Vendor Document and Data Requirement (VDDR)

PM009 - Vacuum Belt Filter

H376512-PM009-240-212-0001

			Gupta, Yogesh			Voronkov, Dmitriy
2025-11-14	C	Approved for Bid	Y. Gupta	M. Nigam	L. Gresse	D. Voronkov
DATE	REV.	STATUS	PREPARED BY	CHECKED BY	APPROVED BY	APPROVED BY
				Discipline Lead	Functional Manager	Client

Revision History

Revision	Date	Author	Summary of Changes
C	2025-11-14	Y. Gupta	Approved for Bid
B	2025-10-30	Y. Gupta	Client Review
A	2025-10-07	Y. Gupta	Internal Review

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Table of Contents

1. General 1

2. Vendor Data Schedule 1

3. Documentation Requirements 2

4. Documentation Format and Quantity Requirements 20

5. Documentation Preparation 20

6. Documentation Submittal and Review Requirements 21

7. Spare Parts Lists 23

8. Installation, Operating and Maintenance Manuals 24

List of Tables

Table 3-1: Legend for Vendor Documentation Requirements List 3
Table 3-2: Vendor Documentation Requirements List 4

List of Figures

Figure 6-1: Vendor Data Review Stamp Example 22

1. General

1.1 This specification covers the production and supply of all engineering documentation from the vendor to the engineer that is required to undergo a formal project review and acceptance process.

2. Vendor Data Schedule

2.1 The vendor must list all contractual engineering documentation on the first submittal of the vendor data schedule (VDS) and fill in all the required information as well as the "Forecast Initial Submittal Date". The VDS must be maintained and updated by the vendor and must be submitted whenever there is a change to it.

2.2 All contractual submission dates for each document, drawing, data sheet, etc. are driven by the overall project's design studies of the master schedule independently of the delivery or the installation date of the equipment. Therefore the vendor must comply with the submission dates.

2.3 The vendor must advise the engineer through the VDS in the "Forecast Initial Submittal Date" column of any change of contractual documentation submittal date, which is subject to rejection or review if it has any negative impact on the overall master schedule.

2.4 The vendor must enter the project document number on documentation once allocated by the project's document control group (DCG). The project document number is made up typically of the following:

- Project number
- Package number
- Discipline designation
- Document type
- Sequential number
- Submittal number.

2.5 Documents, drawing, technical data, etc. which are to be furnished by the vendor as part of the contract, must apply to all parts of the merchandise to be furnished by the vendor, including those fabricated by sub-vendors and supplied by the vendor as a component of the merchandise.

2.6 All documents, drawings, data and manuals for "Review", as "Certified" or "As-Built" must be in English.

2.7 Integral with the vendor proposal, and after award, must be the submission of the VDS within the time stipulated in the vendor documentation requirements list (VDRL – see

Table 3-2). This is a critical document for successful implementation of the project's document control process. The VDS must:

- Show all documents and data to be submitted after award
- Include initial submittal dates for all documents and data
- Be reviewed in comparison with the VDRL by the package coordinator (PC) to ensure compliance with those requirements
- Where more than one document is submitted against a VDS code, list each document, this includes sheet numbers for drawings
- Generic titles must not be used i.e. the actual title of the drawing or document must be shown
- Document numbers must not be listed as "various"
- Each page must be numbered and clearly identified with the contract number
- Documentation considered 'Not Applicable' will be listed and must include appropriate explanations for any changes
- The vendor must continue to submit the VDS as requested with all information included and changes highlighted in a suitable manner
- To fulfil these requirements the vendor must pre-allocate document numbers before the documentation is drafted/submitted. Changes may take place at the drafting stage and any superseded or cancelled titles and numbers must be advised at that time by re-submission of the VDS.

3. Documentation Requirements

3.1 The following engineering-related documentation is to be submitted within the indicated number of weeks from Contract award date.

3.2 Once the contract has been awarded then documentation must be submitted to the project's electronic document management system (EDMS), ShareCenter portal:

- The link to the ShareCenter vendor portal will be provided in a separate email by the project document management manager once the contract has been awarded. The unique username, password and access instructions will also be included in this email to the vendor
- All documentation must be identified by the engineer's purchase order/contract number
- All documentation submitted to any other destination will not be considered officially or contractually received.

3.3 After award, the vendor must submit all documentation in the format and quantities as agreed to in Table 3-2 below.

3.4 The vendor must furnish documentation in accordance with Table 3-2, and, the legend as listed in Table 3-2.

3.5 Table 3-1 will be applied accordingly in Table 3-2.

Table 3-1: Legend for Vendor Documentation Requirements List

Legend	Description
PR	Paper Reproducible (Hard Copies)
EC	Electronic Copies:- • **N-1 = Native** (1 – Native format + 1 – PDF format) • **D-1 = Digital** (1 – PDF format)
ARC	After Receipt of Contract
ARRD	After Receipt of Reviewed Document
WKS	Weeks

Table 3-2: Vendor Documentation Requirements List

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
00	**General**										
00.1	Vendor Documentation Schedule (VDS)		2	D-1	1	-	D-1				
00.2	Equipment Plot Plan Drawing	D-1	4	D-1	1	-	D-1	2	-	N-1	
00.3	General Installation Drawing		4	D-1	1	-	D-1				
00.4	Plant Installation Instructions		6	D-1	1	-	D-1				
00.5	Equipment, Maintenance and Operating Instruction Manuals		4	D-1	1	-	D-1				
00.6	Instructions for Transportation and Handling		6	D-1	1	-	D-1				
00.7	Instructions for Storage/Warehousing		6	D-1	1	-	D-1				
00.8	Instructions for Long Term Storage										
00.9	Spare Parts Manuals		6	D-1	1	-	D-1				
00.10	List of Consumables and Chemicals for Start-Up		2	D-1	1	-	D-1				
00.11	List of Consumables and Chemicals for One Year		2	D-1	1	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
00.12	Training Programme										
00.13	Training Manual		8	D-1	1	-	D-1				
00.14	Two Years Operating Spare Parts	D-1	6	D-1	1	-	D-1				
00.15	Installation and Commissioning Spare Parts	D-1	6	D-1	1	-	D-1				
00.16	Site Services Requirement		4	D-1	1	-	D-1				
00.17	Erection Procedure/Method Statement										
00.18	Design Calculations		4	D-1	1	-	D-1				
00.19	Equipment Data Sheets/Completion of Engineers Data Sheets										
00.20	Detailed Technical Specification		4	D-1	1	-	D-1				
00.21	Noise and Vibration Data		Dispatch								
00.22	Noise and Vibration Test Certificates		Dispatch								
00.23	Bills OF Quantities		4	D-1	1	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
00.24	List of Special and Small Tools		6	D-1	1	-	D-1				
00.25	Performance Test Certificates				1	-	D-1				
00.26	Heavy Equipment Lifts (>20 Tons)		4	D-1	1	-	D-1				
00.27	Factory Acceptance Test Dossier										
00.28	Plant Commissioning Manual		Dispatch	D-1	1	-	D-1				
00.29	Plant Commissioning Dossier										
00.30	Photographs		Continues	D-1							
00.31	Design Criteria										
00.32	Spare Parts List, Inc OEM Part Numbers		6	D-1	1	-	D-1				
00.33	Lubrication Schedule		2	D-1	1	-	D-1				
00.34	Drawings of Equipment for Field Assembly										
00.35	Clearances for Equipment during Operation and Maintenance		4	D-1	1	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
00.36	Catalogues and Brochures	D-1									
00.37	Tie-in Location Drawings		4	D-1	1	-	D-1	2	-	N-1	
00.38	Engineer's Certificate of Design		4	D-1	1	-	D-1				
00.39	Project/Contract Schedule	D-1	2	D-1	1	-	D-1				
00.40	Progress Reports		Weekly	D-1	-	-	-	-	-	-	
00.41	Equipment Packing Lists		Before Dispatch	D-1							
00.42	Protective Coating and Corrosion Protection Specification	D-1	2	D-1	1	-	D-1				
00.43	Signed VDDR Schedule	D-1									
00.44	Bolt Schedule		Dispatch	D-1	01		D-1	1		D-1	
00.45	Sub Vendors List	D-1	04	D-1	1	-	D-1				
00.46	3Di Model		06	N-1	02		N-1	1	-	N-1	
01	**Health and Safety**										
01.1	H&S Management Plan	D-1	2	D-1	1		D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
01.2	Risk Assessment Requirements										
02	**Quality Assurance/Quality Control**										
02.1	Project Quality Policy	D-1	2	D-1	1	-	D-1				
02.2	Project Quality Manual		2	D-1	1	-	D-1				
02.3	Project Quality Plan	D-1	2	D-1	1	-	D-1				
02.4	Manufacturer's Data Report (Data Book) – Manufacture And (or) Construction							Dispatch	2	N-1	
02.5	Schedule/List of QCPs			D-1	1	-	D-1				
02.6	Quality Control Plan (QCP)		02	D-1	1	-	D-1				
02.7	Certificate of Registration (ISO)	D-1	2	D-1	1	-	D-1				
02.8	Inspection and Test Procedures (Including NDE)		2	D-1	1	-	D-1				
02..9	Manufacturing Data Report Index (For Approval)		2	D-1	1	-	D-1				
02.10	Manufacturing Data Report (Refer to Quality Spec for Content		Dispatch	D-1							
02.11	Oil Test Reports										
02.12	Extent of Shop Assembly and Testing Statement		4	D-1	2	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
02.13	Factory Acceptance Test Procedure		1 month prior to FAT	D-1	1	-	D-1				
02.14	Site Acceptance Test Procedure		1 month prior to Delivery	D-1	1	-	D-1				
02.15	Post Weld Heat Treatment Report		Dispatch	D-1	1	-	D-1				
02.16	STRESS RELIEVING RECORDS		Dispatch	D-1							
02.17	Welding Procedure and Specification		1	D-1	1	-	D-1				
02.18	Welder's Qualifications (Each Welder)		4	D-1	1	-	D-1				
02.19	Factory Acceptance Test Reports and Certificates				Dispatch	-	D-1				
05	**Process**										
05.1	Mass Balance/Energy Balances	D-1	2	D-1	2	-	D-1				
05.2	Process Design Calculations		2	D-1	2	-	D-1				
05.3	Design Basis Document										
05.4	Process Flow Diagrams (PFDs)	D-1	2	D-1	1	-	D-1	2	-	N-1	
05.5	Piping and Instrumentation Diagram (P&ID)		2	D-1	1	-	D-1	2	-	N-1	
05.6	Process Description	D-1	2	D-1	2	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
05.7	Process Safety Description (PSD)		2	D-1	2	-	D-1				
05.8	Equipment Functional Specification/Operating Procedure	D-1	2	D-1	2	-	D-1				
05.9	Hazop Dossier	-			-	-	-				
05.10	Hazop Close-Out Report		2		2	-	D-1				
05.11	Symbology Schedule										
05.12	Fluid Identifier List										
05.13	Effluent and Emission List	D-1	2	D-1	2	-	D-1				
05.14	Utilities Consumption List	D-1	2	D-1	2	-	D-1				
05.15	Control Philosophy	D-1	2	D-1	2	-	D-1				
05.16	Materials Safety Data Sheets		Dispatch	D-1							
05.17	Shutdown and Emergency Philosophy Procedure		2	D-1	2	-	D-1				
05.18	Instrument Data Sheets (Process Info Only)										
05.19	Equipment List										
05.20	Operating Curves										
05.21	Safety and Emergency Philosophy Procedure		2	D-1	2	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
05.22	Safety Interlock Schedule		2	D-1	2	-	D-1				
07	**Environmental**										
07.1	Environmental Management Plan										
10	**Civil – Infrastructure**										
10.1	Concrete Layout Drawings										
10.2	Piling Layout Drawings										
10.3	Concrete Detail Drawings										
10.4	Column Loading Drawings										
10.5	Reinforcement Detail Drawings										
10.6	Reinforcement Bending Schedules										
10.7	Cast-in Items Drawings/Schedules										
10.8	Dynamic Analysis Report										
10.9	Geotechnical Report										
10.10	Foundation Drawings										
10.11	Alignment Drawings Horizontal and Vertical										

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
10.12	Temporary Works Drawings										
10.13	Guide Drawing for Civil Work And Loading Requirements										
10.14	Site Drilling Reports (Driller's Logs)										
10.15	Final Geotechnical Exploratory Hole Logs										
10.16	Site Geotechnical Field Test Sheets										
10.17	Final Geotechnical Field Test Sheets										
10.18	Laboratory Test Data Sheets										
10.19	Final Laboratory Test Results										
10.20	Photographs of Geotechnical Holes and (or) Samples										
10.21	Factual Geotechnical Report										
10.22	Interpretative Geotechnical Report										
10.23	Hold Down Bolt Sizes and Location		6	D-1	1	-	D-1	-	-	-	
35	**Structural**										
35.1	Shop Detail Drawings		6	D-1	1	-	D-1				
35.2	Shop Pre-Assembly Details		6	D-1	1	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
35.3	Erection Assembly Drawings		6	D-1	1	-	D-1				
35.4	Layout Drawings		6	D-1	1	-	D-1	2	-	N-1	
35.5	Cladding and Fixing Details		6	D-1	1	-	D-1				
35.6	Ventilator Detail Drawings										
35.7	Structural General Arrangements	D-1	6	D-1	1	-	D-1	2	-	N-1	
35.8	Structural Detail Drawings		6	D-1	1	-	D-1	2	-	N-1	
35.9	Structural Design Calculations		6	D-1	1	-	D-1				
35.10	Instructions For Erection		6	D-1	2		D-1				
40	**Architectural**										
40.1	Architectural General Arrangements										
40.2	Architectural Schedules										
40.3	Architectural Detail Drawings										
50	**Mechanical**										
50.1	Equipment Functional Specification										
50.2	Equipment General Arrangement Drawing	D-1	6	D-1	1	-	D-1	2	-	N-1	

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
50.3	Detail Drawings		6	D-1	1	-	D-1	2	-	N-1	
50.4	Equipment Base Plate Drawings		6	D-1	1	-	D-1	2	-	N-1	
50.5	Permissible External Loads		4	D-1	1	-	D-1				
50.6	Lubrication Sheets		4	D-1	1	-	D-1				
50.7	Nameplate Drawings		6	D-1	1	-	D-1				
50.8	Equipment List	D-1	4	D-1	1	-	D-1	1	-	D-1	
50.9	Operating Curves	D-1	4	D-1	1	-	D-1				
50.10	Equipment Data Sheets/Schedules	D-1	4	D-1	1	-	D-1	1	-	D-1	
50.11	Hydraulic Diagrams		4	D-1	1	-	D-1	1	-	D-1	
50.12	Pneumatic Diagrams		4	D-1	1	-	D-1	1	-	D-1	
50.13	HVAC Drawings										
50.14	Fire Protection/Detection Drawings										
50.15	Failure Modes and Effect Analysis (FMEA)		4	D-1	1	-	D-1	2	-	D-1	
50.16	Lubrication Diagram		2	D-1	1		D-1				
60	**Piping**										

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
60.1	Piping Material Specification	D-1	4	D-1	1	-	D-1				
60.2	Piping Routing General Arrangement		6	D-1	1	-	D-1	2	-	N-1	
60.3	Piping Isometrics		6	D-1	1	-	D-1	2	-	N-1	
60.4	Piping Line Lists	D-1	4	D-1	1	-	D-1	1	-	D-1	
60.5	Piping Data Sheets	D-1	4	D-1	1	-	D-1	1	-	D-1	
60.6	Piping Valve List	D-1	4	D-1	1	-	D-1	1	-	D-1	
60.7	Piping Flexibility Analysis and Calculation Note		4	D-1	1	-	D-1	1	-	D-1	
60.8	Piping Bill of Material		4	D-1	1	-	D-1	1	-	D-1	
70	**Electrical**										
70.1	Electrical Load Lists	D-1	4	D-1	1	-	D-1	2	-	N-1	
70.2	Single Line Diagrams		6	D-1	1	-	D-1	2	-	D-1	
70.3	Schematic and Control Diagrams		6	D-1	1	-	D-1	2	-	N-1	
70.4	Cable Schedules		6	D-1	1	-	D-1	2	-	D-1	
70.5	Hazardous Area Classification Drawings		6	D-1	1	-	D-1				
70.6	Hazardous Area Compliance Certificate		6	D-1	1	-	D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
70.7	Factory Acceptance Tests (FATs)										
70.8	Certificate of Compliance/Conformance		Dispatch	D-1	1	-	D-1	1	-	D-1	
70.9	Factory Test Reports and Certificates		Dispatch	D-1	1	-	D-1	1	-	D-1	
70.10	Relay Protection Settings/Calculations										
70.11	Layout and Routing Drawings (incl. Earthing)		6	D-1	1	-	D-1	2	-	N-1	
70.12	Connection Drawings/Lists		6	D-1	1	-	D-1				
70.13	Cable Routing Drawings		6	D-1	1	-	D-1	1		D-1	
70.14	Motor Start Calculations		4	D-1	1	-	D-1				
70.15	Lightning Protection and Underground Earthing Details		4	D-1	1	-	D-1				
70.16	Motor Overload Replay Settings		4	D-1	1	-	D-1				
70.17	Lighting Layout										
70.18	Transformer Design Data										
70.19	MCC and Panel Layouts		6	D-1	1	-	D-1	2		N-1	
70.20	Motor Lists		4	D-1	1	-	D-1				
70.21	General Arrangement Drawings	D-1	4	D-1	1	-	D-1	1	-	D-1	

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
70.22	Preliminary Power Consumption List	D-1									
70.23	Protection Co-ordination Curves		4	D-1	1		D-1				
70.24	Equipment Data Sheets	D-1	4	D-1	1	-	D-1	2	-	D-1	
70.26	Bill of Material with Catalogue Cuts for Electrical Component		4	D-1	1		D-1				
70.27	Termination Diagrams		6	D-1	2		D-1	2		D-1	
70.28	List of Emergency Power Consumers	D-1	4	D-1	1		D-1				
75	**Instrumentation and Control**										
75.1	Instrument Location Plans		6	D-1	1		D-1				
75.2	Cable Racking And Routing Drawings		6	D-1	1		D-1	1	-	D-1	
75.3	Cable Block Diagrams		6	D-1	1		D-1	2	-	N-1	
75.4	Wiring and Connection Schedules		4	D-1	1		D-1				
75.5	Cable List		4	D-1	1		D-1	2	-	N-1	
75.6	Power Distribution Diagram		6	D-1	1		D-1				
75.7	Earthing Diagram		6	D-1	1		D-1				
75.8	Loop Drawings		6	D-1	1		D-1	1	-	D-1	

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
75.9	Control Schematics		6	D-1	1		D-1	1	-	D-1	
75.10	Logic Diagrams		6	D-1	1		D-1	1	-	D-1	
75.11	Erection Material – Take Off – BOM		4	D-1	1		D-1				
75.12	Functional Specifications		6	D-1	1		D-1				
75.13	Instrument List	D-1	4	D-1	1		D-1	1	-	D-1	
5.14	Control System Software Documented Programme		4	D-1	1		D-1	1	-	D-1	
75.15	Power Supply Calculations		4	D-1	1		D-1				
75.16	Air Supply Calculations		4	D-1	1		D-1	1	-	D-1	
75.17	Calibration/Test Certificates				With Shipment		D-1				
75.18	FAT Specification and Programme										
75.19	SAT Specification and Programme										
75.20	Panel/Cabinet Ga Layout		6	D-1	1		D-1	1	-	D-1	
75.21	User Manual		6	D-1	1		D-1				
75.22	I/O List		4	D-1	1		D-1	1	-	D-1	
75.23	Trip/Alarm Schedule		4	D-1	1		D-1				

Item	Documentation Requirements	Info. required at Tender Stage Quantity	For Review Quantity		Certified Final Quantity			As-built Quantity			Comments
		EC	WKS ARC	EC	WKS ARRD	PR	EC	WKS ARRD	PR	EC	
75.24	Control System Hardware Configuration		4	D-1	1		D-1				
75.25	Sequence and Interlock Definition Document (SIDD)		4	D-1	1		D-1				
75.26	Instrument Data Sheets		6	D-1	1		D-1				
75.27	Control Philosophy										

4. Documentation Format and Quantity Requirements

4.1 The type and number of copies of documentation required must be as indicated in Table 3-2. All copies must be in electronic format and specified as such in Table 3-2 (e.g. PDF, MS Office (native/source file), AutoCAD (native/source file) and (or) MicroStation (native/source file)).

4.2 Where possible all portable document formats (PDFs) of documentation must always be converted to PDF from the native/source application rather than scanned.

4.3 The vendor must be responsible for ensuring that the documentation supplied conforms to appropriate standards indicated in this document. Documentation found to be non-compliant will be rejected and must be reformatted and re-submitted by the vendor.

4.4 The vendor must be responsible for ensuring that documentation supplied by their corporation or sub-vendors are in a consistent, logical and useable electronic format.

4.5 The preferred program for schedules is Microsoft Project 2010 with Primavera P6, being acceptable.

4.6 Drawings must be single files in AutoCAD and (or) MicroStation format and must be dimensionally accurate. The plotter configuration files used by each CAD file must be supplied with the first issue of drawings by the vendor.

5. Documentation Preparation

5.1 All drawings, data, manuals, documents, etc. must be in the English language.

5.2 Unless otherwise specified, all dimensioning on drawings, documents, etc. are to be as per SI units of measure.

5.3 Drawings and technical data furnished by the vendor as part of the work performed must apply to the parts of the work to be furnished by the vendor, including those parts fabricated by sub-vendors and supplied by the vendor as a component of the work. The engineer must be notified in writing of changes made from the drawings, specifications and other data provided by the vendor.

5.4 The vendor must provide details of all components required for equipment assembly. All details must be cross-referenced to assemblies and all assemblies referenced to details.

5.5 Along with the contract, the engineer will provide the vendor with the full requirements for submitting design data and drawings including a standard drawing border.

5.6 Only one document or drawing must be shown on each sheet – multiples or grouping of documents or drawings on one sheet are not permitted.

5.7 Each drawing must be saved individually. This applies to drawings in PDF and native/source file formats that contain various sheets; each sheet must be saved individually.

5.8 Drawings and data must be in sufficient detail to indicate layout of equipment, drives, access for maintenance and operation, and design of foundations/supports. Supplied drawings must be clear, concise and professional in visual presentation.

5.9 Paper copies of all documentation must be completely legible. Furnished copies must be capable of serving as masters for subsequent reproduction. They must depict the material as shipped and installed.

6. Documentation Submittal and Review Requirements

6.1 Once the contract has been awarded then documentation must be submitted to the project's electronic document management system (EDMS), ShareCenter portal

6.2 Where paper copy (hard copy) is specified then full size submittals must be submitted. Reduced copies are not acceptable.

6.3 For paper copy (hard copy) submittals these must be marked and submitted as follows:

- Attention: Document Control
- H376512: Zuuvch-Ovoo Uranium Project
- Address: 58 Emerald Parkway Road, Greenstone Hill, Johannesburg, 1609, South Africa.

6.4 Documentation will be reviewed and returned within 10 working days from acknowledgement of receipt to the vendor with the following stamp (refer Figure 6-1 below), indicating how the vendor must proceed.

<table>
<tr><td colspan="3">HATCH</td><td colspan="3">VENDOR DATA REVIEW</td></tr>
<tr><td>Project No.</td><td></td><td>Date</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Name</td><td rowspan="2">Signature</td><td rowspan="2">Date</td><td colspan="2">Comments</td><td></td></tr>
<tr><td>Yes</td><td>No</td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
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<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Project Document No.</td><td colspan="2"></td><td>Sub No.</td><td colspan="2"></td></tr>
<tr><td>External Document No.</td><td colspan="5"></td></tr>
<tr><td colspan="3">Review Grade</td><td colspan="3">Next Submittal Status</td></tr>
<tr><td colspan="3">☐ C1 – Proceed to next submission and Status
☐ C2 – Proceed with exceptions as noted to next submission
☐ C3 – Do not proceed, revise as noted and resubmit
☐ C4 – Complete. No further submittal required</td><td colspan="3">☐ Internal Review
☐ Certified
☐ Certified Final
☐ Final
☐ As-Built</td></tr>
<tr><td colspan="3" rowspan="2">Package Coordinator Signature and Date:</td><td colspan="3">Next Submittal Date:</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td colspan="6">REVIEWED ONLY FOR GENERAL CONFORMITY WITH THE SPECIFICATIONS. ACCEPTANCE BY THE ENGINEER DOES NOT WARRANT OR REPRESENT THAT THE INFORMATION CONTAINED ON THIS DRAWING/DOCUMENT IS EITHER ACCURATE OR COMPLETE. THE SOLE RESPONSIBILTY FOR CORRECT DESIGN, DETAILS AND DIMENSIONS MUST REMAIN WITH THE PARTY SUBMITTING THE DRAWING/DOCUMENT.</td></tr>
</table>

Figure 6-1: Vendor Data Review Stamp Example

6.5 When documentation is returned, the grades and processes are explained as follows:-

- C1:

  Only after Vendor documentation is returned **"Proceed to next submission and status"** (Review Grade = "C1") then the vendor must submit documentation to the engineer as "Certified Final or As-Built" (whichever is applicable).

- C2:

  When documentation is returned **"Proceed with exceptions as noted to next submission and status"** (Review Grade = C2) the vendor must make the necessary corrections requested by the engineer and submit revised documentation to the engineer for review no more than two weeks from their receipt, unless otherwise noted/agreed.

- C3:

  "Do not proceed, revise as noted and resubmit next submission and status" (Review Grade = "C3") the vendor must make the necessary corrections required by the engineer and must submit revised documentation to the engineer for review no more than two weeks from their receipt, unless otherwise noted/agreed.

- C4:

  Complete. No further submittal required – this completes the submission process.

6.6 Documentation must be resubmitted for review if revisions to them are made by the vendor after the documentation was previously reviewed and returned by the engineer.

6.7 Certified documentation must be marked "Certified For Construction" by the vendor and signed and dated by an authorised person. All certified structural and electrical documentation must be signed by the vendor's appointed and registered professional engineer (PR Eng). Should equipment fail to conform to the certified drawings, the vendor must furnish all materials, labour and equipment required to correct all deficiencies to the satisfaction of the engineer.

6.8 Where the vendor is responsible for installation of or makes modifications to the equipment at site, drawings submitted as "Certified" must be updated to reflect the final equipment details. Drawings that have changed since the initial certification must be re-submitted on or about the delivery date of the equipment and must be marked "As Built" and signed and dated by an authorised person.

6.9 The engineer's review of documentation must only be for general conformity with the specifications. Acceptance by the engineer does not warrant or represent that the information contained on the drawing or document is either accurate or complete. The sole responsibility for correct design, details and dimensions must remain with the party submitting the drawing or document.

7. Spare Parts Lists

7.1.1 An itemised lists of spare parts for each piece of equipment or component must be submitted, with a recommendation of what parts and quantities should be in the inventory for the following:

7.1.2 Start-up and commissioning spares and supplies:

- Spares required specifically due to initial high wear and which may fail due to abnormal operating conditions during start-up and commissioning but are not considered normal operating spares.

7.1.3 Two years' operating spares:

- Spares required for normal wear and tear experienced during plant operation for two years after commissioning.

7.1.4 Capital spares:

- Spares recommended to maintain plant operability in case of catastrophic failure or accident, or to replace equipment taken out of service for major maintenance.

7.2 Spare parts template must be used for:

- Purchase order/contract number, equipment identification, for which the part is intended
- Original equipment manufacturers (OEM) name and OEM part numbers must be included
- Each spare part must refer to a specific drawing number
- Part number and description, including material
- Quantity of each part recommended for purchase
- Price, unit and total for the number of recommended parts
- Lead time prior to delivery
- Shipping location for recommended spares and minimum quantities stocked.

7.3 Spare parts must be new and of the same quality as those forming part of the supplied equipment.

7.4 Packaging of spare parts must be in accordance with the standard packing and shipping instructions.

8. Installation, Operating and Maintenance Manuals

8.1 Manuals must include the last submitted revision of the following documents, but not be limited to:

- Installation and assembly drawings and instructions
- Operating and maintenance instructions including start-up and shutdown procedure
- Storage requirements and details of maintenance if equipment is stored prior to installation or left undisturbed
- Lifting points and weights of components including crane requirements
- Details of specialised labour required for installation
- Pre-commissioning and commissioning check list
- Wiring diagrams
- Schematic diagram of wiring systems
- Performance curves, test certificates, specifications and technical data sheets

- Control and instrument data sheets
- Complete parts list with manufacturer's name and catalogue number for each item and nearest replacement source
- Complete index of all drawings, diagrams and schematics particular to the equipment
- List(s) of recommended spare parts per the requirements detailed above in Section 7
- Safety instructions and warnings regarding hazardous operations, materials or products and the related procedures for protecting personnel and equipment
- Emergency procedures in the event of power failure or stoppage
- Lubrication data sheets prepared according to project specifications complete with detailed diagrams for all lubrication systems
- Maintenance instructions complete with directions for preventative maintenance of all components, including fault diagnosis instruction, lubrication instructions such as recommended cycle of lubrication, type of lubricant, etc.

8.2 All the above must apply to component parts of equipment whether they are manufactured by the vendor or are supplied as a component part of an item of equipment.

8.3 Final submissions of manuals must be suitably bound in ring binders with hard cover and be complete with a detailed index of contents. The contract number/purchase order and equipment numbers as well as the description of the equipment must appear on the front cover. The equipment description and equipment number must be shown on the spine of the manuals. Manuals must include sub-vendor's names, addresses, telephone and fax numbers and complete ordering data on parts not manufactured by the vendor.