



DRAFT

SCOPE OF WORK TEMPLATE

COAA

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Table of Contents

1.0 OVERVIEW OF THE PROJECT3
1.1 GENERAL PROJECT INFORMATION3
1.2 PROJECT LOCATION, LEGAL ADDRESS AND DESCRIPTION OF WORK SITE.....3
1.3 THE PARTIES3
1.4 DEFINITIONS/ACRONYMS3
2.0 SCOPE OF WORK OVERVIEW3
2.1 GENERAL SCOPE OF WORK.....3
3.0 SCOPE OF WORK BREAKDOWN.....4
3.1 DESIGN AND ENGINEERING4
3.2 PROJECT MANAGEMENT5
3.3 PROCUREMENT/EXPEDITING/LOGISTICS7
3.4 SUBCONTRACTING8
3.5 CONSTRUCTION.....8
3.6 PARTY RESPONSIBILITIES.....8
3.7 SITE SERVICES AND LOGISTICS.....9
3.8 BATTERY LIMIT9
3.9 TESTING AND PRE-COMMISSIONING9
3.10 COMMISSIONING AND START UP9
4.0 SCHEDULE AND MILESTONES9
4.1 MILESTONE DATES9
5.0 DELIVERABLES10
5.1 LIST OF DELIVERABLES10
6.0 INTERFACES.....11
7.0 ENVIRONMENTAL HEALTH AND SAFETY11
8.0 QUALITY11
9.0 ATTACHMENTS12

DRAFT

1.0 OVERVIEW OF THE PROJECT

1.1 GENERAL PROJECT INFORMATION

The Project Owner [Name the Owner] is constructing [Describe the project the owner is constructing] (the "Project"). The Project Contractor, [name of the prime contractor] is the prime contractor performing the construction of the Project.

1.2 PROJECT LOCATION, LEGAL ADDRESS AND DESCRIPTION OF WORK SITE

[Insert Project Location];
[Insert Legal Address];
[Insert Description of Work Site]

1.3 THE PARTIES

1.3.1 "Contractor" is _____;

1.3.2 "Owner" is _____; and,

1.3.3 "Project Owner" is _____, and referred to above in section 1.1.

1.4 DEFINITIONS/ACRONYMS

In this Scope of Work Document, the following words or phrases are deemed to be interchangeable between this Scope of Work and stated definitions contained in other Project contract documents.

"Contract" to refer broadly to all of the contract documents between the Owner and Contractor established and stated in those contract documents.

"Project Specifications" are those documents consisting of the written requirements of the Work referred to in the list of Contract Documents.

"Site Commencement Date" is the date on which the Contractor is to commence the Work on the Project site, such date being set in the Milestone Dates.

"Standard of Performance" means performance of the Work within the standards and practices that would be exercised by a competent and experienced contractor, performing similar work with similar experience in a similar market and similar site conditions, and in accordance with the specific requirements that are set out in the Contract (the "Standard of Performance").

"Work" refers to the services, products, materials and other responsibilities set out in this and other Contract documents.

"Work Schedule" is set out in 3.2.4.

2.0 SCOPE OF WORK OVERVIEW

2.1 GENERAL SCOPE OF WORK

Except as otherwise expressly provided herein, Contractor shall supply all adequate and competent labour, supervision, tools and, equipment, installed and consumable materials, services, testing devices, and each and every item of expense necessary for:

- *design;*
- *engineering;*
- *supply;*

- *fabrication;*
- *field erection;*
- *application;*
- *hauling;*
- *receiving;*
- *handling & unloading;*
- *field installation;*
- *construction;*
- *warehousing;*
- *lay down areas;*
- *assembly;*
- *testing;*
- *evaluation;*
- *quality assurance;*
- *fitting of material*

and the specific requirements set out in Section 3.0 below for the Work.

3.0 SCOPE OF WORK BREAKDOWN

The following services are included in the Work, each of which is defined below:

3.1 DESIGN AND ENGINEERING

3.1.1 CONCEPTUAL DESIGN

Contractor shall advise on site use and improvements, selection of materials, building systems and equipment, as well as provide recommendation on construction feasibility, availability of materials and labour, time requirements for installation and construction, and factors related to cost including costs of alternative designs or materials, budget and possible economics.

3.1.2 DETAIL ENGINEERING

Detail Engineering includes the completion of all engineering related activities (such as development of Single Line Diagram, Equipment Data Sheets and Safety in Design) and the development of detailed, non-overlapping specific scopes of work, including the specific deliverables, a budget and schedule that can be compared with actual performance, and that is required for actual construction execution (“Construction Work Packages”). The Contractor shall:

- (a) ensure all deliverables are produced to the Standard of Performance, at a rate that meets or exceeds the requirements of the applicable schedule established under the Contract and this Scope of Work;
- (b) manage the activities of all interdisciplinary interfaces for the Work, including civil, structural, architectural, mechanical, piping, electrical, and instrumentation and controls;
- (c) Contractor, if requested, shall assist in developing a battery limits interface, for coordination and execution of the Project.
- (d) for the Owner vendors, regularly oversee, on Owner’s behalf, the performance of such vendors of their respective design responsibilities in order to ensure that all design work is performed by the suppliers in accordance with the respective supplier contracts (the “Vendor Design Deliverables”). It shall review all Vendor Design Deliverables that are submitted for Owner approval and it shall determine and apprise Owner whether: (i) the deliverables can be approved on the basis that they are in general accordance and conform to the requirements set out in the relevant contract; or (ii) alternatively, there are specific errors or omissions in the deliverables that need to be rectified before the deliverables can be approved.

- (e) prepare an execution plan for the Engineering services to be included in the Project Execution Plan and issue such plan to the Owner for approval on or before the time set out in the Milestone Dates; and,
- (f) provide on-going engineering support through completion of the Work.

3.1.3 DESIGN BASIS MEMORANDUM (DBM)

[: these sections can be split with specific elements required for each. Terminology should match the Owner's stage-gating process stages. Other examples are FEL-1, 2, 3 or EDS; Note also that this section is a work in progress]

Contractor shall provide optimization studies and evaluation of technological process alternatives to ensure minimal requirements are achieved, general site layout, and the preparation of overall process flowsheets. Deliverables for these types of Work may include, but are not limited to providing:

- (a) Preliminary process flowsheets complete with heat and material balances;
- (b) A complete set of preliminary Drawings for buildings, equipment and associated electrical, piping and instrumentation systems;
- (c) A Project master schedule detailing engineering, procurement and construction activities, major milestones, major equipment lead times, permitting, and critical activities which shall be the basis for the dates in all Project control documentation; and,
- (d) Progressive cost forecast and a cost estimate as may be further defined in the applicable Work Order.

DBM Engineering Services constitutes Contractor's requirements to review and accept the Final DBM Documentation delivered by Owner and prepared by others in accordance with the provisions of this Agreement. The expression "Final DBM Documentation" means the design basis memorandum for the Project facility that comprises the design basis, the project capital and specific engineering design deliverables and each of the other documents, in each case as approved, that are referred to in Article 5.XX DELIVERABLES".

3.2 PROJECT MANAGEMENT

3.2.1 The Contractor shall perform the following project management and coordination services in accordance with the Contractor's Safety and Quality Plan, including any revisions agreed to in the Contract (as detailed in Attachments XX and XX). The Contractor's Project Management responsibilities include, but are not limited to:

- (a) Overall management of the Work in accordance with the Contractor's Project Execution Plan;
- (b) Planning, controlling and executing engineering, constructability, procurement, fabrication, assemblies, transportation, construction, integration and turnover plans, to the extent necessary to achieve performance of the Work; and,

- (c) Producing and updating Project Schedules in compliance with Scheduling and Reporting Requirements [Attachment XX] Project schedules established under the terms of the Contract.

3.2.2 PROJECT EXECUTION PLANNING

The Contractor shall develop a project execution plan and provide to the Owner in the form provided in Attachment XX.

3.2.3 A detailed Project Execution Plan (the "Project Execution Plan") is to be provided **(X)** days from Project award that sets out:

- (a) Overall management of the Work;
- (b) Overall coordination of engineering, procurement and construction management activities;
- (c) Preparation of detailed cost estimates and schedules for all Project phases;
- (d) Preparation of detailed planned sequencing activities;
- (e) Preparation of procurement documents and logistics planning, material management and subcontracting;
- (f) Deployment of the Owner's Policies;
- (g) Procedure and process for cost control and reporting;
- (h) Project accounting details;
- (i) Development of necessary specifications, standards and procedures
- (j) Development of training, operation and maintenance manuals;
- (k) Planned assistance to the Owner for the acquisition of local and site specific permits;
- (l) The preparation of procurement or construction tender documents, purchase orders and construction contracts and construction specifications;
- (m) Development of Construction Work Packages;
- (n) A procurement, expediting, logistics plan and materials management; and,
- (o) Pre-qualification of vendors, subcontractors and other construction contractors.

3.2.4 The Project Execution Plan shall also contain the Work Schedule, which constitutes:

- (a) A detailed sequence in which the Contractor intends to perform the Work;
- (b) start and completion dates for all separate portions of Work;
- (c) manpower forecasts by trade or discipline;
- (d) key materials and equipment procurement and delivery dates; and,

- (e) other relevant data and information.

all of which will be provided in a Primavera Level 2 format.

The Owner shall review the Contractor's overall execution plan for the Work and planned sequencing activities in the Preliminary Project Execution Plan (if applicable); and, detailed planned sequencing events in the Project Execution Plan, and advise the Contractor in writing if it has any disputes with the contents, with sufficient detail to allow Contractor to revise the disputed item, within the time period set out in the Milestone Dates.

3.2.5 The Contractor shall update the Project Execution Plan upon a reasonable request of the Owner during the performance of the Work, and obtain the Owner's approval of any proposed deviations prior to their implementation. Any material deviations or alterations to the Project Execution Plan requested by or required due to actions of the Owner will be addressed under the change provisions of the Contract.

3.2.6 In addition to subsection 3.2.5, the Contractor shall, as separate identified items, maintain and provide the status of the Work, including the percentage complete of the Work, incurred cost of the Work to date, Project cost and schedule impacts of any changes, Owner requests, deviations or additions to the Work that are expected or are currently required, all in accordance with Attachment XX Reporting Requirements.

3.2.7 The Contractor's monthly reporting shall include:

- (a) Outstanding issues;
- (b) Confirmation that there are no reasonably known or anticipated claims for an adjustment to the Contract cost or schedule, or, a statement of those items with reasonably detail;
- (c) Current actual status of the schedule of the Work in Primavera level 4 detail;
- (d) A list of pending deliverables for the next 30 days and completed deliverables for the previous 30 days;
- (e) Any safety issues, near-misses, minor incidents, safety infractions or citations and any serious or lost time incidents;
- (f) All requests for information (RFIs) that have been submitted, and their status;
- (g) All change orders that have been submitted, approved and pending, with an aggregate total of the time and cost effects of the Project change orders to date;
- (h) Site meeting minutes; and,
- (i) A list of all Project submitted and pending dispute notices to date.

3.3 PROCUREMENT/EXPEDITING/LOGISTICS

3.3.1 Procurement includes the procurement of all tagged and non-tagged equipment and material necessary for the construction of the Work, including safety systems and other equipment and material required for completion of the Work. The Contractor shall be accountable for vendor interface, material management, expediting and logistics management.

3.3.2 Contractor shall include a plan for procurement services within the Project Execution Plan and Contractor shall conduct the procurement services in accordance with that plan. The Project Execution Plan shall set out the nature and extent, as well as the frequency, of the reporting that Contractor is to provide in relation to the performance of the procurement services. The Project Execution Plan shall also set out the matrix of the various matters relating to the performance of the procurement services that require Owner approval and the time periods within which Contractor requires a response from the Owner, with material items added to the Milestone Dates.

3.4 SUBCONTRACTING

3.4.1 Contractor shall:

- (a) manage subcontractors on the Project site with respect to their planning, scheduling, allocation and assignment of construction resources, progress measurement and reporting;
- (b) monitor and inspect work performed by its subcontractors and confirm such work complies with the Standard of Performance, Project Specifications, approved construction safety principles and the quality assurance/quality control plans;
- (c) incorporate Owner strategies, plans, procedures and the terms of the Prime Contract into every Subcontract, unless express written approval is provided otherwise by Owner; and,
- (d) incorporate terms allowing the assignability of subcontracts to the Owner upon notice by the Owner of same.

3.5 CONSTRUCTION

3.5.1 The Contractor shall perform all work as described in this scope of the Work and Owner's strategies, plans and procedures so as to provide all services required to construct, install, test and deliver a complete and operable facility. The Contractor shall provide all adequate and competent construction management, personnel, supervision, staff, labour, construction planning, scheduling, documentation, construction quality, HSE and testing devices in order to complete the Work in accordance with the Standard of Performance.

3.5.2 The Contractor shall be responsible for providing the following permits and approvals:

- (a) All licenses, approvals, permits, registrations, and memberships necessary for the Contractor, as a corporate entity and with personnel who may be governed by professional bodies and regulations, to perform the Work;
- (b) [Others]

3.5.3 The Owner shall be responsible for providing the following permits and approvals:

[List]

3.6 PARTY RESPONSIBILITIES

3.6.1 Responsibilities Matrix

The Contractor and Owner shall each be responsible for achieving their respective listed items set out in the Responsibility Matrix. The Responsibility Matrix will also set out

exclusions from the Work and which will be performed by the Owner or others, such as supply of certain materials, free issue items, certain equipment and certain services. See Attachment XX.

3.6.2 Exclusions

The Owner will provide the materials, free issue items and equipment as detailed in Appendix XX.

3.7 SITE SERVICES AND LOGISTICS

3.7.1 Shared Services Matrix

Contractor and the Owner will be sharing certain site services on the Project, and each will be responsible for providing such services and for payment for the use of such services to the extent set out in the Shared Services Matrix.

[Attached]

3.7.2 Site Logistics

Contractor will provide its labour force on the Project site in accordance with the Personnel Logistics and Rates [Attachment X]. Contractor will only receive living out allowance and compensation for travel to the extent set out in the Personnel Logistics and Rates. All policies and booking requirements for travel and site accommodations are required to be completed by the Contractor. Contractor shall enter any project labour agreements that may apply to the Project site and ensure harmonious integration of its labour force with other labour present on site.

3.7.3 SITE SHIFT SCHEDULE

[Details]

3.8 BATTERY LIMIT

[Detail]

3.9 TESTING AND PRE-COMMISSIONING

[Detail]

3.10 COMMISSIONING AND START UP

4.0 SCHEDULE AND MILESTONES

Contractor shall meet the Work Schedule and each detailed schedule established under the terms of this Scope of Work.

4.1 MILESTONE DATES

The Milestone Dates are as follows:

Milestone Dates

Milestone Dates		
Milestone	Start Date	Completion Date
Site Commencement Date		
Submission of Execution Plan		
Owner Review of Project Execution Plan		
Approval of the Project Execution Plan		
Substantial Completion of the Work		
Final Completion of the Work		

5.0 DELIVERABLES

5.1 LIST OF DELIVERABLES

- 5.1.1 The Contractor shall supply the deliverables and reports as designated within Attachment XX Project Deliverables Matrix. All deliverables shall be submitted for review and/or Owner approval in accordance with requirements of the Owner's standards.
- 5.1.2 The Contractor shall prepare the following procedures, report templates and plans for the Owner's review and approval, these procedures and reports form part of the Contract. Any revisions to the procedure and reports shall be reviewed and agreed upon by both parties, prior to implementing any changes. Contractor reporting to Owner is intended to provide the Owner with information on the Work status to discuss, schedule status, cost/schedule variances with explanation and current issues.
- 5.1.3 All of the following Deliverables shall be provided in the detail and format provided in the form provided in the applicable attachment. The due date for each Deliverable is determined from the date of the execution of the Contract, with each Deliverable being due the number of days indicated in the table below calculated from the date of the execution of the Contract:

Deliverable	Attachment	Days	Status
Project Execution Plan			
Safety Plan/Environmental Health and Safety Plan			
Quality Plan			
Environmental Health and Safety Plan			
Work Schedule			
Schedule Reporting Management Plan			
Issues Resolution Log			
[Others]			

6.0 INTERFACES

Given the integrated nature of the Project, and integration of other Project contractors, suppliers and personnel, Contractor shall be responsible for administration and follow-up of the progress of the external interfaces between Contractor and the other contractors, suppliers and vendors to close-out Project interfaces and complete the Work and Project.

7.0 ENVIRONMENTAL HEALTH AND SAFETY

The Contractor shall fully comply with all Safety and Security requirements under the Contract and Owner's regulations, including supply of safety personnel in accordance with Attachment XXXX - SAFETY PLAN (OWNERS AND/OR CONTRACTORS). The Contractor shall obtain all necessary permits to perform the Work according to the safety or security requirements as to the Contractor's Works, personnel, vehicles, materials and equipment.

The Contractor shall submit a detailed Safety Plan in accordance with Attachment 5.XX DELIVERABLES, prior to mobilizing on Site for the Owner's approval, which will be incorporated into the Contract Documents as Attachment XXXX – SAFETY PLAN

8.0 QUALITY

The Contractor shall fully comply with all quality requirements under the Agreement and Owner's regulations in accordance with Attachment XXXX – QUALITY PLAN (OWNERS AND/OR CONTRACTORS).

The Contractor shall submit detail quality assurance plan and procedure prior to mobilizing to Site for Owners review and approval, which will be incorporated into the Contract Documents as Attachment XXXXX – QUALITY PLAN

9.0 ATTACHMENTS

- 9.1 Owner's Safety Plan
- 9.2 Drug & Alcohol Policy
- 9.3 Contractor's Safety Plan
- 9.4 Owner site Orientation
- 9.5 Project Deliverables Matrix
- 9.6 Scheduling and Reporting Requirements
- 9.7 Battery limit
- 9.8 Work Schedule
- 9.9 Quality Plan
- 9.10 Responsibilities Matrix (including Interface Matrix, if applicable)
- 9.11 Exclusions (Owner supplied materials equipment etc.)
- 9.12 Project Execution Plan
- 9.13 Project Management Plan
- 9.14 Schedule Reporting Management Plan
- 9.15 Risk Management Plan
- 9.16 Site Services Checklist
- 9.17 Contractor Orientation
- 9.18 Personnel Logistics Requirements and Rates
- 9.19 Project Labour Agreements (PLAs)
- 9.20 Preferred Vendors and Required Supply Contracts
- 9.21 [other attachments]