



BUILDING PLANTS FROM NAPKINS

What to expect from DePue's Planning Process

At DePue, we understand that the journey of turning your project idea into a tangible cost estimate should be customized to fit your project, timeline, and requirements. We recognize that each client's needs vary - some desire a comprehensive step-by-step process, while others require a more streamlined approach. That's why we adapt the Front-End Loading (FEL) deliverables specifically to your unique needs, recognizing that what matters most are the results rather than the specific steps involved. Trust us to tailor our approach to ensure your project's success.

[LEARN MORE](#)



FRONT-END LOADING

FEL-0
DELIVERABLES

FEL-1
DELIVERABLES

FEL-2
DELIVERABLES

FEL-3
DELIVERABLES

WHY USE FEL

LET'S TALK

FRONT-END LOADING



FEL-0
Preliminary Identification



FEL-1
Opportunity Identification and Assessment



FEL-2
Scope Development and Conceptual Design



FEL-3
Execution Planning

FEL Stages

Front-End Loading (FEL), also known as Front-End Planning (FEP), is a crucial process in the capital project life cycle that can significantly enhance project success if executed effectively. It entails creating strategic information and essential documentation, which empowers project owners to identify and mitigate potential project risks, make informed decisions about project viability, allocate resources, and increase the likelihood of project success.

When utilized as a formal stage gate process, FEL can serve as an approval process with gates after each phase to enable key stakeholders to make informed investment decisions. Each gate must be cleared before proceeding to project execution. Alternatively, individual FEL phases such as FEL3/FEED can be conducted separately; this largely depends on the level of planning required for a specific capital project.





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OUR PLANNING PROCESS

FEL -0

PRELIMINARY IDENTIFICATION

W WHAT TO EXPECT

During this stage, the feasibility of the project is evaluated, and the different possible routes for the project's execution are analyzed.

FEL-0 aims at providing a comprehensive understanding of the project and establishes the basis for the project definition and planning. It involves high-level engineering studies, cost estimating, risk analysis (if applicable), and project development planning.

D DELIVERABLES

Deliverables for FEL-0 typically include:

- PLAN CAPACITY
- PROJECT OBJECTIVES
- ROUGH COST ESTIMATE
- IDENTIFY MAJOR EQUIPMENT
- PROJECTED LOCATION

FEL -1

OPPORTUNITY IDENTIFICATION & ASSESSMENT

WHAT TO EXPECT

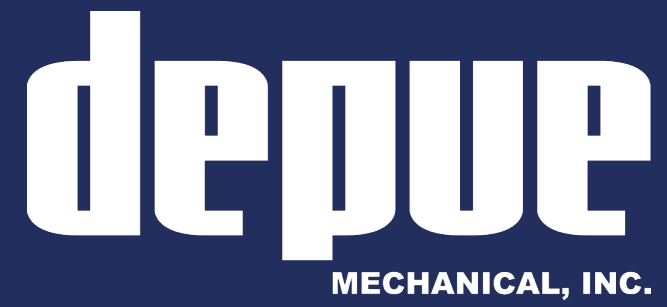
During FEL-1, the focus is on identifying and defining the business need or opportunity for the project. This includes assessing the feasibility of the project from technical, economic, and organizational perspectives. It is during this stage that an initial evaluation of the project's viability and potential risks is conducted.



DELIVERABLES

Deliverables for FEL-1 typically include:

- ▶ PRELIMINARY PROCESS FLOW DIAGRAMS
- ▶ PRELIMINARY EQUIPMENT COSTS
- ▶ STRATEGIC BUSINESS ASSESSMENT
- ▶ LOCATION/SITE LOGISTICS STUDIES
- ▶ PRELIMINARY LAYOUTS
- ▶ PRELIMINARY FACTORED COST ESTIMATE +/- 30%
- ▶ PROFORMA (ROI JUSTIFICATION)
- ▶ PRELIMINARY PROJECT SCHEDULE



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FEL -2

SCOPE DEFINITION & CONCEPTUAL DESIGN

DELIVERABLES

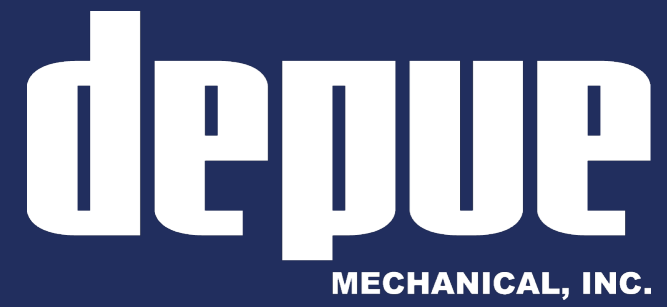
Deliverables for FEL-2 typically include:

- ▶ PRELIMINARY EQUIPMENT SIZING & SPECIFICATIONS
- ▶ REFINED PROJECT COST ESTIMATES +/- 20%
- ▶ PERMITTING & COMPLIANCE PLANNING
- ▶ PRELIMINARY PROCESS & INSTRUMENTATION DIAGRAMS
- ▶ REFINED PROJECT SCHEDULE
- ▶ OVERALL PROJECT EXECUTION STRATEGY
- ▶ PROFORMA REFINEMENT
- ▶ UPDATED OPERATING COST

WHAT TO EXPECT

During the FEL-2 stage, also known as Conceptual Engineering, the focus is on developing and evaluating preliminary design concepts and process options.





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FEL-3
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OUR PLANNING PROCESS

FEL -3

EXECUTION PLANNING

WHAT TO EXPECT

During this stage, the team fully designs the project, including specifying the exact construction, commissioning, startup, and operation details of the plant or facility.



DELIVERABLES

Deliverables for FEL-3 typically include:

- ▶ EQUIPMENT SPECIFICATIONS & LISTS
- ▶ ENVIRONMENTAL PERMIT APPLICATION SUBMITTAL
- ▶ PRE-DESIGN PROCESS HAZOP ANALYSIS
- ▶ DETAILED EPC PROJECT SCHEDULE
- ▶ FINAL COST ESTIMATE +/- 10%
- ▶ DETAILED P&IDS
- ▶ PROJECT EXECUTION PLAN
- ▶ SITE PLANS/ PLOT PLANS
- ▶ FINALIZED UTILITY FLOW DIAGRAMS
- ▶ COMMISSIONING & STARTUP PLANS
- ▶ PRELIMINARY INSTRUMENTS SPECIFICATIONS & LISTS
- ▶ GENERAL ARRANGEMENT DRAWINGS (LAYOUTS)



WHY DEPUE USES AN FEL APPROACH

Our extensive experience of over 15 years in providing front end loading contracting to clients in diverse scenarios has highlighted the crucial importance of accurate preliminary planning. We meticulously tailor the deliverables to align with your specific project, enabling you to successfully execute your project on plan, on time, and on budget.



Increase project accuracy



Reduce the risk of human error



Minimize downstream mistakes



Distribute responsibility



Amplify your value to the business.

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depue
MECHANICAL, INC.

PLANNING A PROJECT?

Wondering how this could work for you?

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