    - Financial, document control, admin
  - Foreman / Leading Hands
- 

# Project Manager's Responsibilities

- The Construction Management Association of America (CMAA) (a primary US construction management certification and advocacy body) says the *120 most common responsibilities of a Construction Manager* fall into the following 7 categories:

- Project Management
- Planning
- Cost Management
- Time Management
- Quality Management
- Contract Administration
- Safety Management

*Project*

*Management*

*Responsibilities*

# Key Words of Project Management

- ▶ Scope
- ▶ Time
- ▶ Price/Cost
- ▶ Quality
- ▶ Safety

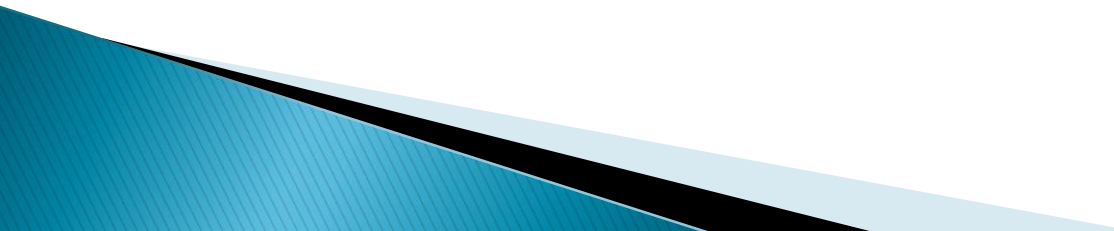
Successful Completion!





# Project Management

## Why have Project Management?

- To construct on time and under budget and per the specifications.
  - Once the project starts it is NOT a self-regulating mechanism.
  - Must conform to the plans and specifications
  - ▶ No two projects are ever the same!
- 

# Where do we start and how?

## ▶ Quite overwhelming!

- Understand the scope (**contract**)
- Understand the design (**specifications and drawings**)
- Ensure you have the right resources (**project team, tools, machinery**)
- Put together how to manage/control costs and time elements (**Project Team**)
- How to manage / track quality (**Quality**)
- Assessment of risk (**Risk**)
- How to ensure good **Safety, Environment** practices
- Put together good **communication** tools
- ***And MOST IMPORTANTLY...get the Right People in the Right Roles!***

# Roles

## Right People in the Right Roles

- ▶ Look at the Project Capability and do an assessment on the skills required:
  - Technical: SAFETY, Engineering, risk, Construction methodology, etc
  - Soft Skills: Management, Leadership,
  - Behaviours: Are the team members displaying the corporate culture and representing the company well?
  
- ▶ *Example: Supply Chain Specialists type of Characteristics to consider:*
  - ▶ *Ethical*
  - ▶ *Emotionally Intelligent*
  - ▶ *Relationship*
  - ▶ *Team Member / Builder*
  - ▶ *Authentic Leadership*

# Conclusion

**On your next Project think about:**

- ▶ 1. Do you have a Completion Management Plan (or activities as such) covered in your planning?
  - ▶ 2. Have you built a team by assessing the Capability / developing via a skills matrix?
  - ▶ 3. Do you have the right people in the right roles to be able to execute and handover the project successfully?
- 