

Document Title: CTO5 Waste to Energy Project | Engineering Management | Project Deliverables

Document no: CTO5-ENM-PLN-0001
Revision: A
Date: 11th May 2026



Document History and Status

Revision	Date	Description	Author	Reviewed	Approved
A	11-May-26	Issued for Review	ST	-	-

Municipality of Anchorage

Jacobs Project Management Co T +1.907.762.1500
3800 Suite Centerpoint Drive F +1.907.762.1600
Anchorage, AK 99503
United States

© Copyright 2026 Municipality of Anchorage. All rights reserved. The content and information contained in this document is the property of the Municipality of Anchorage. Publication, distribution, or reproduction of this document in whole or in part without the written permission of Municipality of Anchorage constitutes an infringement of copyright. Jacobs Project Management Co. is under contract to manage and operate the PMO. Jacobs, the Jacobs logo, and all other Jacobs Group trademarks or those of companies under contract to Jacobs for PMO services are the property of Jacobs Group or those companies.

NOTICE: This document has been prepared exclusively for the use and benefit of the Municipality of Anchorage. Jacobs Group nor any company under contract to Jacobs for PMO services, accepts no liability or responsibility for any use or reliance upon this document by any third party.

Notes:**Purpose:**

The purpose of this Deliverables Framework is to establish a common reference structure for the anticipated engineering deliverables associated with the development of the Waste -to-Energy (WTE) Facility project.

This document is intended to:

- Provide proposers with a clear understanding of the typical types, categories, and maturity levels of engineering deliverables expected on a complex, multidisciplinary WTE project;
- Support alignment of proposal assumptions, level-of-effort planning, and staffing strategies across responding firms;
- Facilitate coordination and integration between engineering, procurement, construction, commissioning, and operations planning under the Project's collaborative delivery model; and
- Serve as a planning and communication tool to reduce ambiguity, improve comparability of proposals, and inform subsequent scope definition during contract negotiation.

This Engineering Deliverables Framework reflects industry-standard practices for large, integrated infrastructure and energy projects and is structured to support progressive design development, early procurement planning, constructability reviews, and lifecycle considerations.

This document is issued for proposal alignment and scope clarification purposes only. Not all deliverables identified herein are expected to be produced in all phases of the project, nor does inclusion of a deliverable imply that it will be required as part of the Design Consultant's base scope. The final list of required deliverables, their level of detail, review requirements, and phase applicability will be refined and mutually agreed following selection of the Design Consultant and incorporated into the negotiated professional services agreement.

Nothing in this document is intended to:

- Expand or modify the Scope of Work described in the Request for Proposal;
- Transfer responsibility for procurement execution, construction means and methods, commissioning execution, or operational activities to the Design Consultant; or
- Create a warranty or guarantee of cost, performance, schedule, or regulatory approval.

Document Milestone Definitions:

The following document milestone codes are used throughout this Engineering Deliverables Framework to indicate the status, maturity, and intended use of engineering documents as they progress through design, procurement, construction, commissioning, and operations. These definitions are provided for terminology alignment only.

IFI – Issued for Information	Documents issued for general information or reference purposes only. Not intended for review, approval, procurement, or execution.
IFR – Issued for Review	Documents issued to solicit review and comment from the Owner, CMAR, OMAR, PMO, or other stakeholders. Not approved for execution or procurement.
IFH – Issued for Hazard Review	Documents issued specifically to support formal safety studies (e.g., HAZID, HAZOP). Not intended for procurement or construction use.
IFF – Issued for FEED	Documents issued at a level of maturity suitable to support FEED objectives, design development, and Class 3 cost estimating. Not approved for procurement or construction.
IFB – Issued for Bid	Documents issued to support solicitation of vendor or contractor bids, including technical specifications and data sheets.
IFP – Issued for Procurement	Documents issued to support final procurement actions following bid evaluation. Incorporates accepted technical deviations and clarifications.
IFD – Issued for Design	IFD documents are engineering coordination deliverables that represent an intermediate design-maturity milestone used to establish a controlled technical baseline and advance interdisciplinary design toward Issued for Construction (IFC) status, but they are not construction documents or contract documents.
IFC – Issued for Construction	Final, fully coordinated documents approved for construction and fabrication. Subject to formal change control after issue.
IFU – Issued for Use	Documents approved for execution or use, including procedures, plans, manuals, and commissioning or operational documentation.

Document milestone codes describe the intended use and level of maturity of documents only. Inclusion of a deliverable at a particular milestone does not mean that the deliverable is required in all cases, nor does it define approval, acceptance, or contractual scope. The final list of required deliverables and their applicable milestones will be confirmed during contract negotiation or by written authorization.

Earned Value and Progress Measurement:

Engineering progress will be measured and reported using a milestone-based earned value approach, where achievement of defined document and deliverable milestones (such as IFI, IFR, IFF, IFB, IFC, and IFU) is used to determine earned progress. This approach is intended to provide objective, auditable measurement of engineering performance for progress reporting and schedule tracking. The detailed rules, milestone weightings, and calculation methodology for earned value will be developed and finalized after contract

Waste to Energy Project: Project Deliverables Framework

Bidders Instructions:

Proposers shall use the Engineering Deliverables Framework as a reference baseline to describe how they will plan, sequence, and execute the Project's engineering scope under a collaborative delivery model.

Proposers are expected to actively engage with the Framework and, as part of their proposal:

Mark up or annotate the Framework to reflect their proposed execution approach;

Identify deliverables they consider part of their base scope, conditional or interface-driven, or advisory in nature;

Clearly indicate which deliverables they propose to author and own, and where they expect to provide technical input or coordination to the CMAR, OMAR, vendors, or the Owner; and

Add and identify any additional deliverables the Proposer believes are necessary to successfully execute the Project but are not currently reflected in the Framework, including a brief rationale.

The Municipality recognizes that different firms may propose different approaches. Proposers will be evaluated on the clarity, completeness, and practicality of how they use the Engineering Deliverables Framework to communicate their execution strategy, deliverable ownership, and interfaces.

Engineering Management: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Engineering Governance & Control									
WTE Facility Basis of Design	Basis of Design	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Engineering Management Plan	Plan	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Engineering Execution Plan	Plan	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Engineering Work Breakdown Structure	Plan	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Engineering Responsibility Matrix	Plan	Excel / Eng Database		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Technology Selection Report	Report	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Document & Data Control									
Master Document Register (MDR)	Report	Excel / Eng Database		S2	IFR IFF IFD	IFR	IFF	IFD	<input type="checkbox"/>
Document Numbering & Coding Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Document Transmittal Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Document Status & Revision Control Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Engineering Progress & Reporting									
Engineering, Procurement & Construction Schedule	Report	Primavera P6 / PDF		S1	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Engineering Progress Measurement Procedure	Procedure	Excel / Eng Database		S1	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Discipline Progress Curves	Report	Primavera P6 / PDF		S2	IFI	IFR	IFI	IFI	<input type="checkbox"/>
Engineering Deliverables Status Report	Report	Excel / Eng Database		S2	IFI	IFR	IFI	IFI	<input type="checkbox"/>
Engineering Change & Rework Tracking Register	Report	Excel / Eng Database		S2	IFI	IFR	IFI	IFI	<input type="checkbox"/>
CAD, CADD & Drawing Standards									
CAD Drawing Templates (by Discipline)	-			S3	IFU	IFU	-	IFU	<input type="checkbox"/>
Plot Plan & General Arrangement CAD Templates	-			S3	IFU	IFU	-	IFU	<input type="checkbox"/>
Schematic & Diagram CAD Templates	-			S3	IFU	IFU	-	IFU	<input type="checkbox"/>
Standard Detail CAD Template Library	-			S3	IFU	IFU	-	IFU	<input type="checkbox"/>
3D Model & Digital Engineering Management									
3D Model Management Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
3D Model Progress Measurement Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
3D Model Review Procedure – 30%	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
3D Model Review Procedure – 60%	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
3D Model Review Procedure – 90%	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Model Clash Management Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>

Engineering Management: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Interdisciplinary & Quality Management									
Interdisciplinary Design Review (IDR) Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Design Verification & Checking Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Engineering Quality Plan	Plan	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Engineering Non-Conformance Management Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Supplier & Vendor Data Management									
Requisition List (inc. Long Lead Identification)	Report	MS Word / PDF		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Supplier Document Requirements List (SDRL)	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Vendor Data Review & Approval Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Vendor Data Tracking Register	Report	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
Vendor Interface & Integration Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Supplier Data Review (input)	-	-	-	-	-	-	-	-	<input type="checkbox"/>
Budget Quotations for Long Lead Items	Report	MS Word / PDF		S2		IFI	-	-	<input checked="" type="checkbox"/>
Engineering Change Management									
Design Change Notice (DCN) Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Critical Design Change Notice Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Engineering Change Register	Report	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Technical Query (TQ) / Field Change Procedure	Procedure	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
Interface & Integration Management									
Interface Management Procedure	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Interface Register	Procedure	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Interface Agreements	Report	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
Cost Estimating									
Bais of Estimate Document	Report	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Class 4 Capital Cost Estimate	Estimate	Excel / Database		S2	IFR	IFR	-	-	<input type="checkbox"/>
Class 3 Capital Cost Estimate	Estimate	Excel / Database		S2	IFR	-	IFR	-	<input checked="" type="checkbox"/>
Quantity Take-Off Summary (by discipline)	Report	Excel / Database		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>

Process Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Process Design Criteria	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Equipment Specifications (process input)	Specifications	MS Word / PDF		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Process and Utility System Narratives	Specifications	MS Word / PDF		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Utility Requirements Tables	Specifications	Excel		S2	IFR IFF IFD	IFR	IFF	IFD	<input type="checkbox"/>
Relief Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Desing Basis Memorandum	Design BAis	MS Word / PDF		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Winterization Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Isolation Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input type="checkbox"/>
Process Shutdown Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Drainage Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Water Treat. & Chemical Injection Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Waste Characterization Study (by others)	Study	MS Word / PDF		S2	IFU	IFU	-	-	<input checked="" type="checkbox"/>
Biosolids Characterization & Co-incineration Desing Basis	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Combustion System Design Criteria	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Bioiler / Steam Cycle Design Basis	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
CEMS Design Basis & EPA Method Compliance Plan	Report	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Corrosion and Materials Philosophy	Philosophy	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Auxiliary Fuel System Design Basis	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input type="checkbox"/>
Blended Feed Design Basis (MSW + Biosolids)	Design Basis	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Registers & Lists									
Line List (Process input)	Lists / Schedules	Excel / Eng Database		S2	IFR IFE IFC	-	IFE	IFC	<input type="checkbox"/>
Hazardous Area Release Points List	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Calculations									
Process Calculations	Calculations	Excel		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Process Simulations / Studies	Studies	Thermoflow		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Heat & Material Balance	Studies	Thermoflow		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
PSV / Relief Valve Sizing	Calculations	Excel		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Drawings									
Process Flow Diagrams (PFDs)	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Utility Flow Diagrams (UFDs)	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Piping & Instrumentation Diagrams (P&IDs)	Drawings	AUTOCAD / MicroStation		S2	IFI IFF IFH IFD IFC IFI		IFF	IFC	<input checked="" type="checkbox"/>
Cause & Effect Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>

Process Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Reports									
HAZID	Report	MS Word / PDF		S2	IFI IFR IFF IFD	IFI	IFF	IFD	<input checked="" type="checkbox"/>
HAZOP Report (Process Led)	Report	MS Word / PDF		S2	IFR IFF IFD	-	-	IFD	<input type="checkbox"/>
Data Sheets									
Process Datasheets	Datasheets	Excel		S3	IFR IFB IFP	-	IFF (long lead)	IFP	<input type="checkbox"/>
Supply Chain									
Supplier Data Review (input)	-	-	-	-	-	-	-	-	<input type="checkbox"/>
Construction & Commissioning Phase									
Operating Manuals (Process input)	Manuals	MS Word / PDF		S2	IFR IFD	-	-	IFR IFD	<input type="checkbox"/>
Commissioning Procedures (Process input)	Procedures	MS Word / PDF		S2	IFR IFD	-	-	IFR IFD	<input type="checkbox"/>
Performance Test Support (Process input)	Procedures	MS Word / PDF		S2	IFR IFD	-	-	IFR IFD	<input type="checkbox"/>
Regulatory Inputs to Environmental Permitting									
Emission Rate Calculations (BACT Analysis)	Calculations	Excel		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Flue Gas Flow & Composition (DEC Title V Application)	Report	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Biosolids Co-Incineration Emission Basis (40 CFR Part 503)	Report	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
PFAS Thermal Destruction Efficiency Basis (PFAS Plan)	Report	MS Word / PDF		S1	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>

Piping Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Piping Design Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
3D Model Coordination Procedure	Procedures	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Piping Design Criteria	Design Basis	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Pipe Classes	Specifications	Eng Database		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Piping Material Specifications	Specifications	Eng Database		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Piping Stress Design Criteria	Specifications	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Heat Tracing Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Registers & Lists									
Line List	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFC	IFR	IFF	IFC	<input type="checkbox"/>
Valve List	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFC	IFR	IFF	IFC	<input type="checkbox"/>
Specialty Items List	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFC	IFR	IFF	IFC	<input type="checkbox"/>
Bolt List	Lists / Schedules	Excel		S4	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Critical Line List	Lists / Schedules	Excel / Stress Database		S4	IFR IFF IFC	-	IFF	IFD	<input type="checkbox"/>
Tie-in List	Lists / Schedules	Excel		S4	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Field Weld List	Lists / Schedules	Isometric Software		S4	IFR IFC	-	-	IFC	<input type="checkbox"/>
Layouts & Drawings									
Site Plot Plan	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Area Plot Plans	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Equipment Location Plan	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Pipe Rack Layout Drawings	Drawings	AUTOCAD / MicroStation		S4	IFR IFF IFD IFC	IFR	IFF	IFC	<input type="checkbox"/>
Piping General Arrangement Drawings	Drawings	AUTOCAD / MicroStation		S2 - Sample only	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Piping Isometrics (inc. Heat Tracing)	Isometrics	IsoGen / E3D / S3D		S4	IFC	-	-	IFC	<input type="checkbox"/>
Module Location Plan	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Material Selection Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Models									
Piping 3D Model	3D Model	E3D / S3D		N/A	30% / 60% / 90% / Final 10%		30% (>8" / Critical)	Final	<input type="checkbox"/>
3D Model Reviews	3D Model	Navisworks		S4					
Supports									
Pipe Support Standard Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Engineered Supports	Drawings	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>

Piping Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Analysis & Calculations									
Line Sizing Calculations	Calculations	Excel		S4	IFR IFF IFD	IFR (Layout Critical)	IFF (Process Critical)	IFD	<input checked="" type="checkbox"/>
Pressure Drop Calculations	Calculations	Excel		S4	IFR IFF IFD	IFR (Layout Critical)	IFF (Process Critical)	IFD	<input type="checkbox"/>
Relief / Vent Basis Calculations	Calculations	Excel		S4	IFR IFF IFD	-	IFF (Process Critical)	IFD	<input type="checkbox"/>
Stress Analysis Calculations / Reports	Calculations	CAESAR		S4	IFR IFF IFD	-	IFF (Stress Critical)	IFD	<input type="checkbox"/>
Quantities and Procurement									
Piping Material Take-Off (MTO)	Lists / Schedules	3D Model / Eng Database		S4	IFR IFF IFB IFP	IFR	IFF	IFP	<input checked="" type="checkbox"/>
Bulk Materials Quantities	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFP	IFR	IFF	IFP	<input type="checkbox"/>
Specialty Items Datasheets	Datasheets	MS Office / PDF		S3	IFR IFB IFC	-	IFR	IFC	<input type="checkbox"/>
Technical Requisitions	Requisitions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requisitions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	-	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-	-	-	-	-	-	-	<input type="checkbox"/>

Structural / Architectural Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Structural Design Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Structural Design Criteria	Design Basis	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Weight Control Plans and Procedures	Procedures	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Geotechnical Report	Report	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Sesimic Design Basis	Design Basis	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Registers & Lists									
Building List (input to MOA Building Permit)	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Module List	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFC	IFR	IFF	IFC	<input type="checkbox"/>
Pile Schedule	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Layouts & Drawings									
Architectural Standard Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Architectural Building Plans and Elevations	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Equipment Foundation Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Piling Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Structural Steel Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Structural Steel Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFD IFC	-	-	IFC	<input type="checkbox"/>
Finished Floor Plans	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Anchor Bolt Setting Drawings	Drawings	AUTOCAD / MicroStation		S4	IFR IFD IFC	-	N/A	IFC	<input type="checkbox"/>
Analysis & Calculations									
Foundation Calculations	Calculations	Excel		S4	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Structural Calculations	Calculations	Excel / STAAD		S4	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Weight Reports	Calculations	Excel		S4	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Stack Height Structural Certification (input to FAA Ass.)	Report	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Quantities									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Technical Requisitions	Requestions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requestions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	N/A	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-	-	-	-	-	-	-	<input type="checkbox"/>

Electrical Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
Bankable Business Plan									
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	
Design Basis & Control									
Electrical Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Equipment Specifications	Specifications	MS Word / PDF		S2	IFR IFD	IFR (long lead)	IFD	IFD	<input checked="" type="checkbox"/>
Electrical System Operating Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
Packaged Equipment Specification (Input)	Specifications	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Interconnection Feasibility Study	Study	MS Word / PDF		S2	IFR IFD IFC	IFR	IFD	IFC	<input checked="" type="checkbox"/>
Railbelt Reliability Council Grid Code Compliance Assessment Report		MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Registers & Lists									
Load List	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Electrical Equipment List	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
LV Distribution Panel Schedules	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
MCC / Switchgear Schedules	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Cable Schedule	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Layouts & Drawings									
Key Plans	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Legend & Symbols Sheet	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Equipment Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Raceway / Conduit Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Underground Routing	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Lighting & Small Power Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
One Line Diagrams (Overall)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
One Line Diagrams (Area)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
One Line Diagrams (UPS / DC Supplies)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Hazardous Area Classification Drawings	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Schematics	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Grounding Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Interconnection Wiring Diagrams	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Electrical Equipment Layouts (Heat Tracing)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Installation Details	Drawings	AUTOCAD / MicroStation		S4	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Datasheets									
Electrical Equipment Datasheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	IFR (long lead)	IFF	IFP	<input type="checkbox"/>
Protection Relay Setting Datasheets	Datasheets	Excel / Eng Database		S4	IFC	-	N/A	IFC	<input type="checkbox"/>

Electrical Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
Bankable Business Plan									
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	
Analysis & Calculations									
Load Flow Study	Study	ETAP		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Fault Level Study	Study	ETAP		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Transient Stability Study	Study	ETAP		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Harmonic Study	Study	ETAP		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Arc Flash Hazard Analysis	Study	ETAP		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Grounding System Design Study	Study	ETAP		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Protection Coordination Study	Study	ETAP		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Motor Starting Study	Study	ETAP		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Load Shedding Study	Study	ETAP		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Equipment Sizing Calculations	Calculations	Excel / ETAP		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Cable Sizing Calculations	Calculations	Excel / ETAP		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Lighting Calculations	Calculations	DIALux		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Technical Requisitions	Requisitions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requisitions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	N/A	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-	-	-	-	-	-	-	<input type="checkbox"/>
Fire Alarm Design									
Fire Alarm Layout Drawings	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Fire Alarm Interface Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Fire Alarm System One Line Diagram	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Fire Alarm System Calculations	Calculations	Excel		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Wiring / Loop Diagrams	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFC	-	-	IFC	<input type="checkbox"/>
Electrical Heat Tracing Design									
Wiring / Loop Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
General Arrangement / Location Plans	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>
Heat Tracing Isometrics	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFC	-	IFF	IFC	<input type="checkbox"/>

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
I&C Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Packaged Equipment Specification (input)	Specifications	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Equipment Specifications	Specifications	MS Word / PDF		S2	IFR IFD	IFR (long lead)	IFD	IFD	<input type="checkbox"/>
Emergency Shutdown Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Telecommunications Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Industrial Network & Cybersecurity Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
CCTV & Security Systems Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Public Address & General Alarm Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Historian & Data Management Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Alarm Management Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Instrumentation Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Control System Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Safety Instrument System (SIS) Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Fire & Gas Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Maintenance & Diagnostics Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input type="checkbox"/>
Control Narratives	Control Narrative	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
CEMS System Design Specification	Specifications	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Combustion Control System Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Biosolids Feed Control & Blending Ratio System Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Grate and Furnace ESD Philosophy	Philosophy	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
SCADA / Historian Interface with Chugach Electric SCADA	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Registers & Lists									
Cable Schedule	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Instrument Index	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFD IFC	IFR	IFF	IFD	<input type="checkbox"/>
I/O List	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFD IFC	IFR	IFF	IFD	<input type="checkbox"/>
Alarm Register	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Instrument Power Load List	Lists / Schedules	Excel / Eng Database		S2	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Layouts & Drawings									
Control System Architecture Diagram	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input type="checkbox"/>
Network Architecture Diagram	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	IFR	IFF	IFC	<input type="checkbox"/>
Package System Interface Diagram	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Control Room Layout	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Control Building Equipment Layout	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Instrument Location Plans	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Instrument Cable Routing Layouts	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Instrument Hook up Drawings	Drawings	AUTOCAD / MicroStation		S4	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Loop Diagrams	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Instrument Termination Diagrams	Drawings	AUTOCAD / MicroStation		S4	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
System Cabinet / Marshalling Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Cause & Effect Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Control Logic Diagrams	Drawings	AUTOCAD / MicroStation		S4	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Datasheets									
I&C Equipment Datasheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	-	IFF	IFP	<input type="checkbox"/>
Telecom / IT Equipment Datasheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	-	IFF	IFP	<input type="checkbox"/>
Analysis & Calculations									
Instrument & Control Valve Sizing Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
SIL Verification Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input type="checkbox"/>
Technical Requisitions	Requisitions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requisitions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	-	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-	-	-	-	-	-	-	<input type="checkbox"/>

Mechanical Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Mechanical Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Package Equipment Specification	Specifications	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Equipment Specifications (Balance of Plant)	Specifications	MS Word / PDF		S2	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Combustion Grate System Specification	Specifications	MS Word / PDF		S1	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Waste Heat Recovery Boiler Specification	Specifications	MS Word / PDF		S1	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Overhead Crane Specification — Refuse Pit	Specifications	MS Word / PDF		S1	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Biosolids Receiving & Feed System Specification	Specifications	MS Word / PDF		S1	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Air-Cooled Condenser Specification	Specifications	MS Word / PDF		S1	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Ash Handling System Specification	Specifications	MS Word / PDF		S2	IFR IFB IFD	IFR (long lead)	IFB	IFD	<input checked="" type="checkbox"/>
Long-Lead Equipment Procurement Schedule	Schedule	Excel / Primavera P6		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Vendor Factory Acceptance Test (FAT) Procedures	Procedures	MS Word / PDF		S2	IFR IFD	-	IFR	IFD	<input type="checkbox"/>
Material Handling Guidelines	Specifications	MS Word / PDF		S2	IFR IFF IFD	IFR	IFF	IFD	<input type="checkbox"/>
Registers & Lists									
Equipment List	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Motor List	Lists / Schedules	Excel / Eng Database		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input type="checkbox"/>
Layouts & Drawings									
Material Selection Diagram (input to Piping)	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Equipment Sketches & Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Datasheets									
Equipment Datasheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	IFR (long lead)	IFF	IFP	<input checked="" type="checkbox"/>
Analysis & Calculations									
RAM Analysis	Study	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input checked="" type="checkbox"/>
Noise Study	Study	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input checked="" type="checkbox"/>
Equipment Sizing Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	IFR (long lead)	IFF	IFD	<input checked="" type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Technical Requisitions	Requisitions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requisitions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	N/A	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-		-	-	-	-	-	<input type="checkbox"/>

Mechanical Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Regulatory Inputs to Environmental Permitting									
Noise Source Data Sheets (Input to Noise Impact Assessmer Datasheet	Datasheet	Excel		S2	IFR IFF	-	IFR	IFD	☑
Equipment Vibration Data (Input to Noise Study)	Datasheet	Excel		S2	IFR IFF	-	IFR	IFD	☑
Boiler Registration Data (Input to Alaska OCS Permit)	Report	MS Word / PDF		S1	IFR IFD	-	IFR	IFD	☑

Civil Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Civil Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Civil Specifications	Specifications	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input checked="" type="checkbox"/>
Standards & Details									
Standard Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Layouts & Drawings									
Roads (Plant, Access & Haulage)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Drainage & Dewatering	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Fencing Plans and Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Final Grading	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Pond & Dyke Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Rough Grading Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Underground Services	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Analysis & Calculations									
Civil Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Regulatory Inputs to Environmental Permitting									
Site Drainage Report (Input to SWPPP)	Report	MS Word / PDF		S2	IFR IFF	-	IFR	IFD	<input checked="" type="checkbox"/>
Stack Height Structural Basis (Input to FAA Form 7460)	Report	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Site Survey & Topographic Data (Input to Permit Applications Report)	Report	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>

Loss Prevention Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Loss Prevention Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Loss Prevention Specification	Specifications	MS Word / PDF		S2	IFR IFD	-	IFD	IFD	<input type="checkbox"/>
Fire Protection Philosophy	Philosophy	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Standards & Details									
Standard Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Layouts & Drawings									
Firewater / Deluge Layout Drawings	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Fire & Gas Detection Layout Plans	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Escape / Muster Point (Route / Layouts)	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
F&G Cause & Effect Diagrams	Drawings	AUTOCAD / MicroStation		S2	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Reports & Studies									
Fire Hazard Analysis (FHA)	Report	MS Word / PDF		S2	IFR IFD	IFR	IFR	IFD	<input checked="" type="checkbox"/>
HAZID (Hazard Identification)	Report	MS Word / PDF		S2	IFR IFD	-	IFR	IFD	<input checked="" type="checkbox"/>
HAZOP (Hazard & Operability Study)	Report	MS Word / PDF		S2	IFR IFD	-	IFR	IFD	<input type="checkbox"/>
Stack Air Dispersion Report	Report	MS Word / PDF		S2	IFR IFD	IFR	IFR	IFD	<input checked="" type="checkbox"/>
Explosion Risk Assessment	Report	MS Word / PDF		S2	IFR IFD	IFR	IFR	IFD	<input checked="" type="checkbox"/>
Ammonia Dispersion Study	Report	MS Word / PDF		S2	IFR IFD	IFR	IFR	IFD	<input checked="" type="checkbox"/>
Datasheets									
Fire Protection Equipment Data Sheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	-	IFF	IFP	<input type="checkbox"/>
Analysis & Calculations									
Firewater Demand / Hydraulic Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	IFR	IFF	IFD	<input checked="" type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Technical Requisitions	Requests	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requests	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	-	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-	-	-	-	-	-	-	<input type="checkbox"/>

Environmental Permitting: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
<p>Environmental & Permitting deliverables are included to support project planning, regulatory strategy development, permitting progression, and overall project readiness for the Waste-to-Energy Facility. These deliverables identify anticipated technical inputs and interfaces required to demonstrate environmental feasibility and compliance; they do not imply that the Design Consultant is the sole author, permit applicant, or regulatory approval authority. Environmental permitting activities may be performed by the Owner, the Design Consultant, and/or specialist environmental consultants depending on jurisdictional requirements and commercial arrangements, with final permit issuance governed by regulatory</p>									
Environmental Governance & Management									
Environmental Management Plan	Plan	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Environmental Compliance Framework	Plan	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Regulatory Agency Engagement Plan	Plan	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Permit Schedule & Critical Path	Plan	MS Word / PDF / Primavera P6		S4	N/A	☑	☑	☑	☑
Permit Status Register	Register	Excel		S4	N/A	☑	☑	☑	☑
Waste Characterisation									
MSW Waste Characterisation Study	Study	MS Word / PDF		S4	N/A	☑	☑	☑	☑
MSW Calorific Value & Composition Report	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Biosolids Characterisation Study	Study	MS Word / PDF		S4	N/A	☑	☑	☑	☑
PFAS Characterisation Report — Biosolids	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Ash Characterisation Study — RCRA Classification	Study	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Hazardous Waste Exclusion Protocol	Procedure	MS Word / PDF		S4	N/A	☑	☑	☑	☑
National Environmental Policy Act (NEPA)									
NEPA Applicability Determination	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Environmental Assessment (EA) / EIS Scoping Document	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Draft Environmental Assessment (EA)	Report	MS Word / PDF		S4	N/A	-	☑	☑	☐
Final Environmental Assessment / FONSI	Report	MS Word / PDF		S4	N/A	-	-	☑	☐
Cultural Resources / Section 106 Assessment	Report	MS Word / PDF		S4	N/A	-	☑	☑	☐
Air Quality — Alaska DEC Title V Permit									
Pre-Application Meeting Request — Alaska DEC	Correspondence	MS Word / PDF		S4	N/A	☑	☑	☑	☑
DEC Pre-Application Meeting Notes & Action Register	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Title V Air Permit Application — Draft	Permit Application	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Title V Air Permit Application — Final	Permit Application	MS Word / PDF		S4	N/A	-	-	☑	☐
Potential to Emit (PTE) Calculations	Calculations	Excel / MS Word		S4	N/A	☑	☑	☑	☑
Emission Inventory Report	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
DEC Agency Response Management Register	Register	Excel		S4	N/A	-	☑	☑	☑

Environmental Permitting: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Air Quality — EPA 40 CFR Part 60 Subpart CCCC									
Subpart CCCC Compliance Plan	Plan	MS Word / PDF		S4	N/A	☑	☑	☑	☑
BACT Analysis — Preliminary	Study	MS Word / PDF		S4	N/A	☑	☑	☑	☑
BACT Analysis — Final	Study	MS Word / PDF		S4	N/A	-	-	☑	☐
NOx Emission Compliance Basis (SNCR Design)	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
SO ₂ / HCl Compliance Basis (Scrubber Design)	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Mercury Compliance Basis (ACI Design)	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Dioxin / Furan Compliance Basis	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Particulate Matter Compliance Basis (Baghouse Design)	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
CO Compliance Basis (Combustion Control)	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
CEMS Design Basis & EPA Method Compliance Plan	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
PFAS Management									
PFAS Management Plan	Plan	MS Word / PDF		S4	N/A	☑	☑	☑	☑
PFAS Thermal Destruction Efficiency Basis	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
PFAS Stack Emission Testing Plan	Plan	MS Word / PDF		S4	N/A	-	☑	☑	☐
EPA PFAS Incinerator Rule — Applicability Assessment	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Biosolids — 40 CFR Part 503									
40 CFR Part 503 Applicability Determination	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☐
Biosolids Co-Incineration Compliance Basis	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☐
Part 503 Permit Application / Compliance Schedule	Permit Application	MS Word / PDF		S4	N/A	-	☑	☑	☐
Metals Loading Calculations — Biosolids Combustion	Calculations	Excel / MS Word		S4	N/A	☑	☑	☑	☐
Air Dispersion Modelling									
Stack Height Determination Report	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Air Dispersion Modelling — Preliminary (AERMOD)	Study	AERMOD / MS Word		S4	N/A	☑	☑	☑	☑
Air Dispersion Modelling — Final	Study	AERMOD / MS Word		S4	N/A	-	-	☑	☐
NAAQS Compliance Demonstration	Report	MS Word / PDF		S4	N/A	☑	☑	☑	☑
Ambient Air Quality Baseline Study	Study	MS Word / PDF		S4	N/A	☑	☑	☑	☑

Environmental Permitting: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Solid Waste Facility Permitting									
Alaska DEC Solid Waste Facility Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ash Disposal Plan — ARL Interface	Plan	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ash Monofill / Disposal Cell Design Basis	Report	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Leachate Management Plan	Plan	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stormwater & Water Quality									
Stormwater Pollution Prevention Plan (SWPPP)	Plan	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NPDES / Alaska APDES Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wastewater Discharge Characterisation	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Groundwater Protection Assessment	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wetlands, Biological & Cultural Resources									
Wetlands Delineation & USACE Section 404 Assessment	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Biological Assessment / ESA Section 7 Consultation	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural & Archaeological Resources Survey	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FAA Airspace & Noise									
FAA Airspace Assessment — Stack Height (Form 7460)	Report	MS Word / PDF / FAA Forms		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FAA No Hazard Determination — Follow-Up	Correspondence	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noise Impact Assessment	Study	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Community Noise Mitigation Plan	Plan	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Traffic & Site Access									
Traffic Impact Study — Waste Truck Routing	Study	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transportation Management Plan	Plan	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Truck Route Permit Applications — Municipality of Anchorage	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Building & Construction Permits									
Municipality of Anchorage Building Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mechanical / Plumbing Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electrical Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire Authority / Fire Suppression Permit Application	Permit Application	MS Word / PDF		S4	N/A	-	-	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Boiler & Pressure Vessel Registration — Alaska OCS	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Permitting: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Grid Interconnection & Energy Regulatory									
Chugach Electric Generator Interconnection Application	Application	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Railbelt Reliability Council (RRC) Notification	Correspondence	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RCA Power Purchase Agreement Regulatory Filing	Permit Application	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PURPA Qualifying Facility Application (if applicable)	Application	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Community Engagement & Environmental Justice									
Public Participation Plan	By Others								<input checked="" type="checkbox"/>
Environmental Justice Assessment	By Others								<input checked="" type="checkbox"/>
Community Information Programme Materials	By Others								<input checked="" type="checkbox"/>
Stakeholder Engagement Register	By Others								<input type="checkbox"/> <input checked="" type="checkbox"/>
Regulatory Inputs from Other Disciplines									
Flue Gas Composition Report (Process input to Title V)	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emission Rate Calculations (Process input to BACT)	Calculations	Excel		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Noise Source Data Sheet (Mechanical input to Noise Study)	Datasheet	Excel		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Site Drainage Report (Civil input to SWPPP)	Report	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stack Height Structural Basis (Structural input to FAA)	Report	MS Word / PDF		S4	N/A	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PFAS Destruction Efficiency Data (LP input to PFAS Plan)	Report	MS Word / PDF		S4	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

HVAC Engineering Design: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
HVAC Design Basis	Design Basis	MS Word / PDF		S1	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
HVAC Specifications	Specifications	MS Word / PDF		S2	IFR IFD	IFR	IFD	IFD	<input checked="" type="checkbox"/>
Standards & Details									
HVAC Standard Details	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Layouts & Drawings									
HVAC Plans & Elevations	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
HVAC Schematics	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Lists & Scheddules									
HVAC Equipment List	List	Excel / Eng Database		S3	IFR IFF IFD IFC	IFR	IFF	IFD	<input checked="" type="checkbox"/>
HVAC Cable Schedule	Schedule	Excel / Eng Database		S3	IFR IFF IFD IFC	-	IFF	IFD	<input type="checkbox"/>
Datasheets									
HVAC Equipmet Data Sheets	Datasheets	Excel / Eng Database		S2	IFR IFF IFB IFP	-	IFF	IFP	<input type="checkbox"/>
Analysis & Calculations									
HVAC Equipment Sizing Calculations	Calculations	Excel / Eng Database		S2	IFR IFF IFD	-	IFF	IFD	<input type="checkbox"/>
Quantities and Procurement									
Quantities & Material Take-Off (MTO)	Lists / Schedules	Excel / Eng Database		S4	IFR IFF IFB IFC	IFR	IFF	IFC	<input checked="" type="checkbox"/>
Technical Requisitions	Requestions	MS Office / PDF		S1	IFR IFB IFP	-	IFB (long lead)	IFP	<input type="checkbox"/>
Technical Bid Evaluations	Requestions	Excel / PDF		S1	IFR IFP	-	IFP (long lead)	IFP	<input type="checkbox"/>
Purchase Orders		ERP System / PDF		S1	IFR IFP	-	-	IFP	<input type="checkbox"/>
Supplier Data Review and Approval	-	-		-	-	-	-	-	<input type="checkbox"/>

Construction: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Design Basis & Control									
Construction Execution Plan	Design Basis	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Construction Management Plan	Specifications	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Temporary Works Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Preservation & Protection Philosophy	Philosophy	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Site Logistics & Traffic Management Plan	Plan	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Laydown Area Management Plan	Plan	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Construction Equipment Utilization Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Crane Utilization Plan	Plan	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Construction Plan & Critical Path	Report	Primavera P6 / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Standards & Details									
Welding Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Field Fabrication Standards	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Lifting & Rigging Standards	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Scaffolding Standards	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Excavation and Shoring Standards	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Hot Work and Permit-to-Work Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Temporary Facilities, Power & Utilities									
Temporary Facilities Layout Plan	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Power Desing Basis	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Power Load Calculations	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Power Electrical Distribution Dwgs	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Lighting Layouts	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Water Supply & Distribution	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Drainage & Dewatering Provisions	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary Fire Protection Provisions	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary HVAC / Heating Requirements	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Temporary IT / Security Systems	Drawings	AUTOCAD / MicroStation		S3	IFR IFF IFD IFC	-	IFF	IFC	<input type="checkbox"/>
Material Handling, Lifting & Heavy Lift									
Mechanical Handling & Erection Plan	Plan	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Crane & Lifting Studies	Report	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFD	<input checked="" type="checkbox"/>
Heavy Lift Studies (Critical Lifts)	Report	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFD	<input checked="" type="checkbox"/>

Construction: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Lifting Gear Register & Certification	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Erection Stability & Temporary Bracing	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Scaffold Design & Certification Records	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Layouts & Drawings									
Construction Site Layout Plans (by phase)	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Laydown Area Layout Drawings	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Crane & Access Plans	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Construction Access & Temporary Roads Drawings	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Temporary Utilities Routing Drawings	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Temporary Fencing & Security Layouts	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Temporary Foundations & Supports Drawings	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
Formwork & Falsework Drawings	Drawing	AUTOCAD / MicroStation		S3	IFR IFC	-	IFR	IFC	<input type="checkbox"/>
HSE - Construction Phase									
Construction HSE Management Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Job Hazard Analysis / Job Safety Analysis (JHA / JSA)	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Permit-to-Work System (Construction Phase)	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Hot Work Management Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Confined Space Entry Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Working at Height Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Excavation & Trenching Safety Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Emergency Response Plan – Construction Phase	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Incident Reporting & Investigation Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
HSE Training & Competency Records	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
QA / QC & Inspection									
Construction Quality Plan (CQP)	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Inspection & Test Plans (ITPs)	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Field Quality Inspection Checklists	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Welding Procedures (WPS / WPQ / PQR)	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
NDT Procedures & Reports	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Concrete Placement & Testing Records	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Coating & Fireproofing Inspection Records	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>

Construction: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Material Receiving & Inspection Reports	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Vendor Field Quality Surveillance Reports	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Non-Conformance Report (NCR) Management Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
RFIs, Field Engineering & Controls									
Request for Information (RFI) Management Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Technical Query (TQ) Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Site Engineering Instruction Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Field Change Management Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Site Instruction Notices (SIN)	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Daily / Weekly Construction Reports	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Mechanical Completion & Turnover									
System & Sub-System Breakdown Structure	Report	MS Word / PDF		S2	IFR / IFU	-	IFR	IFU	<input type="checkbox"/>
Mechanical Completion Philosophy	Philosophy	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Mechanical Completion Check Sheets	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Pre-Commissioning Checklists	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Punch List Management Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
System Handover Certificates	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Redline / As-Built Drawing Management	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Turnover Dossier Requirements	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Preservation Release Certificates	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Interfaces with Commissioning									
Commissioning Interface Plan (Input)	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
System Walkdown Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Temporary Operating Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Construction Close-Out									
Construction Completion Report	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Construction Punch Close-Out Records	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Final Site Safety File (Construction)	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>

Construction: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Construction Records Archive	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>
Lessons Learned – Construction Phase	Report	MS Word / PDF		S4	IFI	-	-	IFI	<input type="checkbox"/>

Commissioning: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description)</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept Select / FEL-2 to support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Commissioning Governance & Control									
Commissioning Philosophy	Philosophy	MS Word / PDF		S1	IFR IFU	-	IFR	IFU	<input checked="" type="checkbox"/>
Commissioning Execution Plan	Plan	MS Word / PDF		S1	IFR IFU	-	IFR	IFU	<input checked="" type="checkbox"/>
Commissioning Management Plan	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Systemization & Sub-System Definition	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Commissioning Schedule (Integrated)	Schedule	Primavera P6 / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Mechanical Completion & Turnover									
Mechanical Completion Definition Document	Plan	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Mechanical Completion Check Sheets	Report	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Punch List Management Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Turnover Package Index	Report	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
System Handover Certificate Template	Report	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Pre-Commissioning									
Pre-Commissioning Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Flushing & Cleaning Procedures	Procedure	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Drying & Leak Test Procedures	Procedure	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Electrical Pre-Energization Checklists	Report	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Instrument Calibration Procedures	Procedure	MS Word / PDF		S4	IFR IFU	-	-	IFU	<input type="checkbox"/>
Loop Check Procedures	Procedure	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Functional Test Procedures (Cold Tests)	Procedure	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Commissioning & Start-Up									
System Commissioning Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Start-Up Procedures (System-Level)	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Control System Functional Test Procedures	Procedure	MS Word / PDF		S3	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
Trip & Interlock Test Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	IFR	IFU	<input type="checkbox"/>
First Fire / First Feed Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Safe Start-Up Authorization Template	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>

Operations: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Operations Governance & Readiness									
Operations Philosophy	Philosophy	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Operations Readiness Plan	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Staffing & Competency Plan	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operations Organization & Roles Definition	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operating Procedures									
Normal Operating Procedures (NOPs)	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Start-Up Operating Procedures (Operations-Owned)	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Shutdown Operating Procedures (Operations-Owned)	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Abnormal Operating Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Emergency Operating Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Maintenance & Asset Management									
Maintenance Philosophy	Philosophy	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Preventive Maintenance Strategy	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Maintenance Task Lists	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Spare Parts Strategy & Critical Spares List	Plan	MS Word / PDF		S2	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Lubrication Program	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Asset Register (Operations View)	List / Register	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Alaska Spare Parts Inventory Strategy	Plan	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Vendor Service & Warranty Response Plan	Plan	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Grate & Boiler Planned Maintenance Schedule	Plan	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Single-Train Availability & Management Procedure	Procedure	MS Word / PDF		S1	IFI IFR IFU	IFI	IFR	IFU	<input checked="" type="checkbox"/>
Health, Safety & Environmental Operations									
Operations HSE Plan	Plan	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
Permit-to-Work Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Lock-Out / Tag-Out Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Confined Space Entry Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Emergency Response Plan (Operations-Owned)	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Environmental Compliance Procedures	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>

Operations: Project Deliverables Framework

Deliverables	Activity Description	Software / Program	Procedure / Work Instruction	Surveillance Level	Milestone Set	Concept Design (Class 4)	Front End Design (Class 3)	Design Completion	BBP
<i>The actual deliverable, this may be specifications, calculations, lists, datasheets, drawings. design standards</i>	<i>Activity Description (Cross reference to P6 Activity Description</i>	<i>The software / program and versions number that must be used for this activity. If there are several options include them. If the type of program does not matter note that as well.</i>	<i>The procedure / work instruction describes how the to complete the activity</i>	<i>S1: PMO Approval to Proceed S2: PMO Review Required S3: PMO Review (optional) S4: FYI only</i>	<i>The document milestone set defines the lifecycle of a document, from early review through to final issue</i>	<i>The progress milestone that the document needs to be at the end for Concept support the Class 4 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve FEED completion to support FEL 3 / Class 3 Estimate</i>	<i>The progress milestone that the document needs to be issued to achieve Design Completion (FEL-4)</i>	<i>Bankable Business Plan</i>
Reliability, Availability & Performance									
Reliability Management Plan	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operating Constraints Register	List / Register	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Performance Monitoring & KPIs	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operating Envelope Definitions	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Continuous Improvement Plan	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Training & Competency									
Operations Training Plan	Plan	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operator Training Manuals	Manual	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Simulator / Practical Training Scenarios	Procedure	MS Word / PDF		S3	IFR IFU	-	-	IFU	<input type="checkbox"/>
Competency Assessment & Certification Records	Report	MS Word / PDF		S4	IFR IFI	-	-	IFI	<input type="checkbox"/>
Handover, Acceptance & Steady-State Operations									
Operations Acceptance Criteria	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operations Handover Procedure	Procedure	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Final Operating Manuals (As-Operated)	Manual	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Operations Data & Records Management Plan	Plan	MS Word / PDF		S2	IFR IFU	-	-	IFU	<input type="checkbox"/>
Steady-State Operations Declaration	Report	MS Word / PDF		S4	IFR IFI	-	-	IFI	<input type="checkbox"/>
Supply Chain									
Supplier Data Review (input)	-	-	-	-	-	-	-	-	<input type="checkbox"/>
Regulatory Compliance Operations									
CEMS Data Management & Reporting Procedure	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
EPA Subpart CCCC Annual Compliance Report Procedure	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
Alaska DEC Title V Annual Compliance Certification	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
40 CFR Part 503 Annual Biosolids Compliance Report	Procedure	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
PFAS Monitoring & Reporting Plan	Plan	MS Word / PDF		S1	IFR IFU	-	-	IFU	<input type="checkbox"/>
Ash Disposal & ARL Interface Operating Procedure	Procedure	MS Word / PDF		S1	IFR IFU	-	IFR	IFU	<input type="checkbox"/>