

How database content is developed

Project Phases in Construction Boxscore

Pre-FID Phases

- Proposed: typically, is company news release or news bureau story
- **Planned**: specific activities; e.g. siting, permitting, commitments
- Study: this can support planning, or pre-FEED technology selection
- FEED: Front-End Engineering Design, enough to develop FID budget

EPC to Startup

- Engineering: Detailed engineering, used for ordering and fabrication
- Procurement: Ordering & tracking, includes logistics, site warehouse
- **Construction**: Includes any modules from offsite and all onsite work
- Commission: from mechanical completion, through reliable start up

Contacts by Status in Construction Boxscore

Typical Contacts in Pre-FID Phases

- **Proposed**: **Communications** person per stock exchange's rules about "forward-looking statements", others may not be allowed to comment
- **Planning**: If an EISA is underway, Owners may add a contact person for **Environmental**. If a permit is being sought, may add **Regulatory** person
- **Study**: If study supports planning, company may add HSE **Consultant.** For Pre-FEED technology selection, may add **engineering consultancy**. (*Some EPC firms, but not all, do have an in-house consultancy group*)
- **FEED**: Seek **engineering leadership** contacts for this specific project. Our HP Process Handbooks have **contacts for Licensed technologies**.

Typical Contacts EPC to Startup

- Engineering: prefer Engineering Director, also any Project Manager with design responsibility over any major work package
- **Procurement**: prefer **Procurement Director**, also any **Project Manager with buying responsibility** over any major work package. Also contacts with responsibility over large **offsite fabrication**, any **module yards**, **logistics** with knowledge of **delivery timings** to site
- **Construction**: prefer **Site Project Director**, also any **Project Manager with site responsibility** over any defined areas / modules



• **Commissioning:** those named who **lead Commissioning activity**, for every EPC on-site, and their **named counterparts** in the owner team

"PROPOSED" in Construction Boxscore

- **Project ID**: unique numeric key used throughout project life-cycle
- **Operator**: name of company which will ultimately operate this site
- **Project name**: unique label for this project, so include site/owner?
- Plant name: name of the facility check if this already exists in BX
- Startup: target project completion date, currently nearest quarter
- Capacity: units by type: Gas Processing, Petrochemical, Refining
- **Investment**: in \$MM not always available at the proposed stage
- **Locality**: not always specific. *May be for competitive reasons (e.g. looking for state offering best tax break), or if siting is contentious*
- **CONTACTS**: particularly for publicly-traded company, only contact provided MAY be their authorized communications spokesperson

"PLANNING" in Construction Boxscore

Might take several forms. e.g. siting choice, permitting, commitments

- Scope: good time to ensure that scope is complete per planning docs
- Background: document reason why project is happening, why now
- **Financials**: ensure all investors, banks identified. Also, any signed agreement for product off-take. If insufficient, can delay a project.
- Timeline: YYYY mon short summary, short sentences each time
- Locality: if applying for a permit, county-level siting may be given. If project still gathering funding / tax breaks, may not be available
- **CONTACTS**: company may add contacts for permitting and siting, but often stick with the same corporate communications people.

"STUDY" in Construction Boxscore

May be done all in-house, but might also use outside consultants

- **Consultant**: if an engineering firm, list this way, with Contract Type If a law firm, or HSE only, list as **Supplier / Service** (aka Additional)
- **Notes**: as with any firm involved in this project, notes should just summarize the scope of THEIR services, within the overall project
- Licensor(s): they may be selected during a study phase. If named, add as Licensor. Notes to include chosen technology tradenames



• **CONTACTS**: prefer to get study leads, plus any owner counterpart

"FEED" in Construction Boxscore

For mega-projects, may use two firms, each one is compensated. This is done to increase trustworthiness of investment for the FID

- Engineering firm(s): ensure their contract type is correctly listed
- **Notes**: as with any firm involved in this project, notes should just summarize the scope of their services, within the overall project
- Licensor(s): Will have been chosen. Some units may be "open art"
- Investment, startup, capacity: update if any of the fields change. In Timeline, cite what changed; "from" quantity "to" a new value.
- Scope: Revise, don't add to it, to list all unit/technology selections
- CONTACTS: prefer to get FEED leads plus any owner counterparts

"Engineering" in Construction Boxscore

Note awards of EPC might be to multiple firms in a mega-project. (EPC is not usually awarded without formal investor FID decision)

- Engineering firm(s): ensure their Contract type is correctly listed
- **Contract Type**: e.g. EPC, EPCC, EPCM, EPCIC, EPS, FEED, MSA, PMC and that's just types with acronyms! Over 20 in BX: will trim these
- **Notes**: as with any firm involved in this project, notes should just summarize the scope of their services, within the overall project.

"Additional" in Construction Boxscore

This should be used only for Service firms, and/or for Supplier firms.

- Examples of Service firms include e.g. law firms, HSE consultancies
- Examples of **Supplier** firms include automation, catalyst suppliers

Do NOT use this for Engineering firms. If selected, their company names can appear multiple times. e.g. in Study, FEED and in EPC. Should only be listed more than once if they got separate awards e.g. if Engineering firm is awarded Study and FEED, state in Notes.

Work process to close out active projects

Endeavor to get "as-built" investment, and month project started up



- Timeline: edit out minor updates, focus upon the project's milestones
- **CONTACTS**: important to get the names of Operations, Maintenance leadership of the project facility, listed under the Operator's contacts

(Also get key O&M decision-makers with responsibility over multiple facilities, if that is how company is organized for operation oversight)