

A large, circular graphic resembling a compass rose, centered in the image. The outer ring is white with black markings for degrees (15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 180, 195, 210, 225, 240, 255, 270, 285, 300, 315, 330, 345) and cardinal directions (N, S, E, W). The inner circle is dark blue with white text and two small compass rose icons at the top and bottom. The background of the entire image is a starry night sky with a horizontal orange band across the middle. The orange band contains faint, technical-style line drawings of gears and arrows.

46TH ANNUAL
ECC CONFERENCE

ALIGNING *THE* STARS

*Connecting People,
Projects & Performance*

ENGINEERING & CONSTRUCTION CONTRACTING ASSOCIATION



Balancing Expectations and Maximizing Performance



C. Rex West, P.E.

Project Manager
LyondellBasell



Neil Robertson, C.Eng

Vice President
WorleyParsons

Balancing Expectations - Managing Performance

The respective roles of Owners and Contractors in successful projects have shifted; both parties are impacted by retiring expertise and a war for talent.

Balancing Expectations - Managing Performance

For large projects especially, the supply chain has many weak links, and Owners often feel they have to expand their role to compensate for unreliable quality and timely performance. Likewise, Contractors often feel as if unrealistic Owner expectations, burdensome oversight, and clumsy decision making hampers performance.

Balancing Expectations - Managing Performance

How can the roles and expectations of both the Owner and the Contractor be balanced, transparent, and tailored to their respective strengths?

Differing Perceptions of Reality:

Owners:

- Think Contractors cannot meet schedules

Contractors:

- Think Owners demand unachievable schedules

Differing Perceptions of Reality:

Owners:

- Think Contractors only want to maximize billable hours

Contractors:

- Think Owners are too focused on the lowest mark-up

Differing Perceptions of Reality:

Owners:

- Think Contractors have constant turnover

Contractors:

- Think Owners have constant turnover

Differing Perceptions of Reality:

Owners:

- Believe Contractors can keep a stable of qualified resources on the bench without billable work

Contractors:

- Believe Owners rely on too many contract employees that do not share the Owner's core values

Differing Perceptions of Reality:

Owners:

- Think Contractors cannot manage change

Contractors:

- Think Owners will not freeze the scope

Differing Perceptions of Reality:

Owners:

- Think Contractors don't follow their own procedures

Contractors:

- Think Owners are annoyed by procedures

Differing Perceptions of Reality:

Owners:

- Think Contractors rarely push back, allowing the project to take an unfortunate direction

Contractors:

- Fear Owner's retaliation whenever push back is offered. Pushback can get a Project Manager replaced!

Differing Perceptions of Reality:

Owners:

- Expect the projects to be executed the Owner way

Contractors:

- Think Owners know little about project execution

Differing Perceptions of Reality:

Owners:

- Believe Contractors cannot deliver on commitments

Contractors:

- Think Owners force unreasonable commitments on Contractors, otherwise the job will be lost!

Differing Perceptions of Reality:

Owners:

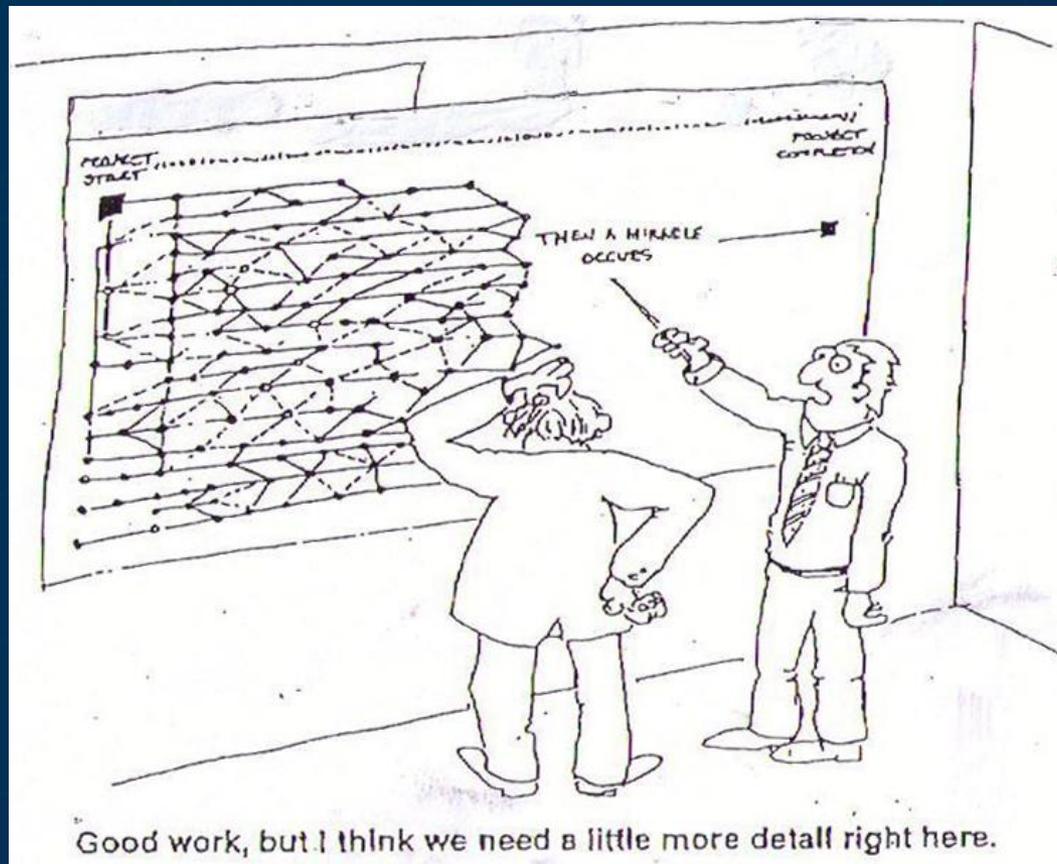
- Believe Contractors over promise and under deliver

Contractors:

- Believe Owners expect the unachievable.

Balancing Expectations and Maximizing Performance

Let's talk about "The Schedule"



Schedule

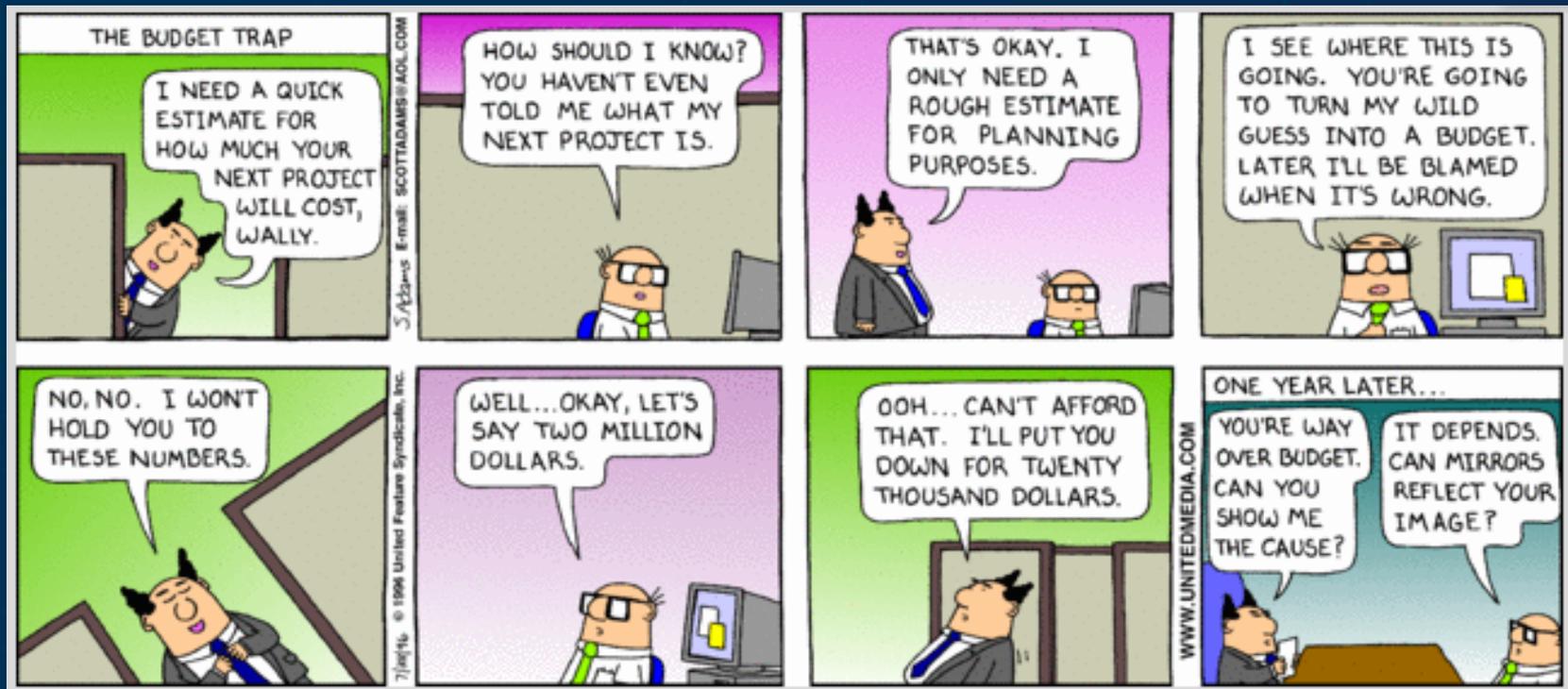
- Rex and Neil tell us why your companies agree to unreasonable schedules?
- What can be done so that all the stakeholders can agree to a reasonable schedule?
- How do we bring schedule certainty into our projects?

ARS – What is the most important thing to consider in getting the schedule right?

1. Continue using FEL and interactive execution plans as the basis for the schedule, then benchmark for validity.
2. Rigorously work the schedule; Add more activities to the schedule and undertake probability risk assessments and increase float accordingly
3. Owner's accept the fact that today's projects take more time, and adjust expectations accordingly.

Balancing Expectations and Maximizing Performance

Let's talk about "The Estimate" both for services rendered and for TIC



Estimates

- Neil, why do engineering houses have trouble estimating the cost of their services, much less the TIC of a project?
- Rex, what are you doing as an Owner to adjust your expectations of Project budgets?

ARS-Accepting the premise that engineering company estimates may be unreasonable, what is the best way forward to change this paradigm?

1. Owners need to stop forcing Contractors to give them the answer they need to get the project through the gate.
2. Contractors need to adjust estimates to match current market conditions and persuade Owners of the estimate's validity.
3. The premise is flawed. My projects are meeting or exceeding obligations.

Balancing Expectations and Maximizing Performance

Let's talk about the Resource Gap



Resource Gap

- Neil and Rex, for years we have spoken about the resource gap – aging demographics; too few candidates in college; lack of training; etc., but projects are getting executed – is the resource gap actually contributing to a problem and what is the impact on projects?

What are some of the innovative things you have seen companies doing to close the resource gap?

ARS – Do you believe the resource gap is a long term issue or the Market will self correct?

1. Yes. I believe the resource gap is a long term issue and my organization is actively developing additional capability for the future.
2. No. I believe the Market will turn / self correct, and my organization is making no substantial changes.

Balancing Expectations and Maximizing Performance

Let's talk about "Engineering Company Oversight"



Engineering Company Oversight

- Many Owners believe they have to provide robust oversight, while engineering companies believe this approach interferes with their ability to execute efficiently.
 - Rex, how can Owner's determine the right ratio of Owner/Contractor personnel?
 - Neil, what are your thoughts on how the two groups interface?

ARS-What is the best approach an Owner should take today regarding oversight of the Contractor to assure the success of the project?

1. Owners should have as many or few representatives as the Owner deems necessary.
2. Owners should trust the contractors to meet the project objectives, and only have enough representation to answer Contractor questions.
3. Each project is so different- Owners and Contractors should work out roles for all participants

Balancing Expectations and Maximizing Performance

Let's talk about "Trust between the Contractor and Owner"



ARS-What are the primary reasons Owners and Contractors do not trust each other?

1. Contractor's have over-promised and under-delivered; Contractor's past performance proves Contractor's cannot be trusted to act in the Owner's best interest!
2. Owner's believe that Contractors only want to maximize profit and do not really care about the Owner's objectives.
3. The Owner/Contractor relationships on my projects are fine!

Trust

- Neil and Rex what do you believe are the root issues that caused the shift whereby Owner's do not trust engineering firms any more? Any thoughts on how to turn that around?
- As a result of this distrust – what material impacts does this have on the schedule, cost, quality, safety, performance and scope of projects? Even if the distrust continues, what recommendations can you make to mitigation most of the negatives?

ARS-What statement best reflects your view of 'Trust' in the Owner/Contractor relationship?

1. Owners and Contractors should work in integrated teams, and trust will follow.
2. Owner's should consider alliances and contracting strategies with risk and reward structures, providing a frame work to develop trust over time.
3. 'Trust But Verify' ---Owners need to increase oversight to overcome any problems lack of trust could cause.

Balancing Expectations - Managing Performance

So, What Can We Do About It? .

What Can We Do About It?

The Obvious

- Expand your view of 3rd World Sourcing
- Consider modular construction
- Exploit high value engineering centers
- Set expectations with each other- hold extensive inter-active planning sessions

Balancing Expectations - Managing Performance

So, What Can We Do Differently?

Align cost and schedule expectations with today's reality!

- Adjust your targets!
 - Projects are taking longer and costing more
- Challenge the economics!
 - Evaluation of wider risks may highlight the possible real world outcomes-some projects may not be viable
- Look for insidious schedule drivers!
 - Permits
 - Data from Vendors and Vendor's Subs

Acknowledge the Resource Gap

- Retainage- think it through
- ‘Train-up’ your employees
- Portfolio Management – Look at your organizational ability- are you being realistic?
- Take more engineers to the field
 - Constructors are struggling with engineering concepts
 - Engineers need the feedback to their designs
- Get creative!
 - Like your Contractor employee? Use bounties!

Optimize the Owner & Contractor Teams

- Owner oversight teams should be optimized.
 - Collaboratively size the team
 - Don't let one party dictate the staffing
 - Put resources on the highest risk projects
 - Delegate authority- crisply! Especially on the Owner side
 - Align the Owner team to common objectives
 - Transfer of Owner knowledge and prompt follow-up drive engineering completion.

Balancing Expectations - Managing Performance Key Takeaways

- Benchmarking old projects for today's projects is creating unachievable expectations
 - *Adjust contingencies, allowances, risk identification, economic modeling*
- Acknowledge there is a resource gap
- Owner oversight- Work it!
- Trust - hard to formulate and esoteric, but building trust will make your outcomes better

Balancing Expectations and Maximizing Performance

- Does the audience have any questions for the panel?



A large, circular graphic resembling a compass rose, centered in the image. The outer ring is white with black markings for degrees (15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 180, 195, 210, 225, 240, 255, 270, 285, 300, 315, 330, 345) and cardinal directions (N, S, E, W). The center is dark blue with white text and two small compass rose icons at the top and bottom.

46TH ANNUAL
ECC CONFERENCE

ALIGNING THE STARS

*Connecting People,
Projects & Performance*

ENGINEERING & CONSTRUCTION CONTRACTING ASSOCIATION