INVITATION TO BID

Bidding package No.	**VT-1322/26-XL-DA-TTHN**
Title of bidding package:	**Electrical Bulk Materials for BK-10A - Block 09-1**
Nam of the Project*:*	**Electrical Bulk Materials for BK-10A - Block 09-1**
Issued on*:*	**Date: 14/05/2026 to 09:00 AM date 19/06/ 2026**
Bid closing time:	**09:00 AM date 19/06/2026 (date/month/year)**
Issued including Decision:	**ITB No.4361/26-HSMT-PTM/BMĐH approved 07/05/2026**

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BRIEF DESCRIPTION

Part 1. BIDDING PROCEDURES

Chapter I. Instructions to bidders

This Chapter provides information to help bidder in preparation of Bid Proposal. Information includes rules of preparation, submission of Bid Proposal, bid opening, bid evaluation and contract award. Chapter I contains provisions that are to be used without modification.

Chapter II. Bidding data sheet

This Chapter specifies in detail contents of Chapter I for applying for each bidding package.

Chapter III. Bid proposal evaluation criteria

This Chapter includes criteria for evaluation of Bid Proposal.

Chapter IV. Bidding forms

This Chapter includes forms that bidder shall complete to form a part of Bid Proposal.

Part 2. TECHNICAL REQUIREMENTS

Chapter V. Technical requirements

This Chapter includes scope, progress of goods supply, technical requirements, drawing for description the specification of goods and related services; contents on inspection and testing of goods (if any).

Part 3. TERMS AND CONDITIONS OF CONTRACT AND CONTRACT FORMS

Chapter VI. General Conditions of Contract

This Chapter includes general conditions applied for all contracts of various bidding packages. Chapter VI contains common provisions that are are completed by awarded bidder before contract comes into effect.

Chapter VII. Particular Conditions of Contract

This Chapter includes contract data and specific conditions, which specifies detailed conditions for each contract. Particular conditions of contract are to be modified and supplemented but not to replace general conditions of Contract.

Chapter VIII. Contract forms

This Chapter includes forms which, once completed, shall become integrated part of contract. Forms of contract performance guarantee (Performance Bond) and Advance payment guarantee (if any) are completed by awarded bidder before contract comes into effect.

Part 4. APPENDICES

- Attachment 01: Scope of supply
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- Other technical documents, … with link for reference (if any).

ABBREVIATION

ITB	Instructions to Bid
BDS	Bid data sheet
GCC	General conditions of contract
PCC	Particular conditions of contract
VND	Vietnam Dong
USD	US Dollar
EUR	European currency

Part 1. BIDDING PROCEDURES

Chapter I. INSTRUCTIONS TO BIDDERS

1. Scope of bid	1.1. Employer as specified in the Bid Data Sheet (BDS) issues this Invitation to Bid for selection of Bidder to implement bidding package for procurement of goods folowing single-stage one-envelope procedure. 1.2. Title of the bidding package; number, quantity of parts (in case bidding package is divided into many independent parts) belongs to bidding package as specified in BDS.
2. Explanation of terms used in bidding	2.1. The Deadline for bid submission is the deadline for submission bids and is specified in the Invitation to Bid. 2.2. Day refers to Gregorian calendar day, including weekends, holidays, and Tet holidays according to the provisions of labor law. 2.3. Time and day, month on the national bidding network shall be defined time and day, month published the national bidding network (GMT+7).
3. Source of funds	Source of funding (or method of capital arrangement) for bidding package as specified in **BDS**.
4. Prohibited acts in bidding	4.1. Offering, giving, receiving or taking a bribe. 4.2. Abusing positions or entrusted power to influence or illegally intervene in bidding process in any form. 4.3. Collusive practice, including: a) Reaching, with or without undue influence, an arrangement or agreement which is designed to let one or more parties to prepare bids for all bidders or to withdraw submitted bids so that one of them will win the bid; b) Reaching an arrangement or agreement on refusal to supply goods or services, or subcontract, or reaching other agreements to limit competition so that one party will win the bid; c) A bidder or investor with appropriate qualifications and experience has submitted a bid and meets the requirements laid down in the Invitation to Bid but deliberately refuses to provide additional documents proving their capacity and experience at the Vietsovpetro's request for clarification of the bid or verification of their submitted documents with the aim of facilitating one party's winning of the bid. 4.4. Fraudulent practice, including: a) Forging or falsifying information and/or documents used in bidding; b) Deliberately providing information and documents which are not accurate or objective in bids or proposals with the aim of falsifying the contractor selection result. 4.5. Obstructive practice, including: a) Destroying, deceiving, altering or concealing of evidence or making false statements; threatening, harassing or intimidating any party to prevent the verification or investigation into a corrupt,

	fraudulent or collusive practice made with a supervision, inspection or audit authority; b) Obstructing the competent person, employer, Vietsovpetro, bidders in the course of contractor selection; c) Impeding competent authorities' rights of supervision, inspection or audit of bidding activities; d) Deliberately making false complaints, denunciations or petitions with the aim of impeding bidding process; e) Acts of violation against laws and regulations on cybersecurity and safety intended to intervene or impede the online bidding process. 4.6. Inequality and non-transparency, including: a) A bidder of a package or investment project is also the Vietsovpetro or employer or takes charge of performing tasks of the Vietsovpetro or employer of that package or investment project, violating against the regulations stated in Point 5 ITB; b) A person or entity concurrently engages in the preparation and appraisal of Invitation to Bid, or RFP of the same package or investment project; c) A person or entity concurrently engages in the evaluation of bids or proposals and the appraisal of the contractor selection result of the same package or investment project; d) A person who is working for the Vietsovpetro/employer directly engages in the contractor selection, or acts as a member of the expert team or appraising team in charge of appraising the contractor selection result, or is a competent person or head of the Vietsovpetro/employer, for a package or investment project for which his/her family relative, as defined in the Law on enterprises, directly submits a bid or acts as the legal representative of a bidder; e) A bidder submits a bid for a procurement, construction or non-consulting service package for which the bidder is also acting as a consultant on preparation, verification and appraisal of cost estimate, technical design, building drawings and designs, front-end engineering design (FEED); preparation and appraisal of Invitation to Bid; evaluation of bids; inspection of goods; appraisal of contractor selection result; supervision of contract execution; f) A person acts as a bidder for a package of a project or investment project of the Vietsovpetro or employer for which he/she worked and held the executive or managerial position within 12 months from the date of his/her resignation therefrom; g) A supervision consultant also acts as the inspection consultant of the same package; 4.7. Unauthorized disclosure of the following information and documents on the contractor/investor selection: a) Contents of bidding documents before they are issued as prescribed; b) Contents of Bids, notebooks, minutes of bid evaluation meetings, comments and evaluations for each Bids before publishing

	contractor selection result; c) Content of request for clarification of Bid proposals of the Vietsovpetro and responses of bidders during the evaluation process of Bid proposals before publising the bidder selection result; d) Report of the Vietsovpetro, report of the Expert Group, appraisal report, report of consulting bidder, report of relevant professional authorized organization during the bidder selection process before publishing the bidder selection result; e) The bidder selection result before being published arcording to regulation as prescribed. 4.8. Illegal transfer of awarded contract: The contractor transfers to other contractor(s) a workload of task of the package worth more than 10% of package value; or worth less than 10% of package value but more than 02 million USD (after deducting the workload of the subcontractor's responsibility as declared in the contract), calculated on the signed Contract price.
5. Eligibility of bidders	A bidder that is an organization shall be deemed to be eligible if complying the following requirements: a) It is requried to have registration of establishment and operation issued by the competent authority of the country where the bidder is operating; b) It must keep independent accounting records; c) It is not undergoing dissolution process or subject to revocation of enterprise registration certificate, cooperative/cooperative union/artel registration certificate; is not facing insolvency as prescribed by the law on bankruptcy; d) It must ensure competitiveness in bidding as prescribed in Point BDS; e) It is not being prohibited from participating in bidding; f) It is not liable to criminal prosecution; g) It is not the state of temporary suspension, termination of participation in national bidding network; h) It is name is registered on National bidding network before the grant of approval for contractor selection result as prescribed in BDS.
6. Contents of Invitation to Bid	6.1. The Invitation to Bid consists of Parts 1, 2, 3, 4 accompanied with documents of Bid Proposal amendment as specified in ITB 7 (if any) including as follows: **Part 1. Bidding Procedures:** - Chapter I. Instructions to Bidders (ITB); - Chapter II. Bidding Data Sheet (BDS); - Chapter III. Bid Proposal Evaluation Criteria; - Chapter IV. Bidding Forms. **Part 2. Technical Requirements:** Chapter V. Technical Requirements.

	Part 3. Conditions and Forms of Contract: This part includes the terms, conditions, data and forms that constitute the complete contract. **Part 4. Appendices** 6.2. Vietsovpetro is not responsible for the preciseness, completeness of the Invitation to Bid, explanation for clarification documents or amendment of Invitation to Bid as prescribed in ITB 7 if these documents are not provided by Vietsovpetro. In case of any contradiction, documents issued by Vietsovpetro shall prevail. 6.3. The bidder shall examine all instructions, forms, supply requirements and other requirements in the Invitation to Bid for preparation Bid Proposal including all information or documentation as required by the Invitation to Bid.
7. Clarification and amendment of Invitation to Bid	7.1. The amendment of the Invitation to Bid shall be made as prescribed in **BDS** prior to the deadline for submission of bid proposal by issuing the written documentation for amendment in accordance with the methods as prescribed in **BDS**. To give bidders reasonable time in preparing their bid proposal, Vietsovpetro may, at its discretion, extend the deadline for the submission of bid proposals. 7.2. Any bidder who needs clarification of the ITB shall send a written request to Vietsovpetro in a minimum period of time as presribed in the **BDS** prior to date of Deadline for bid submission in order that Viesovpetro shall take consideration. After receiving the written request for clarification by the deadline, Vietsovpetro shall make a written clarification response in a minimum period of time as prescribed in **BDS**, that specifying clarification content request without specifying the name of the requesting bidder, and send it to every bidder who have received the ITB from the Vietsovpetro. If the clarification leads to amendment ITB, Vietsovpetro shall amend the ITB in accordance with ITB 7.1. 7.3. If necessary Vietsovpetro hold pre-bidding conference to discuss the contents in Bidding Document in which the bidders are unclear as stiupulated in **BDS**. Vietsovpetro shall send an invitation to the pre-bidding conference to all contractors who have received the Invitation to Bid and post it on the System. The discussion shall be formally recorded as minutes of clarification which shall be sent to all bidders who have bought or acquired Invitation to Bid from Vietsovpetro. 7.4. In case the Invitation to Bid is required to be modified after the pre-tender conference, Vietsovpetro shall issue a written document for amendment as specified in ITB 7.1, minutes of pre-bidding conference is not the amendment of Invitation to Bid. 7.5. No participation in pre-bidding conference or without a confirmation letter that bidder having particiated in pre-bidding conference is not the reason to reject the Bid proposals' bidder.
8. Cost of bidding	The bidder shall bear all costs associated with the preparation and submission of its Bid Proposal. Vietsovpetro shall not be liable for those cost under any circumstances.

9. Language of Bid Proposal	The bid proposal, as well as all correspondence and documents relating to the bid proposal exchanged by the bidder and Vietsovpetro, shall be written in English. Any supporting documents in bid proposal can be written in other languages and concurrently attached with translation in English. In case of no translation, if necessary, Vietsovpetro may ask bidder for supplementation of documents.
10. Documents comprising the Bid Proposal	The Bid Proposal shall comprise of the following: 10.1. Application for bidding in accordance with ITB 11; 10.2. Consortium agreement in case the bidder is Consortium in accordance with Form 03, Chapter IV – Bidding forms; 10.3. Bid Bond, in accordance with ITB 18; 10.4. Proof documents for eligibility of bidder in accordance with ITB 5; 10.5. Proof documents for eligibility of signatory under the application for bidding, in accordance with ITB 20.3; 10.6. Proof documents for capacity and experience of bidder, in accordance with ITB 16; 10.7. Technical proposals and proof document for adequacy of goods and related services, in accordance with ITB 15; 10.8. Price proposals and price schedules with full information, in accordance with ITB 11, 13; 10.9. Proposals of technical alternatives, in accordance with ITB 12 (if any); 10.10. Other contents as specified in **BDS**.
11. Application for bidding form and price schedules	The application for bidding form and respective price schedules shall be prepared using the relevant forms furnished in Chapter IV, Bidding Forms.
12. Proposals of technical alternatives	12.1. In case Invitation to Bid stipulates in **BDS** for probability of technical alternatives, then those technical alternatives shall be considered. 12.2. Technical alternatives are only considered when main solution meets requirements and bidder is ranked first. In this case, bidder shall provide all information necessary for evaluation of the alternatives by Vietsovpetro, including: notes, drawings, technical specifications, progress of supply, costs and other relevant information. The evaluation of technical alternatives in accordance with Section 5, Chapter III.
13. Biding prices and discounts	13.1. Bidding price stated in the Application for bidding and in the bidding price tables with discounts must comply with the regulations as specified in this Section: a) The bidding prices means the price stated in Application for bidding, including all costs for implementation of bidding package (not including discounts). b) In case the bidding packages is not devided into independent parts, on condition that bidder offers discount, this can be offered directly in Application for Bidding or put in separate letter for

	discount. Bidder has to specify the content of discount and details of discount allocation into specific items in columns of "List of goods", "Services description". In case details are not provided, the discount is assumed to apply uniformly for all items in the columns of "List of goods", "Services description". Letter for discount (if any) can be submitted with Bid Proposal or separately provided that Vietsovpetro receive prior to Deadline for bid submission. c) Bidder shall submit Bid Proposal for all work described in ITB 1.1 and offer unit prices, extended amount for work specified in columns of "List of goods", "Services description" in accordance with respective Form prescribed in Chapter IV – Bidding forms. In case columns "Unit price" and "Extended amount" are not offered or offered "0", it is assumed that bidder allocates prices of these goods and services into others prices of those in bidding package, bidder is responsible to provide goods, services in accordance with requirements of Invitation to Bid and not receive payment from Vietsovptero during implementation of contract. Bidder is required to offer prices in each Price schedules as prescribed in **BDS**. 13.2. In case bidding package is divided into independent parts and bidder is allowed bidding in each part specified in BDS, bidder is able to bid for one or many parts of bidding package. Bidder has to bid all work of such part which the bidder attends. Should the bidder offer discount, bidder shall specify details and prices of discount in each part as per ITB 1.2. 13.3. The bidder shall be responsible for the bidding price quoted to perform and complete the work in accordance with the requirements as stated in the Invitation to Bid. In case the biddier offer a low unit price in abnormal manner which affecting to the quality of the bidding package, the Vietsovpetro may require the bidder to clarify the feasibility of such abnormal unit price. 13.4. Bidder's bidding price quoted shall include all taxes, fees and charges (if any) in response to tax rates, expenses, fees at the time of 28 days prior to the stipulated deadline for bid submission. In case bidders announce bidding prices not including taxes, fees, charges (if any), bidders' Bid Proposal shall be rejected. 13.5. Bidders offer the bidding price as stipulated in **BDS**.
14. Currencies of Bid and payment	14.1. The currency of the bid shall be offered in *VND/ USD/ EUR*. Cost incurred inside Vietnam shall be offered in VND. Cost incurred outside Vietnam shall be offered in *VND/ USD/ EUR*. Bidders have to offer by only one currency for a specific work. In case bidding price is offered in foreign currency, bidder has to prove that the respective work has been using foreign currency. 14.2. The currency of payment for work items shall correspond with the currency of bid for those items. Domestic costs are only paid in VND. 14.3. The currency for conversion of different bidding prices from various currencies into unique currency for evaluation and comparison is: VND/USD applying the selling rate stated by

	Vietcombank on the date when the bid is closed. If all bidding prices are in foreign currency, then bid evaluation and comparison shall be done in USD. In the event that one of bidding prices is in VND, then bid evaluation and comparison shall be done in VND. 14.4. Without prejudice to any terms mentioned above and relevant applicable laws, contract currency for domestic bidders shall be in VND, applying the selling rate stated by Vietcombank on the date when the bid is closed.
15. Documents establishing the conformity of the Goods and related services	15.1. To establish the eligibility of the goods and related services in accordance with Invitation to Bid, the bidder shall furnish as part of its Bid Proposal the documentary evidence that the goods conform to the technical specifications and standards specified in Chapter V. 15.2. The term "Goods" is construed including but not limited to machinery, equipment, raw materials, fuel, materials, supplies, accessories; consumables; medical supplies used for medical establishment. 15.3. The term "origin" shall mean as country or territory where produces whole goods or implements final basic processing in case many countries or territories take part in production process of those goods. 15.4. The term "Related Services" including but not limited to the Services such as: warranty, maintenance, overhaul, repair, supply of spare parts or supply of other after sales services like training, technology transfer, … 15.5. The documentary evidence responsiveness of the goods and related services may be in the form of documents, drawings, data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the goods and related services, demonstrating substantial responsiveness of the goods and related services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Chapter V. 15.6. The bidder shall also provide a list giving full particulars, current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods during the period specified in the **BDS** following commencement of the use of the goods. 15.7. Standards for manufacturing, production process of material and equipment, as well as references to brand names or catalogue numbers specified by Vietsovpetro in the Chapter V, are intended to be descriptive only and not restrictive to bidder. The bidder may offer other standards of quality, brand names, catalogue numbers, provided that it demonstrates, to Vietsovpetro's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Chapter V.
16. Documents establishing the capacity and	16.1. The bidder shall provide necessary information in Forms in Chapter IV – Bidding Forms in order to demonstrate capacity and experiences for performance of contract as specified in Chapter III

experiences of the bidder	– Bid Proposal evaluation criteria. The bidder shall prepare original documents for verification with information stated in bidder's Bid proposal if Vietsovpetro requires. 16.2. The documentary evidence of the bidder's capacity to perform the contract if its bid proposal is awared as specified in **BDS**.
17. Period of validity of Bid Proposal	17.1. Bid Proposal shall remain valid not shorter than the period specified in the **BDS**. 17.2. In exceptional circumstances, prior to the expiration of the bid proposal's validity period, Vietsovpetro may request bidders to extend the period of validity of their Bid Proposal. The Bid Bond as also requested shall be extended for 30 days beyond the deadline of the extended validity period. If a bidder refuses to extend its Bid Proposal validity as required, the Bid Proposal shall not be further considered and the Bid Bond shall be returned to bidder. The bidder have accepted Vietsovpetro's extension request shall not be permitted to modify any contents of its Bid Proposal. The extension request and acceptance or non-acceptance shall be in writing.
18. Bid Guarantee	18.1. When attending the bid, prior to deadline for bid submission, the bidder shall implement bid guarantee and attach it to Bid proposal under the following forms: i) a form unconditional guarantee issued by a bank or financial institution which is legally operating in Vietnam or foreign bank branches established under Vietnamese law; ii) submit a certificate of insurance guarantee issued by a domestic non-life insurance enterprise, or branch of a foreign non-life insurance enterprise established under the Vietnamese law; iii) pay a deposit or bank transfer to VSP's account as specified in **BDS** 18.2. In case the validity of Bid proposal is extended as specified in ITB 17.2, the Bid bond's validity shall be accrodingly extended. In case of consortium bidder, all partners of consortium shall implement the same form of Bid bond. In case of Consortium, the Bid Bond shall comply with one of the following: a) Each Consortium partner shall provide a separate Bid Bond; however, the aggregate amount of Bid Bond submitted by all Consortium partners is not less than the required amount specified in ITB 18.2. If the Bid Bond of any Consortium partner is determined to be invalid, the bid of the Consortium shall not be considered and evaluated further. If any Consortium partner is in breach of the rules resulting in without return of Bid Bond in accordance with point b ITB 18.5, then Bid bond of all Consortium partners shall not be returned. b) All partners of the Consortium shall nominate one partner to arrange a single Bid Bond for itself and all other partners in the Consortium. In this case, the Bid Bond shall be in the name of the Consortium or the name of the partner who arranges the Bid Bond

	for the entire Consortium provided that the total amount is not less than the required amount in BDS of ITB 18.2. If any Consortium partner is in breach of the rules resulting in without return of the Bid Bond in accordance with ITB 18.5, the Bid Bond shall not be returned. 18.2. Amount, currency and valid period of the Bid Bond shall be as specified in the **BDS**. 18.3. The Bid Bond shall be considered illegitimate in one of following cases: having lower value, with shorter valid period as specified in ITB 18.2, incorrectly states the name of the beneficiary, not original and without legitimate signature, signed before Vietsovpetro issues the Invitation to Bid or accompanied with adverse condition for Vietsovpetro (including not fully committed with content of the Bid Bond Forms – 04A, 04B, 04C in Chapter IV). In case of using a letter of guarantee or certificate of insurance, the letter of guarantee or certificate of insurance must be provided, signed and stamped (if applied) by one of the following: a lawful representative of a domestic credit institution, a branch of a foreign bank established under Vietnamese law, a domestic non-life insurance enterprise, a branch of foreign non-life insurance enterprise established under Vietnamese law. In case of using a letter of guarantee (of deposit/transfer to Vietsovpetro's account), the letter must be signed and stamped by the legal representative of the contractor. 18.4. Unsuccessful bidder shall be returned or released the Bid Bond in the maximum duration specified in the **BDS** since the date for notification of result of selecting bidder. For successful bidder, the Bid Bond shall be returned or released after the bidder furnishes the contract performance guarantee. 18.5. The Bid Bond shall not be returned in one of following cases: a) After the deadline for submission of bids and during the validity period of the bid, the bidder withdraws their Bid proposals or gives a written refusal to perform one or some tasks proposed in their Bid proposals in accordance with the requirements laid down in the Invitation to Bid; b) The bidder performs any of the prohibited acts specified in Point 4 ITB or commits violations of the bidding law resulting in bid cancellation as prescribed in Point 32 ITB; c) The successful bidder fails to furnish the required performance security as prescribed Point 37 ITB; The first ranked bidder is invited to negotiate the Contract. Within seven (07) days from the date of receipt of the invitation to negotiate the Contract from Vietsovpetro, the bidder does not come to negotiate or refuses to negotiate the Contract or offers conditions different from the content in the Bid Proposals or withdrawing commitments in the Bid Proposals resulting to unsuccessful Contract negotiations, the Bid bond shall be not returned to bidder, except in cases of force majeure; d) The bidder fails or refuses to complete the Contract within

	twenty (20) days from the date of receipt of notification of Bid award from Vietsovpetro, except in cases of force majeure; e) The bidder refuses to sign the Contract within ten (10) days from the date of completion of the Contract, except in cases of force majeure. 18.6. In case the Invitation to Bid is divided into independent parts, bidder may submit the bid bond in either of the two ways as follows: a) A bid bond for all parts that bidder participate in the bidding (the value of bid bond will be equal to the total values of the parts that bidder takes part in). Where the value of bid bond submitted by the bidder is less than the total of values, Vietsovpetro is entitled to decide the application of such bid bond to the parts that bidder takes part in; b) Separated bid bonds for each part that bidder takes part in the bidding. Where the bidder's breach results in a failure to refund the bid bond as stipulated in section ITB 18.5, the failure to refund the value of bid bond shall be calculated on the part violated by the bidder.
19. Deadline for bid submission	19.1. The deadline for bid submission is the time specified in the **BDS**. 19.2. Vietsovpetro may at its discretion, extend the deadline for the submission of Bid Proposal by amending the Invitation to Bid in accordance with ITB 8, in which case all rights and obligations of Vietsovpetro and bidders previously subject to the deadline shall thereafter be subject to the new deadline as extended. 19.3. The bidder submits directly or delivers the Bid Proposal to Vietsovpetro adresss provided that it arrives before deadline for submission of bid specified in the **BDS**. Vietsovpetro receive Bid Proposal of all bidders before deadline for submission of bid, including even if bidder has not bought or received the Invitation to Bid from Vietsovpetro. In such case, the bidder shall pay an amount equal to the selling price of the Invitation to Bid to Vietsovpetro account prior to the Bid Proposal is received and before the deadline for bid submission.
20. Submission, withdrawal, substitution and amendment of Bid Proposal	20.1. The bidder shall prepare Bid Proposal comprising: one original as specified in ITB 10 and some copies with amount mentioned in the **BDS**. The cover of dossier shall be marked clearly "ORIGINAL OF BID PROPOSAL", "COPY OF BID PROPOSAL". In case of amendment, alternative of Bid Proposal, the bidder shall prepare one original and some copies of dossier with amount specified in the **BDS**. The cover of dossier shall be marked clearly "ORIGINAL OF AMENDED BID PROPOSAL", "COPY OF AMENDED BID PROPOSAL", "ORIGINAL OF ALTERNATIVE", "COPY OF ALTERNATIVE". In case of technical alternative in the Bid Proposal specified in ITB 12, the bidder shall prepare one original and some copies with

	amount mentioned in **BDS**. The cover of dossier shall be marked clearly "ORIGINAL OF TECHNICAL ALTERNATIVE", "COPY OF TECHNICAL ALTERNATIVE OPTION". 20.2. Bidders shall be responsible for the appropriateness of the copies compared to the original. In case of deviation between original and copy but without changing the bidder ranking, the original shall be used for evaluation. In case of deviation between original and copy leading to different results in evaluation of original and the copy, and resulting change in the bidder ranking, the Bid Proposal of that bidder shall be rejected. 20.3. The original of Bid Proposal shall be typed, printed with inerasable ink, with continuous page numbers. The application for bidding form letter, letter of discount (if any), supplementary documents, clarifying the Bid Proposal, price offer list and other forms in Chapter IV – Bidding forms shall be signed and stamped by the bidder's legitimate representative or the bidder's legitimate attorney (if any), in case of attorney, letter of attorney specified in Form 02, Chapter IV – Bidding forms or certified copy of company charter, decision on establishment of branch or other documents to demonstrate power of attorney shall be submitted with the Bid Proposal. 20.4. In case of Consortium bidders, Bid Proposal shall be signed by legal representative of all partners in Consortium or legal partner representating Consortium bidders according to Consortium agreement. In order that all partnerss of Consortium to be legally bound, Consortium agreement must be signed by legal representatives of all partners of Consortium. 20.5. Any words added, written between lines, erased, overwritten shall only be deemed legitimate if having signature nearby or in that page of signatory on the application for bidding letter. 20.6. The envelope of Bid Proposal comprises of original and copies, duly marking "BID PROPOSAL". In case of amendment, alternative of Bid Proposal, then the amended, alternative document (including original and copies) shall be placed in separated envelopes other than the envelope for Bid Proposal, clearly marking "AMENDMENT OF BID PROPOSAL", "ALTERNATIVE BID PROPOSAL". In case the bidder proposes an alternative technical plan, the entire alternative technical plan, including technical proposals and price proposals, must be contained in separate envlopes from the Bid Proposal envelop, the outside must clearly state "PROPOSED ALTERNATIVE TECHNICAL OPTION". The envelopes: for Bid Proposal; amended Bid Proposal, proposed alternative technical options (if any) must be sealed. Sealing method is according to the bidders' own regulations. 20.7. The envelopes shall: a) bear the name and address of the bidder; b) be addressed to Vietsovpetro in accordance with **BDS**;

	c) bear title of bidding package in accordance with ITB 1.2; d) bear a warning "not to open before the time and date for bid opening". 20.8. The bidder shall be responsible for aftermath or disadvantages if is not in accordance with this Invitation to Bid such as not sealing or losing seal of Bid Proposal during delivery to Vietsovpetro, not marking right information on envelopes of Bid Proposal as specified in ITB 20.6 and ITB 20.7. Vietsovpetro shall not be responsible for confidentiality of information in Bid Proposal if the bidders do not comply with above requirements. 20.9. Vietsovpetro shall not consider any Bid Proposals submitted after the Deadline for bid submission. Any Bid Proposals received by Vietsovpetro after the Deadline for bid submission shall be declared late submission, be rejected and be returned unopened to the Bidder. 20.10. After submitting the Bid Proposals, the Bidders may amend, replace or withdraw the Bid Proposals by sending a written notice signed by the bidder's legal representative, in case of attorney, a power of attorney letter must be enclosed as prescribed in ITB 20.3. Dossier for amendment or replacement of Bid Proposal must be enclosed with a written notification of the corresponding amendment, replacement and must ensure the following conditions: a) Being prepared by the Bidders and being submitted to the Vietsovpetro in accordance with ITB 20, the dossier containing the notification must be clearly stated "AMENDMENT OF BID PROPOSAL" or "SUBSITUTION OF BID PROPOSAL" or "WITHDRAWAL OF BID PROPOSAL "; b) Being received by Vietsovpetro before the Deadline for bid submission as stipulated in ITB 19. 20.11. The Bid Proposals which the bidder requests to withdraw in accordance with ITB 20.10 shall be returned unopened to the bidder. 20.12. The Bidder is not allowed to modify, replace or withdraw the Bid Proposal after the Deadline for bid submission until the expiration of the Bid Proposal's validity as stated in the application for bidding form letter or until the expiration of the extended validity of the Bid Proposal.
21. Bid opening	21.1. Except in the cases specified in ITB 20, Vietsovpetro shall publicly open and read out, clearly information in accordance with ITB 21.3 of all Bid Proposal received before the deadline for submission of bids. The bid opening shall take place publicly at time and place specified in the **BDS** in the presence of bidders and representatives of related organizations. The bid opening does not depend on presence or absence of bidders' representatives attending the bid. 21.2. In case bidder requests withdrawal or substitution of Bid Proposal, Vietsovpetro shall firstly open and read out clearly information in envelope of which outer notification marks

	"WITHDRAWAL OF BID PROPOSAL", the envelope of Bid Proposal of bidder with request for withdrawal shall remain sealed and be returned unopened to Bidder. Vietosovpetro shall not accept the Bidders' withdrawal of the Bid Proposal and still open such the Bid Proposal if the written notice of "Withdrawal of Bid Proposal" does not include documents providing that the person signing such documents is the bidder's legal representative and must be publicly announced during the bid opening. Next, Vietsovpetro shall open, read out clearly information in envelope of which outer notification marks "SUBSITUTION OF BID PROPOSAL" and this shall be replaced with the previous. This previous shall not be opened and be returned unopened to bidder. Vietsovpetro shall not accept the bidder to replace the Bid Proposal if the written notice of Bid Proposal replacement is not accompanied by documents proving that the person signing the document is the bidder's legal representative and must be made public during the bid opening. For envelope with notification marked "SUBSITUTION OF BID PROPOSAL", any attached notification document accompanied with amended Bid Proposal shall be opened, read out clearly. Vietsovpetro shall not accept the bidder to amend the Bid Proposal if the written notice of Bid Proposal's amendment does not include documents proving that the person signing the document is the bidder's legal representative. Only Bid Proposal opened and read out at the bid opening then shall be considered further and evaluated. 21.3. All the Bid Proposals shall be opened one at a time following the alphabetical sequence of the bidders' names and sequence below: a) Examine the seals; b) Open original of Bid Proposal, amendment of Bid Proposal (if any) and read out clearly at least the following information: name of bidder, quantity of originals and copies, bidding price in letter of bid, bidding price in summarized price list, discount (if any), validity of Bid Proposal, date of contract performance, value, validity of Bid Bond and other necessary information. In case bidding package is divided into many independent parts, then bidding prices and discount for each part shall be read out. Only discount read out in bid opening shall be further considered and evaluated; c) Representatives of Vietsovpetro shall countersign in original of letter of bid, Bid Bond, summarized price list, letter of attorney of bidder's legal representative (if any), letter of discount (if any), Consortium agreement (if any). Vietsovpetro shall not reject any Bid Proposal at the bid opening, except for late submission Bid Propsals as specified in ITB 20. 21.4. Vietsovpetro shall prepare a record of the bid opening that shall include information specified in ITB 21.3. The record shall be signed by representatives of Vietsovpetro and bidders attending bid

	opening. The omission of a bidder's signature on the record shall not invalidate the contents and effect of the record. The record shall be distributed to all bidders attending the bid.
22. Confidentiality	22.1. Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to bidders or any other persons not officially concerned with the bidder selection process until publication of result of bidder selection. Under no circumstances, is the information in Bid Proposal revealed to any other bidders, except for the information that need disclosing during the bid opening. 22.2. Except for the case of enquiries for clarification of Bid Proposal and comparing documents, bidder is not allowed to contact with Vietsovpetro for issues related to bidder's Bid Proposal and other relevant issues of bidding package during the time from bid opening until the result of tendered selection is published.
23. Clarification of Bid Proposal	23.1. After bid opening, the bidder shall be responsible to clarify the Bid Proposal if required by Vietsovpetro, including eligibility, capacity and experiences of the Bidder. In terms of technical, financial proposal in bidder's Bid Proposal, the clarification shall comply with the principle of not changing the basic content of the submitted Bid Proposal and not changing the offed bidding price. 23.2. During the evaluation process, clarification of Bid proposal between Bidders and Vietsovpetro is perform directly in written. 23.3. Clarification of Bid Proposals is only performed between the Vietsovpetro and Bidder whose Bid Proposals need to be clarified. In terms of clarification contents that directly affect evaluation of eligibility, capacity, experiences, technical requirement, financial issues, if period of clarification exceeds deadline and bidder does not submit documentation for clarification or submitted documentation does not comply with requirements of clarification from Vietsovpetro, Vietsovpetro shall evaluate based on the Bid Proposal submitted before deadline for bid submission. Vietsovpetro shall give the Bidder a reasonable period of time to clarify the Bid Proposal. 23.4. In case after Deadline for submission of bids, the bidder knowing that the Bid Proposal it has submitted falls short of documents establishing its eligibility, similar contracts, production capacity, financial reports, tax declaration and payment obligations, documents on personnel, specific equipment proposed in its Bid Proposal may provide such evidence to the Procuring entity within a period of time specified in the BDS. The Procuring entity shall receive, consider and evaluate the bidder's additional and clarifying documents, which shall be considered as part of the Bid Proposal. 23.5. In case of any inconsistencies in the Bid Proposal's content or on the condition that the content is unclear, Vietsovpetro request clarification toward the bidder based on compliance as specified in ITB 23.1.

	23.6. In case of doubt about the authenticity of documents provided by the Bidder, Vietsovpetro shall verify with organizations and individuals related to the content of the documents. 23.7. In case the Invitation to Bid requires the commitment, Contract Principles for equipment rental, main material supply, warranty, upkeep and maintenance, but such documents are not enclosed in the Bid Proposals, Vietsovpetro shall request Bidders to clarify their Bid Proposals and supplement documents within an appropriate period of time but not less than 03 working days as a basis for evaluation of Bid Proposals.
24. Deviations, imposing conditions and omissions	During the evaluation of bid proposal, the following definitions apply: 24.1. "Deviation" is a difference from the requirements specified in the Invitation to Bid; 24.2. "Imposing Conditions" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Invitation to Bid; 24.3. "Omission" is the Bidder's failure to submit part or all of the information or documentation required in the Invitation to Bid.
25. Determination of responsiveness	25.1. Vietsovpetro's determination of a responsiveness of Bid Proposal is to be based on the contents of the Bid Proposal itself, as defined in ITB 10. 25.2. A substantially responsive Bid Proposal is one that meets the requirements of the Invitation to Bid without material deviations, conditions, or omissions. A material deviation, reservation, or omission is one that: a) If accepted, would affect in any substantial way the scope, quality, or performance of the goods and related services; limit in any substantial way, inconsistent with the Invitation to Bid, Vietsovpetro's rights or the bidder's obligations under the contract; b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive Bid proposal that meet the requirement of the Invitation to Bid. 25.3. Vietsovpetro shall examine the technical aspects of the Bid Proposal submitted in accordance with ITB 15 and ITB 16, in particular, to confirm that all requirements of the Invitation to Bid have been complied without any material deviation or reservation, or omission. 25.4. If the Bid Proposal is not substantially responsive to the requirements of Bidding Document, it shall be rejected; not being allowed to deviations, reservation conditions or omission of basic content in such Bid Proposal with the purpose of making Bid Proposal to be met substantially responsive to the requirements of Bidding Document.
26. Nonmaterial mistake	26.1. Provided that a Bid Proposal is substantially responsive, Vietsovpetro may waive any mistakes in the bid proposal that not to be a material deviation, reservation or omission.

	26.2. Provided that a bid proposal is substantially responsive, Vietsovpetro may request that the bidder submits the necessary information or documentation, within a reasonable period of time, to rectify inappropriate points or nonmaterial mistake in the bid related to documentation requirements. The request for provsion of information and documentation to rectify such mistakes shall not be related to any aspect of the bidding price. Failure of the bidder to comply with the request may result in the rejection of its Bid Proposal. 26.3. Provided that a bid proposal is substantially responsive, Vietsovpetro shall rectify quantifiable nonmaterial mistakes related to the bidding price; the bidding price shall be adjusted to reflect the price of a missing or non-conforming item or component; this adjustment is for comparison purposes only.
27. Sub-contractor	27.1. Sub-contractors are organizations, individuals signing contracts with the bidders to perform related services. 27.2. Requirements of Subcontractors are specified in **BDS**. 27.3. Sub-contracting will not change the bidder's responsibilities. The bidders shall be responsible for the workload, quality, progress and other responsibilities for the parts of the contract carried out by the subcontractors. Sub-contractors' capacity and experiences shall not be considered in evaluation of the Bidder's Bid proposal. The bidder itself must comply with capacity criteria (no consideration of sub-contractors' capacity and experiences). 27.4. The bidder may sign contracts with sub-contractors according to the list of sub-contractors stated in the Bid Proposal or signing contracts with sub-contractors approved by Vietsovpetro to participate in performing the work. 27.5. The bidders is not allowed to utilize the sub-contractors to carry out the tasks other than the tasks of the subcontractors mentioned in the Bid Proposal; the replacement or addition of sub-contractors other than the list of sub-contractors prescribed in the Bid Proposal shall only be carried out when there is a valid and arpprorpiate reason and is approved by Vietsovpetro; in case sub-contractors are utilized to carry out the taks other than the tasks listed in the Bid Proposal that using a sub-contractor with a value of 10% or higher (after deducting the work part of the sub-contractor's responsibility) calculated on the contract price signed, as an act of "bid transfer".
28. Bid preferences in the selection of bidder	28.1. Rules of bid preferences: Bidders shall be granted preferential treatment when supplying goods of which costs for domestic production occupy 25% or higher. 28.2. Bid preferences are applied during evaluation process for comparing and rating Bid Proposal: Goods are eligible for bid preferences provided that bidders prove that domestic production costs account for above 25% of total

	price. Percentage (%) of domestic production cost of goods is calculated according to the following formula: **D (%) = G*/G (%)** Where: - G*: Domestic production cost calculated by quoted price of goods defined in the Bid Proposal which subtracts tax values and external costs, inclusive of fees and charges (if any); - G: Quoted price of goods defined in the Bid Proposal subtracting tax values; - D: Percentage (%) of domestic production cost of goods, D gains the rate of 25%, which can enable goods to receive the bid preferences as regulated in this clause. 28.3. Bid preferences calculation is specified in the **BDS**. 28.4. Bidder must declare information about the eligible types of goods for bid preferences according to Forms 15A, 15B and 15C Chapter IV that is on the basis of consideration and evaluation of bid preferences. In case bidders does not declare so, the Bidder's goods are considered not eligible for bid preferences. 28.5. In case goods do not receive bid preferences, evaluation and determination of bid preferences shall not be applied. 28.6. In case of bidders ranking equally, priority shall be given to those with: - Goods originating from the Socialist Republic of Vietnam and the Russia Federation. - Services/Jobs that employ workers from the Socialist Republic of Vietnam and the Russian Federation.
29. Bid Proposal evaluation	29.1. Vietsovpetro shall apply evaluation criteria listed in this clause and methods of evaluation are specified in the **BDS**. Any other criteria and methods of evaluation shall not be allowed. 29.2. Vietsovpetro shall evaluate directly on the bid proposals submitted by the bidder. 29.3. Verify and evaluate eligibility of Bid Proposal: a) The verification and evaluation of eligibility of Bid Proposal as specified in clause 1, Chapter III –Bid Proposal Evaluation criteria; b) Any bidders who have eligibility Bid Proposal shall be further considered and evaluated with respect to capacity and experiences. 29.4. Evaluation of capacity and experiences: a) Capacity and experiences are evaluated as specified in clause 2, Chapter III – Bid Proposal Evaluation criteria; b) Bidders with satisfactory capacity and experiences shall be considered and evaluated to examine their technical capability. 29.5. Technical and price-based evaluation: a) Evaluation of technical capability must adhere to the evaluation standards and methods prescribed in Section 3, Chapter III – Bid Proposal Evaluation criteria;

	b) Bidders who satisfy technical requirements shall be considered to evaluate the price specified in Section 4, Chapter III – Bid Proposal Evaluation criteria. 29.6. After price-based evaluation, Vietsovpetro shall make and approve ranking list of bidders. The bidder ranked at the first position in the bidder's ranking list shall be eligible for the contract negotiation. Ranking of bidders shall be made as prescribed in the **BDS**. 29.7. In case the Invitation to Bid is divided into independent parts and bidder is allowed bidding in each part prescribed in ITB 1.2, bid evaluation is carried out with those respective parts of the bidder as prescribed in Section 6, Chapter III – Bid Proposal Evaluation criteria. 29.8. Principle of Bid proposal's evaluation: a) Vietsovpetro evaluate directly based on the bid proposals submitted by the bidder. In case the information committed, declared in the Bid proposal is not truthful, leading to false results of evaluating Bid proposal of the bidder, bidder shall be considered to have committed fraudulent; b) In case there is inconsistency between information of similar contract and supporting documents proving information of such similar contract, Vietsovpetro request bidder to clarify the Bid proposal. In case the contracts declared, enclosed in the Bid proposal that not meeting the requirements of Invitation to Bid or the Bidder does not declare or incompletely declares the similar contracts, Vietsovpetro request the bidder to clarify and supplement the another contract to meet the requirements of the Invitation to Bid within an appropriate period of time but not less than 03 working days. In case the bidder does not have a contract met the requirements of the Invitation to Bid, the bidder shall be disqualified; c) In case the key personnel and key equipment (if any) proposed by the contractor in the Bid proposal not meeting the requirements, Vietsovpetro allow the bidder to supplement or replace. Bidders are only allowed to add or replace each personnel position, equipment once within an appropriate period of time but not less than 03 working days. In case the Bidder does not have the replacement of personnel and equipment that meet the requirements of the Invitation to Bid, the bidder will be disqualified. Under any circumstances, on condition that the Bidder dishonestly declares personnel and equipment, the Bidder is not allowed to substitute other personnel or equipment, the Bidder's Bid proposal shall be rejected and the Bidder shall be considered having committed fraudulent according to regulations with legislation on bidding or other relevant legislation and shall be subject to be handled according to regulations; d) For the origin of the goods, in case there is any inconsistency between the declared information and attached documents, Vietsovpetro request clarification of the Bid proposal;

	e) For contents other than those mentioned in Points a, b, c and d of this Clause, in case there is inconsistency between the information in the original Bid proposal and the copy of the Bid proposal, the information in the original Bid proposal is the basis for review and evaluation; f) At the financial assessment step, in case the Bidder does not declare information in the bid preferences's form for domestically produced goods (for Goods procurement bidding packages) in order that Vietsovpetro have a basis for calculating bid preferences, then Bidder will not receive the bid preferences.
30. Contract negotiation	Contract negotiation shall be stipulated in **BDS**. 30.1. Contract negotiation shall be based on the followings: a) Report on evaluation of the Bid Proposal; b) Bid Proposal and bidder's records of clarification of bidding package (if any); c) Invitation to Bid. 30.2. Principles of the contract negotiation: a) Not negotiating on the contents the bidder offered in accordance with the requirements of the Invitation to Bid; b) While evaluating Bid Proposal and negotiating contract, if realizing the scope of supply/ work, workloads specified in Chapter V – Scope of Supply are insufficient compared with the design documentation, Vietsovpetro shall request bidder to add supplement scope for this insufficient part, on the basis of the quoted price; if the Bid Proposal has not provided the unit price, Vietsovpetro shall consider and decide on applying the unit price approved estimated price for these scope of work/ inadequate workloads compared to the design documentation or the unit price quoted by other bidders who have passed the technical evaluation if this unit price is lower than the approved unit price in the estimated bidding packge; c) When negotiating a contract for the deficient deviation, if the Bidder's bid proposal does not have a unit price corresponding to the deviation, the lowest bid unit price among other bidders' bid proposals that meet the technical requirements must be taken or taking the unit price in the approved estimate if this is the only bidder who passes the technical evaluation step as a basis for negotiating that deficient deviation. 30.3. Contents of contract negotiation: a) Unspecified, inappropriate and inconsistent contents between Invitation to Bid and Bid Proposal, between different contents in the Invitation to Bid may lead to incidents, disputes or impact on the contractual obligations of contracting parties; b) Deviations that have been found by the Bidder and Bidder's recommendations (if any), including proposal of amendment or technical alternatives which Bidder is allowed to provide according to relevant bidding regulations;

	c) Any issue that arises during the selection of Bidder (if any) in the aim of completing detailed contents of the bidding package; d) Nonmaterial omissions specified in ITB 30; e) Other necessary issues. 30.4. During contract negotiation, negotiating parties must proceed to draft and complete the official agreement, detailed terms and conditions and annexes that determine detailed list of scope of supply, price list and progress of supply. 30.5. If the negotiation fails, Vietsovpetro shall consider, decide to invite the bidder who is ranked at the next positions for contract negotiation; if the successive negotiations also fail, Vietsovpetro shall report to the Investor to consider, decide the bidding cancellation as regulated in point a, ITB 32.1.
31. Conditions for recommendation as the awarded bidder	Bidder shall be considered for recommendation as the winning bidder upon satisfying the following conditions: 31.1. Having Eligibility Bid Proposal as prescribed in Section 1, Chapter III; 31.2. Having capacity and experiences satisfying requirements as prescribed in Section 2, Chapter III; 31.3. Having technical proposals satisfying requirements as prescribed in Section 3, Chapter III; 31.4. Having deficient deviation not exceeding 10% of bidding price; 31.5. Meeting requirements specified in the **BDS**; 31.6. The bidder has the proposed price award (including taxes, fees, charges (if any) not exceeding the approved bidding package price. If the approved estimated budget of bidding package is lower than or higher than the approved bidding package price, this estimate shall replace the bidding package price as basis for consideration for recommendation as the winning bidder.
32. Bidding cancellation	32.1. Vietsovptro shall notify the bidding cancellation in following cases: a) All Bid Proposals fail to satisfy the requirements of the Invitation to Bid; b) Change of the objectives, scope of procurement resulting in changes in volume of work and evaluation criteria stated in the Invitation to Bid at Vietsovpetro's decision; c) The Invitation to Bid fails to comply with legislation on bidding or other relevant legislation that lead to the failure of the selected bidder to meet requirements for performing bidding package; d) The award bidder commits prohibited acts specified in section 4 prohibited acts - Chapter I Instructions to Bidders; e) Organizations and individuals other than the awarded bidder commit prohibited acts specified in section 4 prohibited acts - Chapter I Instructions to Bidders leading to deviations in bidder selection results.

	32.2. Organizations and individuals infringing law on bidding that lead to bidding cancellation as prescribed in point c, d, e in ITB 32.1 is undertaken to compensate expenses for related parties and be handled as prescribed by law. 32.3. In case of bidding cancellation specified in this section, Vietsovpetro shall return or release Bid Bond to bidders who has submitted the original Bid Bond within 05 working days, except the bidder violates the regulation as specified in point d and point e, ITB 32.1.
33. Notice of bidder selection result	33.1. Vietsovpetro shall publish notice of bidder selection results within 05 working days from the date of approval of bidder selection results. Notice of bidder selection result shall include following contents: a) Information of the bidding package: - Number of Invitation to Bidder; - Name of the bidding package; - Bidding package price or approved estimate (if any); - Name of Investor; - Form of bidder selection; - Type of contract; - Time to implement the bidding package; - Time of contract performance. b) Information of the awarded bidder: - Tax code; - Contractor name; - Bidding price; - Bidding price after discount (if any); - Technical scores (if any); - Evaluation price (if any); - Awarded bidding price; - Time to implement the bidding package. c) For each type of goods and equipment in the bidding package, the Investor must publish the following information: - Goods name; - Wattage; - Features and technical specifications; models, part numbers, labels; - Origin; - Awarded of bidding unit price. d) List of unselected bidders and brief reasons of each bidder for not being selected. 33.2. In case of bidding cancellation as prescribed in point a, ITB 32.1, in the notice of bidder selection results and on the national bidding network must be clearly stated the reason for cancellation of bidding.

34. Change in volume of goods and services	34.1. At the time of awarding contract, Vietsovpetro are entitled to increase or decrease the volume of services stated in Chapter IV provided that such change not exceeding the rate specified in the **BDS** and there is not any change in the unit price or other terms and conditions of the Bid Proposals and Invitation to Bid. The rate of increase and decrease in volume shall not exceed 10%. 34.2. Additional purchase option: Before the contract expires, the Investor has the right to purchase an additional volume of goods or services in the bidding package other than the volume stated in Chapter IV provided that not exceeding the rate specified in the **BDS**.
35. Notice of Bid Proposal acceptance and contract award	After publishing the notice of bidder selection results, Vietsovpetro send a notice of acceptance of the Bid proposals and award the contract, including requirements on measures of contract performance guarantee, completion time, and contract signing. VND according to the provisions in Form as prescribed in Part 4 for the awarded bidder. Notice of acceptance of bid proposals and contract award are part of the contract documentation. In case the awarded bidder fails to complete, sign the contract or submit the contract performance guarantee within the deadline stated in the notice of bid proposal's acceptance and contract award, the bidder shall be disqualified and shall not be refunded the value of Bid bond as prescribed in Section 18.5 ITB. The period of time stated in the notice of bid proposal acceptance is calculated from the date Vietsovpetro sending this acceptance notice to the awarded bidder on the nation bidding network.
36. Conditions for signing contract	36.1. At time of signing contract, Bid Proposal of the selected bidder are still valid. 36.2. At time of signing contract, the selected bidder must ensure to meet requirements on technical and financial capability for implementation as prescribed in the Invitation to Bid. If the bidder no longer meets basic requirements of technical and financial capability prescribed in the Invitation to Bid, Vietsovpetro shall refuse to sign contract with the bidder. Vietsovpetro shall therefore cancel previous decision on approval of bidder selection result and contract award, and shall invite the bidder who is ranked at the next position for comparing documentation and contract negotiation (if required). 36.3. Vietsovpetro shall ensure conditions on funding for advance payment, payment funding and other necessary conditions for carrying out the bidding package on the schedule.
37. Contract performance guarantee	37.1. Before signing a contract or before the contract comes into effect, the bidder shall provide contract performance guarantee as specified in Part 3. In case of applying a form of contract performance guarantee, the form specified in Part 3 or another form approved by Vietsovpetro shall be complied. 37.2. The bidder shall not be entitled for the returning of the contract performance guarantee in the following cases:

	a) The bidder refuses to perform the contract after the date the contract comes into force; b) The bidder violates agreements in contract; c) Performing the contract behind schedule due to bidder's fault but refusing to extend the validity of the contract performance guarantee.
38. Handling of complaints in bidding	38.1. When bidder's legal rights and interests are affected, the bidders, agencies and organizations may file any complaint to Vietsovpetro with respect to procurement process, bidder selection result according to the regulations of Vietsovpetro. 38.2. In case of petition to Vietsovpetro, the bidder shall send the petition to the address specified in the **BDS**.
39. Monitoring, supervising of Bidder selection process	When detecting violated behavior or content inconsistent with the provisions of bidding law, the bidder is responsible for notifying the organization, individual performing the monitoring task and supervision as prescribed in the **BDS**.

Chapter II. BID DATA SHEET

ITB 1.1	Employer: **Vietsovpetro**
ITB 1.2	Title of bidding package: **Electrical Bulk Materials for BK-10A (Bidding package No.VT-1322/26-XL-DA-TTHN)** Name of Project: **Electrical Bulk Materials for BK-10A (Bidding package No.VT-1322/26-XL-DA-TTHN)** Quantity, reference numbers of parts under the bid package: **Vietsovpetro will make evaluation and selection by Each group.** **+ Group 1: Cable trays and Ladders (Item 1÷ Item 7)** **+ Group 2: Cables (Item 8÷ Item 33)** **+ Group 3: Electrical Heat Tracing System (Item 34÷ Item 44)** **+ Group 4: Luminaires and Floodlights (Item 45÷Item 54)** **+ Group 5: Junction Boxes, Cable Glands & Multi Cable Transit (MCT) (Item 55÷Item 152)** Year of production: See technical requirements attached Scope of supply: See Attachment 01 of Part 4 Technical requirement: See Attachment 02 of Part 4 Technical evaluation criteria: See Attachment 03 of Part 4
ITB 3	Source of funds: Block 09-1
ITB 5 (d)	Competitiveness in the bidding must be ensured by following rules: - Bidders participating in bidding do not have a shareholding or equity contribution representing more than 30% with Vietsovpetro, except in the case of: (i) The bidder is an affiliate or subsidiary of a state-owned corporation or group whose main production and business lines are consistent with the nature of the bid package of that state-owned corporation or group. (ii) The bidder is a parent company, subsidiary, or affiliate of a state-owned corporation or group whose main production and business lines are suitable for products and services under the bid package, and this bid package belongs to its subsidiary or affiliate. - The bidder do not either have a shareholding or equity contribution relationship with consultants or have a shareholding or equity contribution representing more than 20% of equity owned by a third party being an entity or a natural person, specifically as follows: + Consulting on preparation for technical design: *Not applicable*; + Consulting on verification of bid price: *Not applicable*; + Consulting on supervision of contract execution and inspection: *Not applicable*; + Consulting on preparation for the ITB: *Not applicable*; + Consulting on appraisal of the ITB: *Not applicable*; + Consulting on evaluation Bid Proposal: *Not applicable*; + Consulting on appraisal of bidder selection results: *Not applicable*; + Project management consulting, contract management, other consulting services whose work is directly related to the bid package: *Not applicable*;

	- The bidder does not belong to the same agency or organization directly managing the consultants (mentioned above)[1]. - Public sector entities and employers, procuring entities that have the same direct governing authority, and equity contribution when participating in bidding for each other's bid packages shall not have to satisfy the regulations on legal and financial independence between the bidder and the employer and the procuring entity. - Public sector entities and enterprises that have the same direct governing authority, and equity contribution when participating in bidding for each other's bid packages shall not have to satisfy the regulations on legal and financial independence between the bidder and the employer and the procuring entity. - The ratio of shares, equity contributions between the parties is determined at the deadline for submission of bids and according to the ratio stated in the business registration certificate, establishment decision, and other documents of equivalent value. In case the bidder participates in the bidding as a joint venture or the consultant is selected as a joint venture, the equity ownership ratio of other organizations and individuals in the joint venture is determined according to the following formula: $$\text{Ownership ratio} = \sum_{i=1}^{n} X_i \times Y_i$$ Of which: $X_{i:}$ Equity ownership ratio of other organizations and individuals in the i-th joint venture member; $Y_{i:}$ Percentage (%) of the work volume of the i-th joint venture member in the joint venture agreement; n: Number of members participating in the joint venture.
ITB 5 (h)	Bidder's name is registered on National bidding network before the grant of approval for contractor selection result as prescribed: - Bidders have to register procurement information on **the National bidding network**: **To be applied** - Bidders are to provide confirmation of information registration on the national bidding network system in according to the Circular issued by Ministry of Planning & Investment for providing provisions on posting information about biding, on the roadmap for applying online Contractor selection, and managing the use of the value of bidding guarantee, ensuring the performance of non-refundable contracts: Detailed instructions of the National bidding network system are on the website: http://muasamcong.mpi.gov.vn
ITB 7.1	The amendment of Invitation to Bid shall be published in National bidding network at least **03 working days** prior to the Deadline for bid submission.
ITB 7.2	Requests for clarification should be received by Vietsovpetro at least **05 working days** prior to the Deadline for bid submissions. Vietsovpetro shall clarify the request of clarification at least **03 working**

	days prior to Deadline for bid submissions.
ITB 7.3	Pre-bidding conference: No
ITB 8	Payment for the Invitation to Bid: Interested bidders can buy Invitation to Bid with non-refundable cost of VND 500,000.00/set (in word: Five hundred thousand Vietnam Dong/set) Payment for Invitation to Bid shall be made by Telegraphic Transfer to the following Vietsovpetro's account: Account No. 008.100.000001.1 Beneficiary: Vietsovpetro Vietcombank, Vung Tau Branch Please indicate: Bidder name, payment for Invitation to Bid Bidding package No. VT-3161/25-XL-DA
ITB 10.10	The Bidder shall submit the following additional documents in its bid proposal: Scope of supply, Scope of work and Technical documentation as required in Technical requirement (Part 2 Chapter V – Scope of supply, Scope of work and Technical documents, etc. in Invitation to Bid)
ITB 12.1	Bidder is allowed to submit Technical alternative. The Bidder is required to clearly state the **main offer** and the **alternative offer** in the bidding proposal. Technical alternatives are only considered when main solution meets requirements and bidder is ranked first. In this case, bidder shall provide all information necessary for evaluation of the alternatives by Vietsovpetro, including notes, drawings, technical specifications, progress of supply and other relevant information.
ITB 13.5	In the detailed price quotation table, bidder shall offer prices according to the following requirements: **For foreign bidders:** The Bidders are requested to offer price on delivery term CFR Vietsovpetro port, Ho Chi Minh City, S.R. Vietnam in accordance with Incoterms accompanied with appropriate amendments – if necessary as Bidding form No. 12A, Chapter IV – Bidding form and provide "Incoterms 2020". In case goods are accompanied with services, commissioning, … Bidders have to clearly state that whether the offered price includes Foreign Contractor Withholding Tax (FCWT) as Bidding form No.13. If the offered price has not included, Vietsovpetro will calculate and add FCWT into the offered price for comparison and evaluation *(FCWT tax rate is: 1.01% for goods).* Vietsovpetro shall do necessary procedures for tax exemption of goods. **For Vietnamese Bidders:** The Bidders are requested to offer price on delivery to Vietsovpetro warehouse, Rach Dua Ward, Ho Chi Minh City, S.R. Vietnam including all taxes, fees and charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1 as Bidding forms No. 12A and 12B, Chapter IV – Bidding forms.
ITB 15.6	Expected operating duration of Goods (for the purpose of requirement of

<table>
<tr><td></td><td>spare parts, specialized tools): Not applicable.</td></tr>
<tr><td>ITB 16.2</td><td>The documentary evidence of the Bidder’s capacity to perform the contract if the bidder win the bid including:
Manufacturer’s License for sale or the Certificate of Partnership or similar documents: as per Technical requirement, Chapter V in Invitation to Bid.</td></tr>
<tr><td>ITB 17.1</td><td>The Bid proposal shall be valid for 90 days from the Deadline for bid submission.</td></tr>
<tr><td>ITB 18.1</td><td>The Bidder provides the Bid Bond through Deposit / Telegraphic Transfer to the following Vietsovpetro’s account:
Account: 008.100.000001.1 (VND)
0081370000029 (USD)
Beneficiary: Vietsovpetro
Vietcombank, Vung Tau Branch</td></tr>
<tr><td>ITB 18.2</td><td>Contents of Bid Bond:
The amount and currency of the Bid Bond for each group shall be:
<table>
<tr><th>No.</th><th>Group</th><th>Bid Bond value (USD)</th><th>Bid Bond value (VND)</th></tr>
<tr><td>1</td><td>Group 1: Item 1÷ Item 7</td><td>1,062.00</td><td>27,862,000.00</td></tr>
<tr><td>2</td><td>Group 2: Item 8 ÷ Item 33</td><td>2,481.00</td><td>65,057,000.00</td></tr>
<tr><td>3</td><td>Group 3: Item 34÷ Item 44</td><td>929.00</td><td>24,367,000.00</td></tr>
<tr><td>4</td><td>Group 4: Item 45 ÷ Item 54</td><td>710.00</td><td>18,626,000.00</td></tr>
<tr><td>5</td><td>Group 5: Item 55 ÷ Item 152</td><td>969.00</td><td>25,417,000.00</td></tr>
<tr><td colspan="2">For 05 groups</td><td>6,151.00</td><td>161,329,000.00</td></tr>
</table>
If bidder attends the bid for one or more than one group, value of Bid Bond should be equal to sum of those above value with respective groups.
The Bid Bond shall be valid for 120 days from the Deadline for bid submission.
In case the Bidder provides the Bid Bond through Deposit/Telegraphic Transfer to the following Vietsovpetro’s account:
Account: 008.100.000001.1 (VND)
0081370000029 (USD)
Beneficiary: Vietsovpetro
Vietcombank, Vung Tau Branch</td></tr>
<tr><td>ITB 18.4</td><td>The Bid Bond of unsuccessful Bidders shall be returned or released in maximum 14 days from the date of Notification of Bidder selection Result.</td></tr>
<tr><td>ITB 19.1</td><td>The Deadline for bid submission at:
09h00 (local time) on _____/_____/2026</td></tr>
<tr><td>ITB 20.1</td><td>In addition to original of Technical Proposal and Financial Proposal, the quantity of copies of Technical Proposal (as per required in Technical requirement), Financial Proposal (01 copy). In case of modification, substitution of Technical Proposal, Financial Proposal or technical alternative, the bidders must submit the equal number of copies of modification, substitution or Technical alternative.
Notes:</td></tr>
</table>

	Quantity of Proposal: *+* ***Technical Proposal****: 01 original and 02 copies;* *+* ***Financial Proposal****: 01 original; 01 copy* ***+ Soft copy:*** *01 USB included scanned Technical Proposal;* *01 USB Financial Proposal and native excel file of Financial Proposal.* *+* ***All of the Proposals shall be sealing and marking as requirement in Chapter I Point 21***.
ITB 20.7 (a)	Bidders shall submit their Bid Proposals to: Recipients: Vietsovpetro Address: 105 Le Loi Str., Vung Tau Ward, Ho Chi Minh City, S.R. Vietnam
ITB 21.1	The Bid proposal shall be opened publicly: At the following address: Vietsovpetro, 105 Le Loi Str., Vung Tau Ward, Ho Chi Minh City, S.R. Vietnam Time: at **09h30 (local time) on _____/_____/2026**
ITB 23.4	Bidders themselves can provide such evidence to Vietsovpetro within 03 days from the Deadline for submission of bids.
ITB 27.2	Total value of sub-contractor(s) shall not exceed: **0%** of total value of Bid proposal. Specialized sub-contractor: Not applicable.
ITB 28.3	Calculation of preferential treatment: Goods that do not receive bid preferences must add a monetary amount accounting for 7.5% of bidding price after rectification of errors, adjustment of deviations and deduction of discounts (if any) of these goods to the bidding price after rectification of errors, adjustment of deviations and deduction of discounts (if any) of bidders for comparison and ranking.
ITB 29.1	Bid proposal evaluation methods: a. Evaluation of the bidder's capacity and experience: using Pass/Fail criteria. b. Technical evaluation: *to apply evaluation method calculating point criteria in accordance with evaluation criteria stipulated in Section III, Chapter III, Bid Proposal Evaluation Criteria.* c. The price evaluation: *to apply lowest price method* ***for each group*** *in accordance with evaluation criteria stipulated in Section V, Chapter III, Bid Proposal Evaluation Criteria.*
ITB 29.6	Ranking of bidders: *the bidder who has the lowest price* ***for each group*** *after rectification of errors, adjustment of deviation and deduction of discounts (if any) is ranked the first.*
ITB 30	Contract negotiation: *Not applicable.*
ITB 31.5	Having lowest bidding price for each group after rectification of errors, adjustment of discrepancies, taking into account discount (if any), conversion of bidding price into a single currency, addition preferential treatment value (if any), includes all taxes, fees and charges (if any).
ITB 34.1	The maximum percentage of work volume may be increased is: *Not applicable.* The maximum percentage of work volume may be decreased is: *Not applicable.*

ITB 34.2	Additional purchase option: *Not applicable.* The maximum of additional purchase option: *Not applicable.*
ITB 38.2	Vietsovpetro's address: 105 Le Loi Str., Vung Tau Ward, Ho Chi Minh City, S.R. Vietnam Tel: 84 254 3839 871 Fax: 84 254 3839 857
ITB 39	Address of organization, individual in charge of supervision: Mr. Vu Mai Khanh – General Director of Vietsovpetro 105 Le Loi Str., Vung Tau Ward, Ho Chi Minh City, S.R. Vietnam Fax: 84 254 3839 857

Chapter III. BID PROPOSAL EVALUATION CRITERIA

Section 1: Verification and evaluation the eligibility of Bid Proposal

1.1 Verification the Bid Proposal:

a) Verify the number of original and copies of the bid proposal;

b) Verify the documents comprising the original Bid proposal including: administrative documents, legal documents, Bidder's capacity and experience documents, technical proposal as stipulated in Invitation to Bid, in which there are: Application for Bidding, Consortium Agreement (if any), Power of Attorney for signing Application for Bidding (if any); Bid Bond/Deposit; documentary evidence establishing the Bidder's eligibility to bid; documentary evidence Bidder's capacity and experience; technical proposal; price proposal and any other relevant documents of Bid Proposal as stipulated in ITB 10;

c) Verify the consistency of contents between the original and copies for detailed evaluation process of bidding package.

1.2 Evaluation the eligibility of Bid Proposal:

A. Bid proposal is considered eligibility when it fully meets the following requirements:

a) The Bidder submits the original of Bid proposal.

b) The Application for Bidding is signed and stamped (if any) by the legitimate representative of the bidder as required by Invitation to Bid. For consortium, the Application for Bidding is signed and stamped (if any) by the legitimate representatives of each member of the consortium or the authorized leader member of the consortium sign the Application for Bidding according to responsibilities in written agreement of consortium.

c) Bidding prices in Application for Bidding must be detailed, fixed, indicated by numbers, words and in accordance with total bidding prices mentioned in Summary of bidding price table. Bidders are required not to propose different bidding prices or conditions that put Vietsovpetro in disadvantage.

d) The validity period of the Bid proposal must meet the requirements stipulated in ITB 17.1.

e) The Bid Bond/Deposit must satisfy all the requirements as stipulated in ITB 18.3.

f) The bidder is not named in 02 or more Bid proposals as a main bidder (independent bidder or a member of consortium) in one bidding package. In case the bidding package is divided into many independent parts, the bidder is not named in 02 or more Bid proposals as the main bidder for the parts that bidder participates.

g) For consortium, written agreement of consortium is signed and stamped (if any) by the legitimate representative of each member of the consortium and the consortium agreement must specify the detail scope of work and estimated respective percentage that each member will implement as Bidding Form 03, Chapter IV, Bidding Form.

If the scope of supply includes only one unit/one piece and no related service, bidder is not allowed to enter into a consortium; in case that Bidders is still in a consortium, agreement of consortium shall be considered invalid and Bidder shall be rejected.

h) The bidder is eligible as stipulated ITB 5.

Bidders who submit eligible bid proposals shall be considered and evaluated on their capacity and experience.

Section 2: Capacity and experience evaluation criteria

Standards of competence and experience are mandated and listed in Table No. 01 (for bidders who are Non-manufacturers of goods within the scope of the bid package) or Table No. 02 (for bidders who are manufacturers of goods within the scope of the bid package). A bidder's evaluation of competence and experience is subjected to whether it meets all standards. A subcontractor's competence and experience will not be taken into consideration when evaluating a bid proposal. The contractor itself must meet the evaluation standards of competence and experience.

In case the currency used in similar contracts or one of the following – Investor's payment confirmation for past contracts for the supply of goods, tax declarations, documents proving the bidder's competence and experience – is not VND: in the bid proposal, the bidder must convert them to VND as a basis for evaluation. The conversion is subject to the exchange rate of Vietcombank's selling rate at the date of signing a similar contract.

In case the Bidder participating in bidding is the parent company (for example, Corporation) assigning a subsidiary to perform part of the work in the bid package, the contractor must declare specifically which part using Form 11C Chapter IV. The evaluation of experience in fulfilling similar contracts is based on the value and volume of work that the parent company and subsidiary delivered in the bidding package.

For Consortium, capacity and experience will be defined by the aggregated capacity and experience of each member of Consortium, but it must be assured that each member of Consortium must satisfy the requirement of capacity and experience for the volume of work implemented by him; if any of the members in Consortium do not satisfy the capacity and experience criteria, the Consortium will be evaluated as fail to meet the requirement on capacity and experience.

Sub-contractors' capacity and experience will not be considered in the evaluation of the Bid proposal of main Bidder (unless the Invitation to Bid allows to use specialized sub-contractor). The main bidders themselves must satisfy criteria on capacity and experience (not considered the sub-contractors' capacity and experience).

In case application of pre-qualification, if there are changes in capacity and experience when submitting the bid proposal in comparison with the information in the evaluated pre-qualification documents, the bidders must update their capacity and experience; in case there is no change in bidders' capacity and experience, the bidders must send a written commitment that they still satisfy the bidding package's requirements.

If there is no pre-qualification, the evaluation of capacity and experience will be carried out in accordance with the following evaluation criteria, the bidders are considered "pass" the capacity and experience requirements if they satisfy all the criteria.

2.1. Criteria for evaluation of capacity and experience

The evaluation of capacity and experience will be carried out as in following table:

CRITERIA TABLE FOR EVALUATION OF BIDDER'S CAPACITY AND EXPERIENCE

(For Bidders who are Non-manufacturers[(1)] of goods under the scope of the bid package)

Table No. 01

Capacity and experience criteria			Compliance requirements			Documents
No.	**Description**	**Requirement**	**Single Entity**	**Consortium**		**Submission requirements**
				All members combined	**Each member**	
1	Historical Contract Non-Performance[(1)] due to Bidder's fault	From January 01, year 2023 to Deadline for bid submission, the contractor does not have a contract for the supply of goods, not fulfilled through fault of the bidder.	Must meet requirement	Not applicable	Must meet requirement	Form No. 09
2	Tax obligations fulfilment	Has fulfilled tax obligations of the last fiscal year before Deadline for bid submission.	Must meet requirement	Not applicable	Must meet requirement	Form No.10

Notes:

[(1)] Non performance contracts due to Bidder's fault shall include all contracts where:

- Non performance contracts, as concluded by employer, and were not objected by the Bidder,

- Non performance, as concluded by the employer, and were so objected by the Bidder but fully settled against the Bidder by Arbitration or Court.

Non performance shall not include contracts where employer decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract or applicable law and where all appeal instances available to the Bidder have been exhausted.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	Description	Requirement	Single Entity	Consortium		Submission Requirements
				All Members Combined	Each Member	
3	**Financial capacity**					
3.1	**Financial performance**	Submission of financial statements for the latest **03 fiscal years** ***(2022-2024 or 2023-2025)*** to demonstrate the current soundness of the Bidder's financial position. The Bidder's net worth for the last fiscal year to the Deadline for bid submission (calculated as the difference between total assets and total liabilities) should be positive	Must meet requirement	Not applicable	Must meet requirement	Form No. 10
3.2	Average Annual business activities Turnove[(1)] (excluding VAT)	Minimum average annual turnover of following value within the latest **03** fiscal years[(2)] ***(2022÷2024) or (2023÷2025)*** (In case Company of the Bidder established less than 03 years, the value of Average annual business activity turnover will be sum total value of business activity turnover and devide to total number of years have activities)	Must meet requirement	Must meet requirement	Not applicable	Form No.10

Notes:

(1) In case of Consortium, the evaluation of the turnover criteria will be total turnover of all members for compare and evaluation.

(2) If bidder bids in one or more than one group, minimum average annual turnover within the last 03 fiscal years should be equal to sum of those below value with respective groups:

No.	Group	Description	Minimum average annual turnover value (USD)	Minimum average annual turnover value (VND)
1.	Group 1	Item 1 ÷ Item 7	106,248.00	2,786,000,000.00
2.	Group 2	Items 8 ÷ Item 33	248,082.00	6,505,706,000.00
3.	Group 3	Items 34 ÷ Item 44	92,917.00	2,436,600,000.00
4.	Group 4	Items 45 ÷ Item 54	71,000.00	1,862,570,000.00

No.	Group	Description	Minimum average annual turnover value (USD)	Minimum average annual turnover value (VND)
5	Group 4	Items 55 ÷ Item 152	96,922.00	2,541,678,000.00
	For 04 groups		**615,169.00**	**16,132,554,000.00**

(*) In case the bidder bids in one or more than one group, minimum revenue evaluation is based on the total average revenue required of those groups offered by bidder. In case the bidder bids in one group, it only needs to meet the revenue requirement of that group.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	Description	Requirement	Single Entity	Consortium		Submission Requirements
				All Members Combined	Each Member	
4.	Experience on implementing Contracts of supplying similar goods	Requires **at least 01** contract for supplying of goods and equipment for the Oil and Gas industry / other industries as described hereunder that has been successfully completed(1) as main Contractor (individually or partner of Consortium) or sub-contractor(2) within the last **05 years** (2021÷2025) to the Deadline for bid submission. Contract must have value equivalent to or greater than(3).	must meet requirement	must meet requirement	must meet requirement (equivalent to the volume of work implemented)	Form 07A

Notes:

(1) "Successfully completed" means completion Up to 80% of the contract value. To verify that the Similar Contract has been completed to the required extent, the Bidder shall provide.

(2) For contract implemented by bidder as member of Consortium or sub-contractor, only the amount of work implemented by Bidder itself will be considered.

(3) If bidder bids in one or more than one group, bidder's similar contracts value within the latest 05 fiscal years should be equal those below value with respective groups:

No.	Group	Description	Minimum similar contracts value (USD)	Minimum similar contracts value (VND)
1	Group 1	Item 1 ÷ Item 7	35,416.00	928,745,000.00
2	Group 2	Items 8÷ Item 33	82,694.00	2,168,570,000.00
3	Group 3	Items 34 ÷ Item 44	30,972.00	812,220,000.00

No.	Group	Description	Minimum similar contracts value (USD)	Minimum similar contracts value (VND)
4	Group 4	Items 45÷ Item 54	23,675.00	620,858,000.00
5	Group 5	Items 55÷ Item 152	32,307.00	847,226,000.00

(*) In case the bidder bids one or more than one group, evaluation of similar contract is based on each respective group offered by bidder. The bidder does not have to comly with the size of total similar contract for all those groups bidder offers.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	Description	Requirement	Single Entity	Consortium		Submission Requirements
				All Members Combined	Each Member	
5.	The ability of performing warranty, maintenance, repair, overhaul and provision of spare parts and other after-sale services *(To be evaluated in the Technical evaluation stage*	The bidder must be represented by an Agent (or Representative) who is available to carry out the Bidders' obligations such as warranty, maintenance, repair and provision of spare parts by one of following: - The bidder commits its capability in fulfilling obligations of warranty, maintenance, repair, supply of spare parts or providing after-sales services as required by the Invitation to Bid. *(as per required in the Technical requirement)* - The bidder signs a principle contract with an entity capable of fulfilling the obligations of warranty, maintenance, repair, supply of spare parts or providing after-sales services as required by the Invitation to Bid. *(as per required in the Technical requirement)*	must meet requirement	must meet requirement	must meet requirement (equivalent to the volume of work implemented)	

CRITERIA TABLE FOR EVALUATION OF BIDDER'S CAPACITY AND EXPERIENCE

(For Bidders who are manufacturers[(1)] of goods under the scope of the bid package)

(NOT APPLICABLE)

	Criteria on capacity and experience		Compliance Requirements			Documents
No.	**Description**	**Requirement**	**Single Entity**	**Consortium**		**Submission Requirements**
				All Members Combined	**Each Member**	
1.	Historical Contract Non-Performance[(2)] due to Bidder's fault	From January 01, year … to Deadline for bid submission, the contractor does not have a contract for the supply of goods, not fulfilled through fault of the bidder.	Must meet requirement	not applicable	must meet requirement	Form 09
2.	Tax obligations fulfilment	Has fulfilled tax obligations of the last fiscal year before Deadline for bid submission.	Must meet requirement	not applicable	must meet requirement	Form 07B

Notes:

[(1)] Manufacturer is understood as an enterprise/manufacturing facility that produces goods itself or participates in the production process of goods or a subsidiary or parent company in charge of distributing and consuming products produced by the parent company and other subsidiaries within the Group or Corporation.

[(2)] Non performance contracts due to Bidder's fault shall include all contracts where:

- Non performance contracts, as concluded by employer, and were not objected by the Bidder,

- Non performance, as concluded by the employer, and were so objected by the Bidder but fully settled against the Bidder by Arbitration or Court.

Non performance shall not include contracts where employer decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract or applicable law and where all appeal instances available to the Bidder have been exhausted.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	**Description**	**Requirement**	**Single Entity**	**Consortium**		**Submission Requirements**
				All Members Combined	**Each Member**	
3.	Financial Capacity					
3.1	Financial Performance	Submission of financial statements **… years** (from year … to year … or from year … to year …) to demonstrate the current soundness of the Bidder's financial position. The Bidder's net worth for the last fiscal year, (calculated as the difference between total assets and total liabilities) should be positive.	Must meet requirement	not applicable	must meet requirement	Form 10
3.2	Average Annual business activities Turnover	Minimum average annual turnover of following value within the latest … fiscal years(1) **≥ USD […] / VND […]** (Incase Company of the Bidder established less than 03 years, the value of Average annual business activity turnover will be sum total value of business activity turnover and devide to total number of years have activities)	must meet requirement	must meet requirement	not applicable	Form 10

Notes:

(1) In case of Consortium, The Evaluation of the turnover criteria will be total turnover of all members for compare and evaluation.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	**Description**	**Requirement**	**Single Entity**	**Consortium**		**Submission Requirements**
				All Members Combined	**Each Member**	
4.	Capacity of goods production	The bidder provides documents as proof of production capacity, including either: - The capacity of factories or production lines with minimum output of: ___ units/month; Or: - The highest output per month within the last … years prior to the Deadline for bid submission: ___ units	must meet requirement	must meet requirement	must meet requirement (equivalent to the volume of work implemented)	Form 07B

Notes:

In case the goods are products produced domestically by a Vietnamese bidder (which may or may not have been sold in the market), the bidder must prove that the design capacity or production quantity complies with the requirements.

In case the bidder is both a manufacturer and a supplier (some goods or a part of the volume of goods offered by the bidder in the Bid proposal which are produced by the bidder, some other goods or a part of the volume of goods are purchased by the bidder from other manufacturers or suppliers to supply for the bidding package), in addition to declaring production capacity, the bidder shall also declare experience in performing similar contracts as prescribed in Section 4 – Table No. 01 of this Chapter. The evaluation of the bidder's experience will be done on the basis of providing the similar contract for supply of goods (in response to the part of goods bidder purchases from other manufacturers or suppliers) and the bidder's production capacity (in response to the part of goods that the bidder produces itself providing in the bidding package). Bidder may use documents such as sales invoices, inventory quantities, ... to prove the quantity produced in 01 month.

Criteria on capacity and experience			Compliance Requirements			Documents
No.	**Description**	**Requirement**	**Single Entity**	**Consortium**		**Submission Requirements**
				All Members Combined	**Each Member**	
5.	The ability of performing warranty, maintenance, repair, overhaul and provision of spare parts and other after-sale services *(To be evaluated in the Technical stage)*	The bidder must be represented by an Agent (or Representative) who is available to carry out the Bidders' obligations such as warranty, maintenance, repair and provision of spare parts by one of following: - The bidder commits its capability in fulfilling obligations of warranty, maintenance, repair, supply of spare parts or providing after-sales services as required by the Invitation to Bid. *(as per required in the Technical requirement)* - The bidder signs a principle contract with an entity capable of fulfilling the obligations of warranty, maintenance, repair, supply of spare parts or providing after-sales services as required by the Invitation to Bid. *(as per required in the Technical requirement)*	must meet requirement	must meet requirement	must meet requirement (equivalent to the volume of work implemented)	

2.2. Evaluation Criteria for Key personnel *(Not applicable*)

2.3. Sub-contractors and Specialized Sub-contractors *(Not applicable*)

Section 3: Technical evaluation criteria (see Part 2 – Chapter V)

Section 4: Price evaluation criteria (Lowest price method)

Determination of lowest price as following steps:

Step 1: Determination of bidding price including all taxes, fees, charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1;

Step 2: Rectification of errors (apply in accordance with Note (1));

Step 3: Adjustment of deviations (apply in accordance with Note (2));

Step 4: Determination of bidding price after rectification of errors, adjustment of deviations, discount deduction (if any);

Step 5: Conversion of bidding price into a single currency (if any);

Step 6: Determination of preferential treatment value (if any) as stipulated in ITB 28;

Step 7: Ranking the bidders: the Bid proposal which has the **lowest bidding price for each group** after rectification of errors, adjustment of deviations, discount deduction (if any), conversion of bidding price into a single currency, addition preferential treatment value (if any), including all taxes, fees, charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1 shall be ranked the first.

The following content will be considered in the evaluation and ranking stage of contractors:

During the Bid evaluation stage, for proposal of goods originating from countries affected by armed conflict, in state of war, sanctioned or embargoed, and the importation of those may be interrupted and affect the contract performance and delivery schedule, Bidder must provide explanations and committions on the ability to deliver goods for Vietsovpetro to consider and evaluate.

Based on the actual situation at that time, Vietsovpetro has the sole and exclusive right to review and decide to reject the bids, or not to continue the evaluation, if in the opinion of Vietsovpetro there is any risk to the contract performance and delivery schedule. In that case, the Vietsovpetro at its sole and absolute discretion will have the right to consider and remove these Bidders from the ranking list.

Notes:

(1) Rectification of errors

Provided that the bid proposal substantially satisfies Invitation to Bid, Vietsovpetro shall rectify arithmetical errors and other errors on the following basis:

a) Arithmetical errors include mistakes from calculation such as: addition, subtraction, multiplication, division when calculating bidding price. If there is a discrepancy between the unit price and the total price, the unit price shall prevail and the total price shall be corrected; If there is unusual differences in unit price due to decimal errors (10 times, 100 times, 1000 times), the total price should be used as a legal basis for correction; when the bidder fills without price or "0" in the column of unit price and total price, price of this item shall be deemed to be allocated among the prices for the other items of work of the package and Bidder will not be paid for by Vietsovpetro during contract performance.

b) Other errors:

- If the Total price column is filled without the corresponding unit price, the unit price shall be determined by dividing the total price by the quantity; if the unit price is filled in, but the total price is missing, the total price shall be determined by multiplying the quantity by the unit price; if one of

the items has the unit price and total price filled in, but the quantity is missing, the quantity shall be determined by dividing the total price by the unit price of that particular item. In case the aforesaid quantity that has been additionally defined is different from the quantity mentioned in the Invitation to Bid, that value difference is the deviation in the scope of supply, which shall be adjusted under regulations specified in Step 3;

- Mistake in Unit must be corrected to meet the requirements specified in the Invitation to Bid;

- Mistakes in using comas (instead of periods) and vice versa shall also be corrected in accordance with the written in Vietnamese customary. If Vietsovpetro determines the obvious mistake in placing of comas and periods, the total price shall prevail and the unit price shall be corrected.

- If there is an error in a total corresponding to the addition of subtotals, the subtotals shall prevail and the total shall be corrected;

- If there is a discrepancy between words and numbers, the amount in words shall used as a legal basis for correction. If the amount expressed in words is incorrect, then the number after rectification of error as stipulated in this article should be used as a legal basis for correction.

(2) Adjustment of deviation

a) In case of deviation in the scope of supply compared to the Invitation to Bid, what is deficient shall be added, and what is redundant shall be subtracted according to respective unit price in the Bid proposal of bidder that has deviation;

In case of deficient deviation (lack of items of work in comparison with the scope of supply, lack of inland transportation cost to Vietsovpetro warehouse / Vietsovpetro port in case Bidder does not offer delivery term to Vietsovpetro warehouse / Vietsovpetro port), if there is no respective unit price in the Bid proposal with deficient deviation, the adjustment of deviation will be as follows:

- Lack of items of work in comparison with the scope of supply:

The highest unit price offered for such item of Bid proposals which pass the Technical evaluation shall be used as legal basis for adjustment of deviation. In case the Bid proposals passed the Technical evaluation has no unit price, unit price in the value of bidding package shall be used as legal basis for adjustment of deviation. In case not having value of bidding package, unit price for calculating price of bidding package shall be used as legal basis for adjustment of deviation.

In case only one bidder passes the Technical evaluation, adjustment of deviation shall be made based on respective unit price in the Bid proposal of this bidder; In case this Bid proposal has no respective unit price, unit price in value of bidding package shall be used. In case not having value of bidding package, unit price for calculating price of the bidding package shall be used as legal basis for adjustment of deviation.

- Lack of inland transportation cost to Vietsovpetro warehouse / Vietsovpetro port:

In case Bidder does not offer delivery term to Vietsovpetro warehouse / Vietsovpetro port and not having value / unit price for inland transportation cost to Vietsovpetro warehouse / Vietsovpetro port, unit price in the value of bidding package shall be used as legal basis for adjustment of deviation. In case of not having unit price in the value of bidding package, the following rates shall be used as legal basis for adjustment of deviation:

The inland transportation cost = 0.25% x total proposed bidding price.

b) In case bidder has discount letter, rectification of errors and adjustment of deviation shall be made based on bidding price without discount. Percentage (%) of deficient deviation shall be determined on basis of comparison of bidding price in Application for Bidding.

Section 5: Technical alternative

Bidder is allowed to submit Technical alternative and requested to identify clearly which is “The main offer” and which is “The alternative offer” in the Proposal.

Note: Technical alternatives are only considered when main solution meets requirements and bidder is ranked first. In this case, bidder shall provide all information necessary for evaluation of the alternatives by Vietsovpetro, including notes, drawings, technical specifications, progress of supply and other relevant information.

Section 6: Bidding package with multiple independent parts *(Applicable)*

If the bidding package is divided into multiple independent parts as stipulated in ITB 1.2, implement as follows:

1. The evaluation and approval of the winning of bid will be carried out on the basis that the total proposed bid winning prices of the bidding package are lowest (for lowest price method); the total evaluated prices are lowest (for evaluated price method); the total proposed bid winning prices shall not exceed the approved value of bidding package but are not compared to the estimated value of each part.
2. There is one contract if only one bidder wins all the parts of the bidding package. There are many contracts if many bidders win the different parts of the bidding package.

Section 7: The right to unilaterally terminate contract negotiations with the first-ranked contractor in in contract negotiation satge.

For the proposal of goods originating from countries affected by armed conflict, in state of war, sanctioned or embargoed, and the importation of the those may be interupted and affect the contract performance and delivery schedule, explanations and commitments on the ability to deliver goods must be provided by the Bidder for Vietsovpetro to consider and evaluate.

Based on the actual situation at that time, Vietsovpetro will have the sole and exclusive right to review and decide to reject the proposals of those goods, or not to continue the evaluation, if in the opinion of Vietsovpetro there is any risk to the contract performance and delivery schedule. In that case, Vietsovpetro at its sole and absolute discretion will have the right to stop contract negotiation, and the next ranked bidder will be invited to negotiate the contract.

Chapter IV. BIDDING FORMS

No.	Bidding Form	Performance	Responsibility for performance	
			Vietsovpetro	Bidder
1	Form 01. Application for bidding form	Submission with Bid Proposal		X
2	Form 02. Power of Attorney			X
3	Form 03. Consortium Agreement			X
4	Form 04A. Guarantee for Bid Participation *(Bid Bond), applicable to independent bidders*			X
5	Form 04B. Guarantee for Bid Participation *(Bid Bond), applicable to consortium bidders*			X
6	Form 04C. Form of Deposit for bid participation	Submission with Bid Proposal		X
7	Form 05. Bidder's information form			X
8	Form 06. Information form for consortium bidders			X
9	Form 07A. Similar contract performed by bidder *(applicable to commercial bidders)*			X
10	Form 07B. Declaration of goods production capacity *(applicable to bidders who are manufacturers)*			X
11	Form 08A. Proposed Key Personnel			X
12	Form 08B. Profession skill curriculum vitae of key personnel			X
13	Form 08C. Professional Experience			X
14	Form 09. Historical Contract Non-Performance for the supply of goods due to fault of the bidder in the past.			X
15	Form 10. Bidder's Financial Status			X
16	Form 11A. Scope of work using sub-contractors			X
17	Form 11B. List of specialized sub-contractors			X
18	Form 11C. List of subsidiaries and member companies delivering work in the bidding package			X
19	Form 12. Summary of bidding prices			X

20	Form 12A. Bidding price schedule of goods *(manufactured, processed outside Vietnam)*			X
21	Form 12B. Bidding price schedule of goods *(domestically manufactured, processed or goods manufactured, processed outside Vietnam but already imported and being offered in Vietnam)*			X
22	Form 13. Bidding price schedule for related services			X
23	Form 14A. Spare parts for replacement (*Optional Scope) for Goods manufactured, processed outside Vietnam)*			X
24	Form 14B. Spare parts for replacement *(Optional Scopre) for Goods domestically manufactured, processed or goods manufactured, processed outside Vietnam, but already imported and being offered in Vietnam*			X
25	Form 15A. Declaration of goods with bid preferential treatments			X
26	Form 15B. Costs of goods manufactured domestically with bid preferential treatments *(in case of declaration for cost of import)*			X
27	Form 15C. Costs of goods manufactured domestically with bid preferential treatments *(in case of declaration for cost of manufacturing in Vietnam)*			X

Form 01

APPLICATION FOR BIDDING[1]

Date: …… *(Date of signing application for bidding)*

Name of bidding package: …… *(Name Package according to Bid Announcement)*

Name of project: …… *(Name project)*

Bid invitation No.: ……*(In case of limited tendering)*

Attention to: _____ *(full name and address of Vietsovpetro)*

After studying the Invitation to Bid and the documents for amendment of the Invitation to Bid [*insert the code of the amendment documents, if any]* that we have received, we *[insert the name of the bidder*] commit to execute [*name of Bidding package*] as required by the Invitation to Bid at the total amount of [*specify in number, in words, and currency of bid proposal*][2] and the summary of bidding price.

In addition, we voluntarily offer a discount with amount: _____ *[specify in number, in words, and currency of bid proposal]*.

The bidding price after application of discount is: _____ *[specify in number, in words, and currency of bid proposal]*[3].

Validity of the Proposal[4]: ____ [*write the validity period from the deadline for submission of bids in accordance with the BDS]* days, from the deadline for submission of bids.

Bid Security: ___ *[State the value in figures, in words and in currency of the bid security]*.

Validity of Bid Security: ____ *[insert validity period from deadline for submission of bids]*.

Time for contract implementation: …… (*Total time to perform all work required in Bidding package*)[5].

We commit:

1. We are not in the process of carrying out dissolution procedures or having its business registration certificate, cooperative registration certificate, cooperative union registration certificate, or cooperative group registration certificate revoked, not in a case of insolvency according to the provisions of the law on bankruptcy (not in the process of ceasing operations or having its business household registration certificate revoked for Bidders that are household businesses).
2. We do not violate regulations on ensuring fair competition in bidding.
3. We have fulfilled the tax liabilities of the most recent fiscal year prior to the deadline for submission of bids.
4. We are not being under suspension from participating in bidding according to the provisions of the law on bidding.
5. We are not being prosecuted for criminal liability (the household owner is not being prosecuted for criminal liability in case the bidder is a business household).
6. We do not proceed any practices of corruption, bribe, collusion, obstruction and other violated provisions of the law on procurement when participating this package.
7. The information declared in the bid is truthful.
8. In case of winning the bid, the Proposal and clarification, supplemental documents of the Proposal constitute the agreement of responsibilities between the two parties until the contract is signed.
9. If our bid is accepted, we shall furnish a performance security as specified in ITB 37.1 of the Bidding document.

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

[1] Application for bidding must be filled with sufficient and accurate information of Vietsovpetro, Bidder, the validity duration of Bid proposal, signed and stamped by legitimate representative of the bidder.

[2] *Bidding prices in Application for bidding must be specific, fixed, indicated by numbers, words and in accordance with total bidding prices mentioned in price list. Bidders are required not to propose different bidding prices or conditions that put Vietsovpetro in disadvantage. In case of multiple parts, the Bidder must write the total bidding price of each parts and total bidding price of all parts that bidder participates.*

[3] *Specify discount for the whole bidding package or for one or many works, items (specify detailed discounted works, items).*

[4] *The validity of Bid proposal shall be counted from the date of Deadline for bid submission to the last date of validity period as stipulated in the Invitation to Bid. From the time of Deadline for bid submission until 24:00 of the date which has the deadline for bid submission is considered as one day.*

[5] *Duration of contract implementation in Application for bidding must be in accordance with Technical proposal and completion schedule specified in the Bid Proposal.*

[6] *If legitimate representative of bidder authorizes the subordinate to sign the application for bidding, the bidder must submit Power of Attorney according to Form 02 of this Chapter; if the company's Charter/regulations or other related documents have the assignment of responsibilities to subordinates to sign application for bidding, the bid proposal must include these documents (no Power of Attorney is required in accordance with Form 02 of this Chapter).*

For consortium, the application for bidding must be signed by the legitimate representative of each member of the consortium, except in Consortium agreement (as in Form 03 of this chapter), the members of Consortium agree to authorize the leader member of the consortium to sign the Application for bidding. If each member of consortium has its own authorization, apply as for independent bidders. If the bidder wins the bidding package, the bidder must present to the Employer the notarized/certified copy of these documents before signing the contract. If the information declared is not accurate, the bidder is considered violation of ITB 4.

Form 02

POWER OF ATTORNEY[1]

Date _____/_____/20_____ at (*name of place*) ……:

I, ... [*insert Name, ID/passport number, position of Legitimate representative of the bidder*], the Legitimate representative of _____ [*insert the bidder name*] at _____ [*insert address*]

To issue this Power of Attorney to:

Mr/Mrs _____

ID/Passport number _____

Position _____

To do, execute and perform the following acts and things during the process of participating the Bidding package _____ (*Name of Bidding Package*) of Project _____ (Name of project) held by Vietsovpetro:

[- Sign the Application for bidding form;

- Sign the Consortium agreement (if any);

- Sign all documents, correspondences to Vietsovpetro during the bidding process, including the written requests to clarify Invitation to Bid, written clarification of Bid proposal, or written requests to withdraw, modify or substitute the bid proposal;

- Negotiate and finalize contract with Vietsovpetro;

- Sign the Bidder's arising claims (if any);

- Sign contract with Vietsovpetro (if awarded the Bidding package)][2];

The Attorney shall lawfully perform acts within the scope of Power of Attorney as the legitimate representative of _____ (*name of bidder*).

The Mandator, [*name of Legitimate representative of the bidder*] will be completely responsible for acts performed by the Attorney, _____ [*name of the Attorney*] in the scope of Power of Attorney.

This Power of Attorney is valid for the period from _____ to _____[3] and will be made in ____ originals, _____ of which will be retained by Mandator; _____ of which will be retained by Attorney and the rest will be retained by Vietsovpetro. All original copies hereof are identical and legally equal.

Attorney	Mandator
(*Signature*)	(*Signature*)
(Name, position and stamp (if any))	*(Name, position and stamp (if any) of Legitimate representative of the bidder)*

Notes:

[1] The original of this Power of Attorney must be submitted to Vietsovpetro together with the application for bidding as stipulated in ITB 20.3. Legitimate representative of bidder gives the power of attorney to the deputy, subordinate, branch's manager, chief of bidder's representative office to perform one or more above mentioned listed acts. The stamp used in case of power of attorney can belong to the bidder or to the entity of Attorney. The Attorney can not subsequently give this authorization to another.

[2] The scope of Power of Attorney may include one or more above mentioned listed acts.

[3] Specify the date the power of attorney come into force and expiry date, in accordance with the bidding process

Form 03

CONSORTIUM AGREEMENT[1]

_____, day ___ month ___ year _____

Bidding package: _____ [*name of bidding package*]

Under the project: _____ [*name of project*]

Based on the Invitation to Bid _____ [*name of bidding package*] date ___ month ___ year _____ [*date recorded on the Invitation to Bid*]

We, the representatives of the parties sign the Consortium Agreement, including:

Names of Consortium members _____ [*name of each consortium member*]

Represented by Mr./Ms.: _____

Position: _____

Address: _____

Tel: _____

Fax: _____

E-mail: _____

Account: _____

Tax code: _____

Power of Attorney No. ____ date ___ month ___ year _____ (*in case of authorization*).

The parties (hereinafter referred to as members) agreed to sign this Consortium Agreement with the following contents:

Article 1. General principles

1. The members voluntarily establish a Consortium to participate in the bidding package _____ [*name of bidding package*] under the project _____ [*name the project*].

2. The members agree the name of the Consortium for any transactions related to this package as: _____ [*name of the Consortium as Agreement*].

3. The members commit that there is not any member to arbitrarily join independently in this bidding package or join consortium with other members to participate in this bidding package. In case of winning the bid, all members of the Consortium shall sign the Contract and there is not any member to have the right to refuse performance of the responsibilities and obligations stipulated in the Agreement. In case a member of the Consortium refuses to fulfill their own responsibilities as agreed or violates the provisions of the signed contract, such member shall be handled as follows:

- Compensating for damages to the parties in the consortium;
- Working with members of the Consortium to compensate for all damages to the Vietsovpetro in accordance with the provisions stipulated in the Contract (corresponding to the proportion of each member specified in Article 2 of this Agreement);
- Other forms of handling ____ *[Specify other forms of handling]*.

Article 2. Assignment of responsibilities

Consortium members agree to assign responsibilities for implementation of the bidding package _____ [*write name of bidding package*] under the project _____ [*write name of project*], for each member as follows:

1. Leader of the consortium:

The parties agree to authorize to _____ [*Write name of a party*] as a leader of the consortium, representing the Consortium in the following part of work[2]:

- Signing the application of bidding;

- Signing all documents, correspondences to Vietsovpetro during the bidding process, including the written requests to clarify Invitation to Bid, written clarification of Bid proposal, or written requests to withdraw, modify or substitute the bid proposal;

- Performing Bid Bond on behalf of Consortium;

- Participating in the process of negotiation and finalization of the Contract;

- Performing Performance Bond for the entire Consortium in case the Consortium wins the bid;
- Signing the Bidder's arising claims (if any);

- Performing all obligations of the Consortium which are not specified in the Table of Responsibility between the Consortium members in item 2 as follows;
- Performing other works except for signing Contract _____ [specify the detail content of other jobs (if any)].

2. The members of the Consortium agree to assign the responsibility of members as following table[3]:

No.	**Name**	**Content of assigned work**	**Respective percentage to total bidding price**	**Amount by percentage to total bidding price**
(1)	*(2)*	*(3)*	*(4)*	*(5)*
1.	Name of the first member (Leader of the Consortium)	- Work 1:_____ - Work 2:_____ - Work 3:_____ ……..	_____%	____ VND/USD
2.	Name of the second member	- Work 1:_____ - Work 2:_____ - Work 3 _____	_____%	____ VND/USD
....	.....	....		
Total		**All work of bidding package**	**100%**	**____ VND/USD**

3. The payment method for the Consortium in case of winning the bid and signing a contract with Vietsovpetro is as follows:

- Vietsovpetro shall make direct payment to each member of the Consortium in accordance with the payment schedule specified in the Contract with the distributed amount corresponding to the proportion of workload agreed by the Consortium members and shown in column (4) of the Table of Responsibility in item 2 of this Consortium Agreement.

- Each member of the Consortium shall issue a Legal Invoice in accordance with the amount of the work performed by such Consortium member pursuant to the progress of each payment specified in the Contract.

Article 3. Validity of Consortium Agreement

1. This Consortium Agreement valid from its signing date.

2. This Consortium Agreement shall be determined to be invalid in the following cases:

- In case the Consortium wins the bid, this Consortium Agreement is an integral part of the contract signed with the Investor …and shall only be terminated when the parties fulfill their responsibilities and obligations and complete the liquidation of the contract;

- The parties agree to terminate;

- The Consortium does not win the bid;

- Cancellation of bidding package under the project as notified by the Vietsovpetro.

Consortium Agreement is made in ____ copies, each party keeps ____ copy, each having equal legal force and authenticity.

LEGAL REPRESENTATIVE OF CONSORTIUM LEADER
[Full name, title, signature and stamp]

LEGAL REPRESENTATIVE OF CONSORTIUM MEMBERS
[Full name of each member, title, signature and stamp]

Notes:

[1] *Depending on the size and nature of bidding package, the content of agreement as in this form can be amended appropriately. If the bidding package is divided into multiple independent parts, the consortium agreement must specify clearly the name, reference number of parts that the consortium participates, specify mutual responsibility and separate responsibility of each member in accordance with respective parts that bidder participates.*

[2] *The scope of authorization may include one or more above mentioned listed acts.*

[3] *Bidder must specify the detail work and the estimated percentage of respective value that each member will implement, mutual responsibility and separate responsibility of each member, including head member of the Consortium.*

Form No. 04A

GUARANTEE FOR BID PARTICIPATION[1]

(BID BOND)

(Applicable to independent bidder)

Beneficiary: **VIETSOVPETRO**

105 LE LOI STR, VUNG TAU WARD, HO CHI MINH CITY,

S.R. VIETNAM

(Hereinafter referred to as the employer)

Issue date of Guarantee: ___ *[insert date of issue]*

BID SECURITY No: ___ *[insert guarantee reference number]*

Guarantor: ___ *[insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that …… *[insert name of the Bidder.]* (hereinafter called "the Applicant") will participate bid for execution of the bidding package ____ *[name of the bidding package]* under project ____ *[name of the project]* according to Bid Invitation Letter No/Bid Announcement No. ____. *[insert No. of Bid Invitation letter/ Bid Announcement No]*.

We [*name of the bank]*, hereinafter referred to as "the bank", pledge Beneficiary to guarantee for the bidder to participate in bidding for this bidding package with an amount of [*specify the value in number, in words, and the currency in use]*.

This guarantee is effective for ……[2].days, from the date……month…..year[3]

At the request of the Applicant, we, as Guarantor, hereby unconditionally and irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures, insert amount in words]* within 05 working days upon our receipt of written notice from Beneficiary stating without requiring proof that bidder violates the regulations as follows:

1. Bidder has withdrawn its Bid proposal after Deadline for bid submission and during the validity period of bid proposal;
2. Bidder violating Law on Bidding leads to cancellation of Bid in accordance with Point d, ITB 32.1;
3. Bidder fails or refuses to conduct contract negotiations within 07 days from the date receipt of notification for negotiation of contracts by Vietsovpetro; or Bidder conducts contract negotiations but withdraws its Bid proposal leading to failed contract negotiations, except for force majeure;
4. Bidder fails or refuses to conduct contract finalization within 20 days from the receipt date of Bid Award Notification from Vietsovpetro or bidder finalized contract but refuses to sign contract, except for force majeure; or the bidder refuses to sign the contract within ten (10) days from the date of completion of the contract, except in cases of force majeure;
5. Bidder does not conduct performance bond in accordance with ITB 37

The said guarantee amount shall be paid by Guarantor forthwith to Beneficiary notwithstanding any contestation or protest by Guarantor or Applicant or by any third party, and irrespective of whether or not there is any dispute between Applicant and Beneficiary in respect of or relating to the Bidding package or in respect of any other matter and irrespective of whether or not such said dispute, if any, has been settled, resolved, litigated, or adjudicated upon otherwise howsoever.

If Applicant is selected as successful bidder: This guarantee will expire immediately if the Applicant signs contract and submit Performance Bond to Beneficiary in accordance with agreement in contract.

If Applicant is not selected as successful bidder: This Guarantee will expire immediately after we receive a copy of the Beneficiary's notification to the Applicant about the result of the Bidder selection; within 30 days after the validity period of bid proposal.

Any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

Legitimate representative of the bank

(Specify name, title, sign and stamp)

Notes:

[1] *Apply if Bid Guarantee is in form of Letter of Guarantee from financial institution or foreign bank's branches which is legally operating in Vietnam.*

[2] *Insert as stipulated in BDS 18.2.*

[3] *Insert Deadline for bid submission as stipulated in BDS 19.1.*

Form 04B

GUARANTEE FOR BID PARTICIPATION[1]

(BID BOND)

(Applicable to consortium bidders)

Beneficiary: VIETSOVPETRO

105 LE LOI STR, VUNG TAU WARD, HO CHI MINH CITY, S.R. VIETNAM

(Hereinafter referred to as the employer)

Date: _____ *[Insert date of issue]*

BID GUARANTEE No.: _____ *[Insert guarantee reference number]*

Guarantor: _____ *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that …… *[insert name of the Bidder]*[2] (hereinafter called "the Applicant") will participate bid for execution of the bidding package _____ *[name of the bidding package]* under project *[name of the project]* according to Bid Invitation letter No. ___ *[name No. of Bid Invitation letter]*.

We [*name of the bank]*, hereinafter referred to as "the bank", pledge Beneficiary to guarantee for the bidder to participate in bidding for this bidding package with an amount of [*specify the value in number, in words, and the currency in use]*.

This guarantee is effective for ……[3].days, from the date …… month … year[4]

At the request of the Applicant, we as Guarantor, hereby unconditionally and irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ *[insert amount in figures, insert amount in words]* within 05 working days upon our receipt of written notice from Beneficiary stating without requiring proof that bidder violates the regulations as follows:

1) Bidder has withdrawn its Bid proposal after bid submission deadline and during the validity period of bid proposal;
2) Bidder violating Law on Bidding leads to cancellation of Bid in accordance with Point d, ITB 32.1;
3) Bidder fails or refuses to conduct contract negotiations within 07 days from the date receipt of notification for negotiation of contracts by Vietsovpetro; or Bidder conducts contract negotiations but withdraws its Bid proposal leading to failed contract negotiations, except for force majeure;
4) Bidder fails or refuses to conduct contract finalization within 20 days from the receipt date of Bid Award Notification from Vietsovpetro or bidder finalized contract but refuses to sign contract, except for force majeure; or the bidder refuses to sign the contract within ten (10) days from the date of completion of the contract, except in cases of force majeure;
5) Bidder does not conduct performance bond in accordance with ITB 37.

If any member of consortium ___ *[insert name of consortium]* violates the Law, that leads to the Bid Bond not to be returned as specified in Point b, ITB 18.5 of Invitation to Bid, then the Bid Bond of all consortium members shall not be returned.

The said guarantee amount shall be paid by Guarantor forthwith to Beneficiary notwithstanding any contestation or protest by Guarantor or Applicant or by any third party, and irrespective of whether or not there is any dispute between Applicant and Beneficiary in respect of or relating to the Bidding package or in respect of any other matter and irrespective of whether or not such said dispute, if any, has been settled, resolved, litigated, or adjudicated upon otherwise howsoever.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary upon the instruction of the Applicant; or (b) if the Applicant is not the successful Bidder, upon the earlier of our receipt of a copy of the Beneficiary's notification to the Applicant of the name of the successful bidder within 30 days after the expiration of Bid Proposal.

Any demand for payment under this Bid Bond must be received by us at the office on or before that date.

Legitimate representative of the bank

(Specify name, title, sign and stamp)

Notes:

[1] *Applying in case the bid security (bank security) is a letter of guarantee of credit institutions or foreign banks' branches which are established under Vietnamese law. The bank is recommended to use this Bid security (bid bond) form, in case of applying for other different forms that violates one of following regulations: bid security has lower value than required, the validity period of bid security is shorter than regulation prescribed in ITB 18.2, invalid name of Beneficiary, not original and without valid signature or with the disadvantageous conditions to Vietsovpetro, bid security shall be invalid.*

[2] *Bidders'name can be one of following cases:*

- Name of consortium participates in bid, for instance consortium bidder A + B participates in bid, name of bidders shall be written "Consortium bidder A + B";

- Name of the member undertakes implementation of bid security for the entire consortium or for other partners in consortium, for instance consortium A + B + C participates in bid, case of the consortium agreement appointed bidder A performing bid security for whole consortium, the name of bidder shall be "Bidder A (on behalf of consortium bidder A + B + C), in case the consortium agreement appointed bidder B performing bid security for bidder B and C, then name of bidder shall be written as "Bidder B (for the behalf of bidder B and C)";

- Name of consortium's member perform separate the bid security;

[3] *Insert as prescribed in BDS 18.2.*

[4] *Insert date deadline for bid submission in accordance with BDS 19.1.*

Form 04C

FORM OF DEPOSIT FOR BID PARTICIPATION

Date: …… (*Date of signing application for bidding*)

Name of bidding package: …… (*Name Package according to Bid Announcement*)

Name of project: …… (*Name project*)

Bid invitation No.: …… (*In case of limited tendering*)

Attention to: _____ (*full name and address of employer*)

With reference to the above mentioned bidding package, we *[insert the name of the bidder*] hereby would like to confirm as follows:

1. In lieu of the submission of Bid Bond issued by a bank, *[insert the name of the bidder*] shall implement bid guarantee for [*name of bidding package*] in the form of transfer to Vietsovpetro's bank account a deposit amount equivalent to the Bid Bond amount specified in the ITB, i.e [*specify in number, in words, and currency of deposit*]
2. Bidder confirm that Bidder shall comply all conditions as stipulated in Bid bond form of ITB. (*In the event that Bidder confirms not to comply all conditions in the Bid bond's form in ITB, Bidder's bidding proposal shall not be evaluated)*
3. After [*insert the required bid bond validity period*] days from the bid closing date ……, Vietsovpetro shall transfer deposit amount above to *[insert the name of the bidder*]'s account. *[insert the name of the bidder*] shall be responsible for all the bank fees in connection with this transfer.
4. Vietsovpetro's bank account:

   Beneficiary's name: Vietsovpetro

   Beneficiary's Bank: Joint Stock Commercial Bank for Foreign Trade of Vietnam – Vung Tau Branch

   Account Number: 008.100.00000.11 (VND)

   0081370000029 (USD)

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

Along with this letter, bidder must enclose the Payment order or appropriate document evidencing that bidder executed the payment to Vietsovpetro account

Form 05

BIDDER'S INFORMATION FORM[1]

Date: _____

NCB No. and title: _____

Bidder's name: ____ *[specify Bidder's name]*

In case of consortium, insert name of each partner in consortium

Place of business registration: _____ *(indicate province/city of Constitution)*

Year of business founding / incorporation __ *[year of company founding]*

Bidder's legal address *(in country of registration)*

Bidder's legitimate representative information:

Name:

Address:

Telephone/fax numbers:

E-mail address:

a. Attached are copies of original documents: Articles of Incorporation, Business Registration, Decision of Establishment or equivalent documents of constitution or association issued by authority of country where Bidder is operating.

b. Included the organizational chart.

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

[1] *In case of consortium Bidder, each consortium member must declare this form.*

Form 06

INFORMATION FORM FOR CONSORTIUM BIDDER's MEMBERS[1]

Date: _____

Bid package No. and titles: ____

Consortium Bidder's name:

Consortium member's name:

Consortium member's country of registration:

Consortium member's year of foundation:

Consortium member's legal address in country of registration:

Consortium member's legitimate representative information:

Name:

Address:

Telephone/fax numbers:

E-mail address:

1. Attached are copies of original documents of: Business Registration of Company, Certificate of Investment, Decision of Establishment, etc.
2. Included is the organizational chart.

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

[1] *In case of consortium Bidder, each consortium member must declare this form.*

Form 07A

SIMILAR CONTRACT PERFORMED BY BIDDER[1]

(Applicable to commercial bidders)

Date __ month __ year __

Bidder's name: ____ *[full name of bidder]*

Descriptions of each contract should contain following information:

Name and contract number	*[Full contract name and number]*		
Contract signing date	*[Date, month, year]*		
Completion date	*[Date, month, year]*		
Contract Value(3)	*[Total signed contract value and the original currency]*		Equivalent to ____ VND
If the bidder is a consortium member, provide a summary of the work undertaken and its value	*[Summary of the work]*	*[Value of the work undertaken (amount in original currency and %]*	Equivalent to ___ VND
Project or Procurement name	*[Full name of the project/procurement estimate whose contract is being declared]*		
Name of Investor:	*[Full name of the Investor in the contract being declared]*		
Address: Telephone/fax: Email:	*[Full current address of the Investor]* *[Phone number, fax number including country code, area code]* *[Email address]*		
Describe similarities in accordance with Section 2.1 of Chapter III[2]			
1. Type of goods	*[Correct type]*		
2. Fulfilled contract value[3]	*[Actual contract value fulfilled based on acceptance value, contract liquidation]*		
3. Scale	*[Scale according to the contract]*		
4. Other characteristics	*[Other characteristics, if needed]*		

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

The contractor shall carefully study the Invitation to Bid and proposes similar contracts to ensure the requirements of the Invitation to Bid are complied.

[1] In case of consortium, each member must declare according to this Form.

[2] Bidders only declare the similar content with the requirements of the bidding package.

[3] In case the contract value is not in VND, it shall be converted to VND at the exchange rate specified in Section 2 of Chapter III as a basis for evaluation.

Form 07B

(Not applicable)

DECLARATION OF GOODS PRODUCTION CAPACITY

(Applicable to bidders who are manufacturers)

The number of factories and production facilities (collectively referred to as factories): ____ *[Number of factories]*

For each factory, the bidder declares the following information:

Factory Name:	*[Factory name]*
Address:	*[Factory address]*
Total investment:	*[Total investment]*
Design capacity:	*[Design capacity]*
Effective capacity:	*[Effective capacity of last year]*
Production standard:	*[Current production standard, if applicable]*
Number of employees:	*[Total number of employees working at the factory]*

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

For a consortium, each member of the consortium shall declare using this Form.

Form 07B

(Not applicable)

DECLARATION OF GOODS PRODUCTION CAPACITY

(Applicable to bidders who are manufacturers)

The number of factories and production facilities (collectively referred to as factories): ____ *[Number of factories]*

For each factory, the bidder declares the following information:

Factory Name:	*[Factory name]*
Address:	*[Factory address]*
Total investment:	*[Total investment]*
Design capacity:	*[Design capacity]*
Effective capacity:	*[Effective capacity of last year]*
Production standard:	*[Current production standard, if applicable]*
Number of employees:	*[Total number of employees working at the factory]*

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

For a consortium, each member of the consortium shall declare using this Form.

Form 08A
(Not applicable)

PROPOSED KEY PERSONEL

The Bidder shall declare its key personnel as required in Section 2 of Chapter III and shall demonstrate its capability to mobilize these people to deliver the bidding package. Key personnel may be on the contractor's payroll or mobilized by the bidder. In case the key personnel declared by the bidder in its bid proposal does not meet the requirements or the contractor cannot demonstrate mobilization capability (including cases where said personnel has been mobilized for another contract with overlapping execution timeline), Vietsovpetro shall allow the bider to make addition or replacement. The bidder is allowed to make addition or replacement once for each position for a suitable period of time not less than 03 working days. In case the bidder does not have a replacement comlying the Invitation to Bid's requiments, the contractor shall be disqualified. In all cases, if the bidder declares personnel in a dishonest manner, making replacement shall not be allowed, the bid proposal shall be disqualified and the bidder shall be considered fraudulent according to the provisions of legislation on bidding or other relevant legislation and penalized accordingly.

1.	Job position *[detailed job position in the bidding package]*
	Name *[name of key personnel]*
2.	Job position *[detailed job position in the bidding package]*
	Name *[name of key personnel]*
3.	Job position
	Name
4.	Job position
	Name
5.	Job position
	Name
—	Job position
	Name

Legal representative of bidder
(Name, position, signature and stamp)

Form 08B
(Not applicable)

PROFESSIONAL CURRICULUM VITAE OF KEY PERSONNEL

The Bidder must supply all required information below and attach certified copies of original related documents.

Position		
Personnel Information	Name	Date of Birth
	Professional Qualification	
Current Job	Employer's name	
	Employer's address	
	Telephone No:	Contact person (Deputy / HR officer)
	Fax	E-mail
	Title	Number of years of experience with the present employer

Legal representative of bidder
(Name, position, signature and stamp)

Form 08C
(Not applicable)

PROFESSIONAL EXPERIENCE

Summarize professional experience in reverse chronological order. Specify professional and management experience related to the bidding package

From	To	Company/Project/Position/Related professional and management experience

Legal representative of bidder
(Name, position, signature and stamp)

Form 09

HISTORICAL CONTRACT NON-PERFORMANCE FOR THE SUPPLY OF GOODS NOT FULFILLED DUE TO FAULT OF THE CONTRACTOR IN THE PAST[1]

Name of contractor: _____
Date: _____
Name of member of the consortium contractor (if any): _____

Contracts for the supply of goods not fulfilled due to fault of the contractor in the past in accordance with Clause 2.1 Section 2 Chapter III			
☐ No contract Supply of goods not fulfilled through bidder's fault as of January 01, 2022 in accordance with Criterion 1 in the Evaluation Standards for Competence and Experience under Clause 2.1, Section 2, Chapter III. ☐ There is a contract Supply of goods not fulfilled through bidder's fault as of January 01, 2022 in accordance with the Evaluation Standards for Competence and Experience under Clause 2.1 Section 2 of Chapter III.			
Year	**Scope of work not fulfilled**	**Contract description**	**Total contract value** (value, currency, exchange rate, equivalent value in VND)
		Contract Description: _____ Name of Investor: _____ Address: _____ Causes of non-fulfillment of the contract: _____	

Legal representative of bidder
(Name, position, signature and stamp)

Notes:

[1] The Bidder must accurately and truthfully declare contracts for the supply of goods that were not fulfilled through fault of the Bidder in the past. In case Vietsovpetro discovers that the bidder has a contract for the supply of goods that is not fulfilled due to fault of the bidder in the past which was not declared, the bidder is deemed to have committed fraud and its bid proposal shall be disqualified. For a consortium bidder, each member of the consortium must declare using this form.

Form 10

FINANCIAL PERFORMANCE (1)
BIDDER'S HISTORICAL FINANCIAL PERFORMANCE[1]

Bidder's name: _____

Date: _____

Name of Consortium member (if any): _____

	Financial Data for Previous 03 Years[2] [VND/USD]: 2022 ÷ 2024 or 2023÷2025		
	Year 01	**Year 02**	**Year 03**
Information from balance sheet			
Total assets			
Total liabilities			
Net worth			
Current assets			
Current liabilities			
Working capital			
Information from Income Statement			
Total turnover			
Average annual turnover from business activities[3]			
Profits before taxes			
Profits after taxes			

Attached are copies of financial statements (balance sheets, including all related notes and income statements) for the last **03 years**[4], as indicated above, complying with the following conditions:

* All such documents reflect the financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries or affiliates.

* Historic financial statements must be audited in accordance with the applicable laws and regulations.

* Historic financial statements must be complete, including all notes to the financial statements.

* Historic financial statements must correspond to accounting periods already completed and audited. Attached with notarized copies one of following original documents:

- Tax finalization inspection report.
- Declaration form of self tax finalization report (VAT and CIT) confirmed by the Tax department/District tax department at the time of submitting the declaration form.
- Proper documentation in which the bidder has declared the electronic tax finalization.
- Confirmation in writing from tax department/ district tax department (confirmed the cumulative payment for full year) about complying paying tax duty.
- Audited report
- Other documents

Legal representative of bidder
(Name, position, signature and stamp)

Notes:

[1] *In case of Consortium Bidder then each member of Consortium Bidder must declare according to this Form.*

[2, 4] *The period stated here should be the same as the period indicated under Criterion 2.1 of Chapter III (Bid Evaluation Criteria).*

In case Bidder has less than the number of years of establishment as required in ITB, the average annual turnover is calculated on the number of years that Bidder has been established.

[3] *To determine average annual turnover from business activities, the Bidder will divide total turnover from business activities in years to number of years based on supplied information.*

Form 11A

(Not applicable)

SCOPE OF WORK USING SUB-CONTRACTORS[1]

No.	Name of sub-contractor[2]	Scope of work[3]	Amount of work[4]	Value estiamated[5]	Contract or agreement document with sub-contractor[6]
1.					
2.					
3.					
4.					
...					

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

[1] Applying this form in case of using sub-contractors.

[2] Bidder specifies the sub-contractor's names. In case at the moment at participating in bid, the sub contractors have not yet been identified, bidders do not have to provide information in this column, but it should be declared in the column "Scope of work". After that, if bidder is being successful, since the sub-contractors mobilized for implementing the work have to be approved by the Vietsovpetro.

[3] Bidder specifies name and work description for the sub-contractor.

[4] Bidder specifies the scope of work for the sub-contractor.

[5] Bidder specifies the value of work percentage which the sub-contractor undertakes compared to the bidding price.

[6] Bidder specifies the contracts number or agreement documents, the bidder should submit the original or notarized copy of these documents.

Form 11B

(Not applicable)

LIST OF SPECIALIZED SUB-CONTRACTORS[1]

Bidder must provide the proof evidence which meets requirements prescribed at Point 2.3 Chapter III, Bid Proposal Evaluation criteria.

No.	Name of specialized subcontractor[2]	Scope of work[3]	Amount of work[4]	Percentage value estimated[5]	Contract or agreement document with specialized sub-contractor[6]
1.					
2.					
3.					
4.					
...					

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

[1] Applying this form in case of using sub-contractor.

[2] Bidder specifies the specialized sub-contractor's name.

[3] Vietsovpetro specifies names and work description that are implemented by the specialized sub-contractor.

[4] Bidder specifies the scope of work assigned to the specialized sub-contractor.

[5] Bidder specifies the value of work in percentage which the specialized sub-contractor undertakes to perform, compared to the bidding price.

[6] Bidder specifies the contract numbers or agreement documents, the bidder should submit the original or notarized copy of these documents.

Form 11C

LIST OF SUBSIDIARIES AND MEMBER COMPANIES DELIVERING WORK IN THE BID PACKAGE[1]

No.	Name of subsidiary/ member company[2]	Scope of work[3]	Value (% out of bid value)[4]	Notes
1.				
2.				
...				

Legal representative of bidder
(Name, position, signature and stamp)

Notes:

[1] In the case the contractor participating in bidding, being a parent company (for example, the Corporation), mobilizes its subsidiary or member company to deliver part of the work in the bid package, it must be specifically declared in this table. The evaluation of experience and competence of the bidder is based on the value and volume of work delivered by the parent company, subsidiary and member company in the bidding package. In case the bidder participating in bidding is not the parent company, this Form shall not apply.

[2] Specify the name of the subsidiary or member company.

[3] Specify the work delivered by the subsidiary or member company.

[4] Specify how many % the value of work delivered by the subsidiary or member company accounts for in the total bid proposal value.

Form 12

SUMMARY OF BID PRICE

No.	Content	Bid price
1.	Goods manufactured, processed outside Vietnam	(M_1)
2.	Goods domestically manufactured, processed or goods manufactured, processed outside Vietnam, but already imported and being offered in Vietnam	(M_2)
3.	Related services: Not applicable	(I)
	Total bidding price **(Transfer to Application for Biding form)**	**(M_1) + (M_2) +(I)**

Legal representative of bidder
(Name, position, signature and stamp)

Form 12A

BIDDING PRICE SCHEDULE OF GOODS MANUFACTURED, PROCESSED OUTSIDE VIETNAM

(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
Line item	**Description of goods**	**Part number/ model of goods**	**MNF**	**CO**	**Unit**	**Required quantity**	**Unit price**	**Extended Price per line item (Col. 6x7)**
I.	Group 1 (Item 1÷ Item 7)							
1	…							
2	…..							
II.	Group 2 (Items 8÷ item 33)							
8	…							
9	…							
…	…							
III	Group 3 (Items 34÷ item 44)							
34	.....							
35	.....							
.....	.....							
IV	Group 4 (Items 45÷ item 54)							
45	.....							
46	.....							
.....	.....							
V	Group 5 (Items 55÷ item 152)							
55	.....							
56	.....							
… ….	.....							
	Total bidding price of goods including taxes, fees, charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1 ***(Transfer to the Summary of Bidding Price Form)*** ***<u>Note:</u>*** ***- Request to describe all the works and the Goods following requirements in Scope of supply indicated in Technical requirement (attached)*** ***- Request to breakdown value for each line item and for all items in Scope of supply***							**M1**

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

Col. (1), (2), (6) and (7): In accordance with List of goods stipulated in Attachment 01: Scope of Supply in Part 4 – Appendices.

The bidder offers in Col. (3), (4), (5), (8) and (9).

For Vietnamese Bidders: The Bidders are requested to offer price on delivery to **Vietsovpetro warehouse, Rach Dua Ward, Ho Chi Minh City, S.R. Vietnam**, including taxes, fees, charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1.

For Foreign Bidders: The Bidders are requested to offer price on delivery term: CFR Vietsovpetro Port, Ho Chi Minh City, S.R. Vietnam, Incoterm 2020. Bidders must clearly state in the offered price, as followings:

- Bidder intends to use inland transportation to delivery the goods from any discharge port in Vietnam to Vietsovpetro port: Yes/No.

- If Bidder declares its attention to use inland transportation to deliver the goods from discharge port in Vietnam to Vietsovpetro port, Vietsovpetro will calculate and add FCWT into the offered price for comparison and evaluation.

- If Bidder declares NOT to use inland transportation to transport the goods to Vietsovpetro port, or makes no statement in this regard, Vietsovpetro will not calculate and add FCWT into the offered price for comparison and evaluation. Bidder shall acknowledge that, if any inland transportation is used during performance of Contract (if awarded to Bidder), Bidder will be subject to FCWT according to the applicable regulations of S.R. Vietnam. FCWT incurred will be deducted from payment by Vietsovpetro.

When participating in bidding, all bidders have to take responsibility of researching, calculating and offering sufficient tax, fees, charges (if any) in response to tax rates, expenses, fees at the time 28 days prior to the stipulated deadline for bid submission.

In case the bidder announces the bidding price not including taxes, fees, charges then the Bid Proposal of the bidder will be rejected.

Form 12B

BIDDING PRICE SCHEDULE OF GOODS DOMESTICALLY MANUFACTURED, PROCESSED OR GOODS MANUFACTURED, PROCESSED OUTSIDE VIETNAM, BUT ALREADY IMPORTED AND BEING OFFERED IN VIETNAM

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Line item	**Description of goods**	**Unit**	**Required quantity**	**Manufacturer, Country of origin, Part number, model of goods**	**Unit price**	**Extended Price per line item (Col. 4x6)**	**Taxes, fees, charges (if any)**
I.	Group 1 (Item 1÷ item 7)						
1.	…					A1	T1
2	.....					A2	T2
.....	.....						
II.	Group 2 (Items 8÷Item 33)						
8	…					A8	T8
9	…					A9	T9
…	…						T…
III	Group 3 (Items 24÷Item 44)						
24	.....					A24	T24
25	.....					A25	T25
.....	.....						
IV	Group 4 (Items 45÷Item 54)						
45	.....					A45	T45
46	.....					A46	T46
.....	.....						
V	Group 5 (Items 55÷Item 152)						
55	.....					A55	T55
56	.....					A56	T56
…..	.....						
Total bidding price of goods not including taxes, fees, charges (if any)						**A=A1+A2 +...+A152**	
Total value of taxes, fees, charges (if any)							**T=T1+T2 +...+T152**
Total bidding price of goods including taxes, fees, charges (if any) (Transfer to the Summary of Bidding Price Form)						**M_2=A+T**	

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

Detailed T1, T2 and Tn (type, calculation).

Col. (1), (2), (3) and (4): In accordance with List of Goods as stipulated in Attachment 01: Scope of Supply in Part 4 – Appendices.

The bidder offers at Col. (5), (6), (7) and (8). The bidder offers unit price at col (6), including necessary expenses to supply goods in response to requirements of Vietsovpetro, not including tax, fees, charges (if any) offered at col (8).

Col. (8) includes all tax, fees, charges (if any). When participating in bidding, bidders have to take responsibility of researching, calculating and offering sufficient tax, fees, charges (if any) in response to tax rates, expenses, fees at the time 28 days prior to the stipulated deadline for bid submission. In case the bidder announces the bidding price not including taxes, fees, charges then the Bid Proposal of the bidder will be rejected.

Form 13

(Not applicable)

BIDDING PRICE SCHEDULE OF RELATED SERVICES

(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
No.	**Description of Services**	**Required quantity**	**Unit**	**Place where services will be performed**	**Final completion date**	**Unit price**	**Extended price per Service (Col. 3x7)**
I.	**Onshore technical service**						
	……						
II.	**Offshore technical service**						
	……						
III.	**Training (if any)**						
	……						
IV.	**Other services (if any)**						
1.							
2.							
Total bidding price of related services not including taxes, fees, charges							
Taxes, fees, charges							
Total bidding price of related services including taxes, fees, charges (if any) (Transfer to the Summary of Bidding Price Form)							**(I)**

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

Col. (1), (2), (3), (4), (5) and (6): In accordance with Table of Related Services stipulated in Part 2 – The scope of supply's requirement.

The bidder offers Col. (7) and (8).

Foreign bidders have to clearly state that whether the offered price includes Foreign Contractor Withholding Tax (FCWT). If the offered price has not included, Vietsovpetro will calculate and add FCWT into the offered price for comparison and evaluation.

Form 14A
(Not applicable)

BIDDING PRICE OF GOODS (OPTIONAL SCOPE)
FOR GOODS MANUFACTURED, PROCESSED
OUTSIDE VIETNAM

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Line item	**Description of goods**	**Part number/ model of goods**	**MNF**	**CO**	**Unit**	**Required quantity**	**Unit price**	**Extended Price per line item (Col. 7x8)**
	Priced list of recommended spare parts for 02 years' operation *(i.e.: as stated in Technical Requirement)* *Detailed list of spare parts and prices shall be provided:*							
1.	……							
2.	……							
…	……							
n	……							
*	***Total bidding price of goods including taxes, fees, charges (if any) arisen inside Vietnam and shall be taken into consideration exemption of import tax and VAT for imported goods from using List of exempted goods available for Vietsovpetro in Block 09-1*** ***(Transfer to the Summary of Bidding Price Form)*** ***Note:*** ***- Request to describe all the works and the Goods following requirements in Scope of supply indicated in Technical requirement (attached)*** ***- Request to breakdown value for each line item and for all items in Scope of supply***							**M1**

Legal representative of bidder
(Name, position, signature and stamp)

Notes:
Refer to Notes in Form 12A.

Form 14B

(Not applicable)

BIDDING PRICE OF GOODS (OPTIONAL SCOPE)

FOR GOODS DOMESTICALLY MANUFACTURED, PROCESSED OR GOODS MANUFACTURED, PROCESSED OUTSIDE VIETNAM, BUT ALREADY IMPORTED AND BEING OFFERED IN VIETNAM

(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
Line item	**Description of goods**	**Unit**	**Required quantity**	**Country of origin, Part number, model of goods**	**Unit price**	**Extended Price per line item (Col. 4x6)**	**Taxes, fees, charges (if any)**
1.	Goods 1					A1	T1
2.	Goods 2					A2	T2
…	…						
n	Goods n					An	Tn
Total bidding price of goods not including taxes, fees, charges (if any)						**A=A1+A2+ ...+An**	
Total value of taxes, fees, charges (if any)							**T=T1+T2+ ...+Tn**
Total bidding price of goods including taxes, fees, charges (if any) (Transfer to the Summary of Bidding Price Form)						**M_2=A+T**	

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

Refer to Notes in Form 12B.

Form 15A

DECLARATION OF PREFERENTIAL GOODS[1]

No.	Item	Origin *[name of country, origin, marks and numbers, model/PN, manufacturer]*	Goods with domestic production cost of 25% or higher		Domestic cost declaration	
			Yes	No	Form 15B	Form 15C
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1.	Goods 1		□	□	□	□
2.	Goods 2		□	□	□	□
…	…					
n	Goods n		□	□	□	□

Legal representative of bidder
(Name, position, signature and stamp)

Notes:

(1) and (2): The bidder fills consistently with Form 15B or Form 15C.

(3) and (4): The bidder checks the correct box for each goods.

(5) and (6): For goods with a domestic production cost of 25% or higher, the contractor either declares the cost of domestic production using Form 15B (Declaration of cost of import) or Form 15C (Declaration of production cost in Vietnam).

Form 15B

DECLARATION OF DOMESTIC PRODUCTION COSTS FOR PREFERENTIAL GOODS

(In the case of declaring cost of import)

No.	Item	Offered price in Bid proposal	Taxes	Cost of import	Cost of domestic production	Cost of domestic production (%)
		(I)	**(II)**	**(III)**	**G* = (I) – (II) – (III)**	**D(%)=G*/G where đó G = (I) – (II)**
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1.	Goods 1					
2.	Goods 2					
…	…					
n	Goods n					

Legal representative of bidder
(Name, position, signature and stamp)

Notes:

(1) The bidder fills in the checked goods in column (3) and (5) of Form 15A.

(2) The bidder fills in the unit price offered (including all taxes, fees, charges (if any)).

(3) and (4) The bidder self-declares.

(5) and (6) The bidder fills.

Form 15C

DECLARATION OF DOMESTIC PRODUCTION COST FOR PREFERENTIAL[(1)]

(In the case of declaring production costs in Vietnam)

No.	Item	Offered price in Bid proposal	Taxes[(2)]	Cost of domestic production	Cost of domestic production (%)
		(I)	**(II)**	**G***	**D(%)=G*/G where G = (I) – (II)**
	(1)	*(2)*	*(3)*	*(4)*	*(5)*
1.	Goods 1				
2.	Goods 2				
…	…				
n	Goods n				

Legal representative of bidder

(Name, position, signature and stamp)

Notes:

(1) The bidder fills in the checked goods in column (3) and (6) of Form 15A.

(2) The bidder fills in the unit price offered (including all taxes, fees, charges (if any)).

(3) and (4) The bidder self-declares.

(5) The bidder fills.

Part 2. TECHNICAL REQUIREMENTS

Chapter V. Technical Requirements

(Refers to attachment in Part 4 – Appendices)

Part 3. CONDITIONS OF CONTRACT AND CONTRACT FORMS

Form 16. Letter of Proposal Acceptance and Contract Award

Form 17. Contract form

Form 16

LETTER OF PROPOSAL ACCEPTANCE AND CONTRACT AWARD

_____, day ____ month ___ year ____

To: _____ *[name and address of awarded Contractor, hereinafter referred to as "Contractor"]*

Subj: Notification of Proposal Acceptance and Contract Award

Dear Sir/Madam,

In accordance with the Letter of Invitation to Tender (ITB No. ……) regarding tender process, we would like to notify that you are the tender winner for the items listed hereunder (scope of supply) based on the following basic terms and conditions:

- Scope of Supply: ……
- Total price: …… – CFR Vietsovpetro port, Ho Chi Minh City, S.R. Vietnam
- Delivery time: …… days from the date of Letter of Award / contract signing
- Payment condition: TT / LC

As soon as possible but not later than 07 working days from the date signing this Purchase Order, you should open the Performance Bond which is issued by banks / branches legally operated in Vietnam with amount 08% (eight percent) of Purchase Order and send to Vietsovpetro. The validity of the Guarantee is equal to the delivery time plus 60 calendar days.

Please acknowledge the receipt of this letter and send us your acceptance / comments as soon as possible but not later than 02 working days from the date of this letter.

Looking forwards to receiving your favorable reply.

LEGAL REPRESENTATIVE OF THE EMPLOYER

[Full name, title, signature and stamp]

Form 17

CONTRACT FORM

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Definitions.

As used in this Contract:

1.1 Company means Vietsovpetro, as specified in the Purchase Order;

1.2 "Purchase Order" means the documented Agreement between the Company and the Contractor, including all attached appendices and documents; herein called PO.

1.3 "Contractor" means the bidder who has been awarded PO by the Company (either Independent or Consortium Contractor) and is specified in the PO;

1.4 "Subcontractor" means a person, or entity, Contractor whose name is proposed in the list of subcontractors by the Contractor in the Proposal or who carries out any part of work proposed by the Contractor in the Bid Proposal. Subcontractor enters into the PO with the Contractor to perform part of work, as specified in the Proposal and accepted by the Company;

1.5 "PO Documents" means the documents listed in the PO, including any amendments, addendums thereto;

1.6 "PO Price" means the total price as specified in the PO for supplying Goods (and Related Services). PO Price include all taxes, fees and charges (if any).

1.7 "Date" means calendar day; "Year" means 365 days;

1.8 "Goods" means all of the machinery, equipment, commodities, spare parts, raw materials, consumer goods, medical material used at medical facilities;

1.9 "Related Services" means the services such as warranty, maintenance, overhaul, repair, supply of spare parts and/or other after-sale services including training, technology transfer;

1.10 "Completion" means the fulfillment of the Related Services by the Contractor in accordance with the terms and conditions set forth in the Contract;

1.11 "The Project Site" means the place named in the PO.

2. Order of precedence

The documents forming the Contract is arranged in the following order of precedence:

2.1 PO, including all Appendix;

2.2 Letter of Proposal Acceptance and Contract Award;

2.3 Bidding Result Approval;

2.4 General Conditions of Contract (GCC);

2.5 Proposal and Clarifications (if any);

2.6 Invitation for Bid and Bulletins (if any);

2.7 Any other document listed in the PO.

3. Governing law and Language

The Contract shall be governed by and interpreted in accordance with the laws of the Socialist Republic of Vietnam. The Contract shall be written in English.

4. Notice

4.1 Any notice from one Party to another relating to the Contract shall be conducted in writing, to addresses specified in the PO.

4.2 A notice from one Party shall be considered as effective from the date the other Party receives it or from the effective date as specified in the notice, whichever comes later.

5. Performance Bond

5.1 Performance Bond shall be submitted to the Company no later than the date specified in Letter of Proposal Acceptance and Contract Award. Performance Bond shall be issued in one of following forms:

a) Submit a performance bond issued by a legally domestic bank or foreign bank's branch established under Vietnamese law;

b) Submit the certificate of guarantee insurance from a domestic non-life insurance enterprise or a branch of a foreign non-life insurance enterprise established under Vietnamese law.

The Performance Bond specified in Point a and b of this Clause is an unconditional guarantee (paid upon request), according to the form specified in the PO.

5.2 Validity and formality is specified in the PO.

5.3. The Performance Bond will be paid to the Company to compensate for any loss arising from the Contractor's failure to fulfill their contractual obligations.

5.4 The return of Performance Bond is specified in the PO.

6. Subcontractor

6.1 The Contractor is allowed to sign contracts with Subcontractors in the List of proposed subcontractors specified in the Contract to perform part of work stated in the Proposal. The use of subcontractors shall not relieve the Contractor from any of his obligations. The Contractor shall take full responsibilities for work load, quality, progress and other responsibilities for work performed by Subcontractors.

The changing, supplement of subcontractors onto List of subcontractors shall be only conducted with reasonable grounds and Company's approval.

6.2 Contractor is not allowed to use subcontractors for other work which are not stated in the Bid Proposal.

6.3 Other requirements for subcontractor are specified in the PO.

7. Settlement of Disputes

7.1 The Company and the Contractor shall make every effort to resolve amicably by negotiation any disagreement or dispute arising between them.

7.2 If the dispute has not been resolved by such mutual negotiation within the specified duration in the PO from the date on which dispute arose, then either party may ask to commence arbitration under the dispute resolution mechanism, as specified in the PO.

8. Scope of Supply

Goods (and Related Services) shall be supplied as specified in Appendix No. 01 – Scope of Supply, which is considered as an integral part of this PO, including types of goods (and Related Services) supplied by the Contractor and their unit prices.

9. Delivery Schedule of Goods, Completion Date of Related Services (if any) and Documentations

Delivery Schedule of Goods, Completion Date of Related Services (if any) must be performed according to the provisions of the PO. The Contractor must provide invoice and other documents as described in the PO.

10. Contractor's Responsibilities

Contractor shall supply all Goods (and Related Services) (if any) in accordance with the Scope of Supply in accordance with GCC Clause 9, and follow the Delivery Schedule of Goods (and Completion Date of Related Services), as per GCC Clause 10.

11. Type of Contract and Contract Price

Type of contract: is specified in the PO.

Contract Price specified in the PO covers all expenses for complete supplying Goods (and Related Services) stated in the Price schedule of the PO.

12. Tax Adjustment

12.1 The Contractor shall be responsible for all costs of taxes, fees and charges incurred until the goods are delivered to the Company.

12.2 In case the Contractor is eligible for tax, fee and charge exemption or reduction, the Company shall use its best efforts to enable the Contractor to apply tax, fee and charge exemption or reduction policies.

12.3 Tax adjustment are carried out in accordance with the PO.

13. Advance Payment

13.1 The Company shall make advance payment to the Contractor with an amount stated in the Contract upon provision of Advance Payment Guarantee by the Contractor, with the value equal to the advance payment. The Advance Payment Guarantee shall be issued by a bank or credit organizations legally operating in Vietnam and shall remain effective until the advance payment has been repaid; the value of the Advance Payment Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be applied on the advance payment.

13.2 The Contractor is to use the advance payment only for the purpose of executing the Contract. The Contractor has to prove that advance payment has been used for the right purpose by providing copies of invoices or other relevant documents to the Company. The Contractor shall be deprived of advance payment if advance payment is not used correctly.

14. Payment

14.1 Payments are made in accordance with the PO.

14.2 The payment currency shall be VND/USD/EUR in accordance with the PO.

15. Copyright

Contractor shall take full responsibility for all damages arising from a third party's appeal against copyright violation of intellectual property relating to Goods supplied by Contractor to Company.

16. Use of documentations and information relating to Contract

16.1. The Company and the Contractor shall keep confidential any documents, data or other information relating to the contract provided directly or indirectly by one party to the other party, and shall not disclose such documents, data or information to a third party without the prior written consent of the other party, whether such documents, data or information are provided before, during or after the fulfillment or termination of the contract. The Contractor may transfer to a subcontractor appropriate documents, data and information provided by the Company for the subcontractor to perform its work under the contract; in this case, the subcontractor shall have an undertaking to the Contractor to keep such documents, data or information confidential.

16.2. The Company shall not use the documents, data and other information received from the Contractor for any purpose other than the contract. The Contractor shall not use the documents, data and other information received from the Company for any purpose other than the performance of the contract.

16.3. The obligations of the Company and the Contractor specified in under GCC Sub-Clauses 16.1 and 16.2 shall not apply to information that:

a) Information that the Company or Contractor needs to provide to the competent authority;

b) Information that has been or will be published through no fault of the Company or Contractor;

c) Information owned by one party at the time of publication and not previously provided directly or indirectly by the other party;

d) Information that a party lawfully receives from a third party that is not under an obligation to keep the information confidential.

16.4. The provisions of GCC Clause 16 shall not in any way modify any confidentiality commitments made by a party prior to the date of signing the contract relating to the provision of goods and services.

16.5. The provisions of GCC Clause 16 shall continue in effect after fulfillment or termination of the contract for any reason.

17. Technical Specifications and Standards

Goods (and Related Services) supplied under this Contract shall conform to the technical specifications and standards mentioned in Appendix No. 01 - Scope of Supply; and when no applicable specification or standard is mentioned, the applicable specification or standard shall be equivalent or superior to the official standards currently applied in the Goods' country of origin.

18. Packing

The Contractor shall provide such packing of the Goods as is required in the PO and is suitable with each type of transportation means during transit to their final destination. The packing shall be sufficient to prevent the Goods from damage or deterioration due to rough handling and other environmental impacts. Packing case size and weights shall take into consideration the conditions of transportation such as distance, type of transport mean, infrastructure, etc. from origin to specified destination.

19. Insurance

Goods supplied in the Contract shall be fully insured to cover losses or damages occurred in production process, transportation, stocking and delivery as described in the PO.

20. Transportation and Incidental Services

Conditions about Transportation and Incidental Services are specified in the PO.

21. Goods Inspections and Testing

The Contractor must test and take inspection of Goods and related services relevant to the provisions of the Contract and bear all testing and inspection costs according to the provisions of the Contract.

22. Damages

Damages are specified in the PO.

23. Warranty

The Contractor warrants that all the Goods supplied under Contract are new, unused, and the quality is in accordance with manufacture standard, unless otherwise provided in the Contract. The Contractor further warrants that the Goods shall be free from defects that cause problems under normal use.

Warranty period and place for the Goods is specified in Article 9 of the PO.

24. Force Majeure

24.1 For purposes of this Clause, "Force Majeure" means events beyond the control and foreseeability of the parties, such as wars, revolutions, fires, natural disaster, floods, epidemics, quarantine restrictions.

If a Force Majeure situation arises, the affected party shall promptly notify the other party in writing of such condition and the cause thereof. The affected party also has to give given by authorised organisation in the place of event.

During the Force Majeure, Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. In this case, the Company shall consider reimbursing the Contractor necessary and reasonable additional and necessary costs beared by the Contractor.

24.2 Neither the party shall be liable for forfeiture of its Performance, liquidated damages, or if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

In case dispute arising due to Force Majeure shall be resolved according to GCC Clause 7.

25. Amendment, Addendum of Contract

25.1 Amendments to the Contract shall be applied in the following cases:

(a) Changes in drawings, designs, or technical requirements, where Goods to be furnished under the Contract are to be specifically manufactured for the Company;

(b) Changes in method of goods transportation or packing;

(c) The place of delivery;

d) Changes of related services;

(e) The schedule of delivery.

25.2. In case the amendment, addendum to the work content of the contract specified in Clause 25.1 GCC change the cost or implement time of any terms in the contract, price or delivery time and the completion date of the relevant service must be make corresponding adjustments and the two parties will amend the contract. The Contractor's request to adjust the contract's price, delivery time or completion date must be made within 28 days from the date the Contractor receives the Company's request to amend the scope of work.

25.3. In case the Contractor provides goods with a new version of the same manufacturer, the same origin, with technical requirements, configuration, parameters... equivalent or better than the version that the Contractor proposed in their proposals, the Contractor must notify the Company in writing for the Company's consideration. In this case, based on usage needs, the Company could accept the Contractor's proposal provided that the unit price and other terms and conditions of the contract remain unchanged.

25.4. In case of performing related services that has not stated in the contract, the Company and Contractor will negotiate to ensure the unit price is consistent with the market price.

25.5. The Company and the Contractor will negotiate to sign a contract's amendment in case of amendments. All transactions during the implementation of the Contract are made in writing by the Parties and sent by post or by fax number to the registered address or fax number of each Party specified in the Contract and email to the email address according to the form in Appendix 4 (A, B) attached.

In case the Contractor's proposal is accepted by the Company and it makes the reduce of the contract price, the Company shall pay the Contractor with the rate that specified in the Contract to the price reduction value. And if it makes the increase of the contract price, the Company shall pay the Contractor the arising value.

26. Amendment in Delivery Schedule

26.1. During the contract implementation time, in case of unfavorable conditions arise that prevents the Contractor or subcontractor from providing goods and performing related services as prescribed in Clause 8 GCC, The Contractor must promptly notify the Company in writing about the delay, reason, and duration of delay. Based on the Contractor's notice, the Company must quickly consider the situation and extend the contract. In case the Company agrees to extend the contract, the two parties will negotiate to sign amendments, supplement the contract.

26.2. Except the force majeure specified in Clause 24 GCC, if the Contractor delivers the Goods or completes related services lately, he is obliged to compensate the Company as prescribed in Clause 22 GCC.

27. Contract Termination

27.1. Contract Termination due to faults:

a) The Company may terminate partial or all of the Contract without prejudice to other remedies for breach of contract by informing the Contractor by letter about the breachs in the contract in the following cases:

(i) The Contractor cannot deliver the goods or part of the goods within the shipment time as specified in the contract, or within the extension period as specified in Clause 26 GCC;

(ii) The Contractor does not perform any other obligations under the contract;

(iii) The Company show that the Contractor violated one of the prohibited acts specified in Article 16 of the Bidding Law during the bidding process or contract implementation;

b) In case the Company terminates partial or all of the contract according to Point a of this Clause, the Company may purchase similar goods and related services that have not been performed according to the terms and conditions and methods. The Contractor shall be responsible for compensating the Company for arising costs from purchasing of such similar goods and services. However, the Contractor must continue to perform the part of the contract that was not terminated.

27.2. Contract Termination due to insolvency

In case the Contractor goes bankruptcy or becomes insolvency, the Company may terminate the contract at any time by sending notice to the Contractor. In such case, the Contract shall terminate and the Contractor shall not be entitled to compensation provided that termination shall not fact or prejudice any rights of action or remedy of the Company at any time.

28. Patent indemnity

28.1. The Contractor shall, subject to the Company's compliance with GCC Sub-Clause 28.2, indemnify and hold harmless the Company and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and

expenses of any nature, including attorney's fees and expenses, which the Company may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the contract by reason of:

a) The installation of goods by the Contractor or the use of goods in Vietnam;

b) The sale of the products produced by goods.

Such indemnity shall not cover any use of goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the contract, neither any infringement resulting from the use of goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the bidder, pursuant to the contract.

28.2. If any proceedings are brought or any claim is made against the Company arising out of the matters referred to in GCC Sub-Clause 28.1, the Company shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Company's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

28.3. If the Contractor fails to notify the Company within 28 days after receipt of such notice, that it intends to conduct any such proceedings or claim, then the Company shall be free to conduct the same on its own behalf.

28.4. The Company shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

28.5. The Company shall indemnify and hold harmless the Contractor and its employees, officers, and subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Company.

29. Change in laws and regulations

Unless otherwise specified in the contract, if after the date of 28 days prior to deadline for submission of bids, any law or regulation is promulgated, abrogated, or changed Vietnam that subsequently affects the Delivery Date and/or the contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 11.

30. Export restriction

Any to provide deliveries or services, provided that the Contractor can declare to the satisfaction of the Company that it has completed all formalities in a timely manner, including applying for permits export restrictions which arise from trade regulations from a country supplying the goods or services, and which substantially impede the Contractor from meeting its obligations under the contract, shall release the Contractor from the obligation, authorizations, and licenses necessary for the export of the goods or services under the terms of the contract. Termination of the contract on this basis shall be for the Company's convenience.

PURCHASE ORDER

_____, day ___ month ___ year ____

FACSIMILE

PURCHASE ORDER No. ……

This Facsimile Transmission (Total ____ pages)	
Company:	**……**
Country:	**……**
Fax:	**……**
From:	**Vietsovpetro**
	105 Le Loi Str., Vung Tau Ward, Ho Chi Minh City, S.R. Vietnam
Subj.:	**Provision of …… (VSP's Inquiry No. ……)**

Dear Sirs,

Thank you for your offer No. … dated …. for supply **Electrical Bulk Materials for BK-10A - Block 09-1** under the Bid package №. VT-1322/26-XL-DA-TTHN, we are pleased to confirm this Purchase Order on the terms and conditions as follows:

This transaction is made between:

VIETSOVPETRO

105 Le Loi Street, Vung Tau City, Vietnam

Hereinafter referred to as the Buyer.
AND

.....

Hereinafter referred to as the Seller.

ARTICLE 1: OBJECT

The Seller agrees to sell and the Buyer agrees to buy "**Electrical Bulk Materials for BK-10A -Block 09-1** hereinafter referred to as "Goods", with the quantity, specification, scope of supply as described in Appendix No.01 (in.....pages), which is considered as an integral part of this Purchase Order.

ARTICLE 2: PRICE AND TOTAL VALUE

2.1 The unit prices for the Goods are specified in the Appendix 01 of this Purchase Order.

2.2 The total value of this Purchase Order is USD …, CFR Vietsovpetro Port, Ho Chi Minh City, S.R Vietnam (In words: US Dollars ….)

2.3 The price as mentioned above is understood CFR Vietsovpetro Port, Ho Chi Minh City, S.R. Vietnam – Incoterms 2020, not subject to any alteration and includes value of the Goods, packing, marking, painting, assembling, testing, inspection, manufacturer's certificates, freight, export license if necessary, guarantee services if any etc… in accordance with terms and conditions of this Purchase Order as well as all duties, levied in connection with the performance of this Purchase Order outside the Buyer's country.

ARTICLE 3: DELIVERY

3.1 Delivery time: not later than 135 calendar days from the date of Letter of Award (LOA) to the date that the Goods arrival at Vietsovpetro's port (included navigation and transportation time).

3.2 Shipment to be made from .....port to Vietsovpetro Port, Vung Tau City, S.R.Vietnam on the term CFR Vietsovpetro Port, Vung Tau City, S.R.Vietnam – Incoterms 2020, except the otherwise stated in this Purchase Order.

Earlier shipment is allowed.

Partial shipment is allowed: max 03 shipments.

Transshipment and multimodal transport are allowed at Seller's care and account.

The Seller shall be responsible for any extra transport, warehouse expenses, taxes and other charges incurred in connection with sending of Goods to the other port/wrong port (rather than Vietsovpetro port, Vungtau City, S.R. Vietnam). The Buyer shall carry out all inland transportation from other port to Vietsovpetro port, Vungtau City, S.R. Vietnam and these charges will be deducted from payment by the Buyer.

For the mode of transport by sea or by air, in case the first import border gate (which is the port of discharge stated on the bill of lading or the customs declaration) is not Vietsovpetro port, Vungtau City, S.R. Vietnam (the port specified in the contract) incurring insland transportation to the port specified, the Seller will be subject to Foreign contractor with holding tax (FCWT) according to the current regulations of S.R Vietnam. Any extra transport, warehouse expenses, other charges and FCWT incurred will be deducted from payment by the Buyer.

3.3 The Delivery Date is understood as: The date that Goods arrival at Vietsovpetro port (included navigation and transportation time).

The date of arrival mention here will following the date of arrival of the Goods at Vietsovpetro port that indicated in "Arrival Notice" of Vessel Agent.

3.4. The carrying vessel must have ISM certificate.

ARTICLE 4: NOTICE OF SHIPMENT AND DOCUMENTATION

4.1 The Seller shall notify the Buyer by fax/cable/ telex as soon as possible, but not later than 05 working days from the Bill of Lading date the following information regarding the shipment:

- Purchase Order number
- Name of Goods, quantity and value
- Number of cases, gross weight, measurement
- Bill of Lading number and date.
- Name of vessel, nationality, IMO number.
- Port of exit and destination, ETD/ETA
- Address, telephone, fax of the shipping agent in Vietnam.
- Any other special instructions which should call to the Buyer's attention.

The Seller shall be responsible for any losses, expenses which may be occurred due to incorrect information from the Seller to the Buyer.

4.2 Required shipping document for purchased goods.

4.2.1. By T/T:

Immediately but not later than 05 working days from the Bill of lading date the Seller shall send by Express courier or FEDEX or DHL at the Seller's expenses to "Vietsovpetro" - 105 Le Loi, Vung Tau City, SR Vietnam the following shipment documents:

1. *03 originals and 02 (two) copies of clean on board Bill of Lading* evidencing shipment from port ..... with destination Vietsovpetro Port, Vung Tau city,

S.R.Vietnam, consignee: Vietsovpetro, No.105 Le Loi Street, Vung Tau City, S.R Vietnam, marked "Freight Prepaid".

2. *Detailed Packing List* showing the content of each case or lot, gross and net weight: covering Goods as specified in Appendix No. 1 to this Purchase Order: 03 originals.
3. *Signed Commercial Invoice* issued by the Seller for the respective shipment value indicating term of delivery (for example: CFR Vietsovpetro Port, Vung Tau city, S.R.Vietnam) with itemized and total prices, stating the Seller's bank detail and account number: 03 originals and 01 copy.
4. *Certificate of Quality and Quantity* issued by the Manufacturer: 02 originals and 01 copy / electronic provided web-link to check.
5. *Certificate of Origin* issued by Chamber of Commerce of Manufacturer's country: 02 originals and 01 copy / electronic provided web-link to check.
6. *Other certificates (as Technical Requirements):* 02 originals and 01 copy.
7. *Certificates of Guarantee* issued by the Seller for the quality of Goods for 18 months from the delivery date or 12 months after the Good have been put into service whichever comes first: 01 original.
8. *Export License* or *Letter of the Seller* stating that Export License is not necessary for export: 01 original.
9. *Seller's telex, fax* advising the shipment details (all documents in 4.2.1) to Vietsovpetro: 01 copy and via *email: xndvcang.sd@vietsov.com.vn*.
10. *Beneficiary's certificate* certifying that one set of the above mentioned documents (from 1 to 9 including one original of AWB / Bill of Lading) have been sent to the Buyer's address: 105 Le Loi Street, Vung Tau City, S.R Vietnam within 03 working days from the Delivery Date by Courier's (courier's receipt must be enclosed thereto for negotiation): 01 originals and 02 copies.

4.2.2. By L/C:

Immediately but not later than 05 working days from the Bill of lading date the Seller shall send by Express courier or FEDEX at the Seller's expenses to Vietsovpetro - 105 Le Loi Str., Vung Tau City, S.R. Vietnam the following shipment documents unless otherwise stated:

1. *02 originals and 02 (two) copies of clean on board Bill of Lading* evidencing shipment from port ..... with destination Vietsovpetro Port, Vung Tau city, S.R.Vietnam, consignee: Vietsovpetro, No.105 Le Loi Street, Vung Tau City, S.R Vietnam, marked "Freight Prepaid".
2. *Detailed Packing List* showing the content of each case or lot, gross and net weight: covering Goods as specified in Appendix No. 1 to this Purchase Order: 03 originals.
3. *Signed Commercial Invoice* issued by the Seller for the respective shipment value indicating term of delivery (for example: CFR Vietsovpetro Port, Vung Tau city, S.R.Vietnam) with itemized and total prices, stating the Seller's bank details and account number: 03 originals and 01 copy.
4. *Certificate of Quality and Quantity* issued by the Manufacturer: 02 originals and 01 copy / electronic provided web-link to check.
5. *Certificate of Origin* issued by Chamber of Commerce of Manufacturer's country: 02 originals and 01 copy / electronic provided web-link to check.
6. *Other certificates (as Technical Requirements):* 02 originals and 01 copy.
7. *Certificates of Guarantee* issued by the Seller for the quality of Goods for 18 months from the delivery date or 12 months after the Good have been put into service whichever comes first: 01 original.

8. *Export License* or *Letter of the Seller* stating that Export License is not necessary for export: 01 original.
9. *Seller's telex, fax* advising the shipment details (Invoice value, Bill of lading/Airway Bill's number and date) to Vietsovpetro: 01 copy and via *email: xndvcang.sd@vietsov.com.vn*.
10. *Beneficiary's certificate* certifying that one set of the above mentioned documents (from 1 to 9 including one original of AWB / Bill of Lading) have been sent to the Buyer's address: 105 Le Loi Street, Vung Tau City, S.R Vietnam within 03 working days from the Delivery Date by Courier's (courier's receipt must be enclosed): 01 copy.

All the copies of the documents shall be legible; otherwise the photocopy of the original shall be furnished.

4.3 Any storage demurrage or other charges due to non, late receipt of shipping advice and/or shipping documents by the Buyer from the Seller or the Seller's agent as well as due to incorrect shipping documents shall be at the Seller's account.

4.4 If shipment to be made through a FIATA Freight Forwarder, under Through or Combined Transport Bill of Lading, the Seller shall have to send the Buyer by fax the copy of the Local Bill of Lading of the last distance and inform the Buyer the name, contract address of the Transportation Agent in Vietnam.

4.5 From the date of Letter of Award (LOA), The Seller must provide the Buyer with a regular report once a month on the first day of the month, showing the process of manufacturing, manufacturing, testing and supplying the Goods.

This report please send to email: .....@vietsov.com.vn; .....@vietsov.com.vn; and c/c: nhungth.hq@vietsov.com.vn.

The Seller must immediately report to Buyer the content of the report at least includes the following contents:

a) Description of the work completed in the implementation stage;

b) Highlighting delays or delays that are likely to occur and the causes of delays affecting production progress and providing measures to ensure progress;

c) Change progress if any. During the implementation of the contract, all contacts of Seller send an official letter for VSP leader and send a copy by email: .....@vietsov.com.vn; .....@vietsov.com.vn; and c/c: nhungth.hq@vietsov.com.vn.

Party B must ensure to provide all necessary documents as required in Article 4.2 of this Contract when delivering goods to Party A. In case Party B delivers goods to Party A's warehouse in Vung Tau but does not have all the required documents, Party A agrees to allow Party B to temporarily store the goods at the warehouse to wait for the complete collection of documents at no extra charge for first 5 calendar days. From the 6th day onwards, Party B will have to pay Party A the storage cost of the shipment according to the current storage unit price of Party A that is applied to Party A's customers. This storage cost that will be deducted directly from the invoice for this Contract or from any other payments of the Contract that duly signed by both parties.

ARTICLE 5: PACKING

5.1 Goods supplied under this Purchase Order shall be packed in accordance with international standard for export packing to ensure safety of Goods from damages and corrosion during transportation and suitable for crane operations and handling.

5.2 Before packing, all metal parts of Goods must be preserved with proper grease and wrapped in waterproof strong paper to ensure protection from any damage and corrosion during their transportation and storage in Buyer's country within the guarantee period.

5.3 The Seller shall provide for each package a detailed packing list in English indicating the Purchase Order number, description of items, gross and net weight. One copy of the packing list in a waterproof envelope shall be put into each case with the Goods, the other copy should be fastened to the outer side of the wooden case and shall be covered with a metal plate nailed to the case. For steel cases, both copies of the packing list should be put into the cases.

5.4 The Seller shall be fully responsible for loss, damage of breakage of the Goods and/or rusting/corrosion resulting from defective or inadequate packing.

ARTICLE 6: MARKING

6.1 Marking shall be done in three sides of each case containing Goods, on the two opposite sides and on the top and contain the following information in the English language: SHIPPED: (SELLER'S NAME)

CONSIGNEE : VIETSOVPETRO
105 LE LOI STREET, VUNGTAU,S.R.VIETNAM
PURCHASE ORDER NUMBER No.
CASE No. /
DIMENSIONS: Length x Width x Height in cm
GROSS WEIGHT (KGS); NET WEIGHT (KGS)
AIRPORT/PORT OF DESTINATION

6.2 The marking must be clearly done by indelible paint and not less than 5 (five) cm high, unless restricted by the size of the case. Where necessary, the Seller shall conspicuously mark on the side of the case appropriate international marks according to the different characteristic, the special marking "Top", "Bottom", "Handle with care", handling places for reloading.

6.3 For the oversized cases (more than 10M long), as well as for the case weighing 500 kgs and more, or if the height of the case exceeds one meter, the center of gravity shall be clearly shown with bright indelible paint with sign (+) on the end and side faces of the cases.

6.4 The case number shall be indicated by a fraction, the numerator shows the ordinal number of the cases, and the denominator indicates the overall quantity of the cases into which completely delivered Goods are packed.

6.5 The Seller shall be responsible for any kind of losses and/or damages of the Goods during loading and unloading as well as for its transportation as a consequence of improper or insufficient marking, as well as for any extra transportation and warehouse expenses, losses connected with misaddressed delivery of the Goods due to incomplete marking.

ARTICLE 7: PAYMENT CONDITIONS

By T/T:

7.1 One hundred percent (100%) of shipment value shall be paid by Telegraphic Transfer within thirty (30) working days from the date of the Certificate of quantity and condition issued by Independent Inspection Company at Buyer's warehouse after receipt of the Goods and a full sets of documents above mentioned in Articles 4.2.

7.2 Transfer fee shall be on the Buyer's account.

7.3 All the banking fees, including bank commission and other charges associated with the advising and corresponding bank shall be on the Seller's account.

7.4 All charges in connection with the change of payment form / conditions (whether occurred inside or outside S.R.Vietnam), due to Seller's / Buyer's request, shall be at the Seller's / Buyer's account.

7.5 The Seller provides Seller's bank account number.

By L/C:

7.6 As soon as possible, but not later than fifteen (15) days after the date of Seller's reconfirmation the Buyer will open through the Bank for Foreign Trade of Vietnam, Vung Tau Branch, (Vietcombank Vung Tau) or other bank in Vietnam the Irrevocable and Unconfirmed Letter of Credit in favour of the Seller covering the total Purchase Order value with the content as per Appendix 1 which is to be considered as an integral part of this Purchase Order.

The validity of the Letter of Credit shall cover the Delivery Date plus 21 days.

7.7. Payment under this Letter of Credit shall be made for shipment and in the following installments to the Seller:

7.7.1. First Installment: 90% (Ninety percent) of the shipment value shall be made upon presentation of the following documents in English language by the Seller to the Bank:

1. *01/03 originals and 02 (two) copies of clean on board Bill of Lading* evidencing shipment from port ..... with destination Vietsovpetro Port, Vung Tau city, S.R.Vietnam, consignee: Vietsovpetro, No.105 Le Loi Street, Vung Tau City, S.R Vietnam, marked "Freight Prepaid".
2. *Detailed Packing List* showing the content of each case or lot, gross and net weight: covering Goods as specified in Appendix No. 1 to this Purchase Order: 03 originals.
3. *Signed Commercial Invoice* issued by the Seller for the respective shipment value indicating term of delivery (for example: CFR Vietsovpetro Port, Vung Tau city, S.R.Vietnam) with itemized and total prices, stating the Seller's bank detail and account number: 03 originals and 01 copy.
4. *Certificate of Quality and Quantity* issued by the Manufacturer: 02 originals and 01 copy / electronic provided web-link to check.
5. *Certificate of Origin* issued by Chamber of Commerce of Manufacturer's country: 02 originals and 01 copy / electronic provided web-link to check.
6. *Other certificates (as Technical Requirements):* 02 originals and 01 copy.
7. *Certificates of Guarantee* issued by the Seller for the quality of Goods for 18 months from the delivery date or 12 months after the Good have been put into service whichever comes first: 01 original.
8. *Export License* or *Letter of the Seller* stating that Export License is not necessary for export: 01 original.
9. *Seller's telex, fax* advising the shipment details (all documents in 4.2.1) to Vietsovpetro: 01 copy and via *email:* *xndvcang.sd@vietsov.com.vn*.
10. *Beneficiary's certificate* certifying that one set of the above mentioned documents (from 1 to 10 including one original of AWB / Bill of Lading) have been sent to the Buyer's address: 105 Le Loi Street, Vung Tau City, S.R Vietnam within 03 working days from the Delivery Date by Courier's (courier's receipt must be enclosed thereto for negotiation): 01 originals and 02 copies.

All the documents presented by the Seller to the Bank shall be duly certified by the Seller as correct, due and payable under the terms and conditions of the Letter of credit.

Payment for incomplete delivery will not be allowed.

7.7.2. Second Installment: Ten percent (10%) of shipment value shall be payable against confirmation of the Buyer to the Bank within 30 days after the date of the Certificate of

quantity and condition issued by Independent Inspection Company at Buyer's warehouse and Invoice.

7.8 The Letter of Credit shall be subject to the Uniform Customs and Practice for Documentary credit of International Chamber of Commerce (UCP No. 600), 2007 revision.

7.9 All the banking fees, including bank commission charges and other charges associated with the opening bank shall be on the Buyer's account.

7.10 All the banking fees, including bank commission charges and other charges associated with the advising and corresponding bank shall be on the Seller's account.

7.11 All charges in connection with the amendments of the Letter of Credit (whether occurred inside or outside S.R. Vietnam), due to Seller's/Buyer's request, shall be at the Seller's/ Buyer's account.

7.12 All charges associated with any extension of the Letter of credit arising due to delay in delivery as stated in Article 3 of this Purchase Order shall be at the Seller's account.

7.13 The Letter of Credit is to be automatically cancelled within 15 days from the date of opening, if the Buyer does not receive the original Performance Bond in favour of the Buyer with the content as stated in Appendix 2 of this Purchase Order.

ARTICLE 8: GOODS'S SURVEY

8.1 The survey at Buyer's warehouse of the received Goods shall be made by Independent Inspection Company with issuing a Certificate of Quantity and Condition.

8.2 The Certificate of quantity and condition issued by Independent Inspection Company at Buyer's warehouse for the Goods supplied under this Purchase Order shall be legal document for Buyer to make claim to the Seller.

ARTICLE 9: GUARRANTEE

9.1 The Seller guarantees that the Goods supplied under this Purchase Order shall be of the highest quality and designed standard as set in Manufacture's country for that type of Goods and shall meet current technological achievements as required, and shall be suitable for normal operation in tropical area condition regarding environment temperature up to 45 Deg. C, sea water temperature 25-30 Deg. C, humidity up to 100% and years of Production of the Goods in year 2024 or later for Ex-stock and 2025 or later for Ex-mill

9.2 Proper material of high quality shall be used for manufacturing the Goods to be supplied under this Purchase Order, and the Seller guarantees that the Goods and its quality, quantity shall be fully in compliance with the technical specifications and scope of supply as mentioned in Appendix No. 01 to this Purchase Order.

9.3 The Seller guarantees normal operation of all Goods to be supplied under this Purchase Order 18 months from the delivery date or 12 months after the Good have been put into service whichever comes first

9.4 Should the Buyer reveal any defect within the guarantee period or if the quality of Goods supplied under this Purchase Order is not in compliance with terms and conditions of this Purchase Order and its appendixes, the Buyer shall notify the Seller by telex/ fax of such defect. To substantiate the claims the Buyer shall submit to the Seller the official survey report issued by Independent Inspection Company. The survey report issued by Independent Inspection Company shall be legal document for Buyer to make claim to the Seller.

Any claim relating to defects or non-conformity, which occurred during the guarantee period of the Goods with the technical conditions as stated in the Appendix No. 01 shall be submitted to the Seller not later than three months after expiration of the guarantee period.

9.5 The Seller shall inform the Buyer about the results of consideration of claim not later than 10 days after receipt of the Buyer's claim telex/fax and the Seller shall eliminate the revealed defects, at his own expenses, at the Buyer's first request without any delay, but not later than 15 days after receipt of the Buyer's claim telex/fax and/or replace the defective parts or the missing parts by the new ones of good quality on the condition .....- Vietsovpetro port, Vung Tau city, (or .....- Tan Son Nhat airport), S.R.Vietnam. All charges associated with return of the defective Goods to the Seller and delivery the new one to Buyer shall be at the Seller's account.

9.6 Should the Seller fail to eliminate the defects as claimed, or fail to deliver new Goods within the stipulated time in Article 9.5, the Buyer shall charge to the Seller the agreed and liquidated damages at the rate as per Article 10, the period of the above penalty shall be counted from the date of which the Seller receives the Buyer's official claim to the date of elimination of the defects or to the delivery date of the new replacement Goods minus 15 days or the Buyer shall have the right to eliminate such defects at the Seller's expenses without prejudice to its right in respect of the guarantee, and the Seller undertakes to defray at fist Buyer's request all actual expenses incurred in respect of such elimination and the agreed and liquidated damages at the rate 08% value of non used Goods due to defect found. Small defects not requiring the Seller's participation and/or permitting no delay will be eliminated by the Buyer and charged at normal costs to the Seller.

9.7 The guarantee period for replaced part shall be equal to that indicated in Article 9.3 and the guarantee period for Goods will be extended by the time during which it was not used due to defect found.

9.8 When the elimination and/or replacement is made and all related costs, expenses are settled, the claim is to be considered as finally settled.

All the claim amount, for which the Seller is to be responsible to the Buyer under this Purchase Order may be deducted by the Buyer from the payment of the Purchase Order value or may be covered by act of law or otherwise from the Seller to be agreed by both parties.

ARTICLE 10: AGREED AND LIQUIDATED DAMAGES

10.1. The Seller must deliver goods as specified in Appendix 01 and by the date as stipulated in the Purchase Order. If delayed in delivery the Seller shall pay to the Buyer the agreed and liquidated damages as follows:

- Delay in the first four weeks: 1.00% of group value per week.

- Delay in each following week: 1.50% of group value per week.

When calculating the amount of the agreed and liquidated damages: One week is to be defined as 07 days with 04 days or more than 04 days to be considered as one week, 03 days and less will not be counted. The agreed and liquidated damages calculated on the value of the whole contract having delayed items until the total amount of agreed and liquidated damages for delay shall not exceed 08% of that whole group value

If The Seller delivers goods in number of shipments as specified in Appendix 01, then the delivery time of such goods shall be counted as the last portion's delivery. Goods of the previous portions are only recorded at the warehouse of the Buyer until the last portion of contract is delivered.

10.2. If The Seller does not deliver the sufficient quantity and types of goods as prescribed in Appendix 01 of this Contract, in that case:

- The Seller shall pay to the Buyer the agreed and liquidated damages an amount equal to 08% of the contract

If The Seller does not deliver enough quantity and type of goods for the contract (as specified in Appendix 01 of this Contract):

- The Buyer has the right to refuse the entire contract. The Seller shall pay to the Buyer the agreed and liquidated damages an amount equal to 08% of the contract.

Or;

- The Buyer has the right to receive the rest of the contract, then, the Seller shall pay to the Buyer the agreed and liquidated damages an amount equal to 08% of the contract.

10.3. If the number of shipments exceeds the ones prescribed in Article 3, then the Seller is responsible for paying the extra costs for the exceeded shipments according to the prevailing prices which are applied by the Buyer to the current customers.

10.4. If the supplied goods do not conform to the quality as specified in Article 2 of the Purchase Order, the Buyer shall be entitled to refuse those Goods and payment of the Purchase Order, the Seller shall pay to the Buyer the agreed and liquidated damages as stipulated in Article.10.2. The Buyer shall be entitled to accept / not accept that the Seller will provide new goods to replace the defective ones.

10.5. Delay in delivery / insufficient quantity:

10.5.1. If delay in delivery exceeds 60 days against the stipulated date as in Article 3.1 of this Purchase Order, except the Force majeure circumstances, the Buyer shall be entitled to:

a) Appoint a third party capable of providing goods/ goods with services. In that case, The Seller is responsible for signing a contract with that appointed party to continue performing the work.

Or;

b) Directly enter into contract with that third party buying goods / goods and services to continue performing the contract work. In that case, The Seller must pay the difference amount and other related costs and charges (if any).

Or;

c) Unilaterally terminate the Purchase Order and in this case The Seller shall pay to the Buyer the agreed and liquidated damages an amount equal to 08% of the breached Purchase Order value.

10.5.2. If the Seller delayed in delivery of one portion more than 60 calendar days as specified in Article 3.1 of this Purchase Order except the Force majeure circumstances, the Buyer shall be entitled to:

a) Appoint a third party capable of providing goods / goods with services. In that case, The Seller is responsible for signing a contract with the designated party to continue performing the work.

Or;

b) Directly enter into contract with the third party buying goods / goods and services to continue performing the contract work. In that case, The Seller must pay the difference amount and other related costs and charges (if any).

c) Unilaterally terminate the Purchase Order and in this case The Seller shall pay to the Buyer the agreed and liquidated damages an amount equal to 08% of the breached PurchaseOrder value.

10.6. The total amount of the agreed and liquidated damages should not exceed 08% the Purchase Order value.

10.7. The amount of the agreed and liquidated damages stated in Article 10 of this PurchaseOrder is exclusive of VAT and import tax.

10.8. The Buyer shall be entitled to:

1) Deduct the amount of agreed and liquidated damages from the payment for this Purchase Order or from any payment for other Purchase Order (if any) between both sides.

2) Request the Seller's issuing Bank to pay the amount equal to the Performance Bond's value;

3) The Buyer shall make a written request to the Seller for the amount of agreed and liquidated damages payment. In all cases, The Seller should have to make commitment to the Buyer for the agreed and liquidated damages payment.

10.9 Any compensation for damage (if any) shall be made in accordance with the law of Vietnam.

ARTICLE 11: PERFORMANCE BOND

11.1 As soon as possible but not later than 07 days from the date of the Seller's reconfirmation of this Purchase Order, the Seller shall inform the Buyer by fax/telex of the issuance of the Performance Bond covering **eight percents (08%)** of the Purchase Order amount, **issued by thebanks/branches legally operated in VietNam,** acceptable to the Buyer, informing the number, date of issue and full content. In case the Performance Bond issued by the banks/branches legally operated in VietNam, the Seller shall ensure that the issuing Bank will send to the Buyer the original Performance Bond through Vietcombank Vung Tau Branch.

The content of the Performance Bond shall be in conformity with the Appendix 02 of this Purchase Order.

All costs relating to the Performance Bond shall be at Seller's account.

11.2 Should the Buyer not receive the valid, satisfactory Performance Bond within 30 days from the Purchase Order signing date, the Buyer has the right to cancel the Purchase Order any time and withdraw the Bid Bond without recourse to the law court or to arbitration.

11.3 Should the validity of the Performance Bond be required to be extended (due to delay or extension of Delivery Date of Goods) Seller shall immediately instruct the Issuing Bank to make amendment to the Performance Bond. Such amendment shall be advised by the IssuingBank to Buyer through Vietcombank Vung Tau Branch.

11.4 Should the Buyer make use of Performance Bond, it will immediately send to the Seller copy of declaration to the bank.

ARTICLE 12: FORCE-MAJEURE

12.1 A force majeure event is an event that occurs objectively, which cannot be foreseen and cannot be overcome despite all necessary measures and permissible abilities such as war, riot, and Armed conflicts, embargoes, natural disasters (floods, hurricanes, tornadoes, earthquakes, tsunamis), fires, epidemics (Epidemic, Pandemic) announced by WHO/ Country, Area / National lock down imposed by the host Government ....

12.2. The party that encounters a force majeure event that results in the failure to perform its obligations under the contract directly affected by the force majeure event is obliged to immediately notify the other party, including providing information and explanations about the direct impact of the force majeure event on the contract performance violation, accompanied by evidence to support, measures have been taken to overcome the problem and minimize the loss. The delay in notification, provision of information and explanation if it is more than 10 calendar days after the force majeure event occurred will make the party meeting the force majeure to lose the right of exemption later due to force majeure.

12.3. The written certification of the Vietnam Chamber of Commerce and Industry or the competent agency in the place where the force majeure event occurred is sufficient evidence to prove the event and the time of the force majeure.

12.4. In case, as a result of force majeure events, one Party in the Contract cannot perform all or a part of its obligations under this contract, the contract performance period will be extended accordingly by the time. that force majeure event took place.

12.5. If the force majeure event lasts more than 02 months, each party has the right to terminate this contract without having to compensate any amount of money for the other party.

12.6. The difficulties in production such as lack of materials, electricity, labor, strike ... are not considered force majeure and do not exempt Party B from the obligation of delivery or late delivery; Information from newspapers, the network and other media is for reference only.

ARTICLE 13: ARBITRATION

13.1 This Purchase order is governed by Vietnamese laws.

13.2 Any disputes or discrepancies which may arise out of this Purchase Order shall be settled smoothly, amicably, basing on mutual benefit and mutual understanding.

13.3 Any disputes or discrepancies in connection with this Purchase Order, which can not be settled amicably, shall be referred for final decision and settlement to the Vietnam International Arbitration Centre at the Chamber of Commerce and Industry of Vietnam, Hanoi, S.R.Vietnam under the Rules of this Centre.

13.4 The number of arbitrators shall be one.

13.5 Decision of the arbitration shall be final and binding upon both parties.

ARTICLE 14: OTHER CONDITIONS:

14.1. Any alternations or amendment to this Purchase Order must be made in writing and signed by both parties and sent by post or by Fax to the registered address or Fax number specified clearly in the Purchase Order and emailed to the email addresses as stated in Appendix No.4 (A, B) attached.

14.2. Neither party shall be entitled to transfer its rights and obligations under this Purchase Orderto any third party without the prior consent of the other party.

14.3. All taxes, duties, custom fees in connection with the execution of this Purchase Order lived inside S.R Vietnam except personnel income tax to be at Buyer’s account. All taxes, duties, custom fees in connection with e execution of this Purchase Order levied outside S.R Vietnam and personel income tax inside Vietnam (if any) to be at Seller’s account.

14.4. This Purchase Order shall come into force from the date of Seller's reconfirmation, which should be received by the Buyer within 07 days of this Purchase Order date and the Purchaseorder will be terminated upon fulfillment by both parties all their obligations as stipulated inthis Purchase Order.

14.5. This Purchase Order is made in English and consists of_____pages, including Appendixes No. 1, 2, 3, 4 which are considered as integral parts of this Purchase Order (Appendix No. 01: Scope of supply, Appendix No. 02: Performance Bond, Appendix No. 03: Form Letter of Credit Specimen, Appendix No. 04 (A,B): Sample letter of transaction performance contract.

14.6. This Purchase Order is made in 05 originals of the same value, two of which retained by the Seller and three are retained by the Buyer.

14.7. Components of Purchase Order and legal order of precedence are as follows:

- Purchase Order (together with the Scope of Supply, Price schedule and other Appendices);
- Letter of Proposal Acceptance and Contract Award;
- Record of negotiation and finalization of the Contract;
- Decision on approving bidding results;
- Bid Proposal and Clarifications (if any);
- Invitation for Bid and Bulletins (if any);

- Other attached documents (if any).

We confirm that all of above mentioned terms and conditions of this Purchase Order are considered as terms and conditions of a Contract signed by and between two our Companies.

This is an operative instrument, no mail/airmail will be followed.

Best Regards,

FOR VIETSOVPETRO

Appendix No. 01 to the Purchase order No. ……

SCOPE OF SUPPLY AND PRICE TABLE

This appendix is based on requirements stated in the Invitation to Bid, Bid Proposal and agreements achieved during negotiations and finalizing Purchase Order including price (extended price) for each group and scope of supply. Price (extended price) for each group and scope of supply has included all tax, fees and charges (if any) in accordance with tax rate, fee and charge at the time of 28 days prior to bid closing time of bid proposal.

GOODS PRICE TABLE

(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*
No.	**Description**	**Unit**	**Qty**	**Model, Code, Part number**	**Manufacturer**	**Origin**	**Unit Price (USD)**	**Extended Price (USD) (Column 4x8)**
1.	Item 1							M1
2.	Item 2							M2
	…							…
n	Item n							Mn
Total price in CFR Vietsovpetro port (USD)								**M=M1+M2+...Mn**

LEGAL REPRESENTATIVE OF THE BUYER
[Full name, title, signature and stamp]

LEGAL REPRESENTATIVE OF THE SELLER
[Full name, title, signature and stamp]

Appendix No. 02 to the Purchase order No. ……

PERFORMANCE BOND

_____, day _____ month _____ year _____

TO: _____ *[name of the Employer]*

(Hereinafter referred to as the "Employer")

With reference to Purchase Order No. _____ entitled _____ *(hereinafter referred to as "the Purchase Order")* entered into on the _____ by and between _____, having address at _____ *(hereinafter referred to as "APPLICANT")* and _____, we, _____, having registered office at _____ *(hereinafter referred to as "GUARANTOR")* hereby open in the favor of _____ *(Hereinafter referred to as the "BENEFICIARY")* an unconditional and irrevocable bank guarantee for the amount of _____ (In words: _____) *(hereinafter referred to as "GUARANTEE").*

This GUARANTEE is effective from the issuance date and shall remain valid, binding and in force until _____, hereinafter referred to as "the **Expiry Date**". For any extensions, renewals, or assignments of the Purchase Order beyond the time stated in this GUARANTEE, BENEFICIARY shall not be required to give notice to nor obtain the consent of GUARANTOR. This GUARANTEE would be extended upon written request of APPLICANT to cover the extension, renewal or assignment periods.

GUARANTOR hereby **unconditionally and irrevocably** guarantees to promptly pay BENEFICIARY an amount or amounts, specified by BENEFICIARY, up to the amount stated above, within 05 working days upon our receipt of BENEFICIARY's written demand stating that APPLICANT has failed to fulfill its performance obligation(s) under the Purchase Order.

After the Expiry date, this GUARANTEE shall automatically become null and void, whatsoever and irrespective of whether this GUARANTEE is returned to GUARANTOR or not.

The said guarantee amount shall be paid by GUARANTOR forthwith to BENEFICIARY notwithstanding any contestation or protest by APPLICANT or by GUARANTOR or by any third party, and irrespective of whether or not there is any dispute between APPLICANT and BENEFICIARY in respect of or relating to the Purchase Order or in respect of any other matter and irrespective of whether or not such said dispute, if any, has been settled, resolved, litigated, or adjudicated upon otherwise howsoever.

Neither alteration, variation, incorrect payment, extension in terms of the Purchase Order nor any forbearance of forgiveness in or in respect of any matter or thing concerning the Purchase Order on the part of BENEFICIARY shall in any way release GUARANTOR or APPLICANT or from any liabilities under this GUARANTEE.

Multiple demands under this Guarantee are allowed. In such event, the Guarantee Amount aforementioned shall automatically be reduced by the amount of each and any payment made by us under this Guarantee.

The Guarantee shall be governed by and construed in accordance with the laws of Vietnam. Any dispute arising out of or relating to this Guarantee shall be submitted to [the jurisdiction of competent People's Court of Vietnam in accordance with the governing law] / [arbitration by the Vietnam Arbitration Center international (VIAC) at the Vietnam Chamber of Commerce and Industry in accordance with its rules of arbitration].

This GUARANTEE is issued solely in 01 (one) bilingual original (Vietnamese and English) and is not transferrable. Should there be any inconsistence between the two languages of this GUARANTEE, the Vietnamese content shall prevail and be final.

LEGAL REPRESENTATIVE OF THE BANK

[Full name, title, signature and stamp]

Appendix No. 03 to the Purchase Order No……

LETTER OF CREDIT SPECIMEN

SUBJECT:

KIND OF L/C: IRREVOCABLE UNCONFIRMED L/C, AT SIGHT.

APPLICANT: VIETSOVPETRO
(THE BUYER) 105 Le Loi Str., Vung Tau City, S.R. Vietnam

BENEFICIARY:

(THE SELLER)

ADVISING BANK:

AMOUNT: _____ USD

(In words: United State Dollars _____) - CFR - Vietsovpetro port, HCM City, S.R. Vietnam.

VALIDITY: The validity of the Letter of Credit shall cover the Delivery Date plus 21 days.

PAYMENT CONDITIONS:

Payment under this Letter of Credit shall be made for shipment and in the following installments:
I. First Installment: 90% (Ninety percent) of the shipment value shall be made upon presentation of the following documents in English language by the Seller to the Bank:

1. *01/03 originals and 02 (two) copies of clean on board Bill of Lading* evidencing shipment from port ..... with destination Vietsovpetro Port, HCM city, S.R.Vietnam, consignee: Vietsovpetro, No.105 Le Loi Street, HCM City, S.R Vietnam, marked "Freight Prepaid".
2. *Detailed Packing List* showing the content of each case or lot, gross and net weight: covering Goods as specified in Appendix No. 1 to this Purchase Order: 03 originals.
3. *Signed Commercial Invoice* issued by the Seller for the respective shipment value indicating term of delivery (for example: CFR Vietsovpetro Port, HCM city, S.R.Vietnam) with itemized and total prices, stating the Seller's bank detail and account number: 03 originals and 01 copy.
4. *Certificate of Quality and Quantity* issued by the Manufacturer: 02 originals and 01 copy / electronic provided web-link to check.
5. *Certificate of Origin* issued by Chamber of Commerce of Manufacturer's country: 02 originals and 01 copy / electronic provided web-link to check.
6. *Other certificates (as Technical Requirements):* 02 originals and 01 copy.
7. *Certificates of Guarantee* issued by the Seller for the quality of Goods for 18 months from the delivery date or 12 months after the Good have been put into service whichever comes first: 01 original
8. *Export License* or *Letter of the Seller* stating that Export License is not necessary for export: 01 original.
9. *Seller's telex, fax* advising the shipment details (all documents in 4.2.1) to Vietsovpetro: 01 copy and via *email: xndvcang.sd@vietsov.com.vn*
10. *Beneficiary's certificate* certifying that one set of the above mentioned documents (from 1 to 9 including one original of AWB / Bill of Lading) have been sent to the Buyer's address: 105 Le Loi Street, Vung Tau City, S.R Vietnam within 03 working days from the Delivery Date by Courier's (courier's receipt must be enclosed thereto for negotiation): 01 originals and 02 copies.

II. Second Installment: Ten percent (10%) of shipment value shall be payable against confirmation of the Buyer to the Bank within 30 days after the date of the Certificate of quantity and condition issued by Independent Inspection Company at Buyer's warehouse.

The Letter of Credit shall be subject to the Uniform Customs and Practice for Documentary credit of International Chamber of Commerce (UCP No. 600), 2007 revision.

All the banking fees, including bank commission charges and other charges associated with the opening bank shall be on the Buyer's account.

All the banking fees, including bank commission charges and other charges associated with the advising and corresponding bank shall be on the Seller's account.

All charges in connection with the amendments of the Letter of Credit (whether occurred inside or outside S.R. Vietnam), due to Seller's/Buyer's request, shall be at the Seller's / Buyer's account.

All charges associated with any extension of the Letter of credit arising due to delay in delivery as stated in Article 3 of this Contract shall be at the Seller's account.

COVERING:

Scope of supply, specifications, Quantity and Prices are in accordance to Appendix No. 01 of Purchase Order No. _____

SHIPMENT:

Shipment to be made from _____ Port to Vietsovpetro Port, HCM City, S.R. Vietnam on the terms of ..... - Incoterms 2020.

Delivery Date: not later than 135 calendar days from the date of Letter of Award (LOA) to the date that the Goods arrival at Vietsovpetro's port (included navigation and transportation time). The date of arrival mentioned here will follow the date of arrival of the Goods at Vietsovpetro port that indicated in "Arrival Notice" of Vessel Agent (included navigation period and transportation time).

Earlier shipment is allowed

Partial shipment is allowed.

Total max: 03 shipments.

Transshipment is allowed at Seller's care and account

The Delivery Date is understood as the date arrival Vietsovpetro Port, HCM City, S.R. Vietnam.

PACKING AND MARKING: As per Purchase Order No. __ dated _____

SPECIAL CONDITIONS:

Agreed and liquidated damages for delay of delivery:

Shipment after above stated delivery date is allowed but not exceeds two months. For Bill of Lading dated after delivery date, Buyer's Bank is authorized to deduct the agreed and liquidated damages amount following Group have item be delay as follows:

- Delay in the first four weeks: 1.00% of group value per week.

- Delay in each following week: 1.50% of group value per week.

One week is to be defined as 07 days, 04 days or more than 04 days to be considered as one week, 03 days and less will not be counted.

Total agreed and liquidated damage amount does not exceed 08% of that whole group value

The Letter of Credit is to be automatically cancelled within 15 days from the date of opening, if the Buyer does not receive the original Performance Bond in favour of the Buyer with the content as stated in Appendix No. 02 of this Purchase Order.

APPENDIX No. 4 (A)

FORM OF CONTRACT PERFORMANCE TRANSACTION

Day month year 20..

To: Vietsovpetro

105 Le Loi St., Vung Tau Ward, HCM City, Vietnam.

Fax: 84-254-3839 857

Recipient: Mr. Tran Quoc Thang – Deputy General Director

Copy: Ms. Nguyen Thi Van Anh – Manager of Commercial Department

Email: vspadmin@vietsov.com.vn

thanhnq.hq@vietsov.com.vn

nhungth.hq@vietsov.com.vn

(Insert the transaction content, including: Change of Goods/ Services, schedule, use of quota, contents regarding contract value, payment, etc.)

REPRESENTATIVE OF PARTY ….
(Signature and stamp)

APPENDIX No. 4 (B)

CORRESPONDENCE FORM FOR CONTRACT PERFORMANCE

Day month year 20..

To: Vietsovpetro

105 Le Loi St., Vung Tau Ward, HCM City, Vietnam.

Fax: 84-254-3839 857

Recipient: Vietsovpetro Commercial Department/Vietsovpetro port & Logistics Division/ Offshore Contruction Division

Email: vspadmin@vietsov.com.vn

thanhnq.hq@vietsov.com.vn

nhungth.hq@vietsov.com.vn

(Insert the transaction content, including: *Delivery notice, Delivery of goods documents, notification of commencement of service/ construction, information on personnel/ equipment conducting service/ construction, etc.*)

REPRESENTATIVE OF PARTY ….
(Signature and stamp)

ĐIỀU KIỆN CHUNG CỦA HỢP ĐỒNG (ĐKC)

1. Định nghĩa

Trong hợp đồng này, các từ ngữ dưới đây được hiểu như sau:

1.1. "Chủ đầu tư" là Liên doanh Việt – Nga Vietsovpetro được quy định tại **Hợp đồng**;

1.2. "Hợp đồng" là thỏa thuận giữa Chủ đầu tư và Nhà thầu, thể hiện bằng văn bản, được hai bên ký kết, bao gồm cả phụ lục và tài liệu kèm theo;

1.3. "Nhà thầu" là nhà thầu trúng thầu (có thể là nhà thầu độc lập hoặc liên danh) và được quy định tại **Hợp đồng**;

1.4. "Nhà thầu phụ" là nhà thầu có tên trong danh sách các nhà thầu phụ do Nhà thầu đề xuất trong HSDT và được Nhà thầu ký hợp đồng để thực hiện dịch vụ liên quan;

1.5. "Tài liệu hợp đồng" là các tài liệu được liệt kê trong Hợp đồng, bao gồm bất kỳ bản sửa đổi, bổ sung nào của Hợp đồng;

1.6. "Giá hợp đồng" là tổng số tiền ghi trong hợp đồng cho việc cung cấp hàng hoá và dịch vụ liên quan. Giá hợp đồng đã bao gồm tất cả các chi phí về thuế, phí, lệ phí (nếu có);

1.7. "Ngày" là ngày dương lịch; "năm" là 365 ngày;

1.8. "Hàng hóa" bao gồm máy móc, thiết bị, nguyên liệu, nhiên liệu, vật liệu, vật tư, phụ tùng; hàng tiêu dùng; trang thiết bị y tế dùng cho các cơ sở y tế;

1.9. "Dịch vụ liên quan" bao gồm các dịch vụ như lắp đặt, duy tu, bảo dưỡng, sửa chữa ban đầu, bảo hiểm lắp đặt, bảo hiểm sửa chữa hoặc cung cấp các dịch vụ sau bán hàng khác như đào tạo, chuyển giao công nghệ…;

1.10. "Hoàn thành" là việc Nhà thầu hoàn tất các dịch vụ liên quan theo các điều khoản và điều kiện quy định tại Hợp đồng;

1.11. "Địa điểm dự án" là địa điểm được quy định tại **Hợp đồng**.

2. Tài liệu hợp đồng và thứ tự ưu tiên

2.1. Tất cả các tài liệu nêu tại Mục 2.2 ĐKC (bao gồm cả các phần của tài liệu) sẽ cấu thành Hợp đồng để tạo thành thể thống nhất, có tính tương hỗ, bổ sung và giải thích cho nhau.

2.2. Hợp đồng, các tài liệu và thứ tự ưu tiên pháp lý như sau:

a) Hợp đồng (kèm theo các Phụ lục hợp đồng);

b) Biên bản thương thảo, hoàn thiện hợp đồng;

c) Báo cáo phê duyệt kết quả lựa chọn nhà thầu;

d) Điều kiện chung của hợp đồng;

e) Hồ sơ dự thầu của Nhà thầu trúng thầu;

f) Hồ sơ mời thầu và các tài liệu sửa đổi hồ sơ mời thầu.

3. Luật và ngôn ngữ

Luật điều chỉnh hợp đồng là luật Việt Nam, ngôn ngữ của hợp đồng là tiếng Việt.

4. Thông báo

4.1. Bất cứ thông báo nào của một bên gửi cho bên kia liên quan đến hợp đồng phải được thể hiện bằng văn bản, theo địa chỉ quy định tại **Hợp đồng**. Thuật ngữ "bằng văn bản" có nghĩa là hình thức truyền đạt thông tin dưới dạng viết và có bằng chứng về việc tiếp nhận thông tin.

4.2. Thông báo của một bên sẽ được coi là có hiệu lực kể từ ngày bên kia nhận được hoặc theo ngày hiệu lực nêu trong thông báo, tùy theo ngày nào đến muộn hơn.

5. Bảo đảm thực hiện hợp đồng

5.1. Bảo đảm thực hiện hợp đồng phải được nộp lên Chủ đầu tư không muộn hơn ngày quy định tại Thư chấp thuận HSDT và trao hợp đồng. Bảo đảm thực hiện hợp đồng được thực hiện bằng một trong các hình thức sau:

a) Nộp thư bảo lãnh của tổ chức tín dụng trong nước, chi nhánh ngân hàng nước ngoài được thành lập theo pháp luật Việt Nam;

b) Nộp giấy chứng nhận bảo hiểm bảo lãnh của doanh nghiệp bảo hiểm phi nhân thọ trong nước, chi nhánh doanh nghiệp bảo hiểm phi nhân thọ nước ngoài được thành lập theo pháp luật Việt Nam.

Bảo đảm thực hiện hợp đồng theo quy định tại điểm a và điểm b khoản này là bảo đảm không có điều kiện (trả tiền khi có yêu cầu), theo mẫu quy định tại Phần 4 hoặc một mẫu khác được Chủ đầu tư chấp thuận.

c) Hình thức khác được Chủ đầu tư chấp thuận quy định tại **Hợp đồng.**

5.2. Bảo đảm thực hiện hợp đồng có giá trị và hiệu lực quy định tại **Hợp đồng**.

5.3. Bảo đảm thực hiện hợp đồng sẽ được trả cho Chủ đầu tư để bồi thường cho bất kỳ tổn thất nào phát sinh do Nhà thầu không hoàn thành các nghĩa vụ hợp đồng.

5.4. Thời hạn hoàn trả bảo đảm thực hiện hợp đồng theo quy định tại **Hợp đồng**.

6. Ký hợp đồng thầu phụ

6.1. Nhà thầu được ký kết hợp đồng với các nhà thầu phụ trong danh sách các nhà thầu phụ quy định tại **Hợp đồng** để thực hiện dịch vụ liên quan nêu trong HSDT. Việc sử dụng nhà thầu phụ sẽ không làm thay đổi các nghĩa vụ của nhà thầu. Nhà thầu phải chịu trách nhiệm trước Chủ đầu tư về khối lượng, chất lượng, tiến độ và các nghĩa vụ khác đối với phần việc do nhà thầu phụ thực hiện.

Việc thay thế, bổ sung nhà thầu phụ trong danh sách các nhà thầu phụ nêu trong HSDT hoặc thay đổi nội dung thầu phụ nêu trong HSDT chỉ được thực hiện khi được chủ đầu tư chấp thuận; việc sử dụng nhà thầu phụ phải phù hợp với nhu cầu của nhà thầu trong thực hiện hợp đồng, nhà thầu phụ phải đáp ứng về năng lực, kinh nghiệm theo yêu cầu của nhà thầu.

6.2. Nhà thầu có trách nhiệm thanh toán đầy đủ và đúng hạn cho nhà thầu phụ theo các điều khoản thỏa thuận giữa Nhà thầu và nhà thầu phụ.

7. Giải quyết tranh chấp

7.1. Chủ đầu tư và Nhà thầu có trách nhiệm giải quyết các tranh chấp phát sinh giữa hai bên thông qua thương lượng, hòa giải.

7.2. Nếu tranh chấp không thể giải quyết được bằng thương lượng, hòa giải trong thời gian quy định tại **Hợp đồng** kể từ ngày phát sinh tranh chấp thì bất kỳ bên nào cũng đều có thể yêu cầu đưa việc tranh chấp ra giải quyết theo cơ chế được quy định tại Hợp đồng.

8. Phạm vi cung cấp

Hàng hóa và dịch vụ liên quan phải được cung cấp theo quy định tại **Hợp đồng.**

9. Tiến độ giao hàng, lịch hoàn thành các dịch vụ liên quan (nếu có) và tài liệu chứng từ

Tiến độ giao hàng và lịch hoàn thành các dịch vụ liên quan (nếu có) phải được thực hiện theo theo quy định tại **Hợp đồng**. Nhà thầu phải cung cấp các hoá đơn, chứng từ tài liệu khác theo quy định tại **Hợp đồng**.

10. Trách nhiệm của Nhà thầu

Nhà thầu phải cung cấp toàn bộ hàng hóa và dịch vụ liên quan (nếu có) trong phạm vi cung cấp quy định tại Mục 8 ĐKC và theo tiến độ giao hàng, lịch hoàn thành các dịch vụ liên quan quy định tại Mục 9 ĐKC.

11. Loại hợp đồng và giá hợp đồng

11.1. Loại hợp đồng: theo quy định tại **Hợp đồng**.

11.2. Giá hợp đồng quy định tại **Hợp đồng** là toàn bộ chi phí để hoàn thành việc cung cấp hàng hoá và dịch vụ liên quan của gói thầu nêu trong Bảng giá hợp đồng trên cơ sở bảo đảm tiến độ, chất lượng theo đúng yêu cầu của gói thầu.

12. Thuế, phí, lệ phí

12.1. Nhà thầu chịu trách nhiệm đối với toàn bộ chi phí về thuế, phí, lệ phí phát sinh cho đến khi hàng hóa được giao cho Chủ đầu tư.

12.2. Trường hợp Nhà thầu thuộc đối tượng được miễn, giảm thuế, phí, lệ phí, Chủ đầu tư tạo điều kiện tối đa cho Nhà thầu áp dụng các chính sách miễn, giảm thuế, phí, lệ phí và được quy định tại **Hợp đồng**.

12.3. Việc điều chỉnh thuế thực hiện theo quy định tại **Hợp đồng**.

13. Tạm ứng

13.1. Chủ đầu tư phải cấp cho Nhà thầu khoản tiền tạm ứng theo quy định tại **Hợp đồng**, sau khi Nhà thầu nộp Bảo lãnh tạm ứng tương đương với khoản tiền tạm ứng. Bảo lãnh tạm ứng phải được phát hành bởi một tổ chức tín dụng hoặc chi nhánh ngân hàng nước ngoài được thành lập theo pháp luật Việt Nam.

13.2. Nhà thầu chỉ được sử dụng tiền tạm ứng cho việc thực hiện Hợp đồng. Nhà thầu phải chứng minh rằng khoản tiền tạm ứng đã được sử dụng đúng mục đích, đúng đối tượng bằng cách nộp bản sao các hóa đơn chứng từ hoặc tài liệu liên quan cho Chủ đầu tư.

14. Thanh toán

14.1. Yêu cầu thanh toán của Nhà thầu phải được gửi cho Chủ đầu tư bằng văn bản, kèm theo hóa đơn mô tả hàng hóa đã bàn giao và các dịch vụ liên quan đã thực hiện, cùng với chứng từ nộp theo quy định tại Điều 9 ĐKC và gửi yêu cầu thanh toán khi đã hoàn thành các nghĩa vụ khác quy định trong hợp đồng.

14.2. Việc thanh toán thực hiện theo quy định tại **Hợp đồng**.

14.3. Đồng tiền thanh toán là VND.

15. Quyền tác giả

Quyền tác giả đối với tất cả các bản vẽ, tài liệu và hồ sơ chứa đựng thông tin và dữ liệu mà Nhà thầu đã nộp cho Chủ đầu tư vẫn thuộc về Nhà thầu. Trường hợp các bản vẽ, tài liệu và hồ sơ đó được cung cấp cho Chủ đầu tư một cách trực tiếp hoặc thông qua Nhà thầu bởi một bên thứ ba thì quyền tác giả đối với các bản vẽ, tài liệu và hồ sơ thuộc về bên thứ ba đó.

16. Sử dụng các tài liệu và thông tin liên quan đến hợp đồng

16.1. Chủ đầu tư và Nhà thầu phải bảo mật bất kỳ tài liệu, dữ liệu hoặc thông tin nào khác liên quan đến hợp đồng do một bên cung cấp trực tiếp hoặc gián tiếp cho bên kia, không được tiết lộ tài liệu, dữ liệu hoặc thông tin đó cho bên thứ ba nếu không có văn bản đồng ý của bên kia cho dù tài liệu, dữ liệu hoặc thông tin đó được cung cấp trước, trong hoặc sau khi hoàn thành hoặc chấm dứt hợp đồng. Nhà thầu có thể chuyển cho nhà thầu phụ các tài liệu, dữ liệu và thông tin phù hợp do Chủ đầu tư cung cấp để nhà thầu phụ thực hiện công việc của mình theo hợp đồng; trong trường hợp này, nhà thầu phụ phải có cam kết với Nhà thầu về việc bảo mật các tài liệu, dữ liệu hoặc thông tin đó.

16.2. Chủ đầu tư không được sử dụng các tài liệu, dữ liệu và thông tin khác nhận được từ Nhà thầu cho bất kỳ mục đích nào khác không liên quan đến hợp đồng. Nhà thầu không được sử dụng các tài liệu, dữ liệu và thông tin khác nhận được từ Chủ đầu tư cho bất kỳ mục đích nào khác không liên quan đến việc thực hiện hợp đồng.

16.3. Nghĩa vụ của Chủ đầu tư và Nhà thầu quy định tại Mục 16.1 và Mục 16.2 ĐKC không áp dụng đối với các thông tin sau đây:

a) Thông tin mà Chủ đầu tư hoặc Nhà thầu cần cung cấp cho cấp có thẩm quyền;

b) Thông tin đã hoặc sẽ được công bố mà không phải do lỗi của Chủ đầu tư hoặc Nhà thầu;

c) Thông tin thuộc sở hữu của một bên vào thời điểm công bố và trước đó không phải do bên kia cung cấp trực tiếp hoặc gián tiếp;

d) Thông tin mà một bên nhận được một cách hợp pháp từ một bên thứ ba không có nghĩa vụ bảo mật thông tin.

16.4. Các quy định tại Mục 16 ĐKC không làm thay đổi bất kỳ cam kết bảo mật nào do một bên đưa ra trước ngày ký hợp đồng liên quan đến việc cung cấp hàng hóa, dịch vụ.

16.5. Các quy định tại Mục 16 ĐKC tiếp tục có hiệu lực sau khi hoàn thành hoặc chấm dứt hợp đồng vì bất cứ lý do gì.

17. Thông số kỹ thuật và tiêu chuẩn

Hàng hóa và các dịch vụ liên quan được cung cấp theo hợp đồng sẽ phải tuân theo các thông số kỹ thuật và tiêu chuẩn quy định tại Chương V; nếu tại Chương V không quy định đến một thông số hay tiêu chuẩn nào có thể áp dụng thì phải tuân thủ theo thông số và tiêu chuẩn tương đương hoặc cao hơn tiêu chuẩn hiện hành tại quốc gia hoặc vùng lãnh thổ mà hàng hóa có xuất xứ.

18. Đóng gói hàng hoá

18.1. Nhà thầu phải đóng gói hàng hóa đúng yêu cầu nhằm tránh hư hỏng trong quá trình vận chuyển đến địa điểm dự án theo quy định trong hợp đồng. Trong quá trình vận chuyển, bao gói hàng hóa phải đủ chắc chắn để chịu được những va chạm mạnh, nhiệt độ quá cao hoặc quá thấp, trong nước mặn, nước mưa và ở ngoài trời. Kích thước và trọng lượng của mỗi kiện hàng phải tính đến điều kiện vận chuyển như khoảng cách, phương tiện vận chuyển, điều kiện cơ sở hạ tầng... từ nơi xuất hàng đến địa điểm dự án.

18.2. Việc đóng gói, ghi chú đối với hàng hóa, các giấy tờ bên trong và bên ngoài kiện hàng phải tuân thủ các yêu cầu cụ thể trong hợp đồng, bao gồm cả các yêu cầu (nếu có) quy định ở **Hợp đồng** và các chỉ dẫn khác của Chủ đầu tư.

19. Bảo hiểm

Trừ trường hợp có quy định khác tại **Hợp đồng**, hàng hóa cung cấp theo hợp đồng phải được bảo hiểm đầy đủ cho các tổn thất, hư hại có thể xảy ra trong quá trình sản xuất hoặc tiếp nhận, vận chuyển, lưu kho và giao hàng theo quy định tại **Hợp đồng**.

20. <u>Vận chuyển và các dịch vụ phát sinh</u>

20.1. Yêu cầu về vận chuyển hàng hóa và các yêu cầu khác quy định tại **Hợp đồng**.

20.2. Chủ đầu tư có thể yêu cầu Nhà thầu cung cấp một hoặc một số dịch vụ sau đây, bao gồm cả các dịch vụ (nếu có) theo quy định tại **Hợp đồng**:

a) Thực hiện việc lắp đặt hoặc giám sát việc lắp đặt tại hiện trường, chạy thử hàng hóa;

b) Cung cấp các dụng cụ cần thiết để lắp ráp, bảo dưỡng hàng hóa;

c) Cung cấp tài liệu chi tiết hướng dẫn vận hành và bảo dưỡng cho từng loại hàng hóa;

d) Vận hành hoặc giám sát hoặc bảo dưỡng, sửa chữa hàng hóa trong khoảng thời gian đã được các bên thỏa thuận, với điều kiện là dịch vụ này sẽ không miễn trừ cho Nhà thầu khỏi bất kỳ nghĩa vụ bảo hành nào theo hợp đồng này;

đ) Hướng dẫn nhân sự của Chủ đầu tư về cách lắp đặt, chạy thử, vận hành, bảo dưỡng, sửa chữa hàng hóa.

20.3. Trường hợp phát sinh dịch vụ ngoài hợp đồng, Chủ đầu tư và Nhà thầu thương thảo về chi phí thực hiện dịch vụ, bảo đảm không vượt quá mức giá mà Nhà thầu áp dụng cho dịch vụ tương tự trong các hợp đồng khác.

21. <u>Kiểm tra và thử nghiệm hàng hóa</u>

Nhà thầu phải tiến hành tất cả các thử nghiệm, kiểm tra đối với hàng hóa và dịch vụ liên quan theo quy định tại **Hợp đồng** và chịu toàn bộ chi phí thử nghiệm, kiểm tra theo quy định của Hợp đồng.

22. <u>Phạt và bồi thường thiệt hại</u>

Phạt vi phạm hợp đồng và bồi thường thiệt hại theo quy định tại **Hợp đồng**.

23. <u>Bảo hành</u>

23.1. Nhà thầu bảo đảm cung cấp hàng hóa mới, chưa qua sử dụng theo đúng đề xuất đã nêu.

23.2. Nhà thầu bảo đảm hàng hóa không phát sinh khiếm khuyết do bất kỳ hành động hay sơ suất nào từ phía Nhà thầu hoặc do thiết kế, vật liệu hoặc kỹ thuật chế tạo khi hàng hóa được sử dụng bình thường trong các điều kiện phổ biến tại Việt Nam.

23.3. Thời hạn bảo hành và địa điểm áp dụng bảo hành quy định tại **Hợp đồng**.

23.4. Trường hợp phát hiện khiếm khuyết của hàng hóa, Chủ đầu tư kịp thời thông báo cho Nhà thầu, kèm theo tài liệu chứng minh. Chủ đầu tư tạo điều kiện cho Nhà thầu tiến hành kiểm tra các khiếm khuyết đó.

23.5. Sau khi nhận được thông báo của Chủ đầu tư về việc hàng hóa có khiếm khuyết, Nhà thầu phải kịp thời sửa chữa hoặc thay thế hàng hóa có khiếm khuyết trong thời hạn quy định tại **Hợp đồng** và chịu toàn bộ chi phí sửa chữa, thay thế.

23.6. Trường hợp đã được thông báo nhưng Nhà thầu không tiến hành sửa chữa khiếm khuyết của hàng hóa trong thời hạn quy định tại **Hợp đồng**, Chủ đầu tư có thể tự sửa chữa (nếu cần thiết). Nhà thầu phải chịu tất cả rủi ro và chi phí liên quan. Việc Chủ đầu tư tự sửa chữa khiếm khuyết của hàng hóa không ảnh hưởng đến các quyền khác của Chủ đầu tư đối với Nhà thầu theo hợp đồng.

24. <u>Bồi thường vi phạm sáng chế</u>

24.1. Với điều kiện là Chủ đầu tư tuân thủ Mục 24.2 ĐKC, Nhà thầu có nghĩa vụ bồi thường, bảo đảm Chủ đầu tư và nhân sự của Chủ đầu tư không bị tổn hại bởi bất kỳ vụ kiện tụng, thủ tục

hành chính, khiếu nại, yêu cầu, tổn thất, thiệt hại, chi phí nào, bao gồm cả chi phí thuê luật sư vì có vi phạm hoặc cáo buộc vi phạm sáng chế, mẫu hữu ích, kiểu dáng công nghiệp, nhãn hiệu, quyền tác giả hoặc các quyền sở hữu trí tuệ khác đã đăng ký hoặc tồn tại vào ngày ký hợp đồng mà các vi phạm hoặc cáo buộc vi phạm đó liên quan tới:

a) Việc lắp đặt hàng hóa do Nhà thầu thực hiện hoặc việc sử dụng hàng hóa tại Việt Nam;

b) Việc bán các sản phẩm được sản xuất từ hàng hóa.

Việc bồi thường nêu trên không áp dụng đối với các trường hợp sau: sử dụng hàng hóa hoặc bất kỳ phần nào của hàng hóa ngoài mục đích nêu trong hợp đồng hoặc phát sinh hợp lý từ hợp đồng; có hành vi vi phạm do sử dụng hàng hóa hoặc bất kỳ phần nào của hàng hóa, hay bất kỳ sản phẩm nào được sản xuất từ hàng hóa có sự kết hợp các thiết bị, nhà xưởng hoặc vật tư khác không phải do Nhà thầu cung cấp theo hợp đồng.

24.2. Trường hợp xảy ra kiện tụng hoặc khiếu nại đối với Chủ đầu tư liên quan tới các vấn đề quy định tại Mục 24.1 ĐKC, Chủ đầu tư có nghĩa vụ thông báo kịp thời cho Nhà thầu. Nhà thầu có thể nhân danh Chủ đầu tư giải quyết kiện tụng hoặc khiếu nại đó hoặc thương thảo để giải quyết kiện tụng hoặc khiếu nại đó và chịu trách nhiệm đối với các chi phí liên quan.

24.3. Trong vòng 28 ngày kể từ khi nhận được thông báo của Chủ đầu tư, trường hợp Nhà thầu không thông báo cho Chủ đầu tư về ý định giải quyết kiện tụng hay khiếu nại đó, Chủ đầu tư sẽ tự giải quyết.

24.4. Trường hợp được yêu cầu, Chủ đầu tư hỗ trợ Nhà thầu giải quyết vụ kiện tụng hay khiếu nại đó và sẽ được Nhà thầu hoàn trả mọi chi phí hợp lý phát sinh.

24.5. Chủ đầu tư có nghĩa vụ bồi thường, đảm bảo Nhà thầu, nhà thầu phụ, nhân sự của Nhà thầu không bị tổn hại bởi bất kỳ vụ kiện tụng, thủ tục hành chính, khiếu nại, yêu cầu, tổn thất, thiệt hại, chi phí nào, bao gồm cả chi phí thuê luật sư vì có vi phạm hoặc cáo buộc vi phạm sáng chế, mẫu hữu ích, kiểu dáng công nghiệp, nhãn hiệu, quyền tác giả hoặc các quyền sở hữu trí tuệ khác đã đăng ký hoặc tồn tại vào ngày ký hợp đồng mà các vi phạm hoặc cáo buộc vi phạm đó phát sinh từ hoặc liên quan đến bất kỳ thiết kế, dữ liệu, bản vẽ, thông số kỹ thuật hoặc các tài liệu và hồ sơ nào được cung cấp hoặc thiết kế bởi Chủ đầu tư hoặc thay mặt Chủ đầu tư.

25. Thay đổi liên quan đến pháp lý

Trừ trường hợp có quy định khác tại hợp đồng, kể từ 28 ngày trước ngày có thời điểm đóng thầu trở về sau, nếu có bất kỳ chính sách nào được ban hành, thay thế, sửa đổi hoặc tuyên bố hết hiệu lực tại Việt Nam gây ảnh hưởng đến ngày giao hàng và/hoặc giá hợp đồng thì ngày giao hàng hoặc giá hợp đồng phải được điều chỉnh tương ứng với mức độ ảnh hưởng của nhà thầu khi thực hiện các nghĩa vụ theo hợp đồng. Phần tăng hoặc giảm giá hợp đồng không được thanh toán riêng hay ghi nhận khoản phải trả riêng nếu việc tăng hoặc giảm giá hợp đồng này đã được quy định tại Mục 11 ĐKC.

26. Bất khả kháng

26.1. Nhà thầu không bị tịch thu bảo lãnh thực hiện hợp đồng, không phải chịu trách nhiệm bồi thường thiệt hại hay bị phạt hoặc bị chấm dứt hợp đồng nếu rơi vào các sự kiện bất khả kháng gây cản trở tiến độ thực hiện hợp đồng hoặc không thể thực hiện nghĩa vụ hợp đồng.

26.2. Khi xảy ra sự việc bất khả kháng, việc một bên không thực hiện được bất kỳ một nghĩa vụ nào của mình sẽ không bị coi là vi phạm hay phá vỡ Hợp đồng, với điều kiện nhà thầu bị ảnh hưởng bởi vụ việc này: (a) đã tiến hành những biện pháp ngăn ngừa hợp lý, cẩn trọng và các biện pháp thay thế cần thiết, tất cả với mục đích thực hiện được những điều khoản và điều kiện của Hợp đồng này, và (b) phải tiếp tục thực hiện các nghĩa vụ của mình trong phạm vi Hợp đồng chừng nào việc thực hiện này còn hợp lý và thực tế.

26.3. Trong hợp đồng này, bất khả kháng được hiểu là các sự kiện nằm ngoài tầm kiểm soát của các bên và không thể lường trước, không thể tránh được và khiến cho việc thực hiện hợp đồng là không khả thi mà nguyên nhân không phải do sơ suất hoặc thiếu chú ý của các bên. Sự kiện bất khả kháng có thể bao gồm nhưng không giới hạn bởi chiến tranh, bạo loạn, đình công, hỏa hoạn, lũ lụt, dịch bệnh, cách ly do kiểm dịch hoặc các chính sách, quy định của Nhà nước.

26.4. Khi xảy ra sự kiện bất khả kháng, nhà thầu bị ảnh hưởng bởi sự kiện bất khả kháng phải kịp thời thông báo bằng văn bản cho bên kia về sự kiện đó và nguyên nhân gây ra sự kiện trong vòng 14 ngày kể từ ngày xảy ra sự kiện bất khả kháng. Đồng thời, chuyển cho bên kia giấy xác nhận về sự kiện bất khả kháng đó được cấp bởi một tổ chức có thẩm quyền tại nơi xảy ra sự kiện bất khả kháng.

Nhà thầu bị ảnh hưởng bởi sự kiện bất khả kháng phải tiếp tục thực hiện các nghĩa vụ hợp đồng theo hoàn cảnh thực tế cho phép và phải tìm mọi biện pháp hợp lý để hạn chế hậu quả của sự việc bất khả kháng.

26.5. Thời hạn mà một bên phải hoàn thành một công việc theo Hợp đồng này được gia hạn thêm một khoảng thời gian bằng đúng thời gian bên đó không thể thực hiện được công việc do sự kiện bất khả kháng gây ra.

27. <u>Sửa đổi hợp đồng</u>

27.1. Chủ đầu tư có thể yêu cầu Nhà thầu sửa đổi, bổ sung các nội dung sau đây trong phạm vi công việc của hợp đồng:

a) Thay đổi bản vẽ, thiết kế công nghệ hoặc yêu cầu kỹ thuật đối với trường hợp hàng hóa cung cấp theo hợp đồng được đặt hàng sản xuất cho riêng Chủ đầu tư;

b) Thay đổi phương thức vận chuyển hoặc đóng gói;

c) Thay đổi địa điểm giao hàng;

d) Thay đổi dịch vụ liên quan.

đ) Điều chỉnh tiến độ thực hiện hợp đồng theo quy định tại Mục 28 ĐKC.

27.2. Trường hợp việc sửa đổi, bổ sung các nội dung trong phạm vi công việc của hợp đồng quy định tại Mục 27.1 ĐKC làm thay đổi chi phí hoặc thời gian thực hiện bất kỳ điều khoản nào trong hợp đồng, giá hợp đồng hoặc ngày giao hàng, ngày hoàn thành dịch vụ liên quan phải được điều chỉnh tương ứng và hai bên tiến hành sửa đổi hợp đồng. Yêu cầu của Nhà thầu về việc điều chỉnh giá hợp đồng, ngày giao hàng hoặc ngày hoàn thành phải được tiến hành trong vòng 28 ngày, kể từ ngày Nhà thầu nhận được yêu cầu của Chủ đầu tư về việc sửa đổi, bổ sung nội dung công việc của hợp đồng.

27.3. Trường hợp Nhà thầu cung cấp hàng hóa với phiên bản mới của cùng hãng sản xuất, có cùng xuất xứ, có tính năng kỹ thuật, cấu hình, thông số… tương đương hoặc tốt hơn phiên bản hàng hóa Nhà thầu đề xuất trong HSDT và đáp ứng yêu cầu HSMT thì Nhà thầu phải thông báo trước bằng văn bản cho Chủ đầu tư để Chủ đầu tư xem xét. Trong trường hợp này, căn cứ nhu cầu sử dụng, Chủ đầu tư có thể chấp thuận đề xuất của Nhà thầu với điều kiện là đơn giá và các điều kiện khác của hợp đồng không thay đổi.

27.4. Trường hợp cần thực hiện các dịch vụ liên quan chưa nêu trong hợp đồng, Chủ đầu tư và Nhà thầu tiến hành thương thảo, bảo đảm đơn giá phù hợp giá cả thị trường.

27.5. Chủ đầu tư và Nhà thầu sẽ tiến hành thương thảo để làm cơ sở ký kết văn bản sửa đổi hợp đồng trong trường hợp sửa đổi hợp đồng. Mọi giao dịch trong quá trình thực hiện hợp đồng được các Bên thực hiện bằng văn bản và gửi theo đường bưu chính hoặc theo số Fax tới địa chỉ đăng ký hoặc số Fax của mỗi Bên ghi trong hợp đồng và email đến địa chỉ email theo mẫu quy định tại **Hợp đồng**.

27.6. Trong thời gian thực hiện hợp đồng, nhà thầu có thể đề xuất giải pháp tiết kiệm chi phí bao gồm ít nhất các nội dung sau đây:

a) Nội dung giải pháp, giải thích sự khác biệt so với các yêu cầu theo hợp đồng đã ký kết;

b) Phân tích toàn diện chi phí và lợi ích của giải pháp bao gồm mô tả và ước tính các chi phí (bao gồm cả chi phí vòng đời) có thể phát sinh cho Chủ đầu tư trong trường hợp chấp thuận đề xuất của Nhà thầu;

c) Tác động của giải pháp đối với hiệu quả thực hiện hợp đồng.

27.7. Chủ đầu tư có thể chấp thuận đề xuất của Nhà thầu nếu đề xuất này chứng minh được một trong các lợi ích dưới đây mà không làm ảnh hưởng đến các chức năng cần thiết của hàng hóa:

a) Rút ngắn thời gian giao hàng;

b) Giảm giá hợp đồng hoặc chi phí vòng đời cho Chủ đầu tư;

c) Nâng cao chất lượng, hiệu quả hoặc tính bền vững của hàng hóa trong hợp đồng;

d) Bất kỳ lợi ích nào khác cho Chủ đầu tư.

Trường hợp đề xuất của Nhà thầu được Chủ đầu tư chấp thuận và làm giảm giá hợp đồng, Chủ đầu tư thanh toán cho Nhà thầu theo tỷ lệ quy định tại **Hợp đồng** đối với phần giá trị giảm giá hợp đồng.

Trường hợp đề xuất của Nhà thầu được Chủ đầu tư chấp thuận và làm tăng giá hợp đồng nhưng giảm chi phí vòng đời do tác động của các yếu tố quy định tại các điểm a, b, c và d khoản này, Chủ đầu tư thanh toán cho Nhà thầu theo phần giá trị tăng giá hợp đồng.

28. Điều chỉnh tiến độ thực hiện hợp đồng

28.1. Trong quá trình thực hiện hợp đồng, trường hợp phát sinh các điều kiện bất lợi, cản trở Nhà thầu hoặc nhà thầu phụ trong việc cung cấp hàng hóa và lịch thực hiện các dịch vụ liên quan quy định tại Mục 9 ĐKC, Nhà thầu phải kịp thời thông báo bằng văn bản cho Chủ đầu tư về việc chậm tiến độ, nguyên nhân, khoảng thời gian chậm tiến độ. Trên cơ sở thông báo của Nhà thầu, Chủ đầu tư phải nhanh chóng đánh giá tình hình và có thể xem xét gia hạn hợp đồng. Trường hợp Chủ đầu tư đồng ý gia hạn, các bên tiến hành thương thảo để làm cơ sở ký kết phụ lục sửa đổi, bổ sung hợp đồng.

28.2. Trừ trường hợp bất khả kháng quy định tại Mục 26 ĐKC, Nhà thầu giao hàng chậm hoặc hoàn thành dịch vụ liên quan chậm có nghĩa vụ bồi thường thiệt hại cho Chủ đầu tư theo quy định tại Mục 22 ĐKC.

29. Chấm dứt hợp đồng

29.1. Chấm dứt hợp đồng do sai phạm

a) Chủ đầu tư có thể chấm dứt một phần hoặc toàn bộ hợp đồng mà không gây tổn hại đến các biện pháp khắc phục vi phạm hợp đồng khác bằng cách thông báo bằng văn bản cho Nhà thầu về sai phạm trong hợp đồng trong các trường hợp sau:

(i) Nhà thầu không thể bàn giao hàng hóa hoặc một phần hàng hóa trong thời hạn quy định theo hợp đồng, hoặc trong thời gian gia hạn theo quy định tại Mục 28 ĐKC;

(ii) Nhà thầu không thực hiện bất kỳ nghĩa vụ nào khác theo hợp đồng;

(iii) Chủ đầu tư xác định Nhà thầu vi phạm một trong các hành vi bị cấm quy định tại HSMT trong quá trình đấu thầu hoặc thực hiện hợp đồng;

b) Trường hợp Chủ đầu tư chấm dứt một phần hoặc toàn bộ hợp đồng theo điểm a khoản này, Chủ đầu tư có thể mua sắm hàng hóa và dịch vụ liên quan tương tự như các hàng hóa và dịch vụ chưa được thực hiện theo các điều khoản và phương thức phù hợp. Nhà thầu phải chịu trách nhiệm bồi thường cho Chủ đầu tư các chi phí phụ trội phát sinh từ việc mua hàng hóa và dịch vụ tương tự đó. Tuy nhiên, Nhà thầu vẫn phải tiếp tục thực hiện phần hợp đồng không bị chấm dứt.

29.2. Chấm dứt hợp đồng do mất khả năng thanh toán

Trường hợp Nhà thầu phá sản hoặc mất khả năng thanh toán, Chủ đầu tư có thể chấm dứt hợp đồng vào bất kỳ thời điểm nào bằng cách gửi thông báo cho Nhà thầu. Trong trường hợp đó, hợp đồng sẽ chấm dứt và Nhà thầu không được bồi thường với điều kiện là việc chấm dứt hợp đồng không gây tổn hại hoặc ảnh hưởng đến bất kỳ quyền khởi kiện hoặc biện pháp khắc phục của Chủ đầu tư trước đó hoặc sau đó.

30. <u>Hạn chế xuất khẩu</u>

Trường hợp quốc gia, vùng lãnh thổ cung cấp hàng hóa, dịch vụ có các quy định thương mại dẫn tới việc hạn chế xuất khẩu, gây khó khăn cho Nhà thầu trong việc thực hiện các nghĩa vụ hợp đồng, Nhà thầu không bắt buộc phải hoàn thành nghĩa vụ giao hàng, thực hiện dịch vụ với điều kiện là Nhà thầu cung cấp cho Chủ đầu tư các tài liệu chứng minh việc đã hoàn thành tất cả các thủ tục xuất khẩu cần thiết, bao gồm cả xin giấy phép hoặc ủy quyền để xuất khẩu hàng hóa, dịch vụ theo hợp đồng. Trong trường hợp này, Chủ đầu tư có thể chấm dứt hợp đồng với Nhà thầu.

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

****

HỢP ĐỒNG SỐ: .....

V/v: Mua Electrical Bulk Materials for BK10A- Lô 09-1

(Gói thầu số VT-1322/26-XL-DA-TTHN)

Căn cứ vào nhu cầu của Liên doanh Việt - Nga Vietsovpetro và khả năng cung cấp của Công ty...,

Hôm nay, ngày _____ tháng____ năm ____, các bên gồm

BÊN A: LIÊN DOANH VIỆT - NGA VIETSOVPETRO

Địa chỉ: 105 Lê Lợi, Phường Vũng Tàu-TP. HCM, Việt Nam

Điện thoại: 0254 839 871, Fax: 0254 839 857

Tài khoản số: ..... tại Ngân hàng Ngoại thương VN, CN Vũng Tàu

Mã số thuế: .....

Đại diện: Ông Trần Quốc Thắng – Phó Tổng Giám Đốc Thương mại
(Theo giấy ủy quyền số 77/UQ-PL ngày 18/03/2025)

BÊN B: CÔNG TY ……..

Địa chỉ: ……
Điện thoại: …….
Fax: ……
Tài khoản: ……
Mã số thuế: ……..
Đại diện: Ông ……., Giám đốc

Hai Bên thỏa thuận ký kết hợp đồng với các điều khoản như sau:

***Điều 1:* Đối tượng hợp đồng**

Bên A đồng ý mua và Bên B đồng ý bán **Electrical Bulk Materials for BK-10A- Lô 09-1** (sau đây gọi tắt là "Hàng hóa") với chủng loại, số lượng, đặc điểm kỹ thuật, đơn giá, giá trị hàng hóa theo Phụ lục 01 của hợp đồng và là một phần thống nhất và không tách rời của hợp đồng này.

Hàng hóa của hợp đồng được Vietsovpetro sử dụng cho hoạt động dầu khí tại Lô 09.1.

***Điều 2:* Giá trị hợp đồng**

2.1 Giá trị hợp đồng là: _____ VNĐ *(bằng chữ:_____)*

Giá trị hợp đồng trên không bao gồm thuế nhập khẩu, không bao gồm thuế GTGT của giá trị hàng hóa nhập khẩu ghi trên Tờ khai Hải quan nhưng đã bao gồm các loại thuế, phí, lệ phí phát sinh trong lãnh thổ Việt Nam. Thuế nhập khẩu và thuế GTGT trên được miễn theo Hiệp định liên Chính phủ cho hàng hóa Lô 09.1. Bên B được sử dụng Hạn mức nhập khẩu Lô 09.1 của Bên A để làm thủ tục nhập khẩu hàng hóa và miễn thuế theo Hiệp định.

2.2 Giá trị hợp đồng nêu trên được tính trên cơ sở giao hàng tại kho Vietsovpetro tại thành phố Vũng Tàu, bao gồm giá trị hàng hóa và các loại chi phí do Bên B chi trả như phí vận chuyển, đóng gói, bốc xếp lên phương tiện vận chuyển và các chi phí khác liên quan đến việc thực hiện

hợp đồng này. Giá trị hợp đồng là giá cố định và không thay đổi trong suốt thời gian hợp đồng có hiệu lực.

<u>Điều 3:</u> Quy cách, số lượng, chất lượng hàng hóa

3.1 Quy cách, số lượng, chất lượng, chủng loại, ký mã hiệu, hãng sản xuất, nước sản xuất, năm sản xuất và những thông số khác của hàng hóa do Bên B cung cấp phải phù hợp với quy định nêu trong Phụ lục số 01 của Hợp đồng này. Hàng hóa mới 100%, chưa qua sử dụng và trong tình trạng sử dụng tốt.

Năm sản xuất: 2025 hoặc muộn hơn

3.2 Hồ sơ kèm theo hàng hóa gồm:

- 02 Hóa đơn thuế GTGT (bản gốc);
- Chứng chỉ xuất xứ (CO) do phòng thương mại của nước sản xuất cấp (bản gốc/ bản điện tử có kèm đường link để kiểm tra);
- Chứng chỉ số lượng và chất lượng (CQQ) do nhà sản xuất cấp (bản gốc / bản điện tử có kèm đường link để kiểm tra);
- Các Chứng chỉ khác (Theo YCKT của HSMT) (bản gốc);
- Chứng chỉ bảo hành của Bên B bảo hành 18 tháng kể từ ngày giao hàng hoặc 12 tháng kể từ ngày hàng hóa đưa vào sử dụng (bản gốc);
- Tờ khai hải quan hàng hóa nhập khẩu (bản copy);
- Tài liệu kỹ thuật của hàng hóa (nếu có).

Hồ sơ mời thầu của Bên A và Hồ sơ dự thầu của Bên B cho gói thầu VT-1322/25-XL-DA-TTHN là tài liệu tham chiếu về kỹ thuật cho hàng hóa của hợp đồng này.

<u>Điều 4</u>: Giao nhận và kiểm tra, giám định hàng hóa

4.1 Hàng hóa được giao phải phù hợp với yêu cầu quy định tại Điều 1 và Điều 3 của hợp đồng này trong thời hạn là: **không muộn hơn 135 ngày lịch kể từ ngày Vietsovpetro gửi thư thông báo trúng thầu** đến ngày giao hàng tại kho của Bên A.

Ngày giao hàng của hợp đồng này được ghi trong Biên bản giao nhận hàng do đại diện hai bên ký như quy định tại mục 4.8 dưới đây

4.2 Bên B tự chịu trách nhiệm làm thủ tục hải quan cho hàng hóa nhập khẩu. Bên A cho phép Bên B được sử dụng hạn mức nhập khẩu của Bên A đã đăng ký tại Hải quan Vũng Tàu để làm thủ tục nhập khẩu và hỗ trợ Bên B về mặt giấy tờ trong việc sử dụng hạn mức nhập khẩu của Bên A cho lô hàng nhập khẩu của Hợp đồng này để Bên B xin miễn thuế nhập khẩu và thuế giá trị gia tăng của giá trị hàng hóa nhập khẩu ghi trên Tờ khai Hải quan theo quy định cho Liên doanh Việt – Nga Vietsovpetro.

4.3 Để thuận tiện cho việc thông quan, làm các thủ tục miễn thuế nhập khẩu và miễn thuế giá trị gia tăng của giá trị hàng hóa nhập khẩu ghi trên Tờ khai Hải quan, hàng hóa Bên B nên nhập về cảng Vũng Tàu. Bên A không chịu trách nhiệm trả tiền thuế cho Bên B trong trường hợp nếu Bên B nhập hàng hóa về cảng khác mà không làm được thủ tục miễn thuế hoặc Bên B không sử dụng hạn mức nhập khẩu của Bên A.

4.4 Hàng hóa được giao **03 lần** vào kho của Bên A tại thành phố Vũng Tàu. Bên B cam kết giao hàng đúng số lần quy định. Trường hợp số lần giao hàng thực tế vượt quá số lần qui định tại Điều này, Bên A có thể đồng ý nhận hàng và Bên B phải chịu trách nhiệm thanh toán cho Bên A toàn bộ chi phí phát sinh từ việc Bên A tổ chức nhận hàng của các lần giao hàng vượt quá qui định trong Hợp đồng theo đơn giá hiện hành của Bên A đang áp dụng cho các khách hàng của Bên A.

4.5 Dỡ hàng từ phương tiện của Bên B do Bên A đảm nhận bằng phương tiện, nhân lực và chi phí của mình.

4.6 Trong vòng 02 ngày trước khi giao hàng, Bên B phải thông báo bằng văn bản cho Bên A biết về số lượng, quy cách đóng gói hàng hóa để Bên A bố trí nhân lực và phương tiện bốc

dỡ.

4.7 Người của Bên B đến giao hàng phải có giấy giới thiệu của người đại diện ký Hợp đồng của Bên B.

4.8 Đại diện của Liên Doanh Việt - Nga Vietsovpetro (là Xí nghiệp Dịch vụ và Đơn vị đặt hàng) và đại diện của Bên B tham gia giao nhận, kiểm tra hàng hóa của hợp đồng này và lập Biên bản giao nhận hàng (theo Phụ lục số 02 của hợp đồng này) sẽ ghi rõ số lượng, tình trạng, các hồ sơ giao kèm theo hàng hóa kể cả tờ khai Hải quan (nếu hàng hóa đó là hàng nhập khẩu). Biên bản giao nhận hàng phải được Lãnh đạo Xínghiệp Dịch vụ và Lãnh đạo Đơn vị đặt hàng phê duyệt. Biên bản giao nhận hàng là căn cứ để Bên A thanh toán cho Bên B.

4.9 Trong trường hợp cần thiết, bằng chi phí của mình, Bên A (giao cho Xí nghiệp Dịch vụ) có quyền trưng cầu cơ quan giám định độc lập tham gia giám định hàng hóa. Trong vòng 03 ngày làm việc kể từ khi kết thúc giám định, cơ quan giám định độc lập cung cấp Chứng thư giám định tình trạng và số lượng hàng hóa. Chứng thư giám định hàng hóa là căn cứ pháp lý để Bên A khiếu nại Bên B.

4.10 Bên B phải đảm bảo khi giao Hàng hóa cho Bên A phải có kèm theo đầy đủ các chứng từ như quy định tại Điều 3 của Hợp đồng này. Trong trường hợp Bên B giao hàng tới kho của Bên A tại Vũng Tàu nhưng chưa có đầy đủ các chứng từ theo quy định thì Bên A đồng ý cho Bên B tạm gửi hàng tại kho để chờ tập hợp đầy đủ các chứng từ cho việc giao nhận Hàng hóa chính thức.

Bên A đồng ý miễn phí lưu kho đối với lô Hàng tạm gửi này của Bên B trong 05 ngày lịch đầu tiên. Kể từ ngày thứ 06 trở đi, Bên B sẽ phải trả cho Bên A chi phí lưu kho của lô Hàng theo mức đơn giá lưu kho hiện hành của Bên A đang áp dụng cho các khách hàng của Bên A. Chi phí lưu kho này sẽ được Bên A khấu trừ thẳng vào giá trị mà Bên A thanh toán cho Bên B theo quy định của Hợp đồng này hoặc những khoản thanh toán ở những Hợp đồng khác đã ký giữa Hai bên.

4.11 Bên A có quyền từ chối nhận Hàng nếu Hàng hoá khi giao không đảm bảo chất lượng, như đã quy định ở Điều 1, Phụ lục số 1 cũng như không có đầy đủ bộ chứng từ đi kèm như quy định tại Điều 3 của Hợp đồng này.

4.12 Kể từ ngày thông báo trúng thầu, Bên B phải cung cấp cho Bên A báo cáo thường xuyên 01 tháng/lần vào ngày làm việc đầu tiên của tháng, thể hiện tiến trình sản xuất, chế tạo, kiểm tra và cung cấp Hàng hóa của Bên B. Báo cáo này được gửi cho XN Xây lắp của Bên A bằng email theo địa chỉ: .....@vietsov.com.vn; .....@vietsov.com.vn; và c/c: nhungth.hq@vietsov.com.vn.

Tại các thời điểm khẩn cấp hoặc có sự chậm trễ trong quá trình chế tạo, Bên B phải báo cáo ngay cho Bên A. Nội dung báo cáo tối thiểu bao gồm các nội dung sau:

a) Mô tả các công việc đã hoàn thành trong giai đoạn thực hiện;

b) Nêu bật những chậm trễ hoặc những chậm trễ có khả năng xảy ra và những nguyên nhân gây ra chậm trễ ảnh hưởng đến tiến độ sản xuất và đưa ra các biện pháp bảo đảm tiến độ;

c) Thay đổi tiến độ nếu có. Trong quá trình thực hiện Hợp đồng, mọi liên hệ Bên B gửi công văn chính thức cho Lãnh đạo Liên doanh Việt-Nga Vietsovpetro, sao gửi cho Xí nghiệp Xây Lắp của Bên A và qua email bản scan công văn theo địa chỉ: .....@vietsov.com.vn; .....@vietsov.com.vn; và c/c: nhungth.hq@vietsov.com.vn.

<u>Điều 5:</u> Bao bì, Đóng gói và Ký mã hiệu:

5.1 Hàng hoá giao theo Hợp đồng này sẽ được đóng trong bao bì thích hợp theo tiêu chuẩn xuất khẩu, bảo đảm cho hàng hoá không bị hư hại, ăn mòn trong quá trình vận chuyển và thuận tiện cho bốc xếp, bốc dỡ.

5.2 Bên B hoàn toàn chịu trách nhiệm trong trường hợp hàng hoá bị mất mát, hư hỏng do thiếu sót trong việc đóng gói Hàng hoá.

5.3 Hàng hoá có thể được ghi rõ ràng bằng sơn không xóa được trên bề mặt hoặc in trên tấm ghi nhãn đính trên từng kiện với các thông tin sau bằng tiếng Anh hay tiếng Việt:
- Tên nhà sản xuất.
- Tên Hàng.
- Khối lượng (nếu có).
- Số Hợp đồng (nếu có).

5.4 Bên B chịu toàn bộ phí tổn đối với mọi mất mát/ hư hại của Hàng hoá trong qúa trình bốc xếp, bốc dỡ, vận chuyển do ghi ký mã hiệu không đúng, không đầy đủ cũng như chịu mọi chi phí vận chuyển, bảo quản, mất mát phát sinh thêm do Hàng hóa bị gửi nhầm địa chỉ do ghi ký mã hiệu sai.

<u>Điều 6:</u> Trách nhiệm do vi phạm hợp đồng

6.1. Nếu Bên B giao hàng bị chậm bất kỳ mục nào của nhóm thì Bên B phải chịu phạt 0,2%/ngày/giá trị của nhóm cho 10 ngày lịch chậm đầu tiên; phạt 0,3%/ngày/giá trị của nhóm cho những ngày lịch tiếp theo trên tổng số giá trị hàng giao chậm cho đến mức tổng số tiền phạt không quá 8% giá trị của nhóm

Nếu Bên B giao Hàng hoá quy định tại Phụ lục số 01 của hợp đồng này theo nhiều lần giao hàng thì thời gian giao nhận hàng của hợp đồng được tính là thời gian giao hàng theo lần giao cuối cùng. Hàng hoá của những lần giao trước chỉ được ghi nhận lưu kho tại kho của Bên A cho đến khi Bên B giao nhận đủ số hàng của cả hợp đồng.

6.2. Nếu Bên B không giao đủ số lượng, chủng loại hàng hóa (như quy định tại Phụ lục số 01 của hợp đồng này) thì:

- Bên B vi phạm nghĩa vụ giao hàng theo hợp đồng này và phải chịu phạt một khoản tiền bằng 08% giá trị của cả hợp đồng.
- Nếu Bên B không giao đủ số lượng, chủng loại hàng hóa theo hợp đồng (như quy định tại Phụ lục số 01 của hợp đồng này) thì:
- Bên A có quyền từ chối nhận hợp đồng đó. Bên B vi phạm nghĩa vụ giao hàng theo hợp đồng này và phải chịu phạt một khoản tiền bằng 08% giá trị của cả hợp đồng.

6.3. Nếu Bên B giao hàng hoá vượt số lần giao nhận như quy định tại Điều 4 của hợp đồng này thì:

- Bên B đã vi phạm điều kiện giao nhận hàng và phải chịu trách nhiệm thanh toán các chi phí liên quan tới giao nhận hàng hoá cho lần giao hàng vượt quá số lần giao hàng theo hợp đồng này theo mức đơn giá hiện hành của Bên A đang áp dụng cho các khách hàng của Bên A.

6.4. Nếu Bên B giao hàng không đảm bảo chất lượng như qui định tại Điều 2 của hợp đồng thì Bên A sẽ không nhận hàng và phạt Bên B theo mức phạt không giao đủ hàng như quy định tại mục 6.2 của hợp đồng này. Bên A có quyền chấp nhận/không chấp nhận việc Bên B sẽ cung cấp hàng mới thay thế cho hàng không đảm bảo chất lượng trên.

6.5 Vi phạm do cung cấp chậm/cung cấp không đủ hàng hoá:

6.5.1. Nếu Bên B giao hàng chậm quá 60 ngày lịch so với thời gian quy định tại mục 4.1 của hợp đồng này, ngoại trừ trường hợp bất khả kháng, thì Bên A có quyền:

a) Chỉ định bên thứ 3 có khả năng cung cấp hàng hóa/hàng hoá kèm dịch vụ. Trong trường hợp đó Bên B có trách nhiệm ký hợp đồng với bên được chỉ định để tiếp tục thực hiện công việc cung cấp cho bên A.

Hoặc;

b) Trực tiếp ký hợp đồng mua hàng/hàng hoá kèm dịch vụ của Bên thứ 3 để tiếp tục thực hiện công việc của hợp đồng. Trong trường hợp đó Bên B phải trả khoản tiền chênh lệch và các chi phí liên quan nếu có.

Hoặc;

c) Đơn phương chấm dứt thực hiện hợp đồng và trong trường hợp này Bên B phải chịu phạt một khoản tiền bằng 08% giá trị của hợp đồng.

6.5.2. Nếu Bên B giao hàng chậm (một phần hàng hoá) quá 60 ngày lịch so với thời gian quy định tại mục 4.1 của hợp đồng này, ngoại trừ trường hợp bất khả kháng, thì Bên A có quyền:

a) Chỉ định bên thứ 3 có khả năng cung cấp hàng hóa/hàng hoá kèm dịch vụ. Trong trường hợp đó Bên B có trách nhiệm ký hợp đồng với bên được chỉ định để tiếp tục thực hiện công việc cung cấp cho bên A.

Hoặc;

b) Trực tiếp ký hợp đồng mua hàng/hàng hoá kèm dịch vụ của Bên thứ 3 để tiếp tục thực hiện công việc của hợp đồng. Trong trường hợp đó Bên B phải trả khoản tiền chênh lệch và các chi phí liên quan nếu có.

c) Đơn phương chấm dứt thực hiện tiếp hợp đồng và trong trường hợp này Bên B phải chịu phạt một khoản tiền bằng 08% giá trị của phần hợp đồng.

6.6 Tổng các loại phạt không vượt quá 08% giá trị hợp đồng.

6.7 Giá trị hợp đồng bị vi phạm ghi ở Điều 6 của hợp đồng này là giá trị không có thuế GTGT và không bao gồm thuế nhập khẩu.

6.8 Do hàng hóa của hợp đồng này được lựa chọn trọn gói, nên trong trường hợp Bên B không giao bất kỳ một mục hàng hóa nào của hợp đồng thì:

- Bên A có quyền từ chối nhận các mục còn lại của hợp đồng đó và Bên B chịu phạt mức tối đa 08% giá trị hàng hóa của cả hợp đồng; hoặc:

- Bên A có thể vẫn nhận các mục hàng hóa còn lại của hợp đồng nhưng khi đó Bên B sẽ chịu phạt với mức phạt tối đa 08% giá trị hàng hóa của cả hợp đồng đó.

6.9 Nếu Bên B giao hàng chậm bất kỳ một mục hàng hóa nào của hợp đồng thì Bên A có quyền áp dụng mức phạt giao hàng chậm tương ứng đối với giá trị hàng hóa của cả hợp đồng.

6.10 Để thu hồi khoản tiền phạt vi phạm, Bên A sẽ toàn quyền: 1) khấu trừ khoản tiền phạt vi phạm từ các khoản tiền mà Bên A sẽ thanh toán cho Bên B tại Hợp đồng này hoặc theo các hợp đồng khác được ký kết giữa hai bên; 2) Yêu cầu Ngân hàng cấp Bảo đảm thực hiện hợp đồng thanh toán ngay khoản tiền Bên B mở bảo lãnh cho Bên A; 3) Bằng văn bản, yêu cầu Bên B thanh toán. Trong mọi trường hợp, Bên B cam kết nghiêm túc thực hiện nghĩa vụ thanh toán của mình cho Bên A.

6.11 Việc bồi thường thiệt hại (nếu có) được thực hiện theo quy định của pháp luật Việt Nam.

<u>Điều 7:</u> Bảo hành

7.1 Bên B chịu trách nhiệm bảo hành chất lượng của hàng hóa trong thời hạn 18 tháng kể từ ngày giao hàng hoặc 12 tháng kể từ ngày hàng hóa đưa vào sử dụng. Điều kiện bảo hành theo đúng tiêu chuẩn bảo hành của nhà sản xuất.

7.2 Trong thời gian bảo hành nếu Bên A phát hiện có hư hỏng, sai sót về chất lượng hàng hóa thì Bên A sẽ thông báo kịp thời bằng fax/email cho Bên B biết để cùng nhau xác minh. Việc xác minh sai sót về chất lượng phải được Bên B tiến hành không chậm quá 15 ngày lịch kể từ ngày Bên B nhận được thông báo. Việc xác minh phải được lập thành biên bản,trong đó ghi rõ kết luận về nguyên nhân gây ra hư hỏng, xác định trách nhiệm thay thế cái mới/sửa chữa các hư hỏng đó thuộc về bên nào và thời hạn thay thế/sửa chữa làm căn cứ pháp lý trong thực hiện hợp đồng này.

7.3 Tùy mức độ hư hỏng, nhưng không quá 15 ngày lịch kể từ ngày có kết luận về nguyên nhân hư hỏng, sai sót về chất lượng hàng hóa do lỗi của Bên B thì Bên B phải tiến hành sửa chữa các sai sót về chất lượng hoặc đổi lại hàng mới cho Bên A.

7.4 Trong thời hạn 07 ngày lịch kể từ ngày nhận được thông báo của Bên A, nếu Bên B không trả lời thì coi như đã chấp nhận có sai sót về chất lượng hàng do lỗi của mình và có trách nhiệm phải sửa chữa các sai sót đó hoặc đổi lại hàng mới ngay trong vòng 15 ngày kể từ ngày nhận được thông báo của Bên A.

7.5 Nếu Bên B tiến hành sửa chữa hoặc đổi lại hàng mới bị chậm so với thời hạn qui định ở mục 7.3 và 7.4 của hợp đồng này thì Bên B phải chịu phạt theo mức phạt giao hàng chậm như qui định ở mục 6.1 của hợp đồng này.

7.6 Trong thời hạn quy định trên tại điều 7 của hợp đồng này, nếu Bên B không tiến hành khắc phục (sửa chữa các sai sót về chất lượng do lỗi của mình hoặc đổi lại hàng mới) thì Bên A có quyền tiến hành khắc phục (sửa chữa và/hoặc thay mới) và Bên B phải hoàn trảlại cho Bên A toàn bộ chi phí khắc phục, đồng thời phải chịu phạt 8% giá trị của mặt hàngnày. Cách thức Bên A thu hồi tiền phạt từ Bên B quy định tại điều 6.10 của hợp đồng này.

7.7 Hàng hóa sau khi được Bên B sửa chữa và thay thế trong thời kỳ bảo hành sẽ được Bên B bảo hành lại 12 tháng kể từ ngày bàn giao (có biên bản giao nhận hàng như quy định tại Phụ lục 02 của hợp đồng này).

<u>Điều 8:</u> Thanh Toán

8.1 Bên A thanh toán cho Bên B 100% giá trị hóa đơn hàng đã giao bằng phương thức chuyển khoản qua ngân hàng trong vòng 30 ngày làm việc kể từ ngày nhận được bộ chứng từ thanh toán gồm:

- 02 Hóa đơn thuế GTGT (02 bản gốc), đồng tiền ghi trên hóa đơn là Việt Nam Đồng, trong đó:

+ Hóa đơn số 01: Cho giá trị hàng hóa được miễn thuế GTGT và thuế nhập khẩu ở khâu nhập khẩu: tỷ giá qui đổi ra VNĐ là tỷ giá ghi trên Tờ khai Hải quan; trên hóa đơn chỉ ghi dòng giá bán là giá không có thuế GTGT, dòng thuế suất, số thuế GTGT không ghi và được gạch bỏ.

+ Hóa đơn số 02: Cho phần phát sinh chênh lệch giữa giá trị hàng hóa đã khai báo tại khâu nhập khẩu và giá trị hàng hóa ghi trong Hợp đồng này, trên hóa đơn ghi thuế suất, số thuế GTGT phù hợp với quy định hiện hành.

- 01 bản gốc Biên bản giao nhận hàng (Điều 4.8 của Hợp đồng này).
- Chứng thư giám định (nếu có trưng cầu quy định tại Điều 4.9 của Hợp đồng này).
- Các chứng từ (theo quy định tại Điều 3.2 của Hợp đồng này).
- Bảo đảm thực hiện Hợp đồng (01 bản copy).
- Tờ khai Hải quan hàng nhập khẩu (bản copy).

8.2 Bên A chỉ thanh toán cho Bên B đối với hàng hóa hoàn toàn phù hợp với yêu cầu nêu trong hợp đồng.

8.3 Số tài khoản giao dịch theo hợp đồng này của Bên B:

- Số tài khoản:
- Tên NH:

- Người thụ hưởng:

8.4 Phí chuyển tiền do Bên A chịu.

<u>Điều 9:</u> Bảo đảm thực hiện Hợp đồng

9.1 Trong vòng 07 ngày làm việc sau ngày ký hợp đồng (ghi tại trang 01 của hợp đồng), Bên B phải nộp giấy bảo lãnh thực hiện hợp đồng (Phụ lục số 03 của hợp đồng này) được cấp bởi Ngân hàng có uy tín. Giá trị Bảo đảm thực hiện hợp đồng bằng **08%** tổng giá trị hợp đồng. Giấy bảo lãnh này có hiệu lực bằng thời hạn giao hàng quy định tại mục 4.1 hợp đồng này cộng thêm 60 ngày lịch.

9.2 Mọi chi phí liên quan đến việc phát hành giấy bảo lãnh thực hiện hợp đồng do Bên B chịu.

9.3 Trong thời gian quy định tại mục 9.1 nêu trên, Bên B phải nộp bản gốc bảo lãnh thực hiện hợp đồng cho Bên A. Nếu sau thời gian quy định nói trên, Bên A không nhận được bảo lãnh thực hiện Hợp đồng thì Bên A có quyền đơn phương chấm dứt Hợp đồng và thu hồi tiền bảo lãnh dự thầu của Bên B hoặc áp dụng quy định tại mục 6.8 của Hợp đồng này.

9.4 Bên B không được nhận lại Bảo đảm thực hiện hợp đồng trong trường hợp Bên B từ chối/không thực hiện hợp đồng sau khi ký hợp đồng.

9.5 Trong trường hợp Bên B vi phạm trách nhiệm thực hiện hợp đồng theo quy định tại hợp đồng này thì khoản tiền bảo đảm được Bên A dùng để khấu trừ tiền phạt.

9.6 Bên B phải ngay lập tức yêu cầu Ngân hàng phát hành giấy bảo lãnh thực hiện hợp đồng thực hiện sửa đổi giấy Bảo đảm thực hiện Hợp đồng trong trường hợp cần gia hạn thời gian hiệu lực của Bảo lãnh này vì lý do chậm giao hàng hoặc gia hạn thời hạn giao hàng, đồng thời gửi ngay cho Bên A giấy Bảo lãnh đã gia hạn hiệu lực.

Trong vòng 03 ngày làm việc kể từ khi nhận được yêu cầu gia hạn bằng văn bản của Bên A, nếu Bên B không thực hiện hoặc chậm thực hiện gia hạn hiệu lực bảo lãnh thực hợp đồng thì Bên B sẽ chịu phạt 0,2% giá trị bảo lãnh tương ứng/ mỗi ngày chậm. Tổng giá trị phạt này không vượt quá giá trị bảo lãnh tương ứng. Thu hồi khoản tiền phạt vi phạm này thực hiện theo quy định tại khoản 6.10 - Điều 6 của Hợp đồng.

<u>Điều 10:</u> Bất khả kháng

10.1 Sự kiện bất khả kháng là sự kiện xảy ra một cách khách quan không thể lường trước được và không thể khắc phục được mặc dù đã áp dụng mọi biện pháp cần thiết và khả năng cho phép như: chiến tranh, bạo loạn, xung đột vũ trang, cấm vận, thiên tai (lũ lụt, bão, lốc xoáy, động đất, sóng thần), hỏa hoạn, dịch bệnh (Epidemic, Pandemic) được WHO/Quốc gia công bố, lệnh phong tỏa Vùng/Quốc gia do Chính quyền sở tại áp đặt....

10.2 Bên gặp sự kiện bất khả kháng dẫn đến việc không thực hiện được nghĩa vụ theo hợp đồng do ảnh hưởng trực tiếp bởi các sự kiện bất khả kháng có nghĩa vụ phải ngay lập tức thông báo cho bên kia biết, bao gồm cung cấp thông tin, giải trình về sự ảnh hưởng trực tiếp của sự kiện bất khả kháng đến việc vi phạm thực hiện hợp đồng kèm chứng cứ chứng minh, các biện pháp đã được thực hiện để khắc phục vấn đề và giảm thiểu tổn thất. Việc chậm thông báo, cung cấp thông tin và giải trình nếu trễ hơn 10 ngày lịch sau khi sự kiện bất khả kháng xảy ra sẽ làm cho bên gặp bất khả kháng mất quyền miễn trách sau này vì lý do bất khả kháng.

10.3 Văn bản xác nhận của Phòng Thương mại và Công nghiệp Việt Nam hoặc cơ quan có thẩm quyền ở nơi xảy ra sự kiện bất khả kháng là bằng chứng đủ để chứng minh sự kiện và thời gian xảy ra bất khả kháng.

10.4 Trường hợp do hậu quả trực tiếp của sự kiện bất khả kháng mà một Bên trong Hợp Đồng không thể thực hiện toàn bộ hoặc một phần nghĩa vụ theo hợp đồng này thì thời gian thực hiện hợp đồng sẽ được kéo dài thêm bằng thời gian mà sự kiện bất khả kháng diễn ra.

10.5 Nếu sự kiện bất khả kháng kéo dài hơn 02 tháng, mỗi bên đều có quyền chấm dứt hợp đồng này mà không phải bồi thường bất cứ một khoản tiền nào cho bên kia.

10.6 Các khó khăn trong sản xuất như thiếu vật tư, điện, nhân công, đình công… không được coi là bất khả kháng và không miễn cho Bên B nghĩa vụ giao hàng hoặc giao hàng muộn;

Các thông tin từ trang báo, mạng và các phương tiện truyền thông khác chỉ mang tính chất tham khảo.

<u>Điều 11:</u> Giải quyết tranh chấp

11.1 Bất kỳ tranh chấp nào phát sinh từ hợp đồng này sẽ được giải quyết bằng thương lượng giữa hai bên trên tinh thần hợp tác, hai bên cùng có lợi và tôn trọng lẫn nhau.

11.2 Trường hợp tranh chấp không thể giải quyết bằng thương lượng thì sẽ được đưa ra Trung tâm Trọng tài Quốc tế Việt Nam bên cạnh Phòng Thương mại và Công nghiệp Việt Nam tại Hà Nội để phân xử theo Quy tắc tố tụng của Trung tâm này. Phán quyết của Trung tâm trọng tài là cuối cùng và buộc hai bên phải tuân thủ.

<u>Điều 12:</u> Các điều khoản khác

12.1 Bất kỳ sự sửa đổi, bổ sung nào đối với Hợp đồng này đều phải được lập thành văn bản và có chữ ký của cả hai bên. Mọi giao dịch trong quá trình thực hiện Hợp đồng được các Bên thực hiện bằng văn bản và gửi theo đường bưu chính hoặc theo số Fax tới địa chỉ đăng ký hoặc số Fax của mỗi Bên ghi trong hợp đồng và email đến địa chỉ email…theo mẫu thể hiện tại Phụ lục số 04 (A, B) kèm theo.

12.2 Những điều không quy định hoặc quy định không đầy đủ trong Hợp đồng này sẽ căn cứ vào luật pháp Việt Nam hiện hành.

12.3 Không bên nào được chuyển quyền và nghĩa vụ của mình theo hợp đồng này cho bên thứ ba mà không được sự đồng ý trước bằng văn bản của bên kia.

12.4 Trong quá trình thực hiện hợp đồng trường hợp xảy ra tranh chấp thì các văn bản dẫn chiếu được xem xét theo thứ tự ưu tiên sau đây:

1) Hợp đồng, kèm theo các phụ lục hợp đồng;
(2) Thư thông báo trúng thầu;
(3) Biên bản thương thảo, hoàn thiện hợp đồng;
(4) Hồ sơ dự thầu;
(5) Hồ sơ mời thầu.

12.5 Hợp đồng này có hiệu lực kể từ ngày Ngân hàng Bên B mở bảo lãnh thực hiện Hợp đồng (ngày hiệu lực của bảo lãnh) và hoàn thành việc ký Hợp đồng nhưng không muộn hơn 07 ngày làm việc so với ngày được ghi trên Hợp đồng và tiếp tục cho đến khi hai bên thực hiện hết trách nhiệm của mình như quy định trong hợp đồng.

12.5 Hết thời hạn hiệu lực của hợp đồng, nếu hai bên không có khiếu nại gì coi như hợp đồng đã được thanh lý.

12.6 Hợp đồng gồm _____ trang và 04 Phụ lục (Phụ lục số 01: Phạm vi cung cấp, Phụ lục số 02: Biên bản giao nhận hàng, Phụ lục số 03: Mẫu Bảo lãnh Thực hiện Hợp đồng, Phụ lục số 04 (A, B): Mẫu Phương thức giao dịch) được lập thành 05 bản bằng tiếng Việt (có sử dụng tiếng Anh mô tả hàng hóa tại Phụ lục số 01), các bản có giá trị pháp lý như nhau, Bên A giữ 03 bản, Bên B giữ 02 bản.

ĐẠI DIỆN BÊN A **ĐẠI DIỆN BÊN B**

PHỤ LỤC SỐ 01
HỢP ĐỒNG SỐ .....

PHẠM VI CUNG CẤP VÀ GIÁ TRỊ HÀNG HÓA

Mua ..... (Lô 09-1)

Số TT	Tên hàng, Ký hiệu, Quy cách	Mô tả	Model, P/N	Nhà sản xuất	Xuất xứ (CO)	ĐVT	Số lượng cung cấp	Đơn giá (VND)	Thành tiền (VND)
I.	**……**	**Hàng hóa sử dụng hạn ngạch để nhập khẩu, hàng hóa sử dụng Quota Lô 09-1**							
1.	……					Set/pc		……	……
2.	……							……	……
	……							……	……
n	……							……	……
	Thành tiền I	***Giá trị Hàng hóa không bao gồm thuế GTGT và thuế nhập khẩu của giá trị hàng hóa nhập khẩu ghi trên Tờ khai Hải quan nhưng đã bao gồm toàn bộ các thuế, phí và chi phí phát sinh trong lãnh thổ Việt Nam***						**……**	**……**
II.	**……**	**Hàng hóa không sử dụng hạn ngạch để nhập khẩu (*Hàng hóa mua trong nước hoặc hàng hóa được sản xuất tại Việt Nam)***							
1.	……					Set/pc		……	……
2.	……							……	……
	……							……	……
n	……							……	……
		** Giá trị Hàng hóa chưa bao gồm GTGT*						**……**	**……**
		** Thuế GTGT (áp dụng theo Quy định hiện hành của Việt Nam)*						**……**	**……**
	Thành tiền II	***Giá trị Hàng hóa đã bao gồm thuế GTGT và bao gồm toàn bộ các thuế, phí và chi phí phát sinh trong lãnh thổ Việt Nam***						**……**	**……**
		Tổng giá trị hợp đồng *(mục I+II)* ** (Áp dụng cho mục I)* Giá trị Hàng hóa không bao gồm thuế GTGT và thuế nhập khẩu của giá trị hàng hóa nhập khẩu ghi trên Tờ khai Hải quan nhưng đã bao gồm toàn bộ các thuế, phí và chi phí phát sinh trong lãnh thổ Việt Nam ***** *(Áp dụng cho mục II)* **Giá trị hợp đồng trên đã bao gồm thuế GTGT và bao gồm toàn bộ các thuế, phí và chi phí phát sinh trong lãnh thổ Việt Nam cho Hàng hóa mua trong nước**						**……**	**……**

ĐẠI DIỆN BÊN A **ĐẠI DIỆN BÊN B**

PHỤ LỤC SỐ 02

Phê duyệt - Утверждаю
Thủ trưởng đơn vị đặt hàng
Директор пред–я заказчика

Giám đốc XNDV Cảng &Cung ứng vật tư TB
Директор ПОСОМ

Ngày……tháng……năm 20….

Ngày……tháng……năm 20….

BIÊN BẢN GIAO NHẬN HÀNG
АКТ О ПРИЁМЕ - ПЕРЕДАЧЕ ТОВАРОВ

Ngày…. tháng…. năm 20….

Căn cứ HĐ (biên bản) số: ký ngày…. tháng….năm 20…

На основнии Договора номер:

Chúng tôi, những người ký tên dưới đây - Мы. Нижеподписавщиеся:

1- Đại diện bên giao - Представители поставщика:

- Ông (Bà) Chứcvụ:
- Ông (Bà): Chứcvụ:

2- Đại diện bên nhận - Представители получателя:

2.1 XN dịch vụ cảng & cung ứng vật tư TB - ПОСОМ

- Ông (Bà): Chứcvụ:
- Ông (Bà): Chứcvụ:

2.2 Đơn vị đặt hàng - Представители предприятия - заказчика:

- Ông (Bà): Chứcvụ:
- Ông (Bà): Chứcvụ:

Cùng nhau tiến hành giao nhận hàng hóa, cụ thể như sau: - Произвели приёмо - передачу следующих товаров на складе:...

STT П/П	Tên hàng, Ký hiệu, Quy cách Наименование. Марка товаров	ĐVT ЕД	Thực nhập Фак. Получение		Bao bì Тара	Chất lượng hàng Качество
			Số lượng Кол	Trọng lượng Вес		

- Mẫu phân tích các mặt hàng No được lấy tại - Образец товара получен на складе:

……Ngày…….tháng…….năm 20….

- Người lấy mẫu: - Лаборант:…… Chức vụ - Должность

- Người lấy mẫu: - Лаборант:…… Chức vụ - Должность

Đối với những mặt hàng lấy mẫu phân tích nêu trên thì hàng chỉ chuyển chủ từ bên giao sang bên nhận. Sau khi có kết quả phân tích mẫu đạt yêu cầu như mẫu chào hàng. Trong thời gian chờ kết quả phân tích mẫu, bên nhận (XNDV hoặc đơn vị đặt hàng) nhận giữ hộ.

CHỨNGTỪKÈMTHEO - Прилагаемые документы:

- Chứng chỉ phẩm chất - Сертификат:……
- Hóa đơn (phiếu xuất kho) - Счёт: ……
- Bản kê chi tiết danh điểm mặt hàng (Перечень товаров) gồm __bản __tờ
- Các chứng từ khác - Другие документы : ……

……
……

Biên bản này chỉ lập một bản và chỉ có giá trị để làm thủ tục thanh toán sau khi được Giám đốc XNDVCảng & Cung ứng vật tư TB và lãnh đạo đơn vị đặt hàng phê duyệt (trường hợp giao nhận thẳng cho đơn vị đặt hàng thì biên bản này phải được thủ trưởng đơn vị đặt hàng phê duyệt trước).

Ngày giao hàng của lô hàng này là …

ĐẠI DIỆN BÊN GIAO **KÝ TÊN** - Подписи **ĐẠI DIỆN BÊN NHẬN**

Представители поставщика: Представители получателя:

(Họ tênvà chữ ký) (Họ tênvà chữ ký)

Xác nhận chất lượng của phòng thí nghiệm hoặc đơn vị đặt hàng (nếu có) - Справка лаборатории (заказчика) по качеству

……
……
……

Đại diện phòng thí nghiệm (Hoặc đơn vị đặt hàng) - Представитель лаборатории (заказчика)

Họvà tên - Фамиля..... Ký tên: Подпись

Ngày…….tháng……..năm 20….

Kiểm tra và xác nhận: Các mặt hàng nêu trên có số lượng, ký mã hiệu, xuất xứ hàng hóa, chứng chỉ chất lượng & được kiểm tra chất lượng v.v. phù hợp với các quy định của hợp đồng (Biên bản) Заключение:

Состояние товаров. Количество марки. Место происхождения. Сертификат по качеству и проверка качества....выщеуказнных товаров соответствуют условиям Договора:

T.P vật tư thiết bị - Начальник курирующего отделаю

Ký tên: Подпись *Ngày……tháng……năm 20….*

Trưởng phòng THHĐ - Начальник ОКД

Ký tên: Подпись

Ngày……tháng……năm 20….

PHỤ LỤC SỐ 03

MẪU BẢO LÃNH THỰC HIỆN HỢP ĐỒNG

Ngày tháng năm 20…

Kính gửi: ……

Liên quan tới Hợp đồng _____ về việc _____ (sau đây được gọi là "Hợp đồng") được ký giữa _____ (sau đây gọi là "BÊN ĐƯỢC BẢO LÃNH") và _____ (sau đây gọi là "BÊN THỤ HƯỞNG"), chúng tôi, _____ có trụ sở chính tại ____ (sau đây gọi là "BÊN BẢO LÃNH") phát hành Thư bảo lãnh không hủy ngang và vô điều kiện cho bên thụ hưởng với số tiền là _____ (Bằng chữ: _____) (sau đây gọi là "THƯ BẢO LÃNH").

*With reference to Contract No. _____ entitled _____ (hereinafter referred to as "the Contract") entered into on the _____ by and between _____, having address at _____ (hereinafter referred to as "APPLICANT") and _____, we, _____, having registered office at _____ (hereinafter referred to as "GUARANTOR") hereby open in the favor of _____ (*Hereinafter referred to as the "*BENEFICIARY") an unconditional and irrevocable bank guarantee for the amount of _____ (In words: _____) (hereinafter referred to as "GUARANTEE").*

THƯ BẢO LÃNH này có hiệu lực kể từ ngày phát hành và sẽ duy trì hiệu lực cho đến _____ sau đây gọi là "Ngày hết hiệu lực". Đối với bất cứ sự gia hạn, đổi mới hoặc chuyển nhượng Hợp đồng vượt quá thời gian được quy định trong THƯ BẢO LÃNH này, BÊN THỤ HƯỞNG sẽ không cần phải thông báo hoặc được sự đồng thuận của BÊN BẢO LÃNH. THƯ BẢO LÃNH này sẽ được gia hạn dựa trên yêu cầu bằng văn bản từ BÊN ĐƯỢC BẢO LÃNH để đảm bảo cho thời gian gia hạn, đổi mới hoặc chuyển nhượng của Hợp đồng.

*This GUARANTEE is effective from the issuance date and shall remain valid, binding and in force until _____, hereinafter referred to as "the **Expiry Date**". For any extensions, renewals, or assignments of the Contract beyond the time stated in this GUARANTEE, BENEFICIARY shall not be required to give notice to nor obtain the consent of GUARANTOR. This GUARANTEE would be extended upon written request of APPLICANT to cover the extension, renewal or assignment periods.*

BÊN BẢO LÃNH cam kết **không hủy ngang và vô điều kiện** thanh toán ngay cho BÊN THỤ HƯỞNG một khoản tiền hay những khoản tiền, theo chỉ thị của BÊN THỤ HƯỞNG, tổng không vượt quá số tiền bảo lãnh nêu trên trong vòng 05 ngày làm việc kể từ ngày nhận được văn bản yêu cầu của BÊN THỤ HƯỞNG ghi rõ BÊN ĐƯỢC BẢO LÃNH đã vi phạm nghĩa vụ theo Hợp đồng.

*GUARANTOR hereby **unconditionally and irrevocably** guarantees to promptly pay BENEFICIARY an amount or amounts, specified by BENEFICIARY, up to the amount stated above, within 05 working days upon our receipt of BENEFICIARY's written demand stating that APPLICANT has failed to fulfill its performance obligation(s) under the Contract.*

Sau Ngày hết hiệu lực, THƯ BẢO LÃNH này sẽ tự động không còn giá trị cho dù bản gốc THƯ BẢO LÃNH và các Thư sửa đổi liên quan (nếu có) có được gửi trả lại BÊN BẢO LÃNH hay không.

After the Expiry date, this GUARANTEE shall automatically become null and void, whatsoever and irrespective of whether this GUARANTEE is returned to GUARANTOR or not.

Số tiền bảo lãnh nêu trên sẽ được thanh toán ngay bởi BÊN BẢO LÃNH cho BÊN THỤ HƯỞNG cho dù có sự tranh cãi hoặc phản đối nào của BÊN ĐƯỢC BẢO LÃNH hoặc của BÊN BẢO LÃNH hoặc của bất kì bên thứ ba nào khác, và bất kể có hay không sự tranh chấp giữa BÊN ĐƯỢC BẢO LÃNH và BÊN THỤ HƯỞNG về hoặc liên quan tới Hợp đồng hoặc về bất cứ vấn đề khác và cho dù những tranh chấp này, nếu có, đã được giải quyết, dàn xếp, kiện tụng hoặc phân xử bằng bất kỳ hình thức nào.

The said guarantee amount shall be paid by GUARANTOR forthwith to BENEFICIARY notwithstanding any contestation or protest by APPLICANT or by GUARANTOR or by any third party, and irrespective of whether or not there is any dispute between APPLICANT and BENEFICIARY in respect of or relating to the Contract or in respect of any other matter and irrespective of whether or not such said dispute, if any, has been settled, resolved, litigated, or adjudicated upon otherwise howsoever.

BÊN BẢO LÃNH hoặc BÊN ĐƯỢC BẢO LÃNH sẽ không được giải trừ bất cứ nghĩa vụ nào theo THƯ BẢO LÃNH này cho dù có bất cứ sự sửa đổi, thay đổi, thanh toán sai lệch, gia hạn nào liên quan tới Hợp đồng hay bất kỳ sự trì hoãn ân hạn nào của BÊN THỤ HƯỞNG trong hoặc liên quan đến bất cứ vấn đề gì của Hợp đồng.

Neither alteration, variation, incorrect payment, extension in terms of the Contract nor any forbearance of forgiveness in or in respect of any matter or thing concerning the Contract on the part of BENEFICIARY shall in any way release GUARANTOR or APPLICANT or from any liabilities under this GUARANTEE.

Việc đòi tiền nhiều lần theo bảo lãnh này là được phép và theo đó, Số tiền bảo lãnh nêu trên sẽ tự động giảm tương ứng với số tiền mà Ngân hàng đã thực hiện thanh toán cho Bên thụ hưởng theo Thư bảo lãnh.

Multiple demands under this Guarantee are allowed. In such event, the Guarantee Amount aforementioned shall automatically be reduced by the amount of each and any payment made by us under this Guarantee.

Thư bảo lãnh được điều chỉnh và giải thích theo pháp luật Việt Nam. Bất kỳ tranh chấp nào phát sinh từ hoặc liên quan đến Thư bảo lãnh sẽ [do Tòa án nhân dân có thẩm quyền của Việt Nam giải quyết theo quy định của pháp luật] / [sẽ được giải quyết tại Trung tâm Trọng tài quốc tế Việt Nam (VIAC) bên cạnh Phòng Thương mại và Công nghiệp Việt Nam theo quy tắc tố tụng trọng tài của VIAC].

The Guarantee shall be governed by and construed in accordance with the laws of Vietnam. Any dispute arising out of or relating to this Guarantee shall be submitted to [the jurisdiction of competent People's Court of Vietnam in accordance with the governing law] / [arbitration by the Vietnam Arbitration Center international (VIAC) at the Vietnam Chamber of Commerce and Industry in accordance with its rules of arbitration].

THƯ BẢO LÃNH này được phát hành duy nhất 01 (một) bản song ngữ (tiếng Việt và tiếng Anh) và không được phép chuyển nhượng. Trường hợp có sự khác nhau về cách hiểu giữa nội dung tiếng Việt và tiếng Anh thì nội dung tiếng Việt là căn cứ pháp lý.

This GUARANTEE is issued solely in 01 (one) bilingual original (Vietnamese and English) and is not transferrable. Should there be any inconsistence between the two languages of this GUARANTEE, the Vietnamese content shall prevail and be final.

Đại diện hợp pháp của ngân hàng
[ghi tên, chức danh, ký tên và đóng dấu]

PHỤ LỤC SỐ 04 (A)

MẪU THƯ TÍN GIAO DỊCH THỰC HIỆN HỢP ĐỒNG

Ngày tháng năm 20..

Kính gửi: Liên doanh Việt - Nga Vietsovpetro/Nhà thầu.

105 Lê Lợi, phường Thắng Nhì, Tp. Vũng Tàu

Người nhận: **Ông Trần Quốc Thắng – Phó Tổng giám đốc Thương mại**

Sao gửi: **Bà Nguyễn Thị Vân Anh – Trưởng phòng Thương mại**

Email: vspadmin@vietsov.com.vn

thanhnq.hq@vietsov.com.vn

nhungth.hq@vietsov.com.vn

(Ghi nội dung giao dịch về: *Thay đổi về Hàng hoá/Dịch vụ, tiến độ, sử dụng Quota, các nội dung liên quan tới giá trị HĐ, thanh toán…….*)

ĐẠI DIỆN BÊN ….
(Ký tên và đóng dấu)

PHỤ LỤC SỐ 04 (B)

MẪU THƯ TÍN GIAO DỊCH THỰC HIỆN HỢP ĐỒNG

Ngày tháng năm 20..

Kính gửi: Liên doanh Việt - Nga Vietsovpetro/Nhà thầu.

105 Lê Lợi, phường Thắng Nhì, Tp. Vũng Tàu

Người nhận: Phòng Thương mại VSP/ XN Dịch vụ Cảng và CUVTTB/ Đơn vị thực hiện dịch vụ/xây lắp.

Email: vspadmin@vietsov.com.vn

thanhnq.hq@vietsov.com.vn

nhungth.hq@vietsov.com.vn

(Ghi nội dung giao dịch về: *Thông báo giao hàng, gửi chứng từ hàng hóa, thông báo bắt đầu thực hiện DV/XL, thông tin về nhân sự/thiết bị thực hiện DV/XL….*)

ĐẠI DIỆN BÊN ….
(Ký tên và đóng dấu)

Part 4. APPENDICES

This Chapter includes:

1 - Attachment 01: SCOPE OF SUPPLY

2 - Attachment 02: TECHNICAL REQUIREMENT

3 - Attachment 03: TECHNICAL EVALUATION CRITERIA

And other Technical documents, … with link for reference (if any).

DANH MỤC- СПЕЦИФИКАЦИЯ

Tên hàng hóa/Dịch vụ - На приобретение товаров/услуг: Electrical Bulk Materials for BK-10A/
Электрические материалы для БК-10А

Số ĐHXN - № заявки: 90.XNXL-0196/26-VT

STT П/п	Mã Vật Tư Код МТР	Tên VTTB/dịch vụ (Việt/Nga hoặc Anh) Наименование МТР/услуг (вьетнам./русс. или англ.)	Đặc Tính Kỹ Thuật Технические характеристики	ĐVT Ед. Изм.	Số Lượng Кол-во	Ghi Chú Примечание
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*
I. VẬT TƯ THIẾT BỊ						
GROUP 1: CABLE TRAYS AND LADDERS						
1	010.008.12573	Straight element: 600W x 100H (mm) - Кабельный лоток	Straight element: 600W x 100H (mm) and Accessories Heavy duty cable ladder, SS316 cable ladder, 1.5mm thickness, 100mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hex head bolts & spring washers, hold down clamps, ladder splice connector (all material is SS316), earthing jumper. Cable ladder shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	10,00	
2	010.008.13243	Straight element: 300W x 100H (mm) - Кабельный лоток	Straight element: 300W x 100H (mm) and Accessories Heavy duty cable ladder, SS316 cable ladder, 1.5mm thickness, 100mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hex head bolts & spring washers, hold down clamps, ladder splice connector (all material is SS316), earthing jumper. Cable ladder shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	100,00	
3	010.008.13672	Straight element: 200W x 100H (mm) - Кабельный лоток	Straight element: 200W x 100H (mm) and Accessories. Heavy duty cable ladder, SS316 cable ladder, 1.5mm thickness, 100mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hex head bolts & spring washers, hold down clamps, ladder splice connector (all material is SS316), earth jumper. Cable ladder shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	70,00	

4	010.008.12654	Straight perforated cable tray 100W x 40H (mm) - Кабельный лоток	Straight perforated cable tray 100W x 40H (mm) and Accessories Perforated heavy duty cable tray, SS316 cable tray, 1.5 mm thickness, 40mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hold down clamps, Tray splice connector (all material is SS316), earth jumper. Cable tray shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	250,00	
5	010.008.12718	Straight perforated cable tray 200W x 40H (mm) - Кабельный лоток	Straight perforated cable tray 200W x 40H (mm) and Accessories Perforated heavy duty cable tray, SS316 cable tray, 1.5 mm thickness, 40mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hold down clamps, Tray splice connector (all material is SS316), earth jumper. Cable tray shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	40,00	
6	010.008.13668	Flexible Riser 100W x 40H (mm) - Кабельный лоток	Flexible Riser 100W x 40H (mm) and Accessories Perforated heavy duty cable tray, SS316 cable tray, 1.5 mm thickness, 40mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hold down clamps, Tray splice connector (all material is SS316), earth jumper. Cable tray shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	50,00	
7	010.008.13230	Flexible Horizontal Splice plate, H=40mm - Кабельный лоток	Flexible Horizontal Splice plate, H=40mm and Accessories Perforated heavy duty cable tray, SS316 cable tray, 1.5 mm thickness, 40mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hold down clamps, Tray splice connector (all material is SS316), earth jumper. Cable tray shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).	Pce	100,00	
GROUP 2: CABLES						
8	012.013.00758	Cáp điện 7Cx1.5 mm2 - Кабель 7Cx1.5 мм2	Type P1: 7Cx1.5 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2.	Metre	100,00	

			- Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
9	012.003.01312	Cable 2C+Ex1.5mm2 - Cáp điện /Эл. Кабель	Type P1: 2C+E x 1.5 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	2.000,00	
10	012.003.01105	Cáp điện 2C+E x 2.5 mm2 - Кабель	Type P1: 2C+E x 2.5 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	200,00	
11	012.003.00898	Cáp điện 2C+E x 4 mm2 - Кабель	Type P1: 2C+E x 4 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows:	Metre	1.000,00	

			- Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
12	012.003.01232	CABLE TYPE 3C x 4 mm2 - Cáp điện/ электрический кабель	Type P1: 3C x 4 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, constructed as per document number: RC12-002-TS-ES2-SP-001 - Specification for Electrical Cable, shall be Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	100,00	
13	012.003.00984	Cable 4C x 4 mm2 - Cáp điện/ Кабель	Type P1: 4C x 4 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	250,00	
14	012.014.01404	Cable Type P1, 4C x 6mm2 - 4C x 6mm2	Type P1: 4C x 6 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB)	Metre	200,00	

			multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
15	012.003.01207	Cable 4C x 25 mm2 - Cáp điện/Высоковольтный кабель	Type P1: 4C x 25 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	100,00	
16	012.003.00950	CABLE TYPE 4C+E x 35 mm2 - Кабель	Type P1: 4C+E x 35 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	150,00	
17	012.003.01061	Cable 4C x 50 mm2 - Cáp điện /Эл. Кабель	Type P1: 4C x 50 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for	Metre	100,00	

			indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
18	012.003.01093	Cable 4C x 95 mm2 - Cáp điện/ Эл. Кабель	Type P1: 4C x 95 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	100,00	
19	012.003.01064	Cable 4C x 150 mm2 - Cáp điện /Эл. Кабель	Type P1: 4C x 150 mm2 The low voltage (P1 type) 600/1000V flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	400,00	
20	012.014.01416	CABLE TYPE P3, 2C+E x 2,5 mm2 - Силовой кабель/ Cáp nguồn	Type P3: 2C+E x 2,5 mm2 The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as	Metre	500,00	

			follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
21	012.003.01311	Cable 4C+E x 1.5 mm2 - Cáp điện /Эл. Кабель	Type P3: 4C+E x 1.5 mm2. The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows:- Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606.- Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	1.200,00	
22	012.014.01413	Cable Type P3, 2C+E x 6 mm2 - Силовой кабель	Type P3: 2C+E x 6 mm2 The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to	Metre	600,00	

			withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
23	012.004.09616	Cable 4C x 6 mm2	Type P3: 4C x 6 mm2. The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows:- Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606.- Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	100,00	
24	012.003.01199	CABLE TYPE P3, 4C x 16 mm2 - Силовой кабель	The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer	Metre	200,00	

			sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
25	012.003.01072	CABLE TYPE P3, 2C x 35 mm2 - Силовой кабель	Type P3: 2C x 35 mm2 The low voltage (P3 type) 600/1000V fire resistant and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331-1/-2 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 830oC for 1.5 hours or 750oC for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By colour code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armour: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331-1/-2, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.	Metre	220,00	
26	012.014.01331	CABLE TYPE E1, 1C x 4 mm2 - Cáp nối đất/ Кабель заземления	Type E1: 1C x 4 mm2 Earthing cable (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC, constructed as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360. - Core identification: Green colour with yellow stripe. - Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034.	Metre	400,00	
27	012.009.00127	CABLE TYPE E1, 1C x 16 mm2 - Cáp nối đất/ Кабель заземления	Type E1: 1C x 16 mm2 Earthing cable (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC, constructed as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2.	Metre	100,00	

			- Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360. - Core identification: Green colour with yellow stripe. - Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034.			
28	012.009.00128	CABLE TYPE E1, 1C x 25 mm2 - Cáp nối đất/ Кабель заземления	Type E1: 1C x 25 mm2 Earthing cable (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC, constructed as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360. - Core identification: Green colour with yellow stripe. - Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034.	Metre	200,00	
29	012.009.00170	Cable Type E1, 1C x 35mm2 - Cáp / кабеля	Type E1: 1C x 35 mm2. Earthing cable (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC, constructed as follows:- Conductor: tinned annealed stranded copper as per IEC 60228, Class 2.- Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360.- Core identification: Green colour with yellow stripe.- Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034.	Metre	200,00	
30	012.009.00130	CABLE TYPE E1, 1C x 70 mm2 - Cáp nối đất/ Кабель заземления	Type E1: 1C x 70 mm2 Earthing cable (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC, constructed as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360. - Core identification: Green colour with yellow stripe. - Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034.	Metre	100,00	
31	012.003.00033	Cable 3C x 70mm2, the high voltage 6/10 (12) kV (H1 type) - Эл. Кабель	The high voltage 6/10 (12) kV (H1 type), Tinned Copper Wire Braided (TCWB) power cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Conductor screen: Layer of semi-conducting material. - Insulation: EPR to IEC 60092-360. - Insulation screen: A semi-conducting compound layer and semi-conducting tape (or tinned copper tape). - Core identification: By color or colored tape on the insulation screen.	Metre	400,00	

			- Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-360, IEC 60092-354, IEC 60092-754, IEC 60228, IEC 60332-3 Cat. A, IEC 61034, NEK 606. Core cross sections: 3C x 70 mm2			
32	012.010.00434	CABLE 1Pr x 1.5 mm2	CABLE 1Pr x 1.5 mm2. The instrumentation cable 250V flame retardant, fire resistant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) Instrument cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/SCR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: Tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750o C for 3 hours. - Bedding/Insulation: EPR to IEC 60092-360. - Individual Screen: Paired screen, aluminum back polyester tape, stranded copper drain core. - Core identification: By color code. - Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). Fire resistance as per IEC 60331. LSZH SHF mud outer sheath compound to NEK TS 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606	Metre	200,00	
33	012.010.00435	Cable 250V flame retardant, fire resistant, 2Pr x 1.5mm2 - Кабель	Cable 2Pr x 1,5 mm2. The instrumentation cable 250V flame retardant, fire resistant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH). Instrument cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/SCR/LSZH/TCWB/SHF Mud or equal, construction as follows:- Conductor: Tinned annealed stranded copper as per IEC 60228, Class 2.- Fire resistant layer: Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750o C for 3 hours.- Bedding/Insulation: EPR to IEC 60092-360.- Individual Screen: Paired/ Triad screen, aluminium back polyester tape, stranded copper drain core.- Core identification: By colour code.- Inner sheath: LSZH compound to IEC 60092-360.- Armour: Tinned Copper Wire Braided (TCWB).-	Metre	600,00	

			Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). Fire resistance as per IEC 60331. LSZH SHF mud outer sheath compound to NEK TS 606.- Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606.			
GROUP 3: ELECTRICAL HEAT TRACING SYSTEM						
34	012.016.00051	Self-Regulating Heating Cable 38W/m @10°C - Саморегулирующийся нагревательный кабель	Self-Regulating Heating Cable 38W/m @10°C. Self-Regulating Heating Cable.General:- Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3.- Trace surface type: carbon steel, painted.- Corrosive. Specification:- Supply voltage: 220VAC.- Parallel circuit heating cable.- Construction: Copper conductors 1.2mm2 min./ (self-regulating conductive core)/ Fluoropolymer insulation/ Copper braid/ Fluoropolymer outer jacket.- Maximum exposure temperature (continuous power on): 110°C.- Temperature classification: T3.- Nominal power output: 38W/m @10°C.	Metre	1.500,00	
35	012.016.00053	Self-Regulating Heating Cable 64W/m @10°C. - Cáp sưởi ấm tự điều chỉnh /Саморегулирующийся нагревательный кабель	Self-Regulating Heating Cable 64W/m @10°C. Self-Regulating Heating Cable.General:- Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3.- Trace surface type: carbon steel, painted.- Corrosive. Specification:- Supply voltage: 220VAC.- Parallel circuit heating cable.- Construction: Copper conductors 1.2mm2 min./ (self-regulating conductive core)/ Fluoropolymer insulation/ Copper braid/ Fluoropolymer outer jacket.- Maximum exposure temperature (continuous power on): 110°C.- Temperature classification: T3.- Nominal power output: 64W/m @10°C.	Metre	200,00	
36	010.023.00246	Low-Profile End Seal Kit - Bộ phụ kiện làm kín/ Комплект низкопрофильных торцевых уплотнений	Low-Profile End Seal Kit - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Use for heating cable. - Explosion protection: Ex ‘e’ - Degree of protection: IP56 as minimum - Maximum pipe temperature: 80°C - Operating voltage: 220VAC ± 5% - Materials of construction: o Enclosure, end plate, and shim: engineering polymers, black o Sealing grommet and core sealer: Silicone rubber o Screws, compression spring, reinforcement plate: stainless steel	Pce	50,00	
37	010.022.01361	Surface Sensing Electronic Thermostat - Cảm biến nhiệt/ Поверхностный термостат	Surface Sensing Electronic Thermostat - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Electronic type completed with SPST switch with 1-NO dry contacts (25A, 220VAC) - Explosion protection: Ex ‘e’/Ex'de'/VTA suitable for class 1, Zone 2, T3 - Degree of protection: IP56 as minimum	Set	50,00	

			- Cable entry: 2 x M25, 1 x M16 - Cable glands: 1 x M25 Ex'e'/Ex'd' nickel plated grass gland for power cable, Min. IP56 1 x M25 Ex'e'/Ex'd' nickel plated grass gland for heat tracing cable, Min. IP56 1 x M16 Ex'e'/Ex'd' nickel plated grass gland for 3 Wire PT100, Min. IP56 - Housing material: SS316 / Aluminum Alloy / GRP - 100ohm platinum thermocouple with extension cable, stainless steel sensor. - c/w support bracket			
38	040.006.01352	Tee Connection Kit - Đầu nối chạc ba/ Тройник	Tee Connection Kit. - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3. - Use for heating cable. - Explosion protection: Ex 'e'. - Degree of protection: IP56 as minimum. - Operating voltage: 220VAC. - Maximum circuit reaker rating: 40A. - Maximum pipe temperature: 80oC. - Material: Enclosure: engineering polymers, black Lid screw: Stainless steel Lid gasket: silicone rubber - C/w support bracket and all accessories for installation	Pce	4,00	
39	010.022.01079	Warning Label - Nhãn cảnh báo / Наклейка предупреждения	Warning Label - Electric Traced Label for traced pipe. - Language: English.	Pce	400,00	
40	010.022.01046	Fixing tape :Length 20m/roll, Width 12mm - Băng keo/ Клеящая лента	Fixing tape - Glass cloth tape for attaching heating cable to pipe (not for stainless-steel pipes), - Length 20m/roll - Width: 12mm.	Roll	150,00	
41	038.014.00402	Pipe Strap stainless steel 2 in to 10 in - Трубный хомут	Pipe Strap stainless steel 2 in to 10 in	Pce	100,00	
42	010.023.00849	Pipe Strap stainless steel 10 in to 20 in - Трубный хомут	Pipe Strap stainless steel 10 in to 20 in	Set	20,00	
43	010.022.01047	Fixing tape :Length 55m/roll, Width 65mm	Fixing tape - Aluminum tape for attaching heating cable and thermostat sensor to tank. - Length 55m/roll - Width: 65mm	Roll	30,00	
44	010.002.00924	Tank Adapter - Танковый адаптер	Tank adapter is used for mounting junction box, end seal kit on the tank surface.	Set	20,00	

GROUP 4: LUMINAIRES AND FLOODLIGHTS						
45	010.001.00152*	Indoor High Efficient Linear LED lighting fixture with electronic driver - Аварийный - светодиодный - линейный светильник с электр. Управлением	Indoor High Efficient Linear LED lighting fixture with electronic driver - Location: indoor, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer's technology. - Delivered output: 5000 - 6000 lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED 1.2m tubes and driver. All are replaceable type - Degree of protection: min. IP44 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	Pce	10,00	
46	010.001.00143*	Indoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Аварийный - светодиодный - линейный светильник с электр. Управлением	Indoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Location: indoor, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer's technology. - Delivered output: 5000 - 6000 lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED 1.2m tubes and driver. All are replaceable type - Degree of protection: min. IP44 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Battery with 90 minutes backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	Pce	6,00	
47	010.001.00144*	LED bulkhead lighting fixture	LED bulkhead lighting fixture with electronic driver	Pce	1,00	

		with electronic driver - Аварийный - светодиодный - линейный светильник с электр. Управлением	- Location: wet indoor or outdoor safe area, suitable for marine/offshore industrial application - Enclosure: Aluminum LM6 body, GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer’s technology. - Delivered output: 800 - 1000 lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strip or matrix - Degree of protection: min. IP44 - Nominal power – about 5 - 10 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: ceiling, surface or suspended			
48	010.001.00145*	Outdoor High Efficient Linear LED lighting fixture with electronic driver - Аварийный - светодиодный - линейный светильник с электр. Управлением	Outdoor High Efficient Linear LED lighting fixture with electronic driver - Location: outdoor, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Colour according to manufacturer’s technology. - Delivered output: 5000 - 6000 lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED 1.2m tubes and driver. All are replaceable type - Degree of protection: min. IP56 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	Pce	8,00	
49	010.001.00146*	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Аварийный - светодиодный - линейный светильник с электр. Управлением	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Location: outdoor, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Colour according to manufacturer’s technology. - Delivered output: 5000 - 6000 lumens - Colour Temperature: 4000K (Neutral white)	Pce	6,00	

			- Light source: LED strips or LED 1.2m tubes and driver. All are replaceable type - Degree of protection: min. IP56 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Battery with 90 minutes backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories.			
50	010.001.00147*	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Аварийный - светодиодный - линейный светильник с электр. Управлением	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in - Location: outdoor hazardous area, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Color according to manufacturer’s technology. - Delivered output: 3000 - 4000 lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED 0.6m tubes and driver. All are replaceable type - Degree of protection: min. IP65 - Nominal power – about 25 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Battery with 90 minutes’ backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	Pce	10,00	
51	010.001.00148*	Outdoor High Efficient Linear LED lighting fixture with electronic driver - Аварийный - светодиодный - линейный светильник с электр. Управлением	Outdoor High Efficient Linear LED lighting fixture with electronic driver - Location: outdoor hazardous area, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent polycarbonate, - Colour according to manufacturer’s technology. - Delivered output: 5000-6000 lumens - Colour Temperature: 4000K (Neutral white)	Pce	43,00	

			- LED strip or 1.2m LED tubes and driver. All are replaceable type - Degree of protection: IP 65 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories			
52	010.001.00149*	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes' battery built-in - Аварийный - светодиодный - линейный светильник с электр. Управлением	Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes' battery built-in. - Location: outdoor hazardous area, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent polycarbonate, - Colour according to manufacturer's technology. - Delivered output: 5000-6000 lumens - Colour Temperature: 4000K (Neutral white) - LED strip or 1.2m LED tubes and driver. All are replaceable type - Degree of protection: IP 65 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Battery with 90 minutes' backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories.	Pce	15,00	
53	010.001.00150*	High Output LED Floodlight - Аварийный - светодиодный - линейный светильник с электр. Управлением	High Output LED Floodlight. - Location: outdoor, safe area, marine/ offshore - Enclosure: SS316 or Marine Grade Aluminum alloy with powder finish - Delivered output: 45 000 - 50 000 lumens - Colour Temperature: 4000K/5000K (Neutral/Cool white) - Control Gear: Electronic Driver - Degree of protection: min IP 56 - Nominal power – about 400 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Color according to manufacturer's technology. - Degree of protection: min IP56 - Power supply: single-phase, 220V, 50Hz - Cable entry: 2 x M20 mm & 2 certified rated nickel- plate brass	Pce	5,00	

			stopping plug - Terminal block: 3 core max. 6 sq.mm. conductors with looping. - Mounting: bracket			
54	010.001.00151*	Exit light LED type with self-contained battery pack for 90-minutes backup. Luminaire shall have an illuminated 'EXIT' sign with direction arrow showing from one side - Аварийный - светодиодный - линейный светильник с электр. Управлением	Exit light LED type with self-contained battery pack for 90-minutes backup. Luminaire shall have an illuminated 'EXIT' sign with direction arrow showing from one side. - Location: Indoor, safe area, marine/ offshore - Explosion protection: Gas Group IIA, T3, suitable using for zone 2 - Enclosure: GRP or SS316 - Degree of protection: min IP44 - Power supply: single-phase, 220V, 50Hz - Cable entry: 2 x M20mm clearance holes (c/w Ex- rated nickel plated brass blanking plug) - Terminal block: 3 core 4 sqmm max. conductor with looping. - Wall mounted type	Pce	2,00	
GROUP 5: JUNCTION BOXES, CABLE GLANDS & MULTI CABLE TRANSIT (MCT)						
55	010.006.00296	Junction box for outdoor and hazardous area - Hộp nối điện/ Соединительная коробка	Lighting Junction box for outdoor and hazardous area - Cable entry: 4 x M20 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: SS316 material - Terminal block: C/w ten (10) terminal blocks suitable to 4 mm2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	Lot	40,00	
56	010.006.11233	Junction box for indoor - Cable entry: 4 x M20 and one stopping plug. - Hộp nối/ Соединительная коробка	Lighting indoor Junction box - Cable entry: 4 x M20 and one stopping plug. - Degree of protection: IP44 as minimum - Enclosure: GRP - Terminal block: 10 terminal blocks suitable to 4 mm2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	Set	5,00	
57	010.006.11289	Power Junction box for outdoor and hazardous area - Cable entry: 2 x M40 and one stopping plug. - Hộp nối điện/ Соединительная коробка	Power Junction box for outdoor hazardous area - Cable entry: 4 x M40 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: GRP material - Terminal block: C/w 15 terminal blocks suitable to 35 mm2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper	Pce	1,00	

			terminal block. - Earth stud & mounting accessories (bolt, nut…).			
58	010.006.11289	Power Junction box for outdoor and hazardous area - Cable entry: 2 x M25 and one stopping plug. - Hộp nối điện/ Соединительная коробка	Power Junction box for outdoor and hazardous area - Cable entry: 2 x M25 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: SS316 - Terminal block: C/w 10 terminal blocks suitable to 25 mm2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	Pce	1,00	
59	010.012.00343	CABLE GLAND, Thread size: M20 (OD: 12.5mm - 20.5mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M20 (OD: 12.5mm - 20.5mm) Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	200,00	
60	010.012.00146	CABLE GLAND, Thread size: M25 (OD: 16.9mm - 26mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M25 (OD: 16.9mm - 26mm). Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	20,00	
61	010.012.00332	CABLE GLAND, Thread size: M32 (OD: 22mm-33mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M32 (OD: 22mm-33mm). Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	2,00	
62	010.012.00494	CABLE GLAND, Thread size: M40 (OD: 28mm-41mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M40 (OD: 28mm-41mm). Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	4,00	
63	010.012.00346	CABLE GLAND, Thread size: M63 (OD: 46mm - 65.3mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M63 (OD: 46mm - 65.3mm). Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	28,00	
64	010.012.00344	CABLE GLAND, Thread size: M75 (OD: 57mm -78mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M75 (OD: 57mm -78mm). Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	12,00	
65	010.012.00324	CABLE GLAND, Thread size: M20 (OD: 12.5mm -	CABLE GLAND, Thread size: M20 (OD: 12.5mm - 20.5mm). Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e'	Set	400,00	

		20.5mm) - Ốc siết cáp/ кабельный сальник	suitable for Zone 2, IIA, T3 hazardous area applications. Compression type with a flameproof seal on the cable inner bedding an environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid			
66	010.012.00490	Cable Gland, Thread size: M25 (OD: 16.9mm - 26mm) - Ốc siết cáp/ кабельный сальник	Cable Gland, Thread size: M20 (OD: 16.9mm - 26mm). Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e' suitable for Zone 1, 2, IIA, T3 hazardous area applications. Compression type with a flameproof seal on the cable inner bedding an environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	16,00	
67	010.012.00323	CABLE GLAND, Thread size: M32 (OD: 22mm - 33mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M32 (OD: 22mm - 33mm). Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e' suitable for Zone 1, 2, IIA, T3 hazardous area applications. Compression type with a flameproof seal on the cable inner bedding an environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Set	12,00	
68	010.012.00495	CABLE GLAND, Thread size: M40 (OD: 28mm - 41mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M40 (OD: 28mm - 41mm). Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e' suitable for Zone 1, 2, IIA, T3 hazardous area applications. Compression type with a flameproof seal on the cable inner bedding an environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	6,00	
69	010.012.00387	CABLE GLAND, Thread size: M63 (OD: 46mm - 65.3mm) - Ốc siết cáp/ кабельный сальник	CABLE GLAND, Thread size: M63 (OD: 46mm - 65.3mm) Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e' suitable for Zone 1, 2, IIA, T3 hazardous area applications. Compression type with a flameproof seal on the cable inner bedding an environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid	Pce	8,00	
70	010.023.01118	MCT FRAME - Galvanized Steel: S1 x 1, frame opening: 1 - Packing space: 60mm x 60mm	MCT FRAME - Galvanized Steel: S1 x 1 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	6,00	
71	010.023.00345	MCT FRAME - Galvanized Steel: S2 x 1, frame opening: 1 - Packing space: 60mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S2 x 1 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	2,00	

72	010.005.00055	MCT FRAME - Galvanized Steel: S4 x 1, frame opening: 1 - Packing space: 120mm x 120 mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S4 x 1 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	12,00	
73	010.022.00475	MCT FRAME - Galvanized Steel: S6 x 1, frame opening: 1 - Packing space for each opening: 180mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S6 x 1 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	6,00	
74	010.022.01702	MCT FRAME - Galvanized Steel: S6 x 2, frame opening: 2 - Packing space for each opening: 180mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S6 x 2 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	1,00	
75	010.022.01692	MCT FRAME - Galvanized Steel: S8 x 1, frame opening: 3 - Packing space for each opening: 240mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S8 x 1 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	1,00	
76	010.022.01588	MCT FRAME - Galvanized Steel: S8 x 2, frame opening: 2 - Packing space for each opening: 240mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом рамки	MCT FRAME - Galvanized Steel: S8 x 2 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	2,00	
77	010.022.01589	MCT FRAME - Galvanized Steel: S8 x 3, frame opening: 3 - Packing space for each opening: 240mm x 120mm - Khung của bộ xuyên cáp/ Многокабельное прохождение, сталь типом	MCT FRAME - Galvanized Steel: S8 x 3 Multi Cable Transits (MCT) MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.	Pce	1,00	

		рамки				
78	010.023.00289	Multi Diameter Modules with core: Module 20 (OD Cable: 4-14.5mm) - Модули мульти-диаметра с центральной вилкой для кабелей	Multi Diameter Modules with core: Module 20 (OD Cable: 4-14.5mm)	Pce	50,00	
79	010.023.00288	Multi Diameter Modules with core: Module 30 (OD Cable: 10-25mm) - Модули мульти-диаметра с центральной вилкой для кабелей	Multi Diameter Modules with core: Module 30 (OD Cable: 10-25mm)	Pce	250,00	
80	010.023.00287	Multi Diameter Modules with core: Module 40 (OD Cable: 21.5-34.5mm) - Модули мульти-диаметра с центральной вилкой для кабелей	Multi Diameter Modules with core: Module 40 (OD Cable: 21.5-34.5mm)	Pce	30,00	
81	010.022.01309	Multi Diameter Modules with core: Module 60 (OD Cable: 28-54mm) - Модули мульти-диаметра с центральной вилкой для кабелей	Multi Diameter Modules with core: Module 60 (OD Cable: 28-54mm)	Pce	25,00	
82	010.022.00913	Multi Diameter Modules with core: Module 90 (OD Cable: 48-71mm) - Модули мульти-диаметра с центральной вилкой для кабелей	Multi Diameter Modules with core: Module 90 (OD Cable: 48-71mm)	Pce	30,00	
83	010.022.01042	Wedge with Width 60mm - Клин 60мм для MCT	Wedge with Width 60mm	Pce	10,00	
84	010.022.00915	Wedge with Width 120mm - Клин 120мм для MCT	Wedge with Width 120mm	Pce	25,00	
85	008.011.01743	Stay plate width 60mm - SS316 Material - Металлопрокат	Stay plate width 60mm - SS316 Material	Pce	20,00	
86	010.022.00094	Stay plate width 120mm - SS316 Material - Металлопрокат	Stay plate width 120mm - SS316 Material	Pce	110,00	
87	010.022.00868	MCT Lubricant 25ml - Масло смазочное	MCT Lubricant 25ml	Set	30,00	
88	010.035.00346	Lighting switch for outdoor installation in safe area,	Lighting Switch for outdoor installation in safe area, suitable for marine, tropical environmental condition.	Pce	10,00	

		suitable for marine, tropical environmental condition - Công tắc điện/ Выключатель освещения	Heavy duty, industrial grade with Single pole single throw (DPST) contacts rated 10A, 220V, 50Hz. - Location: outdoor safe area; - Enclosure materials: GRP, stainless steel or marine grade aluminum alloy; - Degree of protection: IP56 - Cable entry: 2xM20 metal thread cable entries - C/w cover plate and mounted gang box and accessories			
89	010.035.00101	Explosion-proof Lighting switch - Công tắc điện / Электро выключатель	Explosion-proof Lighting switch Heavy duty, marine grade, Single pole single throw (DPST) contacts rated 10A, 220V, 50Hz. - Ex-protection type: Ex 'd', Ex 'de' suitable for Zone 1, gas group IIC, T4. - Location: Outdoor/hazardous area. - Enclosure materials: Marine grade SS316, marine grade Aluminum/Aluminum Alloy - Degree of protection: IP56 - Cable entry: 1xM20 metal thread cable entries - C/w cover plate and mounted gang box, earth stud and accessories.	Pce	2,00	
90	010.003.00628	Welding Socket with On/Off Switch c/w Plug - Ổ cắm điện/ Розетка	Welding Socket with On/Off Switch c/w Plug: - Enclosure: GRP materials - Ex-protection type: Suitable for Zone 2 Gas Group IIA, T3 hazardous area applications. - Degree of protection: min IP56 - SS316 mounting bracket. - Rating: 3P+N+E (5 Pin), 63A, 380/220V, 50Hz. - Cable entries: 1xM40 Metric metal thread-bottom entry c/w 1xM40 standard plug. - Terminal block: 35sqmm max. conductor	Pce	3,00	
91	010.003.00629	Receptacle Duplex Socket - Ổ cắm điện/ Розетка	Receptacle Duplex Socket: - Enclosure: GRP materials - Degree of protection: IP44 - Universal type socket outlet (suitable for indoor, non-hazardous), 3 pin(P+N+E), 16A, 220V, 50Hz, 2-gang box type, surface mounted. - Hole entries: 2xM20 metal thread cable entries c/w 01xM20 standard plug. - Terminal block: 4sqmm max. conductor	Pce	14,00	
92	010.035.00286	Local Control Switch (LCS), Corrosion resistance, GRP Housing, suitable for 220V, 50Hz, 6A, Cable size 7Cx1.5 mm2 - Ổ cắm điện/ Розетка	Local Control Switch (LCS) consisting of start/stop push button with running indicating light. 220VAC, 50Hz, 6A, with lockable pin type, cable size 7Cx1.5mm2. - Start button: One pair normally open & normally closed contacts, GREEN color - Stop button: One pair normally open & normally closed contacts, RED color. - Enclosure: GRP	Pce	2,00	

			- Explosion protection: Suitable for zone 2, IIA, T3 - Degree of protection: IP56 as minimum - Selector switch “LOCAL/ REMOTE” - Cable entry: 1xM25 metal thread cable entry and 01 stopping plug - C/w external earthing stud, mounting accessories.			
93	010.011.01334	Copper Compression Metric Lug, 1 Hole, 4mm² Wire, M6 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 4mm² Wire, M6 Stud. Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	150,00	
94	010.011.01345	Copper Compression Metric Lug, 1 Hole, 6mm² Wire, M6 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 6mm² Wire, M6 Stud Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	150,00	
95	010.011.01041	Copper Compression Metric Lug, 1 Hole, 16mm² Wire, M6 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 16mm² Wire, M6 Stud. Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	50,00	
96	010.011.01346	Copper Compression Metric Lug, 1 Hole, 25mm² Wire, M8 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 25mm² Wire, M8 Stud Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	50,00	
97	010.011.00986	Copper Compression Metric Lug, 1 Hole, 35mm² Wire, M8 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 35mm² Wire, M8 Stud Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm) Đầu cốt đồng mạ kẽm 35 mm2, lỗ Ø8 - Compression tin plated copper lugs: 35 mm2 - M8	Pce	100,00	
98	010.011.01335	Copper Compression Metric Lug, 1 Hole, 50mm² Wire, M8 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 50mm² Wire, M8 Stud Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	50,00	
99	010.011.01337	Copper Compression Metric Lug, 1 Hole, 95mm² Wire, M10 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 95mm² Wire, M10 Stud. Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	50,00	
100	010.011.00987	Copper Compression Metric Lug, 1 Hole, 150mm² Wire, M12 Stud - Метрический наконечник для сжатия меди	Copper Compression Metric Lug, 1 Hole, 150mm² Wire, M12 Stud. Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, ring type (core cross-section, mm2/hole diameter, mm)	Pce	100,00	
101	010.011.01044	16-14 AWG (1.5-2.5mm2) Ring Type Cable Lug, Stud size: M4. Material: Copper, Tinned copper, with insulated tongue - Концевые кабельные наконечники	Ring Terminal, tinned copper, with insulated tongue (core cross-section, mm2)	Pce	1.000,00	

102	010.011.01338	12-10 AWG (4mm2 – 6mm2), M4 Stud hole size - Ring Terminal, tinned copper, with insulated tongue - Концевые кабельные наконечники	Ring Terminal, tinned copper, with insulated tongue (core cross-section, mm2)	Pce	400,00	
103	010.011.01339	16-14 AWG (1.5mm2 – 2.5mm2)/ M4 Stud hole size - Compression terminal of pin type, tinned copper, with insulated tongue - Концевые кабельные наконечники	Compression terminal of pin type, tinned copper, with insulated tongue (core cross-section, mm2)	Pce	2.000,00	
104	010.011.01340	12-10 AWG (4mm2 – 6mm2), M4 Stud hole size - Compression terminal of pin type, tinned copper, with insulated tongue - Концевые кабельные наконечники	Compression terminal of pin type, tinned copper, with insulated tongue (core cross-section, mm2)	Pce	1.000,00	
105	010.021.00477	Cable tie, 3.6mm (W) x 203mm (L), thickness 1.1mm - Хомут кабельный	Cable tie, weather resistant nylon, standard package, UV resistant, black color	Pce	1.000,00	
106	010.021.00478	Cable tie, 4.8mm (W) x 368mm (L), thickness 1.3mm - Хомут кабельный	Cable tie, weather resistant nylon, standard package, UV resistant, black color	Pce	5.000,00	
107	010.021.00380	Cable tie 4.6mm (W) x 203mm (L), min. 0.25mm THK, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour - Dây siết cáp/ Кабельная стяжка	Polyester fully coated Cable Tie, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour.	Pce	4.000,00	
108	010.021.00250	Cable tie 7.9mm (W) x 362mm (L), min. 0.25mm THK, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour - Dây siết cáp/ Кабельная стяжка	Polyester fully coated Cable Tie, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour.	Pce	3.000,00	
109	010.021.00479	Cable tie 7.9mm (W) x 521mm (L), min. 0.25mm THK, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material,	Polyester fully coated Cable Tie, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour.	Pce	1.000,00	

		Black colour - Dây siết cáp/ Кабельная стяжка				
110	010.022.01693	Polyvinyl Chloride Elliptical Cable Marker, Letters from A to Z (of each one) - Маркировка кабельная	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends	Pce	2.500,00	
111	010.022.01694	Polyvinyl Chloride Elliptical Cable Marker, Digits from 0 to 9 (of each one) - Маркировка кабельная	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends	Pce	2.500,00	
112	010.022.01695	Polyvinyl Chloride Elliptical Cable Marker, Character "-" (dash) - Маркировка кабельная	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends	Pce	5.000,00	
113	010.022.01696	Polyvinyl Chloride Elliptical Cable Marker, Character "/" (slash) - Маркировка кабельная	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends	Pce	500,00	
114	010.022.01697	Carrier strip suitable for cable marker, 18 digits / characters carriers - Маркировка кабельная	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends	Pce	3.000,00	
115	010.022.01397	Polyvinyldichloride elliptical cable markers for cables cores marking (black on yellow):1.5...4 mm2 ((Set of digits from 0 to 9 (100 pcs per each number)) - Nhãn cáp, số/ Маркировка кабельная	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Set	20,00	
116	010.022.01398	Polyvinyldichloride elliptical cable markers for cables cores marking (black on yellow):2.5…6 mm2 ((Set of digits from 0 to 9 (100 pcs per each number)) - Nhãn cáp, số/ Маркировка кабельная	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Set	20,00	
117	010.022.01399	Polyvinyldichloride elliptical cable markers for cables cores marking (black on yellow):16…70 mm2 ((Set of digits from 0 to 9 (100 pcs per each number)) - Nhãn cáp, số/ Маркировка кабельная	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Set	2,00	
118	010.022.01400	Polyvinyldichloride elliptical cable markers for cables cores	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Set	1,00	

		marking (black on yellow):> 70 mm2 ((Set of digits from 0 to 9 (100 pcs per each number)) - Nhãn cáp, số/ Маркировка кабельная				
119	010.019.00175	Marking plastic selfsticked tape of blue colour with width of 10 to 15mm - Маркировочная пластиковая самоклеящаяся лента синего цвета	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Metre	10,00	
120	010.019.00176	Marking plastic selfsticked tape of red colour with width of 10 to 15mm - Маркировочная пластиковая самоклеящаяся лента красного цвета	Polyvinyl dichloride elliptical cable markers for cables cores marking. Colour: Yellow with black legends	Metre	10,00	
121	010.022.01196	Heat strinkable tubing of black colour 4.8 – 2.4 (150m/Reel) - Ống co nhiệt/ Термоусадочная трубка	Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)	Roll	2,00	
122	010.022.01197	Heat strinkable tubing of black colour 6.4 – 3.2 (75m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	4,00	
123	010.022.01198	Heat strinkable tubing of black colour 9.5 – 4.8 (75m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	4,00	
124	010.022.01199	Heat strinkable tubing of black colour 12.7 – 6.4 (75m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	1,00	
125	010.022.01200	Heat strinkable tubing of black colour 19 – 9.5 (60m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	1,00	
126	010.022.01201	Heat strinkable tubing of black colour 25.4 – 12.7 (60m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	2,00	
127	010.022.01202	Heat strinkable tubing of black colour 38.0 – 19.0 (30m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	2,00	

128	010.022.01203	Heat strinkable tubing of black colour 50.8 – 25.4 (30m/Reel) - Ống co nhiệt/ Термоусадочная трубка	"Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)"	Roll	2,00	
129	010.023.00760	Grounding Boss Ø40mm diameter, 30mm high minimum mild steel for welding,c/w with Bolt M10, Nut, Washer and Spring Washer - Болт заземления	Grounding Boss Ø40mm diameter, 30mm high minimum mild steel for welding,c/w with Bolt M10, Nut, Washer and Spring Washer.	Pce	100,00	
130	010.022.01436	Grounding bar 50x30x4mm-ASTM A36 - Планка заземления	Grounding bar 50x30x4mm, holes for M6 & M10, mild steel ASTM A36, for welding c/w with Bolt M6, Nut, Washer and Spring Washer.	Pce	500,00	
131	010.011.01315	Compression Pin-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 1.5 sq.mm cable. - Метрический наконечник для сжатия меди/ Đầu cốt cáp	Compression Pin-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 1.5 sq.mm cable.	Pce	1.000,00	
132	010.011.01132	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 1.5sq.mm cable. Stud size: M5 - Метрический наконечник для сжатия меди/ Đầu cốt cáp	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 1.5sq.mm cable. Stud size: M5	Pce	500,00	
133	010.011.00791	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 2.5sq.mm cable. Stud size: M6. - Đầu cốt cáp/ Кабельные наконечники	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 2.5sq.mm cable. Stud size: M6.	Pce	1.000,00	
134	010.022.00383	Compression terminal lugs of ring type, tinned copper: 16 mm2	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 16sq.mm cable. Stud size: M10	Pce	100,00	
135	010.011.01190	Compression terminal cable lugs Ring-type, 25 mm2 - Кабельные наконечники	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 25sq.mm cable. Stud size: M10	Pce	100,00	
136	010.011.01188	Compression terminal cable lugs Ring-type, 70 mm2 - Кабельные наконечники	Compression Ring-type cable lug, tinned copper suitable copper one hole metric lug non insulated for 70sq.mm cable. Stud size: M10	Pce	100,00	
137	010.011.00979	Three-core indoor termination for plastic insulated cables (PVC, PE, XPLE, EPR in acc. with IEC 60502- 2). System	Three-core indoor termination for plastic insulated cables (PVC, PE, XPLE, EPR in acc. with IEC 60502- 2). System voltage 6/10 (12) kV. Nominal core cross section 25-95mm2. C/w with all necessary insulation and sealing kit's accessories, pressure spring	Pce	1,00	

		voltage 6/10 (12) kV. Nominal core cross section 25-95mm2. C/w with all necessary insulation and sealing kit's accessories, pressure spring and accessories for earthing - Аксессуары для Кабель	and accessories for earthing			
138	040.012.00542	SS316 round head bolt M6x20 c/w nut, plain washer, spring washer - Bu lông/ Болт	Bolt SS316 round head bolt M6x20 c/w nut, plain washer, spring washer	Pce	2.000,00	
139	061.003.01256	Bolt SS316 round head bolt M6x25 c/w nut, plain washer, spring washer - Bu lông/ Болт	Bolt SS316 round head bolt M6x25 c/w nut, plain washer, spring washer	Set	500,00	
140	040.012.00547	Bolt SS316 hexagonal bolt M6x30 c/w nut, plain washer, spring washer and locknut - Bu lông/ Болт	Bolt SS316 hexagonal bolt M6x30 c/w nut, plain washer, spring washer and locknut	Pce	500,00	
141	040.012.00548	Bolt SS316 hexagonal bolt M8x30 c/w nut, plain washer and locknut - Bu lông/ Болт	Bolt SS316 hexagonal bolt M8x30 c/w nut, plain washer and locknut	Pce	500,00	
142	061.001.05669	SS316 hexagonal bolt M10x20 c/w nut, plain washer and locknut - Bu lông/ Болт	Bolt SS316 hexagonal bolt M10x20 c/w nut, plain washer and locknut	Set	500,00	
143	040.012.00549	SS316 hexagonal bolt M10x30 c/w nut, plain washer and locknut	Bolt SS316 hexagonal bolt M10x20 c/w nut, plain washer and locknut	Pce	200,00	
144	061.001.00121	Bolt SS316 Hexagonal bolt sloter bolt M12x30mm with nut, flat washer and lock washer - Болты	Bolt SS316 Hexagonal bolt sloter bolt M12x30mm with nut, flat washer and lock washer	Set	100,00	
145	010.023.00106	Neoprene Rubber 1000mm x 2000mm x 2mm Thickness - Cao su/ неопреновый каучук	1mW x2mL x2mmThk.Neoprene Rubber	Page/ Sheet	20,00	
146	010.023.00572	Fire stop sealing compound - Противопожарный герметик	Fire stop sealing compound	Kg	5,00	
147	010.023.00478	Reduce Vibration, Insulation Sleeves for M4 Bolt, Grey PTFE/nylon - Снижение вибрации, изоляционные муфты для болта	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon	Set	500,00	
148	010.023.00479	Reduce Vibration, Insulation Sleeves For M6 Bolt, Grey PTFE/nylon - Снижение вибрации, изоляционные муфты для болта	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon	Set	4.000,00	

149	010.023.00480	Reduce Vibration, Insulation Sleeves For M8 Bolt, Grey PTFE/nylon - Снижение вибрации, изоляционные муфты для болта	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon	Set	1.000,00	
150	010.023.00481	Reduce Vibration, Insulation Sleeves For M10 Bolt, Grey PTFE/nylon - Снижение вибрации, изоляционные муфты для болта	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon	Set	1.000,00	
151	010.023.00482	Reduce Vibration, Insulation Sleeves For M12 Bolt, Grey PTFE/nylon - Снижение вибрации, изоляционные муфты для болта	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon	Set	200,00	
152	042.003.00031	Cable tray edge protector - Кабельный лоток	Cable tray edge protector	Metre	400,00	

(*) : New items

BK-10A WELLHEAD PLATFORM

Approved by
Deputy General Director
"VIETSOVPETRO"

Signed by: Dang Duc Phong
Date: 07/11/2025 08:16:34
Certified by: Vietsovpetro CA

DANG DUC PHONG

TECHNICAL REQUIREMENT FOR ELECTRICAL BULK MATERIALS PACKAGE

DOC. NO : OCD-BK10A-TR-18
REV : 0
DATE : 10/2025

ISSUED FOR BID

TABLE OF CONTENTS

1. PURPOSE AND SCOPE OF USE

- This document covers the requirements for **Electrical Bulk Materials Package** for BK-10A Wellhead Platform at White Tiger Oil Field, hereinafter referred to as "Goods".

2. GENERAL REQUIREMENTS FOR EQUIPMENT:

- **Year of manufacture**: Goods and All components of Goods must be brand new and unused, manufactured in **year 2025 or later.**
- **Warranty**: All of the goods shall be furnished with Warranty Certificate for **18 months** from the delivery date or 12 months after the Goods have been put into service, whichever comes first.
- In the offer, it is necessary to clearly state the name, code, technical characteristics, manufacturer and origin of each item of materials.

3. TECHNICAL REQUIREMENT

- Bidder is required to offer Goods meet all requirements in the Scope of supply in Invitation to Bid and in the documents in Appendix 1.
- In the event of any conflict between this Technical Requirement, Specification, Datasheet, drawings and other documents, the order of the precedence of the documents is as follows:
    - Scope of supply on ITB (Invitation to Bid)
    - This Technical requirement
    - Specifications.
    - Other documents and drawings in Appendix 1.
    - International Code and Standards.

4. VSP's MANUFACTURER LIST

- The Bidder is recommended to offer the manufacturer listed below. In case the manufacturer is not on the Manufacturer List, Bidder needs to provide information about the manufacturer's capacity (production capacity, experience, production process, facilities, certification system, similar contracts, documents proving production capacity...) for evaluation

GROUP	DESCRIPTION	RECOMMENDED MANUFACTURER
Group 1	Cable Trays and Ladders	Ogleand, Ackron, B-line (Eaton), GK, Kensteel, M*Rak (Tristar), Sang Tao.
Group 2	Cables	Draka, General cable, Lapp Kabel, LS cable, TMC, Untel, Teldor, Cables International (Jebsen & Jessen), ZTT, Nexans, Prysmian, Amer Cables, JDR Cable Systems, Triangle Cables, T.F.K, Rockbestos, Belden.
Group 3	Electrical Heat Tracing System	- Heating cable,Thermostat, Controller, JB, Cable gland, Contactor, MCCB, Relay, MCB: Raychem, Thermon, Bartec, Chromalox, ABB, Schneider, Siemens, Stahl. - Distribution Board (DB) For Heat Tracing System: Raychem, Thermon, Bartec, Chromalox, ABB, Schneider, Siemens.
Group 4	Luminaires and Floodlights	Chalmit, SICE, Glamox, DTS, Cooper, Stahl, Appleton, CEAG, Crouse Hinds, Kappa Electric, Killark, Orga, Pauluhn.
Group 5	Junction Boxes, Cable Glands & Multi Cable Transit (MCT)	- Junction Boxes: Supermec, Rose, R. Stahl, Weidmuller, Bartec, Cortem, Crouse Hinds, Killark, Hawke, ABTech, Appleton, Curlee, Hoffman. - Cable Glands: Hawke, Supermec, Peppers, CMP, Cortem, Weidmuler, Crouse-Hinds, Bartec, Dong-A Bestech - Multi Cable Transit (MCT): Roxtec, Hawke Transit System (HTS), BST, Nelson Fire Stop.
	Lighting Switches; Power Plug and Socket Connectors	Hawke, Bartec, Killark, Stahl, Crouse-Hinds, Legrand.
	Push-button control station	Appleton, Killark, Stahl, Crouse-Hinds, Bartec, ABTECH.
	Material and Tools	- Cable lugs/pin, Cable tie, cable Marker: Hawke, Swagelok, Peppers, Hawke, CMP, Cortem, Weidmuler, Klauke, Panduit, Band-It, Burndy, Phoenix contact, Thomas Betts. - MV Termination Kits: Raychem, 3M, Cellpack, Tyco.
	Earthing and Bolts	Earthing Bar, Earthing Boss: Furse, Kumwell, Caddy.
	Insulation Layer and Others	All Manufacturer

5. RECOMMENDED ORIGIN OF GOODS

- The Bidder is recommended to offer the country of origin listed below. Other countries of origin will also be evaluated.

GROUP	DESCRIPTION	RECOMMENDED COUNTRY OF ORIGIN
Group 1	Cable Trays and Ladders	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia,VietNam, China, India
Group 2	Cables	G7, Russia, Europe, Australia, Korea, Turkey, Singapore, Thai land, Indonesia, Malaysia, China, India
Group 3	Electrical Heat Tracing System	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, China, India
Group 4	Luminaires and Floodlights	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, China, India
Group 5	Junction Boxes, Cable Glands & Multi Cable Transit (MCT)	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, China, India
	Lighting Switches; Power Plug and Socket Connectors	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, China, India, Vietnam, Taiwan
	Push-button control station	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, China, India
	Earthing and Bolts	G7, Russia, Europe, Australia, Korea, Singapore, Thai land, Indonesia, Malaysia, Viet Nam, China, India
	Material and Tools; Insulation Layer and Others	All Country

- In the offer, the origin of each item of goods shall be clearly identify.
- In case the bidder offers many origins for one item, Vietsovpetro will evaluate the item according to the origin with the lowest score.

6. TIME AND LOCATION OF DELIVERY

- All GOODs shall be delivered at Vietsovpetro warehouse/ Vietsovpetro port.
- Delivery time of GOODs, including vendor data review, packing/handling, shipping, transportation, delivery time shall be not later than **135 calendar days** after LOI (Letter of Intent)/LOA (Letter of Award).

7. QUANTITY AND PACKAGING

- Detail requirement of Goods to be referred to all documents and drawings in the Appendix 1.
- Vendor's scope of supply for **Electrical Bulk Materials Package** shall be as per scope of supply in ITB (Invitation to Bid).
- Bidder can quote each Group or all Groups but Bidder must quote enough quantity of all items in each Group. Detail of Groups as below:

GROUP	DESCRIPTION	REMARK
Group 1.	Cable Trays and Ladders	More detail to be referred to documents in the Appendix 1.
Group 2.	Cables	
Group 3.	Electrical Heat Tracing System	
Group 4.	Luminaires and Floodlights	
Group 5.	Junction Boxes, Cable Glands & Multi Cable Transit (MCT)	
	Lighting Switches	
	Power Plug and Socket Connectors	
	Push-button control station	
	Material and Tools	
	Earthing and Bolts	
	Insulation Layer and Others	

- Packaging shall be as per Manufacturer's standard

8. REQUIREMENTS FOR OCCUPATIONAL SAFETY, INDUSTRIAL HYGIENE, AND ENVIRONMENTAL SAFETY:

- Bidder has to follow Vietsovpetro's HSE policy when delivery goods to Vietsovpetro site.

9. TECHNICAL DOCUMENTATION REQUIREMENTS

BIDDER is requested to submit a complete of Technical Documentations as a part of its bid document and the minimum requirements as below:

Item	Documents	Group 1 (Tray, Ladder)	Group 2 (Cable)	Group 3 (HTS)	Group 4 (Lighting)	Group 5				With BID	After purchase order (for Review/ Information)	Final with Equipment Data book
						JB, CG Junction Boxes, Cable Glands & Multi Cable	MCT	(LS, PP&SK, PB)	Material and Tools, Earthing and Bolts, Insulation Layer and Others			
1.	Scope of supply with detailed model or part number, manufacturer, Origin and quantity (No information or any information such as "or equal", "or equivalent" is not acceptable).	X	X	X	X	X	X	X	X	Yes		
2.	Equipment manufacturer Catalog or datasheet with highlight specification, model and part number.	X	X	X	X	X	X	X	X	Yes	R	Yes

3.	Equipment General Arrangement drawing (dimension of equipment)	X		X	X	X	X	X	X		R	Yes
4.	Certificates of Explosion protection, Ingress Protection issued by third party (Where applicable) (copy)			X	X	X		X		Yes	I	Yes
5.	Type Approval Certificate (Sample) - Copy		X				X				I	Yes
6.	Type Examination certificates (Sample) - Copy			X						Yes	I	

Note:

- *The symbol (X) in the table above is "Yes" required submission for Bidding*
- *All documents and drawings in tender proposal shall be provided with: one (1) original and three (03) copies and one (1) set of electronic copies on USB.*
- *All final documents/ drawing for installation, operation and maintenance shall be provided with: one (01) original and three (03) copies and one (01) set of electronic copies on USB.*

10. REQUIREMENTS FOR CERTIFICATES OF THE GOODS

All relevant certificates must be confirmed or committed to provide and to be submitted before delivery, but not limited to the following:

- **Certificates for Group 1 to 4:**

Item	Certificates	**Group 1** (Cable tray and Ladders)	**Group 2** (Cable)	**Group 3** (Heat tracing**)**	**Group 4** (Luminaires and Floodlights)
1.	Certificate of quality, quantity issued by Manufacturer	Original or Certified copy/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check
2.	Certificate of Origin issued by authorized agency of Manufacturer's country or exporter's country	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check
3.	Type Approval Certificate issued by third party		Original or Certified copy		
4.	Type Examination Certificate issued by third party			Original or Certified copy	
5.	Test report or Certificate issued by manufacturer	Original or Certified copy	Original or Certified copy		
6.	Certificates of Explosion protection, Ingress Protection issued by third party (Where applicable)			Certified copy	Certified copy
7.	Material certificate issued by Manufacturer	Original or Certified copy			
8.	Warranty Certificate issued by Bidder	Original	Original	Original	Original

• Certificates for Group 5:

Item	Certificates	Group 5							
		JB and Cable gland	**MCT**	**Lighting switches**	**Power plug and Socket connector**	**Push-button control station**	**Material and Tools**	**Earthing and Bolts**	**Insulation layer**
1.	Certificate of quality, quantity issued by Manufacturer	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original or Certified copy/ electronic provided web-link to check	Original or Certified copy/ electronic provided web-link to check	Original or Certified copy/ electronic provided web-link to check
2.	Certificate of Origin issued by authorized agency of Manufacturer's country or exporter's country	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original/ electronic provided web-link to check	Original / electronic provided web-link to check	Original / electronic provided web-link to check	Original / electronic provided web-link to check
3.	Certificates of Explosion protection, Ingress Protection issued by third party (Where applicable)	Certified copy		Original or Certified copy	Original or Certified copy	Original or Certified copy			
4.	Material certificate issued by Manufacturer	Copy (For JBs)							
5.	Type Approval Certificate issued by third party		Original or Certified copy						
6.	Warranty Certificate issued by Bidder	Original	Original	Original	Original	Original	Original	Original	Original

Note:

a. Certified copy: Certified copy by manufacturer or final fabricator/authorized distributor.

b. For materials originating in Vietnam, there must be a factory release certificate from the manufacturing factory instead of CO.

11. METHODS FOR EVALUATION OF TECHNICAL PROPOSALS

Technical offers will be evaluated for each group of the package according to the attached Technical Evaluation Criteria/ Technical Scoring Table Doc. No. OCD-BK10A-TE-18.

12. APPENDIX

Appendix 1: Technical Documents.

Note: *All documents and drawings in Appendix 1 can be updated during bidding stage.*

APPENDIX 1 – TECHNICAL DOCUMENTS

ITEM	DOCUMENT NO.	DOCUMENT TITLE	REV.	NOTE
I. PURCHASE REQUISITION				
1.	BK1.BK10.BK10A-001-GE-ES2-RQ-004	PURCHASE REQUISITION FOR ELECTRICAL BULK MATERIALS	0	
II. DRAWING				
2.	BK1.BK10.BK10A-001-GE-ES2-LD-001	ELECTRICAL INSTALLATION DRAWINGS	0	
3.	BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001	BK10A. ELECTRICAL EQUIPMENT LAYOUT	0	
III. SPECIFICATION				
4.	BK1.BK10.BK10A-001-GE-ES2-SP-007	SPECIFICATION FOR ELECTRICAL CABLE	0	
5.	BK1.BK10.BK10A-001-GE-ES2-SP-009	SPECIFICATION FOR ELECTRICAL BULK MATERIALS	0	
6.	BK1.BK10.BK10A-001-GE-ES2-SP-011	SPECIFICATION FOR ELECTRICAL HEAT TRACING	0	

Note: *Attachment documents may be updated and complemented during bidding stage*

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT NAME : **BK-10A WELLHEAD PLATFORM**

DOCUMENT TITLE : **PURCHASE REQUISITION FOR ELECTRICAL BULK MATERIALS**

DOCUMENT NO. : **BK1.BK10.BK10A-001-GE-ES2-RQ-004**

PHASE : **DE**

			CONTROLLED Signed by: Lê Thị Hằng Date: 10/07/2025 15:05:39 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 10.07.2025 16:12:33 Certified by: Vietsovpetro CA	Signed by: Авдеев Андрей Сергеевич Date: 10.07.2025 17:08:22 Certified by: Vietsovpetro CA
			DC: L.T. HANG	**ENG MGR:** GAYNUTDINOV	**PRO MGR:** AVDEEV
0	IFA		Signed by: Панов Александр Анатольевич Date: 10.07.2025 10:37:53 Certified by: Vietsovpetro CA	Signed by: Исатов Дмитрий Олегович Date: 10.07.2025 10:38:57 Certified by: Vietsovpetro CA	Signed by: Исатов Дмитрий Олегович Date: 10.07.2025 10:39:53 Certified by: Vietsovpetro CA
REV.	**DES.**	**DATE**	**PREPARED:** SVYATOKHO	**CHECKED:** ISATOV	**DEPT.MGR:** ISATOV

TRACK CHANGES

No	Rev.	Content of Change	Note
1	0	Issued for approval	

No.	Description	Unit	Quantity	Remarks
I	**Cable Trays and Ladders** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 Specification for Electrical Bulk Materials)			
1	**Heavy duty cable ladder**, SS316 cable ladder, 1.5mm thickness, 100mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hex head bolts & spring washers, hold down clamps, ladder splice connector (all material is SS316), earth jumper. Cable ladder shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).			
1.1	Straight element: 600W x 100H (mm)	pcs	10	
1.2	Straight element: 300W x 100H (mm)	pcs	100	
1.3	Straight element: 200W x 100H (mm)	pcs	70	
1.4	Horizontal Bend 90^0 300W x 100H (mm), R=600mm	pcs	6	
1.5	Horizontal Bend 90^0 200W x 100H (mm), R=600mm	pcs	6	
1.6	Flexible Riser 300W x 100H (mm)	pcs	10	
1.7	Flexible Riser 200W x 100H (mm)	pcs	10	
1.8	Reducer W1=600mm, W2=300mm, H=100mm	pcs	2	
1.9	Horizontal Tee W1,W2=600mm, W3=300mm, H=100mm	pcs	4	
2	**Perforated heavy duty cable tray**, SS316 cable tray, 1.5 mm thickness, 40mm height, 3000mmL completed with covers thickness 1.0mm, cover clamps, hold down clamps, tray splice connector (all material is SS316), earth jumper. Cable tray shall be suitable for offshore/marine installation. (Vendor shall provide detail specification, necessary quantity for all accessories, bolts, nuts, washers for completed tray/ladder installation. All material is SS316).			
2.1	Straight perforated cable tray 100W x 40H (mm)	pcs	250	
2.2	Straight perforated cable tray 200W x 40H (mm)	pcs	40	
2.3	Horizontal Bend 90^0 100Wx40H (mm), R=300mm	pcs	20	
2.4	Horizontal Bend 90^0 200Wx40H (mm), R=300mm	pcs	5	
2.5	Horizontal Tee W1,W2,W3=100 x 40H (mm)	pcs	5	

No.	Description	Unit	Quantity	Remarks
2.6	Flexible Riser 100W x 40H (mm)	pcs	50	
2.7	Flexible Riser 200W x 40H (mm)	pcs	8	
2.8	Flexible Horizontal Splice plate, H=40mm	pcs	100	
2.9	Tray reducer 200mmW-100mmW, 40mmH	pcs	10	
II	**Cables** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-007 Specification for Electrical Cable)			
1	**The low voltage (P1 type) 600/1000V flame retardant**, mud resistance, Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: EPR to IEC 60092-360. - Core identification: By color code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606. - Core cross sections:			
1.1	7C x 1.5 mm^2	m	100	
1.2	2C+E x 1.5 mm^2	m	2000	
1.3	2C+E x 2.5 mm^2	m	200	
1.4	2C+E x 4 mm^2	m	1000	
1.5	3C x 4 mm^2	m	100	
1.6	4C x 4 mm^2	m	250	
1.7	4C x 6 mm^2	m	200	
1.8	4C x 25 mm^2	m	100	
1.9	4C+E x 35 mm^2	m	150	
1.10	4C x 50 mm^2	m	100	
1.11	4C x 95 mm^2	m	100	
1.12	4C x 150 mm^2	m	400	

No.	Description	Unit	Quantity	Remarks
2	**The low voltage** (P3 type) **600/1000V fire resistant** and flame retardant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750^0 C for 3 hours. - Insulation: EPR to IEC 60092-360. - Core identification: By color code. - Bedding/Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606. - Core cross sections:			
2.1	2C+E x 2.5 mm^2	m	500	
2.2	4C+E x 1.5 mm^2	m	1200	
2.3	2C+E x 6 mm^2	m	600	
2.4	4C x 6 mm^2	m	100	
2.5	4C x 16 mm^2	m	200	
2.6	2C x 35 mm^2	m	220	
3	**Earthing cable** (E1 type) 600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green color with yellow stripe in accordance with IEC equivalent, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Insulation: Halogen-free thermoset compound SHF2 in accordance with IEC 60092-360. - Core identification: Green color with yellow stripe - Requirement: IEC 60092-360, IEC 60228, IEC 60754, IEC 61034. - Core cross sections:			
3.1	1C x 4 mm^2	m	400	
3.2	1C x 16 mm^2	m	100	

No.	Description	Unit	Quantity	Remarks
3.3	1C x 25 mm^2	m	200	
	1C x 35 mm^2	m	200	
3.4	1C x 70 mm^2	m	100	
4	**The high voltage 6/10 (12) kV** (H1 type), Tinned Copper Wire Braided (TCWB) power cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/EPR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: tinned annealed stranded copper as per IEC 60228, Class 2. - Conductor screen: Layer of semi-conducting material. - Insulation: EPR to IEC 60092-360. - Insulation screen: A semi-conducting compound layer and semi-conducting tape (or tinned copper tape). - Core identification: By color or colored tape on the insulation screen. - Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound to NEK 606. - Requirement: IEC 60092-360, IEC 60092-354, IEC 60092-754, IEC 60228, IEC 60332-3 Cat. A, IEC 61034, NEK 606. Core cross sections: **3C x 70 mm^2**	m	400	

No.	Description	Unit	Quantity	Remarks
5	**The instrumentation cable 250V** flame retardant, fire resistant, mud resistance, Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) Instrument cables for indoor/ outdoor hazardous and non-hazardous areas, Cu/MGT/EPR/SCR/LSZH/TCWB/SHF Mud or equal, construction as follows: - Conductor: Tinned annealed stranded copper as per IEC 60228, Class 2. - Fire resistant layer: Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750^0 C for 3 hours. - Bedding/Insulation: EPR to IEC 60092-360. - Individual Screen: Paired screen, aluminum back polyester tape, stranded copper drain core. - Core identification: By color code. - Inner sheath: LSZH compound to IEC 60092-360. - Armor: Tinned Copper Wire Braided (TCWB). - Outer sheath: Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). Fire resistance as per IEC 60331. LSZH SHF mud outer sheath compound to NEK TS 606. - Requirement: IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606 - Core cross sections:			
5.1	1Pr x 1.5 mm^2	m	200	
5.2	2Pr x 1.5 mm^2	m	600	

No.	Description	Unit	Quantity	Remarks
III	**Luminaires and Floodlights** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 Specification for Electrical Bulk Materials)			
1	**Indoor High Efficient Linear LED lighting fixture with electronic driver** - Location: **indoor**, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer's technology. - Delivered output: **5000 - 6000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED **1.2m** tubes and driver. All are replaceable type - Degree of protection: min. IP44 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	10	
2	**Indoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in** - Location: **indoor**, safe area, suitable for marine/offshore industrial application - Enclosure: GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer's technology. - Delivered output: **5000 - 6000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED **1.2m** tubes and driver. All are replaceable type - Degree of protection: min. IP44 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Battery with 90 minutes backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	6	

No.	Description	Unit	Quantity	Remarks
3	**LED bulkhead lighting fixture with electronic driver** - Location: wet indoor or outdoor safe area, suitable for marine/offshore industrial application - Enclosure: Aluminum LM6 body, GRP or Zinc coated steel sheet or Steel with epoxy or Polyester painted zintec - Diffusor: transparent polycarbonate - Colour according to manufacturer's technology. - Delivered output: **800 - 1000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strip or matrix - Degree of protection: min. IP44 - Nominal power – about **5 - 10 Wt;** - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: ceiling, surface or suspended	pcs	1	For sanitary room
4	**Outdoor High Efficient Linear LED lighting fixture with electronic driver** - Location: outdoor, **safe area**, suitable for marine/offshore industrial application - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Colour according to manufacturer's technology. - Delivered output: **5000 - 6000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED **1.2m** tubes and driver. All are replaceable type - Degree of protection: min. IP56 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	8	

No.	Description	Unit	Quantity	Remarks
5	**Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in** - Location: outdoor, **safe area**, suitable for marine/offshore industrial application - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Colour according to manufacturer's technology. - Delivered output: **5000 - 6000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED **1.2m** tubes and driver. All are replaceable type - Degree of protection: min. IP56 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - **Battery with 90 minutes** backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	6	
6	**Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes battery built-in** - Location: outdoor **hazardous area**, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent Polycarbonate - Color according to manufacturer's technology. - Delivered output: **3000 - 4000** lumens - Colour Temperature: 4000K (Neutral white) - Light source: LED strips or LED **0.6m** tubes and driver. All are replaceable type - Degree of protection: min. IP65 - Nominal power – about 25 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - **Battery with 90 minutes**' backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	10	

No.	Description	Unit	Quantity	Remarks
7	**Outdoor High Efficient Linear LED lighting fixture with electronic driver** - Location: outdoor **hazardous area**, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent polycarbonate, - Colour according to manufacturer's technology. - Delivered output: **5000-6000** lumens - Colour Temperature: 4000K (Neutral white) - LED strip or **1.2m** LED tubes and driver. All are replaceable type - Degree of protection: IP 65 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	43	
8	**Outdoor Emergency High Efficient Linear LED lighting fixture with electronic driver c/w 90 minutes' battery built-in.** - Location: **outdoor hazardous area**, suitable for marine/offshore environment; - Explosion protection: Ex-e, Gas Group IIA, T3, suitable using for zone 2, - Enclosure: GRP or SS316 body - Diffusor: transparent polycarbonate, - Colour according to manufacturer's technology. - Delivered output: **5000-6000** lumens - Colour Temperature: 4000K (Neutral white) - LED strip or **1.2m** LED tubes and driver. All are replaceable type - Degree of protection: IP 65 - Nominal power – about 40-50 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - **Battery with 90 minutes'** backup duration - Cable entries: at least 2 x M20mm (minimum one at each end) secured with certified plastic plugs - Terminal Block: 3 core max.4 sq.mm conductors with looping and 16A rating through wiring. - Mounting: suspended with 2 fixing points c\w mounting accessories	pcs	15	

No.	Description	Unit	Quantity	Remarks
9	**High Output LED Floodlight.** - Location: outdoor, **safe area**, marine/ offshore - Enclosure: SS316 or Marine Grade Aluminum alloy with powder finish - Delivered output: **45 000 - 50 000** lumens - Colour Temperature: 4000K/5000K (Neutral/Cool white) - Control Gear: Electronic Driver - Degree of protection: min IP 56 - Nominal power – about 400 Wt; - Power supply: 220VAC, 1Ph, 50 Hz - Color according to manufacturer's technology. - Degree of protection: min IP56 - Power supply: single-phase, 220V, 50Hz - Cable entry: 2 x M20 mm & 2 certified rated nickel-plate brass stopping plug - Terminal block: 3 core max. 6 sq.mm. conductors with looping. - Mounting: bracket	pcs	5	
10	**Exit light LED type with self-contained battery pack for 90-minutes backup. Luminaire shall have an illuminated 'EXIT' sign with direction arrow showing from one side.** - Location: Indoor, safe area, marine/ offshore - Explosion protection: Gas Group IIA, T3, suitable using for zone 2 - Enclosure: GRP or SS316 - Degree of protection: min IP44 - Power supply: single-phase, 220V, 50Hz - Cable entry: 2 x M20mm clearance holes (c/w Ex-rated nickel plated brass blanking plug) - Terminal block: 3 core 4 sqmm max. conductor with looping. - Wall mounted type	pcs	2	
IV	**Lighting Switches**			
1	**Lighting Switch** for outdoor installation in safe area, suitable for marine, tropical environmental condition. Heavy duty, industrial grade with Double pole single throw (DPST) contacts rated 10A, 220V, 50Hz. Location: outdoor safe area. Enclosure materials GRP, stainless steel or marine grade aluminum alloy; Degree of protection: min IP56 Cable entry: 2 x M20; C/w cover plate and mounted gang box and accessories.	pcs	10	

No.	Description	Unit	Quantity	Remarks
2	Explosion-proof Lighting switch: Heavy duty, marine grade, Double pole single throw (DPST) contacts rated 10A, 220V, 50Hz. - Ex-protection type: Ex 'd', Ex 'de' suitable for Zone 1, gas group IIC, T4. - Location: Outdoor/hazardous area. - Enclosure materials: SS316 material - Degree of protection: IP56 - Cable entry: 1xM20 metal thread cable entries - C/w cover plate and mounted gang box, earth stud and accessories.	pcs	2	
V	**Power Plug and Socket Connectors** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 - Specification for Electrical Bulk Materials)			
1	**Welding Socket** with On/Off Switches: - Enclosure: GRP materials - Ex-protection type: Ex 'de', suitable for Zone 2 Gas Group IIA, T3 hazardous area applications. - Degree of protection: min IP56 - Complete with plug, SS316 mounting bracket. - Rating: 3P+N+E (5 Pin), 63A, 380/220V, 50Hz. - Hole entries: 1x M40 Metric metal thread-bottom entry c/w 1 x M40 standard plug. - Terminal block: 35sqmm max. conductor	pcs	3	
2	**Receptacle Duplex Socket**: - Enclosure: GRP materials - Degree of protection: IP44 - Universal type socket outlet (suitable for indoor, non-hazardous), 3 pin(P+N+E), 16A, 220V, 50Hz, 2-gang box type, surface mounted. - Hole entries: 2xM20 metal thread cable entries c/w 1 x M20 standard plug. - Terminal block: 4sqmm max. conductor	pcs	14	
VI	**Push-Button Control Station** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 - Specification for Electrical Bulk Materials)			

No.	Description	Unit	Quantity	Remarks
1	**Local Control Switch (LCS)** consisting of start/stop push button with running indicating light. 220VAC, 50Hz, 6A, with lockable pin type, cable size 7Cx1.5mm2. - Start button: One pair normally open & normally closed contacts, GREEN color - Stop button: One pair normally open & normally closed contacts, RED color. - Enclosure: GRP material - Explosion protection : Ex'de' suitable for zone 2, IIA, T3 - Degree of protection: IP56 as minimum - Selector switch "LOCAL/ REMOTE" - Cable entry: 1 x M25 metal thread cable entries and 01 stopping plug - C/w external earthing stud, mounting accessories.	pcs	2	
VII	**Junction Boxes** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 - Specification for Electrical Bulk Materials)			
1	**Lighting Junction box** for outdoor and hazardous area - Cable entry: 4 x M20 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: SS316 material - Terminal block: C/w ten (10) terminal blocks suitable to 4 mm^2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	pcs	40	
2	**Lighting indoor Junction box** - Cable entry: 4 x M20 and one stopping plug. - Degree of protection: IP44 as minimum - Enclosure: GRP material - Terminal block: C/w ten (10) terminal blocks suitable to 4 mm^2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	pcs	5	

No.	Description	Unit	Quantity	Remarks
3	**Power Junction box** for outdoor hazardous area - Cable entry: 4 x M40 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: GRP material - Terminal block: C/w 15 terminal blocks suitable to 35 mm^2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	pcs	1	For welding Unit
4	**Power Junction box** for outdoor hazardous area - Cable entry: 2 x M25 and one stopping plug. - Explosion protection: Ex 'e' suitable for Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. - Degree of protection: IP56 as minimum - Enclosure: SS316 - Terminal block: C/w 10 terminal blocks suitable to 25 mm^2 max. conductor - DIN Rail mounted complete with separators, end bracket /stopper terminal block. - Earth stud & mounting accessories (bolt, nut…).	pcs	1	For LV junction box on Main Deck
VIII	**Cable Glands** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 - Specification for Electrical Bulk Materials)			
1	Nickel-plated brass cable gland suitable for non-hazardous area. Compression type, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid:			
1.1	Thread size: M20 (OD: 12.5mm - 20.5mm)	pcs	200	
1.2	Thread size: M25 (OD: 16.9mm - 26mm)	pcs	20	
1.3	Thread size: M32 (OD: 22mm - 33mm)	pcs	2	
1.4	Thread size: M40 (OD: 28mm - 41mm)	pcs	4	
1.5	Thread size: M63 (OD: 46mm - 65.3mm)	pcs	28	
1.6	Thread size: M75 (OD: 57mm -78mm)	pcs	12	

No.	Description	Unit	Quantity	Remarks
2	Nickel-plated brass cable gland shall be dual certified Ex'd', Ex'e' suitable for Zone 2, IIA, T3 hazardous area applications. Compression type with a dia seal on the cable inner bedding and environmental seal on the cable outer sheath, minimum IP56 protection degree. Complete with locknut, sealing washer and earth tag for cable with tinned copper wire braid:			
2.1	Thread size: M20 (OD: 12.5mm - 20.5mm)	pcs	400	
2.2	Thread size: M25 (OD: 16.9mm - 26mm)	pcs	16	
2.3	Thread size: M32 (OD: 22mm - 33mm)	pcs	12	
2.4	Thread size: M40 (OD: 28mm - 41mm)	pcs	6	
2.5	Thread size: M63 (OD: 46mm - 65.3mm)	pcs	8	
IX	**Multi Cable Transits (MCT)** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-009 - Specification for Electrical Bulk Materials)			
	General Description MCT shall be fire rated and/or blast resistant type. MCT frames shall be suitable for offshore application. MCT shall be suitable for Zone 2 hazardous location, IIA, T3.			
1	MCT FRAME - Galvanized Steel			
1.1	S1 x 1, frame opening: 1 Packing space :60mm x 60mm	pcs	6	
1.2	S2 x 1, frame opening: 1 Packing space :60mm x 120mm	pcs	2	
1.3	S4 x 1, frame opening: 1 Packing space: 120mm x 120 mm	pcs	12	
1.4	S6 x 1, frame opening: 1 Packing space for each opening: 180mm x 120mm	pcs	6	
1.5	S6 x 2, frame opening: 2 Packing space for each opening: 180mm x 120mm	pcs	1	
1.6	S8 x 1, frame opening: 1 Packing space for each opening: 240mm x 120mm	pcs	1	
1.7	S8 x 2, frame opening: 2 Packing space for each opening: 240mm x 120mm	pcs	2	
1.8	S8 x 3, frame opening: 3 Packing space for each opening: 240mm x 120mm	pcs	1	
2	Multi Diameter Modules with core			
2.1	Module 20 (OD Cable: 4-14.5mm)	pcs	50	
2.2	Module 30 (OD Cable: 10-25mm)	pcs	250	

No.	Description	Unit	Quantity	Remarks
2.3	Module 40 (OD Cable: 21.5-34.5mm)	pcs	30	
2.4	Module 60 (OD Cable: 28-54mm)	pcs	25	
2.5	Module 90 (OD Cable: 48-71mm)	pcs	30	
3	Wedge with Width 60mm	pcs	10	
4	Wedge with Width 120mm	pcs	25	
5	Stay plate width 60mm SS316 Material	pcs	20	
6	Stay plate width 120mm SS316 Material	pcs	110	
7	MCT Lubricant 25ml	Tube	30	
X	**Materials and Tools**			
1	Compression Metric Lugs Tinned copper compression lug, single stud hole, non-insulated, Ring type (core cross-section, mm2/hole diameter, mm):			
1.1	4 mm^2/ M6 Stud Hole size	pcs	150	
1.2	6 mm^2/ M6 Stud Hole size	pcs	150	
1.3	16 mm^2/ M6 Stud Hole size	pcs	50	
1.4	25 mm^2/ M8 Stud Hole size	pcs	50	
1.5	35 mm^2/ M8 Stud Hole size	pcs	100	
1.6	50 mm^2/ M8 Stud Hole size	pcs	50	
1.7	95 mm^2/ M10 Stud Hole size	pcs	50	
1.8	150 mm^2/ M12 Stud Hole size	pcs	100	
2	Ring Terminal, tinned copper, with insulated tongue (core cross-section, mm2):			
2.1	16-14 AWG (1.5mm2 – 2.5mm2)/ M4 Stud hole size	pcs	1000	
2.2	12-10 AWG (4mm2 – 6mm2), M4 Stud hole size	pcs	400	
3	Compression terminal of pin type, tinned copper, with insulated tongue (core cross-section, mm2):			
3.1	16-14 AWG (1.5mm2 – 2.5mm2)	pcs	2000	
3.2	12-10 AWG (4mm2 – 6mm2)	pcs	1000	
4	Cable tie, weather resistant nylon, standard package, UV resistant, black color			
4.1	3.6mm (W) x 203mm (L), thickness 1.1mm	pcs	1000	
4.2	4.8mm (W) x 368mm (L), thickness 1.3mm	pcs	5000	
5	Polyester fully coated Cable Tie, 316 stainless steel, self-locking head, heavy cross section, UV resistant, low smoke, halogen-free material, Black colour.			

No.	Description	Unit	Quantity	Remarks
5.1	4.6mm (W) x 203mm (L), min. 0.25mm THK	pcs	4000	
5.2	7.9mm (W) x 362mm (L), min. 0.25mm THK	pcs	3000	
5.3	7.9mm (W) x 521mm (L), min. 0.25mm THK	pcs	1000	
6	Polyvinyl Chloride Elliptical Cable Marker Colour: Yellow with black legends			
6.1	Letters from A to Z (of each one)	pcs	2500	
6.2	Digits from 0 to 9 (of each one)	pcs	2500	
6.3	Character "-" (dash)	pcs	5000	
6.4	Character "/" (slash)	pcs	500	
6.5	Carrier strip suitable for cable marker in the item 6.1, 6.2, 6.3, 6.4 18 digits / characters carriers	pcs	3000	
7	Polyvinyl dichloride elliptical cable markers for cables cores marking Colour: Yellow with black legends			
7.1	1.5…4 mm^2 (digits from 0 to 9 (of each one)	pcs	2000	
7.2	2.5…6 mm^2 (digits from 0 to 9 (of each one)	pcs	2000	
7.3	16…70 mm^2 (digits from 0 to 9 (of each one)	pcs	200	
7.4	> 70 mm^2 (digits from 0 to 9 (of each one)	pcs	100	
8	Marking plastic selfsticked tape of blue colour with width of 10 to 15mm	m	10	
9	Marking plastic selfsticked tape of red colour with width of 10 to 15mm	m	10	
10	Heat strinkable tubing of black colour Flexible, flame retardant, general purpose heat shrinkable, polyolefin tubing (Ø internal diameter, mm/Ø after heating, mm)			
10.1	4.8 – 2.4 (150m/Reel)	Reel	2	
10.2	6.4 – 3.2 (75m/Reel)	Reel	4	
10.3	9.5 – 4.8 (75m/Reel)	Reel	4	
10.4	12.7 – 6.4 (75m/Reel)	Reel	1	
10.5	19 – 9.5 (60m/Reel)	Reel	1	
10.6	25.4 – 12.7 (60m/Reel)	Reel	2	
10.7	38.0 – 19.0 (30m/Reel)	Reel	2	
10.8	50.8 – 25.4 (30m/Reel)	Reel	2	
XI	**Earthing, Cable End Terminals and Bolts**			
1	Earthing			
1.1	**Grounding Boss** ∅40mm diameter, 30mm high minimum mild steel for welding,c/w with Bolt M10, Nut, Washer and Spring Washer.	pcs	100	

No.	Description	Unit	Quantity	Remarks
1.2	**Grounding bar** 50x30x4mm, holes for M6 & M10, mild steel ASTM A36, for welding c/w with Bolt M6, Nut, Washer and Spring Washer.	pcs	500	
2	**Cable End Terminals**			
2.1	Compression **Pin-**type cable lug**,** tinned copper suitable copper one hole metric lug non insulated for 1.5 sq.mm cable.	pcs	1000	
2.2	Compression **Ring-**type cable lug, tinned copper suitable copper one hole metric lug non insulated for 1.5sq.mm cable. Stud size: M5	pcs	500	
2.3	Compression **Ring-**type cable lug, tinned copper suitable copper one hole metric lug non insulated for 2.5sq.mm cable. Stud size: M6	pcs	1000	
2.4	Compression **Ring-**type cable lug, tinned copper suitable copper one hole metric lug non insulated for 16sq.mm cable. Stud size: M10	pcs	100	
2.5	Compression **Ring-**type cable lug, tinned copper suitable copper one hole metric lug non insulated for 25sq.mm cable. Stud size: M10	pcs	100	
2.6	Compression **Ring-**type cable lug, tinned copper suitable copper one hole metric lug non insulated for 70sq.mm cable. Stud size: M10	pcs	100	
2.7	**Three-core indoor termination** for plastic insulated cables (PVC, PE, XPLE, EPR in acc. with IEC 60502-2). System voltage **6/10 (12) kV**. Nominal core cross section 25-95mm^2. C/w with all necessary insulation and sealing kit's accessories, pressure spring and accessories for earthing	set	1	For 6.3kV cable connection to BK10-JackUP JB
3	**Bolts**			
3.1	SS316 round head bolt M6x20 c/w nut, plain washer, spring washer	pcs	2000	
3.2	SS316 round head bolt M6x25 c/w nut, plain washer, spring washer	pcs	500	
3.3	SS316 hexagonal bolt M6x30 c/w nut, plain washer, spring washer and locknut	pcs	500	
3.4	SS316 hexagonal bolt M8x30 c/w nut, plain washer and locknut	pcs	500	
3.5	SS316 hexagonal bolt M10x20 c/w nut, plain washer and locknut	pcs	500	
3.6	SS316 hexagonal bolt M10x30 c/w nut, plain washer and locknut	pcs	200	
3.7	SS316 hexagonal bolt M12x30 c/w nut, plain washer and locknut	pcs	100	

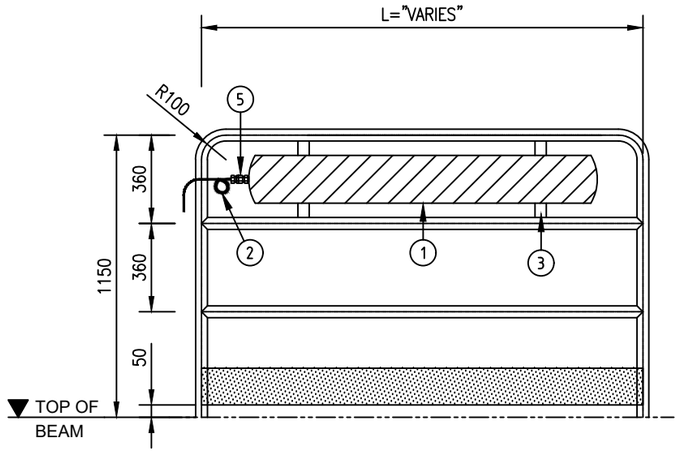
No.	Description	Unit	Quantity	Remarks
XII	**Insulation Layer**			
1	Neoprene Rubber (1mW x 2mL x 2mmThk.)	pcs	20	
2	Fire stop sealing compound	kg	5	
3	Reduce Vibration, Insulation Sleeves for Bolts, Grey nylon			
3.1	For M4 Bolt, screw	pcs	500	
3.2	For M6 Bolt, screw	pcs	4000	
3.3	For M8 Bolt, screw	pcs	1000	
3.4	For M10 Bolt, screw	pcs	1000	
3.5	For M12 Bolt, screw	pcs	200	
4	Cable tray edge protector	m	400	
XIII	**Electrical Heat Tracing System** (Refer to doc. BK1.BK10.BK10A-001-GE-ES2-SP-011 - Specification for Electrical Heat Tracing)			
1	Self-Regulating Heating Cable General - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Trace surface type: carbon steel, painted. - Corrosive Specification - Supply voltage: 220VAC - Parallel circuit heating cable - Construction: Copper conductors 1.2mm^2 min./ (self-regulating conductive core)/ Fluoropolymer insulation/ Copper braid/ Fluoropolymer outer jacket. - Maximum exposure temperature (continuous power on): 110°C - Temperature classification: T3 - Nominal power output: 38W/m @10°C	m	1500	

No.	Description	Unit	Quantity	Remarks
2	Self-Regulating Heating Cable General - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Trace surface type: carbon steel, painted. - Corrosive Specification - Supply voltage: 220VAC - Parallel circuit heating cable - Construction: Copper conductors 1.2mm^2 min./ (self-regulating conductive core)/ Fluoropolymer insulation/ Copper braid/ Fluoropolymer outer jacket. - Maximum exposure temperature (continuous power on): 110°C - Temperature classification: T3 - Nominal power output: 64 W/m @10°C	m	200	
3	Low-Profile End Seal Kit - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Use for heating cable in item 1. - Explosion protection: Ex 'e' - Degree of protection: IP56 as minimum - Maximum pipe temperature: 80°C - Operating voltage: 220VAC ± 5% - Materials of construction: ○ Enclosure, end plate, and shim: engineering polymers, black ○ Sealing grommet and core sealer: Silicone rubber ○ Screws, compression spring, reinforcement plate: stainless steel	Pcs	50	
4	Surface Sensing Electronic Thermostat - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Electronic type completed with SPST switch with 1-NO dry contacts (25A, 220VAC) - Explosion protection: Ex 'e'/Ex'de'/VTA suitable for class 1, Zone 2, T3 - Degree of protection: IP56 as minimum - Cable entry: 2 x M25, 1 x M16 - Cable glands: 1 x M25 Ex'e'/Ex'd' nickel plated grass gland for power cable, Min. IP56 1 x M25 Ex'e'/Ex'd' nickel plated grass gland for heat tracing cable, Min. IP56 1 x M16 Ex'e'/Ex'd' nickel plated grass gland for 3 Wire PT100, Min. IP56 - Housing material: SS316 / Aluminum Alloy / GRP - 100ohm platinum thermocouple with extension cable, stainless steel sensor. - c/w support bracket	each	50	

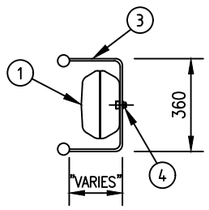
No.	Description	Unit	Quantity	Remarks
5	Tee Connection Kit - Area classification: Class I, Zone 2, Gas group IIA, Temperature Class T3 - Use for heating cable in item 1 - Explosion protection: Ex 'e' - Degree of protection: IP56 as minimum - Operating voltage: 220VAC - Maximum circuit breaker rating: 40A - Maximum pipe temperature: 80°C - Material: Enclosure: engineering polymers, black Lid screw: Stainless steel Lid gasket: silicone rubber - C/w support bracket and all accessories for installation	each	4	
6	Warning Label - Electric Traced Label for traced pipes. - Language: English.	each	400	
7	Fixing tape - Glass cloth tape for attaching heating cable to pipe (not for stainless-steel pipes), - Length 20m/roll - Width: 12mm.	roll	150	
8	Pipe Strap stainless steel 2 in to 10 in	each	100	
9	Pipe Strap stainless steel 10 in to 20 in	each	20	
10	Fixing tape - Aluminum tape for attaching heating cable and thermostat sensor to tank. - Length 55m/roll - Width: 65mm	roll	30	
11	Tank Adapter Tank adapter is used for mounting junction box, end seal kit on the tank surface.	each	20	

FORMAT: A3

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG



FRONT VIEW
SCALE : N.T.S.



SIDE VIEW
SCALE : N.T.S.

TYPE 1: LED LIGHTING FIXTURE HANDRAIL MOUNTED

BILL OF MATERIALS

ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	LED LIGHTING FIXTURE (230VAC,1 PHASE,50Hz)	1 PCS
2	LIGHTING SYSTEM COPPER CONDUCTOR ARMOURED CABLE	AS REQ'D
3	FLAT BAR 60 x 6Thk. CARBON STEEL, PAINTED. SIZE WITH HOLE SUITABLE FOR ØM8 SIZE BOLT PAINTED (HOLE SIZE MUST BE CHECKED WITH LIHGHTING FIXTURE)	2.16 m
4	ØM8 x 60L SS316 BOLT AND NUT (HOLE SIZE MUST BE CHECKED WITH LIGHTING FIXTURE)	2 PCS
5	M20 CABLE GLAND OF NICKEL PLATE BRASS MATERIAL	AS REQ'D

NOTES:

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FABRICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

REFERENCE							
		0	IFA	12.03.2026			
REF. DRAWING No.	REF. DRAWING TITLE	REV.	DES.	DATE	PREPARED: SVYATOKHO	CHECKED: ISATOV	DEPT.MGR: ISATOV

CONTROLLED

Signed by: Lê Thị Hằng
Date: 12/03/2026 17:15:51
Certified by: Vietsovpetro CA

DC: L.T. HANG

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

Signed by: Гайнутдинов Евгений Нурлыгалиевич
Date: 13/03/2026 06:54:52
Certified by: Vietsovpetro CA

ENG.MGR: GAYNUTDINOV

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Авдеев Андрей Сергеевич
Date: 14/03/2026 09:12:34
Certified by: Vietsovpetro CA

PRO.MGR: AVDEEV

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

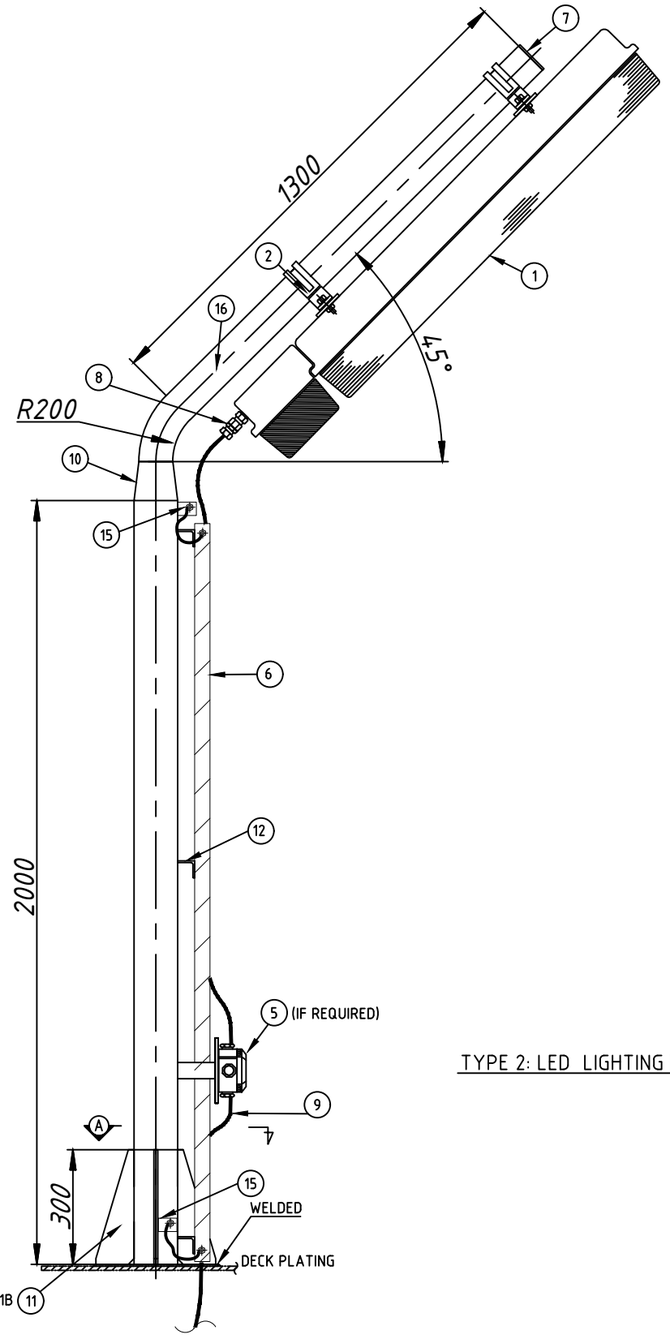
DRAWING TITLE: ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

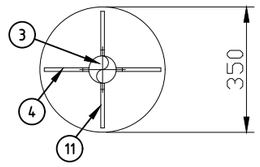
SHEET: 1/19

PHASE: DE

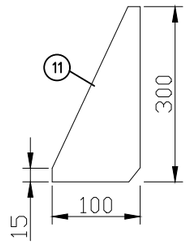
FORMAT: A3



LIGHTING POLE SIDE VIEW
SCALE : N.T.S.



SECTION A
SCALE : N.T.S.



DETAIL 1B
SCALE : N.T.S.

TYPE 2: LED LIGHTING FIXTURE POLE MOUNTED

BILL OF MATERIALS

ITEM NO.	DESCRIPTION	Q.TY.
1	LED LIGHTING FIXTURE (220V AC, 1 PHASE, 50Hz) C/W VENDOR'S MOUNTING ASSESSORIES	1 SET
2	PIPE CLAMP FOR ø3"mm POLE, C/W NUTS AND BOLTS	2 PCS
3	LIGHTING POLE 4" X STD. STEEL PIPE, CARBON STEEL, PAINTED	1,8 m
4	STEEL PLATE ø350 X 6 MM CARBON STEEL, PAINTED	1 PCS
5	4 WAY LIGHTING JUNCTION BOX OF GRP MATERIAL, Ex"e" TYPE WITH 4 X M20 CABLE ENTRIES SUITABLE FOR M20 CABLE GLAND, C/W PIPE MOUNTING ACCESSORIES.	1 PCS
6	CABLE TRAY 100X40MM, STAINLESS STEEL C/W COVER, COVER CLAMPS, BOLTS AND NUTS	2 M
7	STEEL PLATE ø120X6MM CARBON STEEL, PAINTED	1 PCS
8	M20 CABLE GLAND OF NICKEL PLATED BRASS MATERIAL	AS REQ'D
9	LIGHTING SYSTEM ARMOURED CABLE ACCORDING TO LIGHTING CONNECTION DIAGRAM	AS REQ'D
10	4"/3" REDUCER, CARBON STEEL, PAINTED	1 PCS
11	STEEL KNEE 300x100x6MM., CARBON STEEL, PAINTED	4 PCS
12	ANGLE BAR 50X50X6MM, L=100MM CARBON STEEL PAINTED	3 PCS
15	GROUNDING PLATE 50X35X6mm C/W M6x50 mm BOLT, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	2 PCS
16	LIGHTING POLE ø3" X STD. STEEL PIPE, CARBON STEEL, PAINTED	1.5 m

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

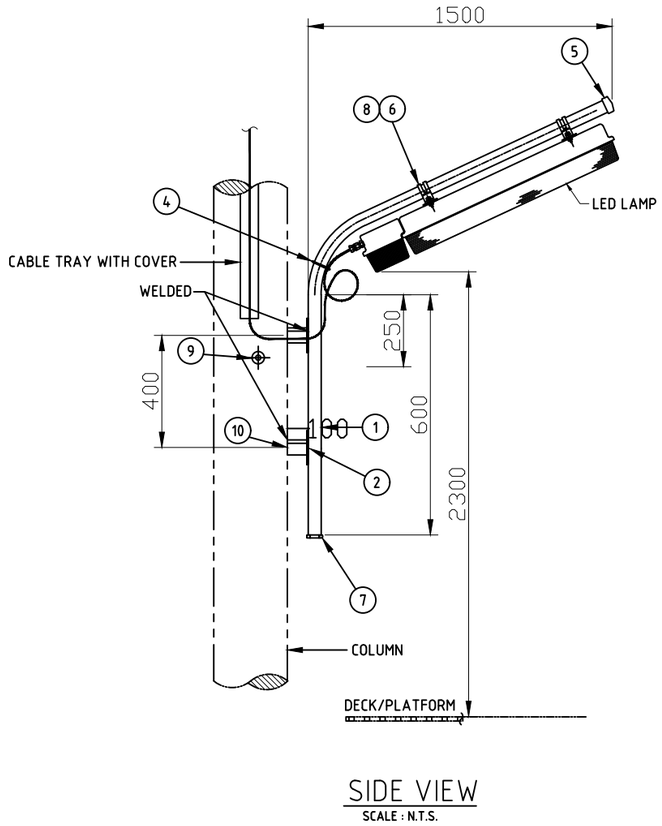
SCALE: -

SHEET: 2/19

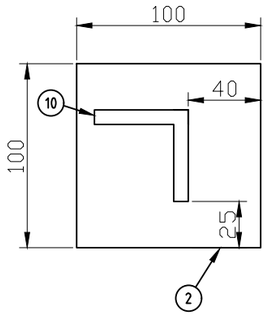
PHASE: DE

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

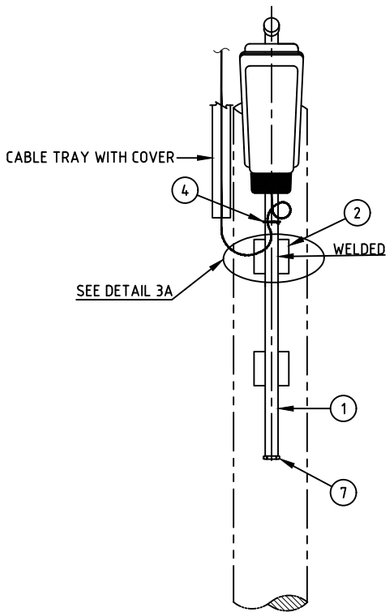
FORMAT: A3



SIDE VIEW
SCALE : N.T.S.



DETAIL 3A
SCALE : N.T.S.



FRONT VIEW
SCALE : N.T.S.

BILL OF MATERIALS

ITEM NO.	DESCRIPTION	QTY.
1	LIGHTING POLE 3" O.D. STEEL PIPE, SCH-80, CARBON STEEL, PAINTED	2.5M
2	100 x 100 X 5mm THK. STEEL PLATE, CARBON STEEL, PAINTED	2 PCS
4	NYLON CABLE TIES 300mm. LENGTH 8mm. WIDTH	3 PCS
5	CAP PLATE SUITABLE FOR (1)	1 PCS
6	PIPE CLAMP FOR ϕ3" POLE, C/W NUTS AND BOLTS	2 PCS
7	INSULATED BUSHING SUITABLE FOR (1)	1 PCS
8	ϕM6 x 50L SS316 BOLT, NUT AND WASHER (DIAMETER MUST BE CHECKED WITH LIGHTING FIXTURE)	4 PCS
9	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS
10	STEEL ANGLE L50 x 50 x 6Thk., CARBON STEEL, PAINTED	0.2M

TYPE 3: LIGHTING FIXTURE BRACKET MOUNTED

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

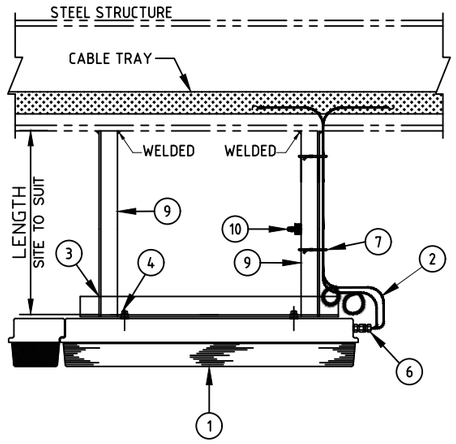
DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

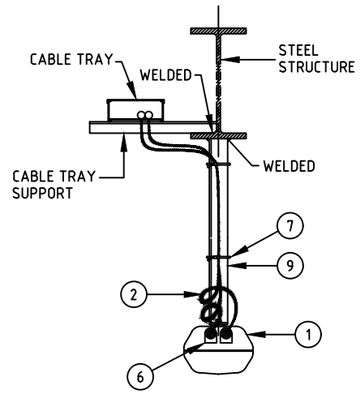
SCALE: -
SHEET: 3/19
PHASE: DE

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

FORMAT: A3

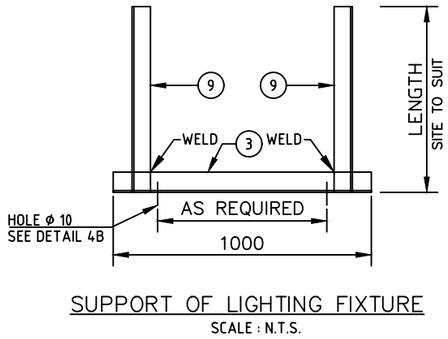


FRONT VIEW
SCALE : N.T.S.

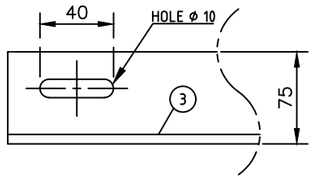


SIDE VIEW
SCALE : N.T.S.

BILL OF MATERIALS		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	LED LIGHTING FIXTURE (230VAC,1 PHASE,50Hz)	1 PCS
2	LIGHTING SYSTEM COPPER CONDUCTOR ARMOURED CABLE	AS REQ'D
3	STEEL ANGLE L65 x 65 x 6Thk., CARBON STEEL, PAINTED. SIZE WITH HOLE SUITABLE FOR ØM8 SIZE BOLT PAINTED (HOLE SIZE MUST BE CHECKED WITH LIHGHTING FIXTURE)	1 m
4	ØM8 x 60L SS316 BOLT AND NUT (HOLE SIZE MUST BE CHECKED WITH LIGHTING FIXTURE)	2 PCS
6	M20 CABLE GLAND OF NICKEL PLATE BRASS MATERIAL	AS REQ'D
7	NYLON CABLE TIES 300mm LENGTH 8mm WIDTH	2 PCS
9	STEEL ANGLE L75 x 75 x 6Thk. CARBON STEEL, PAINTED.	AS REQ'D
10	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS



SUPPORT OF LIGHTING FIXTURE
SCALE : N.T.S.



DETAIL 4B
SCALE : N.T.S.

TYPE 4: LED LIGHTING FIXTURE INDOOR/OUTDOOR STRUCTURE MOUNTED (SUSPENDED MOUNTED)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

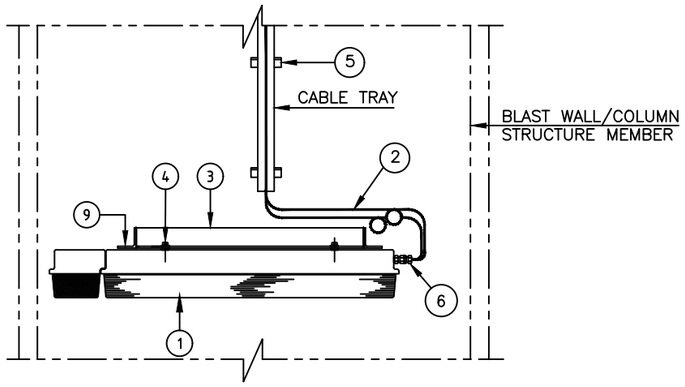
SCALE: -

SHEET: 4/19

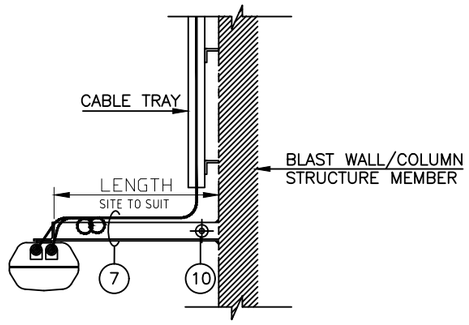
PHASE: DE

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

FORMAT: A3

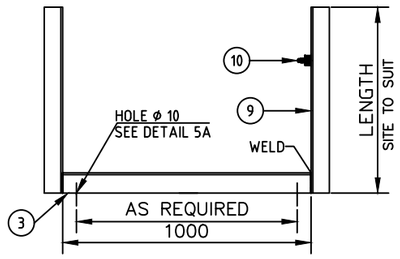


FRONT VIEW
SCALE : N.T.S.

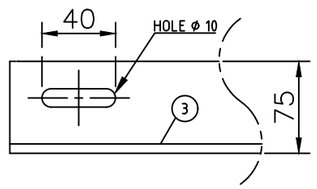


SIDE VIEW
SCALE : N.T.S.

BILL OF MATERIALS		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	LED LIGHTING FIXTURE (230VAC,1 PHASE,50Hz)	1 PCS
2	LIGHTING SYSTEM COPPER CONDUCTOR ARMOURED CABLE	AS REQ'D
3	STEEL ANGLE L75 x 75 x 6Thk. CARBON STEEL, PAINTED. SIZE WITH HOLE SUITABLE FOR ØM8 SIZE BOLT PAINTED (HOLE SIZE MUST BE CHECKED WITH LIHGHTING FIXTURE)	1 m
4	ØM8 x 60L SS316 BOLT AND NUT (HOLE SIZE MUST BE CHECKED WITH LIGHTING FIXTURE)	2 PCS
5	STEEL ANGLE L50 x 50 x 6Thk. CARBON STEEL, PAINTED.	0.15 m
6	M20 CABLE GLAND OF NICKEL PLATE BRASS MATERIAL	AS REQ'D
7	NYLON CABLE TIES 300mm LENGTH 8mm WIDTH	2 PCS
9	STEEL ANGLE L75 x 75 x 6Thk. CARBON STEEL, PAINTED.	AS REQ'D
10	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS



SUPPORT OF LIGHTING FIXTURE
SCALE : N.T.S.



DETAIL 5A
SCALE : N.T.S.

TYPE 5: LED LIGHTING FIXTURE STRUCTURE MOUNTED (WALL MOUNTED)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

PREPARED: SVYATOKHO

REV.	DES.	DATE
0	IFA	

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

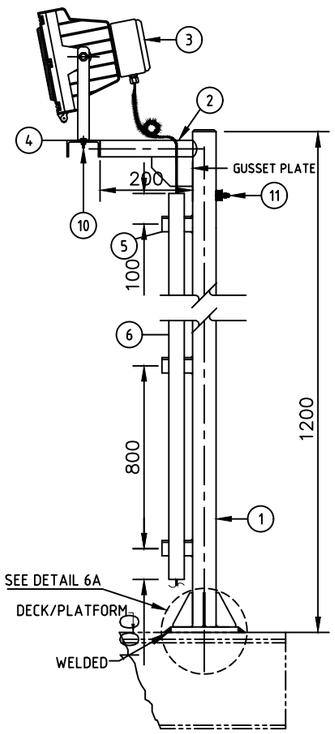
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -
SHEET: 5/19
PHASE: DE

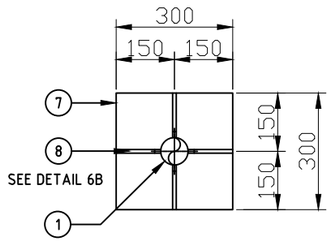
BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

FORMAT: A3

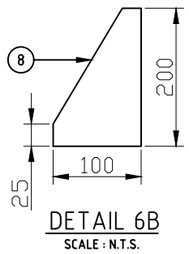
BILL OF MATERIALS		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	3" PIPE SCH 80, CARBON STEEL, PAINTED.	AS REQ'D
2	2" PIPE SCH 80, CARBON STEEL, PAINTED.	200mm
3	FLOOD LIGHT FIXTURE (230VAC, 1 PHASE, 50Hz)	1 PCS
4	CHANNEL STEEL C100 x 50 x 6mm THK. CARBON STEEL, PAINTED.	0.45m
5	ANGLE STEEL L50x50x6mm THK. CARBON STEEL, PAINTED.	0.5 m
6	PERFORATED CABLE TRAY W100mm x 40mmH	AS REQ'D
7	STEEL PLATE, 300x300x10Thk. CARBON STEEL, PAINTED.	1 PCS
8	STEEL PLATE, 100x200x10Thk. CARBON STEEL, PAINTED.	4 PCS
10	ø M12 SS316 BOLT, NUT AND WASHER	3 PCS
11	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS



SIDE VIEW
SCALE : N.T.S.



DETAIL 6A
SCALE : N.T.S.



DETAIL 6B
SCALE : N.T.S.

TYPE 6: FLOOD LIGHT FIXTURE POLE MOUNTED

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

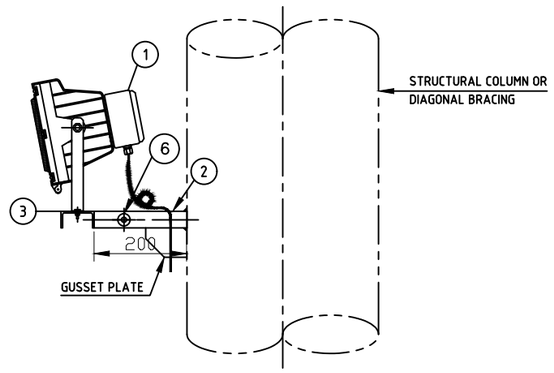
SHEET: 6/19

PHASE: DE

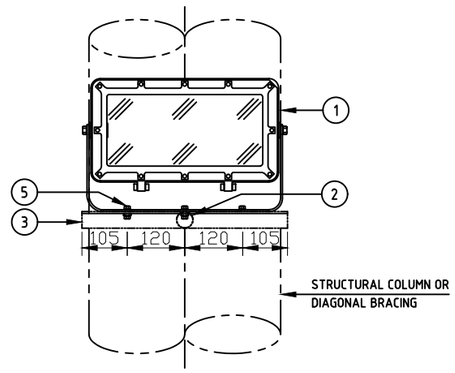
BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

FORMAT: A3

BILL OF MATERIALS (FOR TYPE 7)		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	FLOOD LIGHT FIXTURE (230VAC, 1 PHASE, 50Hz)	1 PCS
2	2" PIPE SCH 80, CARBON STEEL, PAINTED.	200mm
3	CHANNEL STEEL C100 x 50 x 6mm THK. CARBON STEEL, PAINTED.	0.45m
5	ø M12 SS316 BOLT, NUT AND WASHER	3 PCS
6	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS



SIDE VIEW
SCALE : N.T.S.



FRONT VIEW
SCALE : N.T.S.

TYPE 7: FLOOD LIGHT FIXTURE BRACKET MOUNTED

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 7/19

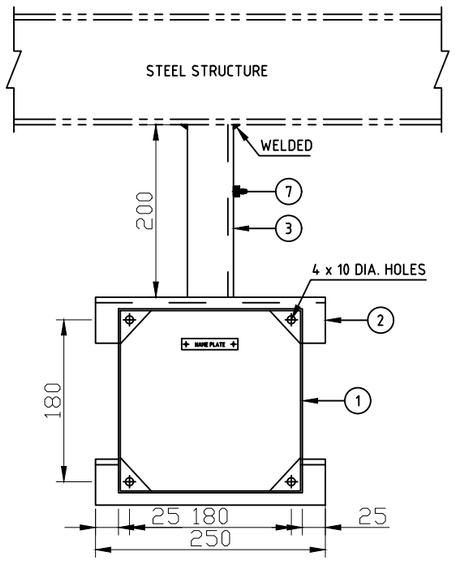
PHASE: DE

1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

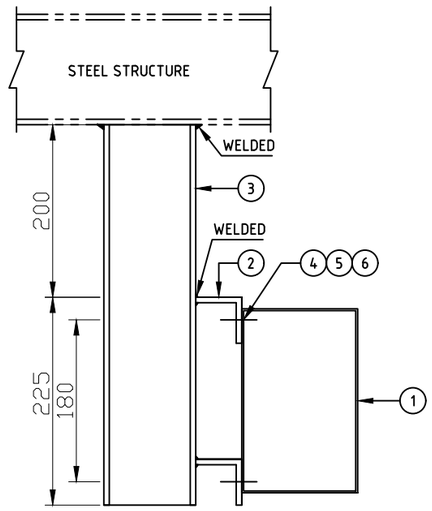
FORMAT: A3

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

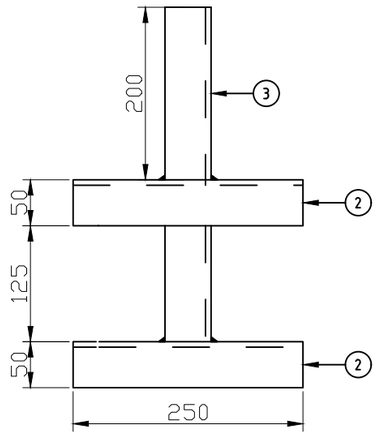
BILL OF MATERIALS (FOR TYPE 7)		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	JUNCTION BOX	1 PCS
2	STEEL ANGLE L50mm x 50mm x6mm thk. CARBON STEEL, PAINTED	0.5m
3	CHANNEL STEEL C100 x 50 x 6mm THK. CARBON STEEL, PAINTED.	0.4m
4	M8 x 30mmL. HEX. HEAD BOLT C/W NUT, PLAIN WASHER & SPRING WASHER (SS316)	4 PCS
5	M8 INSULATION SLEEVE, FOR BOLT M8	4 PCS
6	INSULATION LAYER	AS REQ'D
7	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS



FRONT VIEW
SCALE : N.T.S.



SIDE VIEW
SCALE : N.T.S.



SUPPORT OF JUNCTION BOX
SCALE : N.T.S.

TYPE 8: JUNCTION BOX STRUCTURE MOUNTED
(SUSPENDED MOUNTED)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

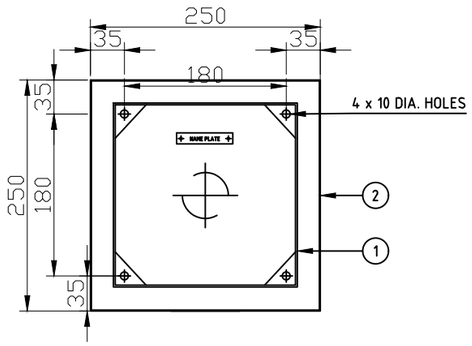
SHEET: 8/19

PHASE: DE

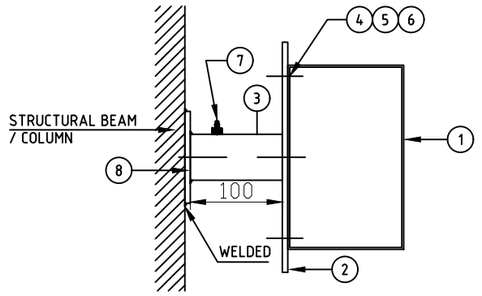
FORMAT: A3

K1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

BILL OF MATERIALS (FOR TYPE 7)		
ITEM NO.	MATERIAL DESCRIPTION	QTY.
1	JUNCTION BOX	1 PCS
2	6mm THICK STEEL PLATE (250mm x 250mm)	1 PCS
3	2" O.D. STEEL PIPE, SCH-80, CARBON STEEL, PAINTED.	0.1m
4	M8 x 30mmL. HEX. HEAD BOLT C/W NUT, PLAIN WASHER & SPRING WASHER (SS316)	4 PCS
5	M8 INSULATION SLEEVE, FOR BOLT M8	4 PCS
6	INSULATION LAYER	AS REQ'D
7	EARTH BOSS 40mmDIAx30mmH C/W M6x60mm STUD FULL THREAD, 2 FLAT WASHERS, 2 NUT, 2 SPRING WASHERS.	1 PCS
8	6mm THICK STEEL PLATE (100mm x 100mm)	1 PCS



FRONT VIEW
SCALE : N.T.S.



SIDE VIEW
SCALE : N.T.S.

TYPE 9: JUNCTION BOX STRUCTURE MOUNTED
(COLUMN / BEAM MOUNTED)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING ACCESSORIES (BOLTS, NUTS, WASHERS ETC.) TO MOUNT LED LIGHT ARE SUPPLIED BY VENDOR.
3. THIS FIGURE IS INDICATIVE ONLY, ACTUAL DIMENSION MAY BE DIFFIRENT. CONSTRUCTION CONTRACTOR TO VERIFY AND UPDATE AS BUILT.
4. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
5. ALL SUPPORT SHALL BE PAINTED.
6. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
7. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	
			CHECKED: ISATOV
0	IFA		PREPARED: SVYATOKHO

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

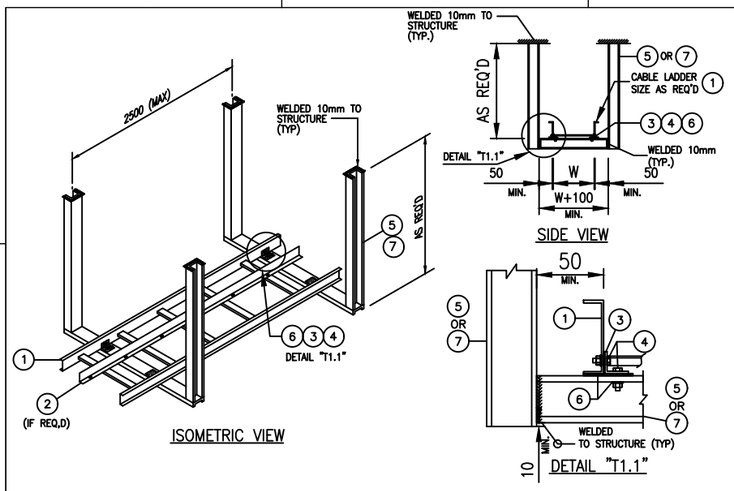
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 9/19

PHASE: DE

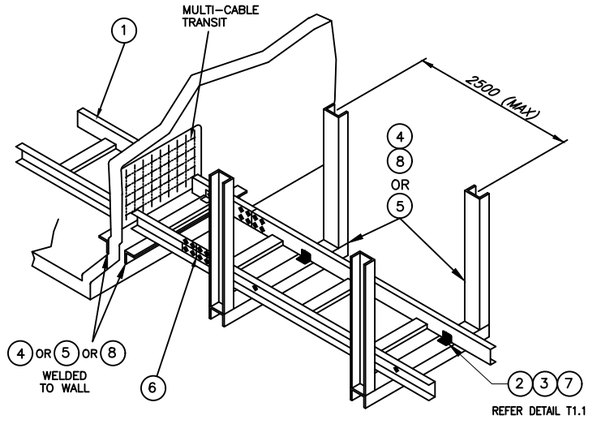
FORMAT: A3



T1 HORIZONTAL CABLE LADDER SUPPORT DETAIL

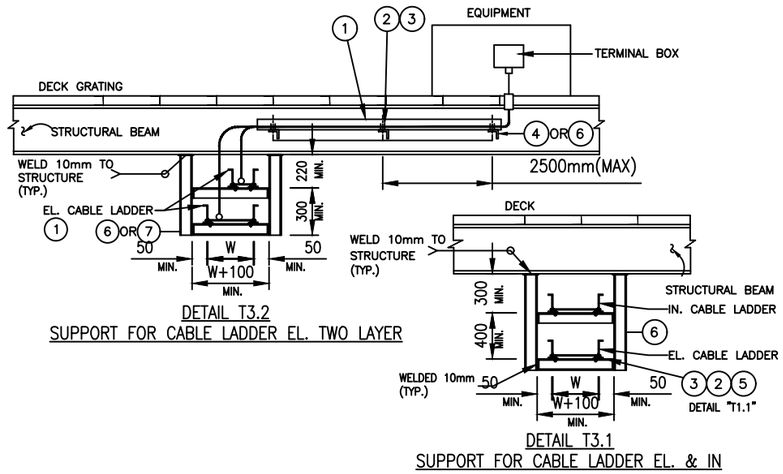
NOTE:
"W": WIDTH OF CABLE TRAY/LADDER

ITEM	DESCRIPTION	QTY
7	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 200mm WIDE TO 450mm WIDE	AS REQ'D
6	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER	AS REQ'D
5	C100 x 50 x 6mm THK. STEEL CHANNEL (CS) – FOR CABLE LADDER 600mm WIDE AND ABOVE	AS REQ'D
4	M10 x 20mm LONG HEX. HEAD SCREW WITH NUT AND WASHERS (SS316)	8 PCS
3	STIGEFESTER/ FIXING CLAMPS (SS316)	4 NOS
2	STRAIGHT DIVIDER (SS316) – IF REQ'D	AS REQ'D
1	CABLE LADDER, STRAIGHT SECTION	AS REQ'D



T2 CABLE LADDER SUPPORT AT WALL/DECK PENETRATION

ITEM	DESCRIPTION	QTY
8	C100 x 50 x 6mm THK. STEEL CHANNEL (CS) – FOR CABLE LADDER 600mm WIDE AND ABOVE	AS REQ'D
7	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER	AS REQ'D
6	SPLICE CONNECTORS, 4–M10 x 20 HEX. HEAD SCREW WITH NUTS PLAIN WASHERS AND SPRING WASHERS (SS316L)	2 PCS
5	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 200mm WIDE TO 450mm WIDE	AS REQ'D
4	L50 x 50 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE TRAY 150mm WIDE AND BELOW	AS REQ'D
3	M10 x 20mm LONG HEX. HEAD SCREW WITH NUT AND WASHER (SS316)	8 PCS
2	STIGEFESTER/ FIXING CLAMPS (SS316)	4 PCS
1	CABLE LADDER STRAIGHT SECTION	AS REQ'D



T3 CABLE LADDER SUPPORTS FOR OUTDOOR EQUIPMENT (BOTTOM ENTRY)

NOTE: "W": WIDTH OF CABLE TRAY/LADDER

ITEM	DESCRIPTION	QTY
7	C100 x 50 x 6mm THK. STEEL CHANNEL (CS) – FOR CABLE LADDER 600mm WIDE AND ABOVE	AS REQ'D
6	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 200mm WIDE TO 450mm WIDE	AS REQ'D
5	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER	AS REQ'D
4	L50 x 50 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE TRAY 150mm WIDE AND BELOW	AS REQ'D
3	M10 x 20mm LONG HEX. HEAD SCREW WITH NUT AND WASHERS (SS316)	8 PCS
2	STIGEFESTER/ FIXING CLAMPS (SS316)	4 PCS
1	CABLE LADDER STRAIGHT SECTION	AS REQ'D

T4 VERTICAL CABLE LADDER SUPPORT ALONG STRUCTURAL COLUMN

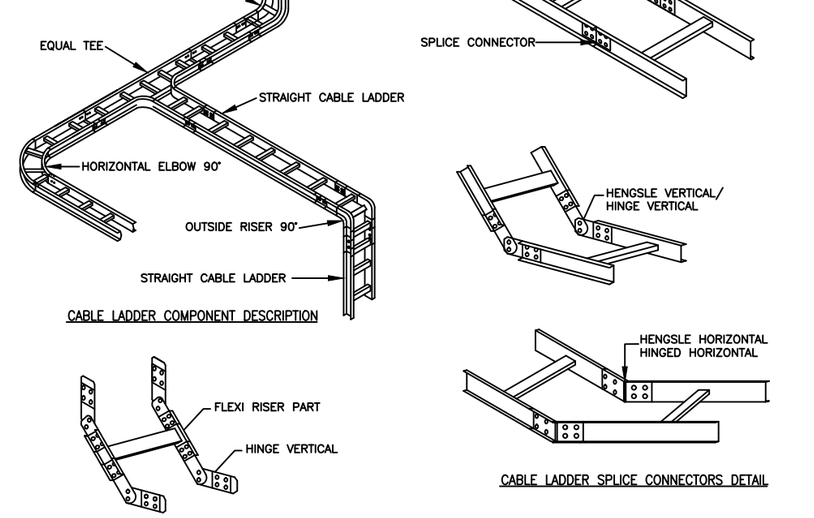
NOTE: "W": WIDTH OF CABLE TRAY/LADDER

ITEM	DESCRIPTION	QTY
8	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER	AS REQ'D
7	EARTH LINK "JUMPERS" L300x010xD35mm2	2 PCS
6	M10 x 20mm LONG HEX. HEAD SCREW C/W NUT AND WASHERS (SS316)	12 PCS
5	STIGEFESTER/ FIXING CLAMPS (SS316)	6 PCS
4	SPLICE CONNECTORS, 4–M10 x 20 HEX. HEAD SCREW WITH NUTS, PLAIN WASHERS AND SPRING WASHERS (SS316)	2 PCS
3	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 300mm WIDE TO 450mm WIDE	AS REQ'D
2	C100 x 50 x 6mm THK. STEEL CHANNEL (CS) – FOR CABLE LADDER 600mm WIDE AND ABOVE	AS REQ'D
1	CABLE LADDER STRAIGHT SECTION	AS REQ'D

T5 VERTICAL CABLE LADDER SUPPORT & GRATING PENETRATION DETAIL

NOTE: "W": WIDTH OF CABLE TRAY/LADDER

ITEM	DESCRIPTION	QTY
8	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER	AS REQ'D
7	EARTH LINK "JUMPERS" L300x010xD35mm2	2 NOS.
6	SPLICE CONNECTORS, 16–M10 HEX. HEAD SCREW WITH NUTS, PLAIN WASHERS AND SPRING WASHERS (SS316)	2 PCS.
5	100 x 6mm THK. STEEL PLATE (CS)	AS REQ'D
4	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)	AS REQ'D
3	M10 x 20mm LONG HEX. HEAD SCREW C/W NUT AND WASHERS (SS316)	8 PCS
2	STIGEFESTER/ FIXING CLAMPS (SS316)	4 PCS
1	CABLE LADDER STRAIGHT SECTION	AS REQ'D



1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL FIXING HARDWARES, BOLTING AND CLAMPING SHALL BE SS316L
3. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
4. ALL SS316L MOUTING BOLTS SHALL BE INSULATED WITH INSULATING SLEEVES & WASHERS TO PREVENT DISSIMILAR METAL CORROSION WHERE REQUIRED.
5. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING .
6. ALL BURRS & SHARP EDGES SHALL BE REMOVE .
7. ALL SUPPORT SHALL BE PAINTED.
8. ALL CABLES IN VERTICAL CABLE LADDERS SHALL BE ATTACHED AT EVERY RUNG USING PROPERLY SIZED NYLON TIE WRAPS, CABLES IN HORIZONTAL CABLE LADDER SHALL BE ATTACHED AT EVERY OTHER RUNG.
9. EACH CABLE LADDER RUN SHALL BE COMPLETED PRIOR TO INSTALLATION OF ANY CABLE IN LADDER.
10. CABLE LADDERS SHALL BE SUPPORTED AT MAXIMUM 2.5m. HORIZONTAL DISTANCE & MAXIMUM 1.2m VERTICAL DISTANCE.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
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REV.	DES.	DATE	
			CHECKED: ISATOV
0	IFA		PREPARED: SVYATOKHO

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

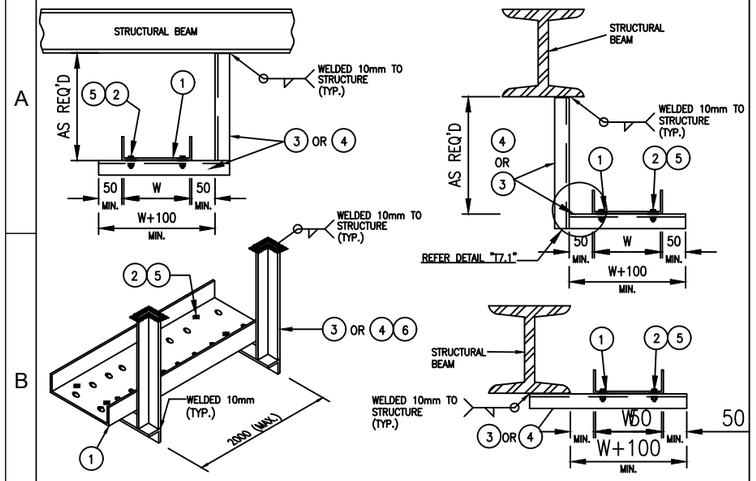
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 10/19

PHASE: DE

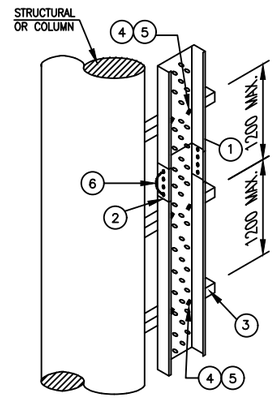
BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG



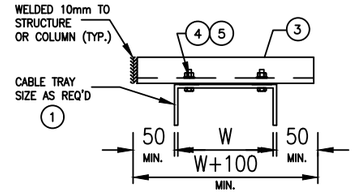
T7 TYPICAL CABLE TRAY SUPPORT DETAIL

NOTE: "W": WIDTH OF CABLE TRAY/LADDER

ITEM	DESCRIPTION
5	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER
4	L50 x 50 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE TRAY 150mm WIDE AND BELOW
3	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 300mm WIDE TO 450mm WIDE
2	2–M6 x 25mm MUSHROOM HEAD c/w NUT & WASHERS (SS316)
1	PERFORATED CABLE TRAY, STRAIGHT SECTION

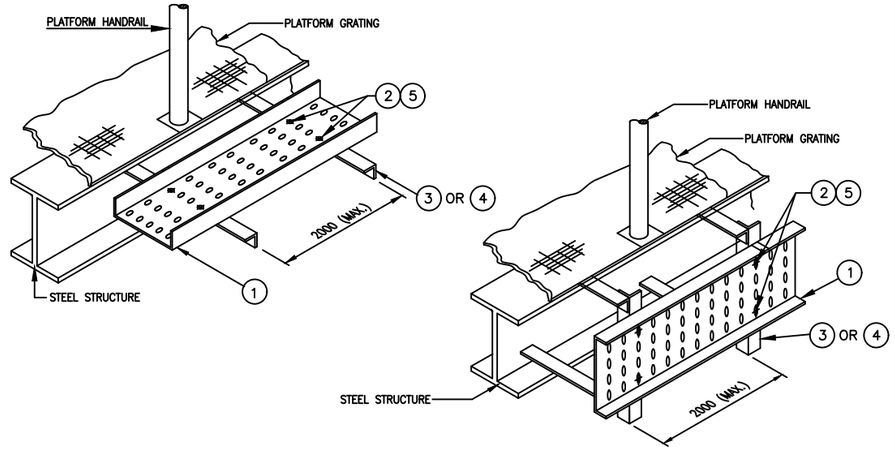


T8 VERTICAL CABLE TRAY SUPPORT ALONG STRUCTURAL COLUMN



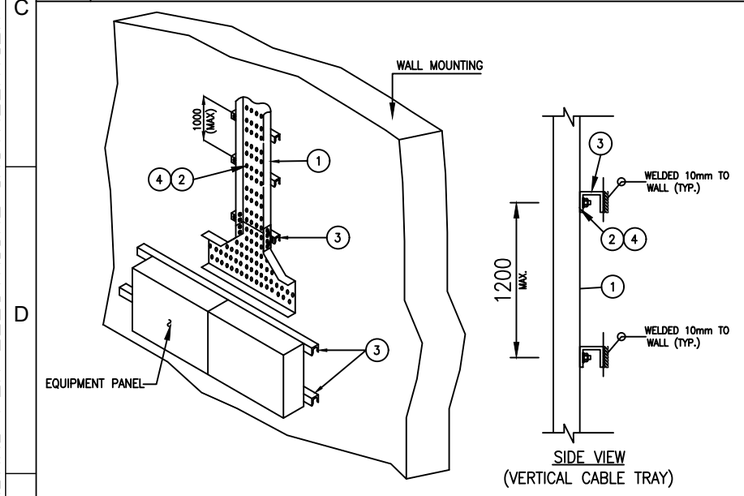
TOP VIEW
(VERTICAL CABLE TRAY)

ITEM	DESCRIPTION
6	EARTH LINK "JUMPERS" L300x010xD35mm2
5	2–M6 x 25mm MUSHROOM HEAD c/w NUT & WASHERS (SS316)
4	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER
3	L50 x 50 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE TRAY 150mm WIDE AND BELOW
2	SPLICE CONNECTORS, 4–M6 x 12mm MUSHROOM HEAD c/w NUT & WASHERS (SS316)
1	PERFORATED CABLE TRAY, STRAIGHT SECTION



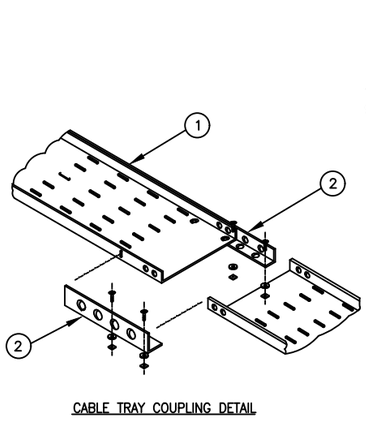
T9 CABLE TRAY SUPPORT AT EDGE OF PLATFORM

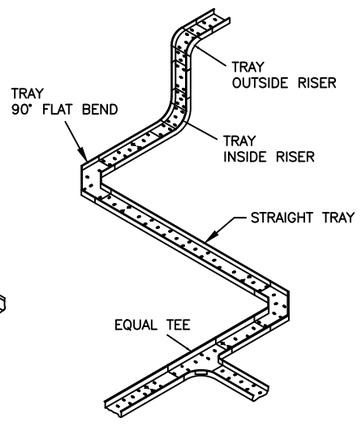
ITEM	DESCRIPTION
5	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER
4	L50 x 50 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE TRAY 150mm WIDE AND BELOW
3	L75 x 75 x 6mm THK. STEEL ANGLE (CS) – FOR CABLE LADDER 300mm WIDE TO 450mm WIDE
2	2–M6 x 25mm MUSHROOM HEAD c/w NUT & WASHERS (SS316)
1	PERFORATED CABLE TRAY, STRAIGHT SECTION



SIDE VIEW
(VERTICAL CABLE TRAY)

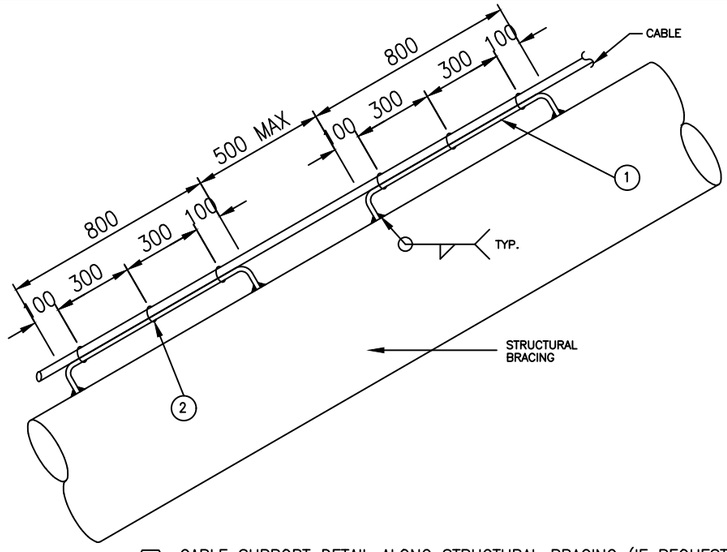
T10 CABLE TRAY SUPPORT AT WALL MOUNTING EQUIPMENT





CABLE TRAY COMPONENT DESCRIPTION

T11 CABLE TRAY COMPONENTS AND ACCESSORIES



T12 CABLE SUPPORT DETAIL ALONG STRUCTURAL BRACING (IF REQUEST)

ITEM	DESCRIPTION
4	2mm (MIN.) THK. INSULATION NEOPRENE RUBBER
3	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)
2	2 X M6 x 25mm LONG HEX. SCREW c/w NUT & WASHERS (SS316)
1	PERFORATED CABLE TRAY, STRAIGHT SECTION

ITEM	DESCRIPTION	QTY
2	SPLICE CONNECTOR, c/w 4–M6 x 12mm LONG MUSHROOM HEAD SCREW C/W NUTS AND WASHERS (SS316)	AS REQ'D
1	PERFORATED STRAIGHT CABLE TRAY	AS REQ'D

ITEM	DESCRIPTION
2	NYLON COATED STAINLESS STEEL CABLE TIES
1	50mm x 6mm THK. FLAT BAR (CS)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL FIXING HARDWARES, BOLTING AND CLAMPING SHALL BE SS316L
3. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
4. ALL SS316L MOUTING BOLTS SHALL BE INSULATED WITH INSULATING SLEEVES & WASHERS TO PREVENT DISSIMILAR METAL CORROSION WHERE REQUIRED.
5. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING .
6. ALL BURRS & SHARP EDGES SHALL BE REMOVE .
7. ALL SUPPORT SHALL BE PAINTED.
8. ALL CABLES IN VERTICAL CABLE LADDERS SHALL BE ATTACHED AT EVERY RUNG USING PROPERLY SIZED NYLON TIE WRAPS, CABLES IN HORIZONTAL CABLE LADDER SHALL BE ATTACHED AT EVERY OTHER RUNG.
9. EACH CABLE LADDER RUN SHALL BE COMPLETED PRIOR TO INSTALLATION OF ANY CABLE IN LADDER.
10. CABLE LADDERS SHALL BE SUPPORTED AT MAXIMUM 2.5m. HORIZONTAL DISTANCE & MAXIMUM 1.2m VERTICAL DISTANCE.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

PREPARED: SVYATOKHO

REV.	DES.	DATE
0	IFA	

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

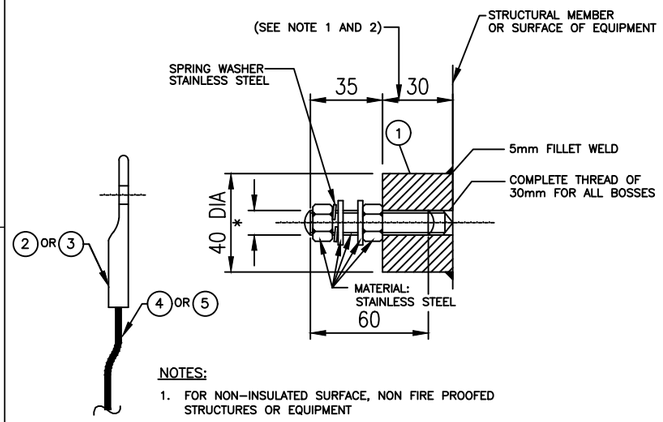
DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 11/19

PHASE: DE

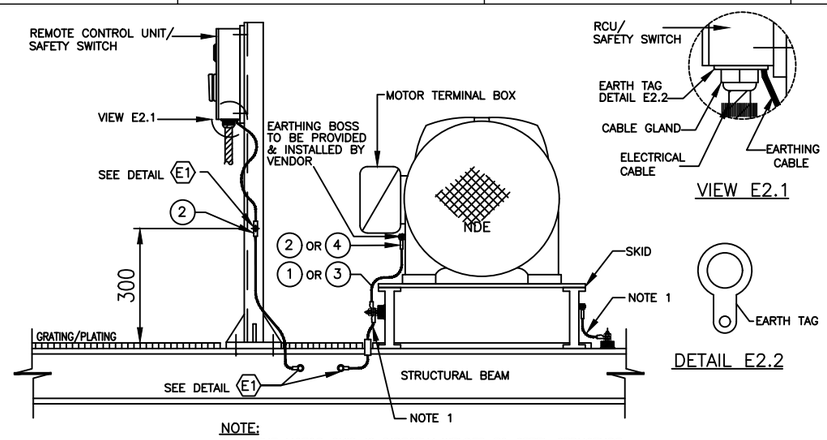


NOTES:
1. FOR NON-INSULATED SURFACE, NON FIRE PROOFED STRUCTURES OR EQUIPMENT
2. FOR INSULATED SURFACE, BOSS LENGTH SHALL BE EQUAL TO INSULATION THICKNESS WITH MIN. OF 30mm.
3. TO BE WRAPPED WITH DENSO TAPE.

E1 EARTH BOSS ASSEMBLY

* 10mm DIA. STUD FOR COMPRESSION TYPE CABLE LUG 25 mm²
* 10mm DIA. STUD FOR COMPRESSION TYPE CABLE LUG 70 mm²

ITEM	DESCRIPTION
5	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
4	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
3	CABLE LUG COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE
2	CABLE LUG COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE
1	30 x 40mm DIA. STAINLESS STEEL EARTH BOSS M10 THREADED C/W NUT, FLAT WASHER AND LOCK WASHER.

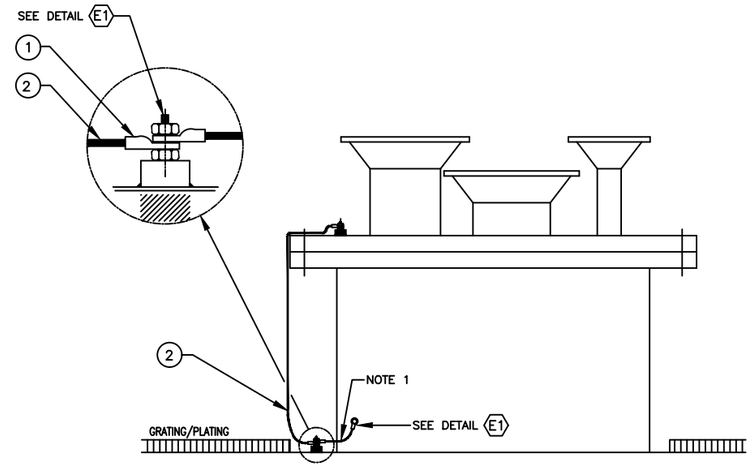


NOTE:
1. IF THE MOTOR SKID IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

EARTHING CABLE SIZE	MOTOR INCOMING CABLE SIZE (s)
6mm²	s ⩽ 6mm²
25mm²	10mm² < s ⩽ 35mm²
70mm²	35mm² < s ⩽ 120mm²

E2 EARTHING OF MOTOR AND RCU/LCS

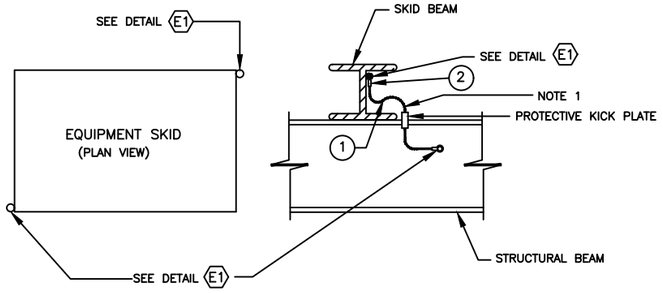
ITEM	DESCRIPTION
4	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE
3	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
2	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE
1	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.



NOTE:
1. IF CAISSON IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

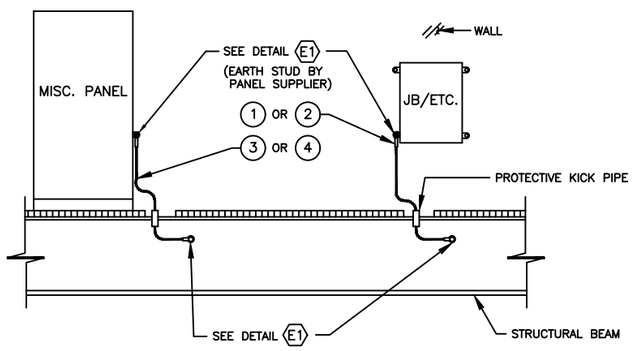
E3 EARTHING OF CLOSED DRAIN & OPEN DRAIN CAISSON

ITEM	DESCRIPTION
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



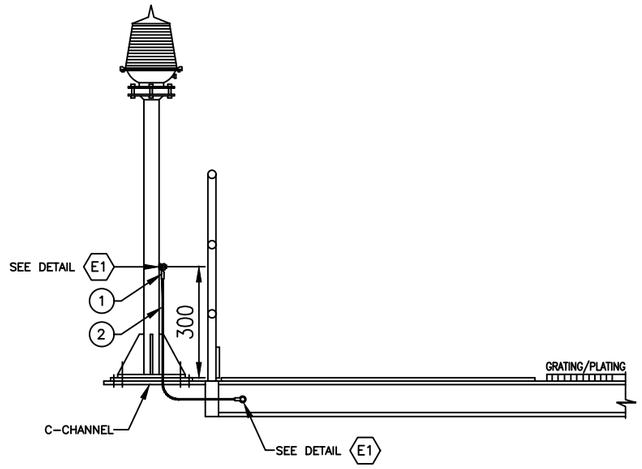
NOTE:
1. IF EQUIPMENT SKID IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E4 EARTHING OF SKID MOUNTED EQUIPMENT



E5 EARTHING OF MISC., PANELS, JUNCTION BOX, ETC.

ITEM	DESCRIPTION
4	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
3	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
2	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



NOTE :
1. IF MOUNTING SUPPORT IS WELDED DIRECTLY TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E6 EARTHING OF NAVIGATIONAL AIDS POLE

ITEM	DESCRIPTION
2	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL CABLE LADDER AND TRAYS SHALL HAVE EARTHING JUMPERS ACROSS EACH JOINT AND SHALL BE EARTHED TO THE PLATFORM STRUCTURE AT INTERVALS NOT EXCEEDING 25 METERS.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

REV.	DES.	DATE
0	IFA	

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

PREPARED: SVYATOKHO

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

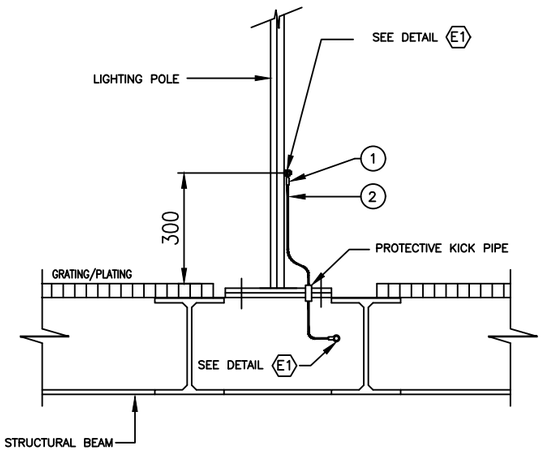
DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

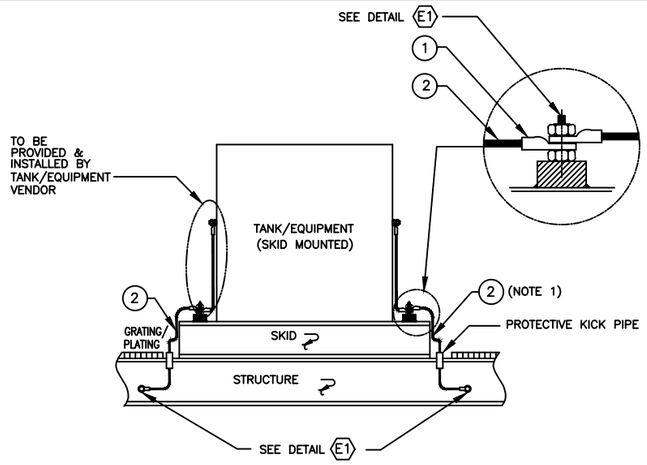
SHEET: 12/19

PHASE: DE



E7 EARTHING OF BOLTED-DOWN LIGHTING POLE

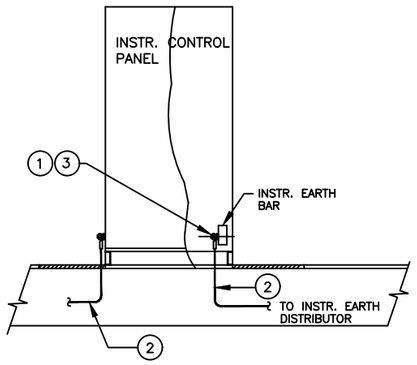
ITEM	DESCRIPTION
2	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE



NOTE:
1. IF THE EQUIPMENT SKID IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E8 EARTHING OF SKID MOUNTED TANK/EQUIP.
APPLICABLE ONLY FOR LARGE SKID

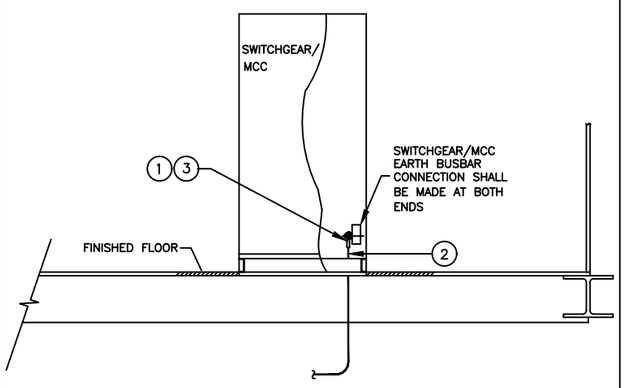
ITEM	DESCRIPTION
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



NOTES:
1. CONNECTION IS TO BE HALF-LAPPED WRAPPED WITH GREEN/YELLOW PVC ADHESIVE TAPE FOR DISTANCE AS SHOWN.
2. REMOVAL OF PVC INSULATION TO BE KEPT TO MINIMUM.

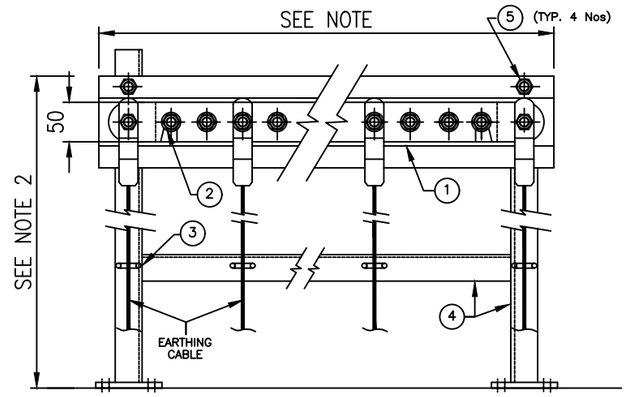
E9 EARTHING OF INSTRUMENT CONTROL PANEL (INDOOR)

ITEM	DESCRIPTION
3	M10 x 32mm LONG HEX. HEAD SCREW C/W NUT, 2 FLAT WASHERS & 1 SPRING WASHER (SS 316)
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



E10 EARTHING OF SWITCHGEAR/MOTOR CONTROL CENTER (INDOOR)

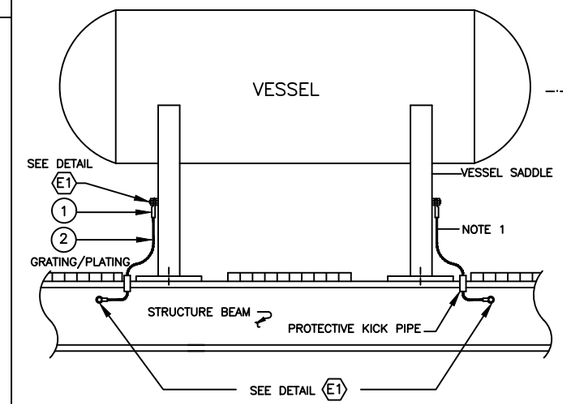
ITEM	DESCRIPTION
3	M10 x 32mm LONG HEX. HEAD SCREW C/W NUT, 2 FLAT WASHERS & 1 SPRING WASHER (SS 316)
2	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE.



E11 COPPER EARTHING BAR

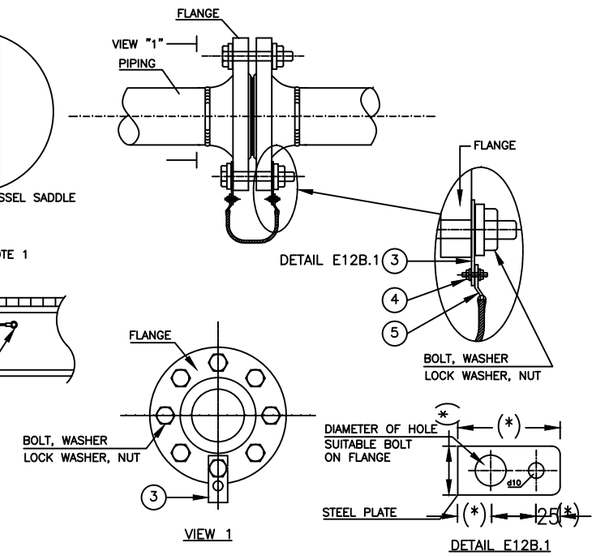
NOTES:
1. LENGTH OF COPPER EARTH BAR DEPENDS ON NUMBER OF CONNECTIONS WITH 30% SPARE TO BE INCLUDED (L950mm/L500mm).
2. COPPER EARTH BAR SHALL BE LOCATED AT 600mm FROM DECK LEVEL EXCEPT FOR AREA WITH FALSE FLOOR, COPPER EARTH BAR SHALL BE LOCATED IN ACCESSIBLE AREA BELOW THE FALSE FLOOR.

ITEM	DESCRIPTION
5	M10 x 75mm LONG HEX. HEAD SCREW c/w NUTS & WASHERS (SS 316)
4	L50 x 50 x 6mm THK. STEEL ANGLE (C.S)
3	CABLE CLIP C/W SCREWS, NUTS AND WASHERS (SS 316)
2	M10 x 32mm LONG HEX. HEAD SCREW C/W NUTS & WASHERS (SS 316)
1	500mmL x 50mmW x 6mm THK. (8 WAYS) COPPER EARTH BAR 950mmL x 50mmW x 6mm THK. (16 WAYS) COPPER EARTH BAR



NOTE:
1. IF VESSEL SADDLE IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.
2. (*) : DEPEND ON FLANGE'S DIMENSION.

E12A EARTHING OF HORIZONTAL VESSEL



E12B EARTHING FOR BONDING VIA FLANGES

ITEM	DESCRIPTION
5	CABLE LUG, COMPRESSION TYPE FOR 300 x 25mm sq. EARTHING CABLE
4	M8 x 20mm LONG HEX. HEAD SCREWC/W NUT & WASHER (SS 316)
3	6mm THK. STEEL PLATE (C.S)
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL CABLE LADDER AND TRAYS SHALL HAVE EARTHING JUMPERS ACROSS EACH JOINT AND SHALL BE EARTHED TO THE PLATFORM STRUCTURE AT INTERVALS NOT EXCEEDING 25 METERS.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
			CHECKED: ISATOV
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

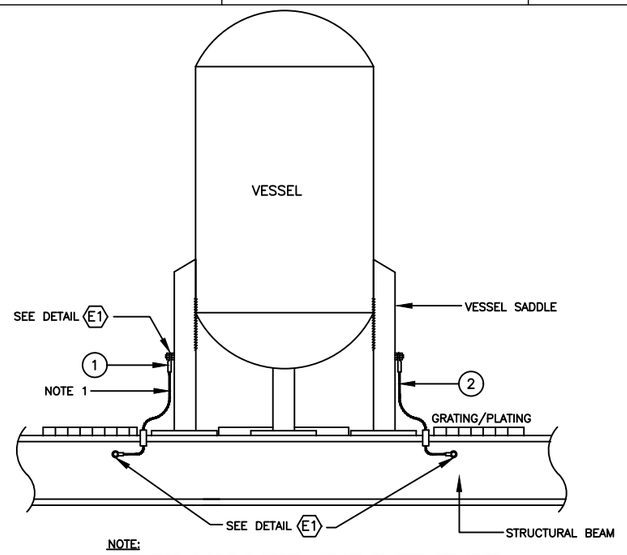
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 13/19

PHASE: DE

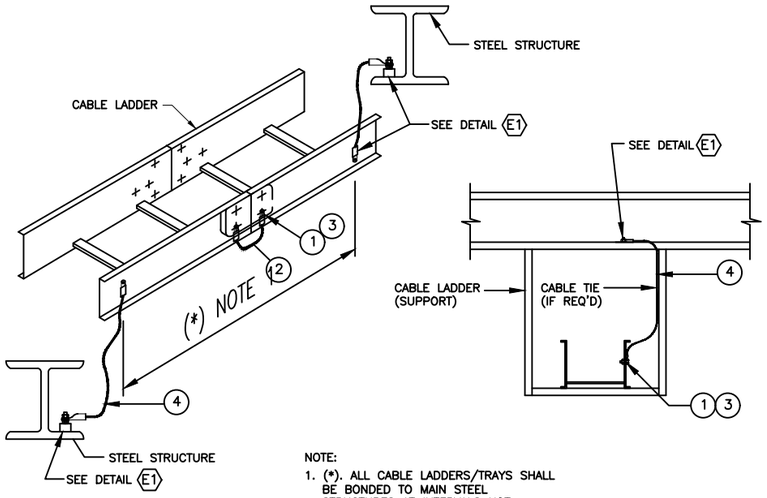
FORMAT: A3



NOTE:
1. IF VESSEL SADDLE IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E13 EARTHING OF VERTICAL VESSEL

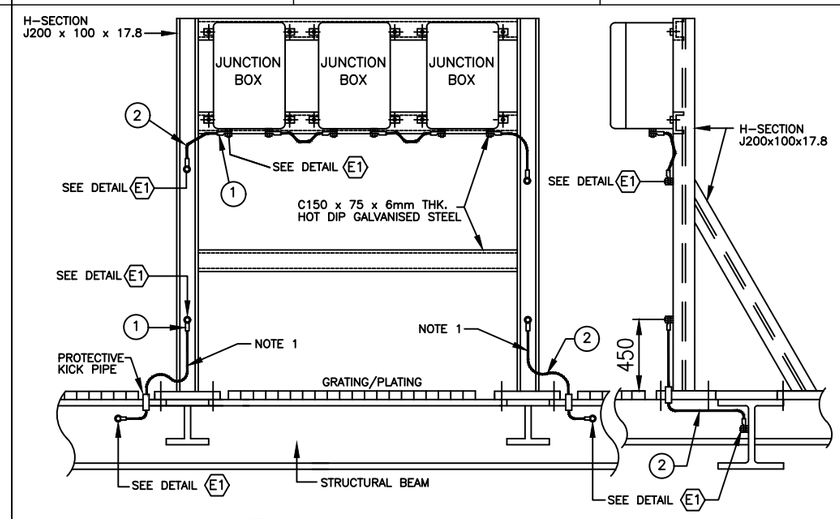
ITEM	DESCRIPTION
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



NOTE:
1. (*). ALL CABLE LADDERS/TRAYS SHALL BE BONDED TO MAIN STEEL STRUCTURES AT INTERVALS NOT EXCEEDING 25 METRES

E14 EARTHING OF CABLE LADDER

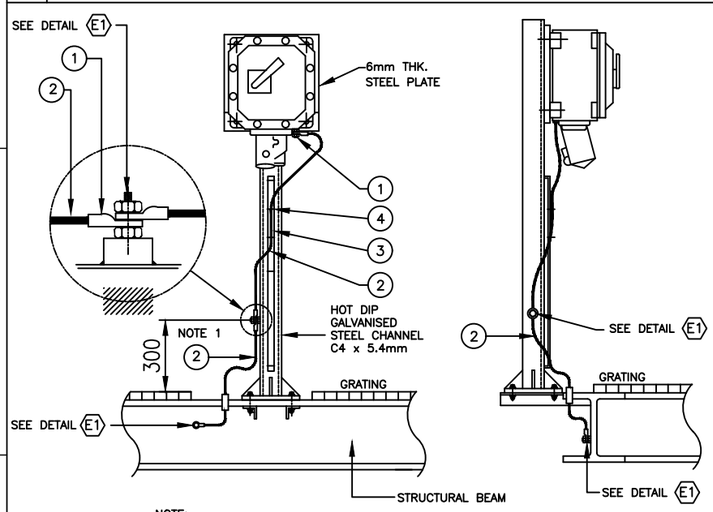
ITEM	DESCRIPTION
4	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
3	M10x25mm LONG HEX. HEAD SCREW WITH NUT AND LOCKWASHER (SS 316)
2	EARTHING BONDING JUMPER TINNED COPPER WIRE 16SQ.MM C/W SS316L FIXING HARDAWARES
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE



NOTE:
1. IF MOUNTING SUPPORT IS WELDED DIRECTLY TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING BOND IS NOT REQUIRED.

E15 EARTHING OF FIELD JUNCTION BOX (METALLIC ENCLOSURE)

ITEM	DESCRIPTION
2	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE



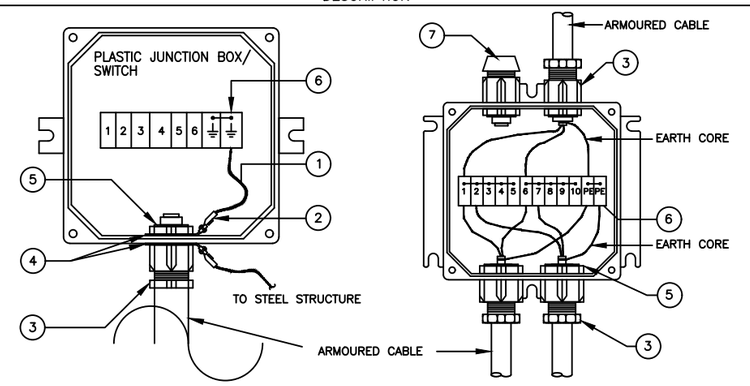
NOTE:
1. IF MOUNTING SUPPORT IS WELDED DIRECTLY TO STEEL STRUCTURE THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E16 EARHTING OF 3-PHASE SOCKET OUTLET

ITEM	DESCRIPTION
4	NYLON COATED STAINLESS STEEL CABLE TIES.
3	38 x 6mm THK. FLAT BAR (C.S)
2	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE

E17 EARTHING OF DISTRIBUTION BOARD

ITEM	DESCRIPTION
6	M10 SPRING WASHER
5	M10 HEX. HEAD NUT (SS316)
4	M10 HEX. HEAD CONTACT NUT (SS316)
3	M10 x 40mm LONG EARTH STUD.
2	25mm OR 70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



E18A CABLE TERMINATION WITHOUT EARTH CORE

TERMINATION OF ARMOURED CABLE VIA BRASS GLAND INTO PLASTIC JUNCTION BOX OR SWITCH OR RCU.

E18B CABLE TERMINATION WITH EARTH CORE

TERMINATION OF ARMOURED CABLE VIA BRASS GLAND INTO PLASTIC LIGHTING JUNCTION BOX.

ITEM	DESCRIPTION
7	Ex'e' CERTIFIED STOPPING PLUG
6	EARTH TERMINALS
5	LOCK NUT
4	EARTH TAG
3	BRASS CABLE GLAND
2	CABLE LUG COMPRESSION TYPE FOR 6mm sq. EARTHING CABLE
1	6mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL CABLE LADDER AND TRAYS SHALL HAVE EARTHING JUMPERS ACROSS EACH JOINT AND SHALL BE EARTHED TO THE PLATFORM STRUCTURE AT INTERVALS NOT EXCEEDING 25 METERS.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO / CHECKED: ISATOV
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

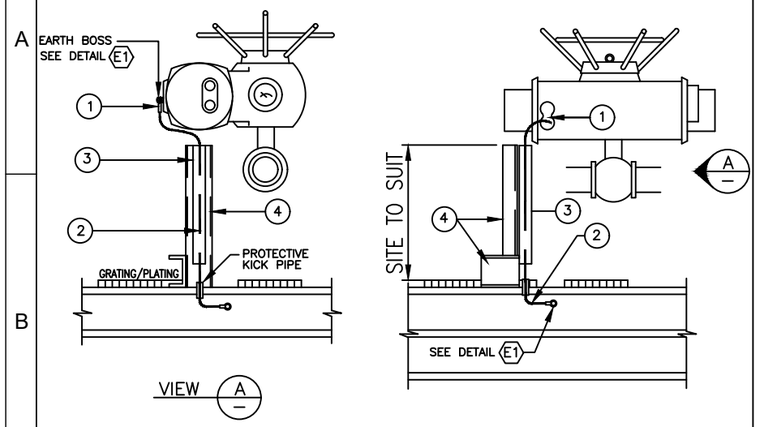
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 14/19

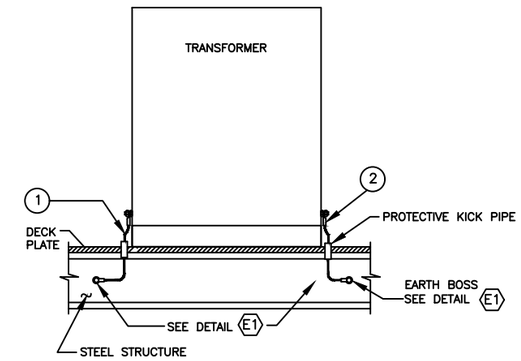
PHASE: DE

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG



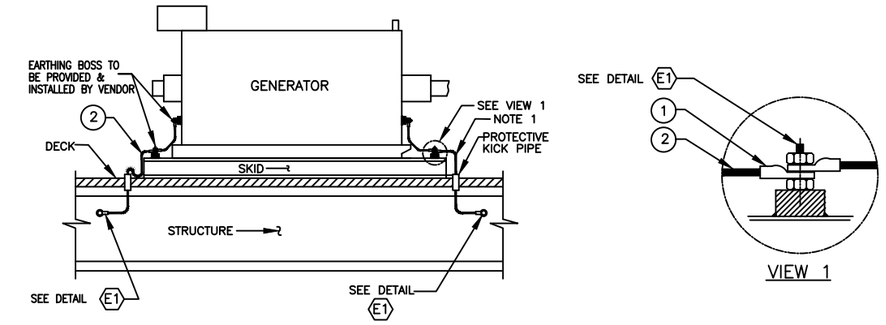
E19 EARTHING OF MOTORISED VALVE

ITEM	DESCRIPTION
4	C100 x 50 x 6mm THK. STEEL CHANNEL (C.S) – (NOTE 2)
3	PERFORATED CABLE TRAY; STRAIGHT SECTION (SS 316)
2	6mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG COMPRESSION TYPE FOR 6mm sq. EARTHING CABLE



E20 EARTHING OF TRANSFORMER

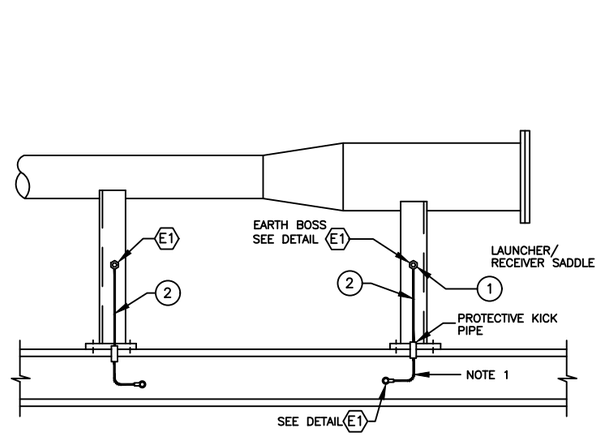
ITEM	DESCRIPTION
2	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE
1	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.



NOTE:
1. IF GENERATOR SKID IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

E21A EARTHING OF GENERATOR

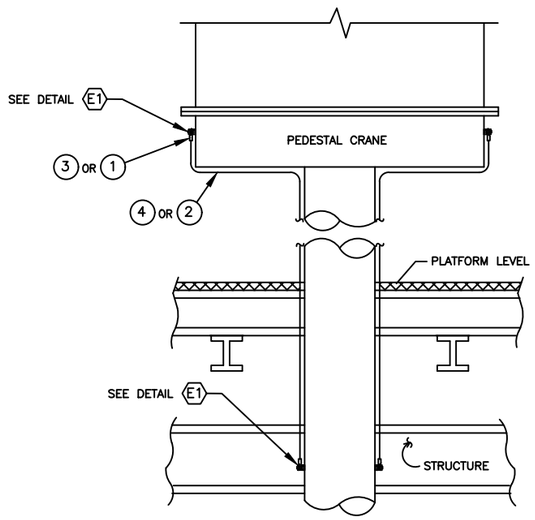
ITEM	DESCRIPTION
2	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE



E22 EARTHING OF LAUNCHERS AND RECEIVERS

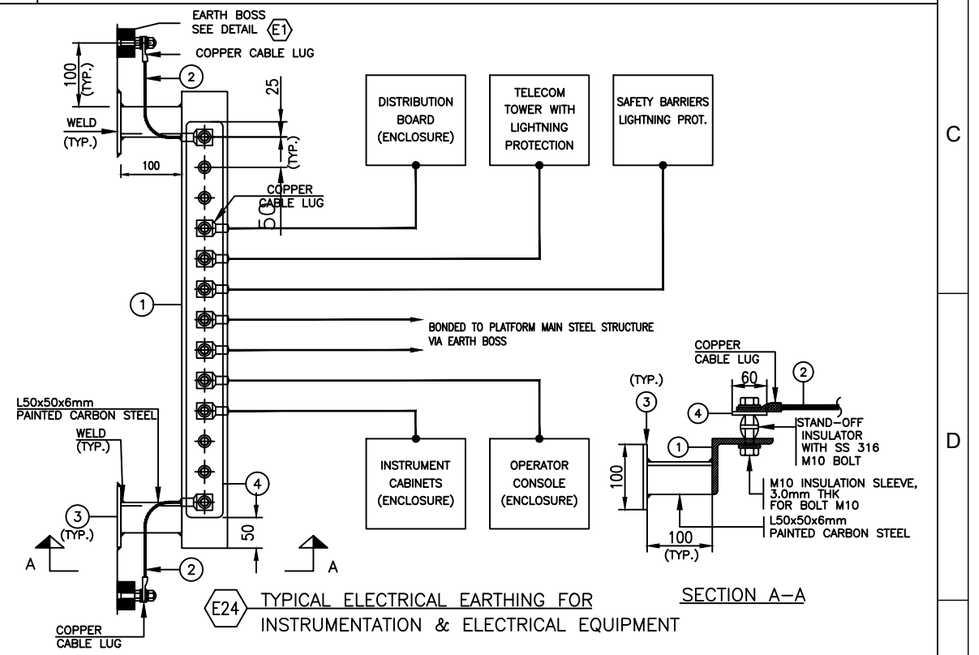
NOTE:
1. IF SADDLE IS DIRECTLY WELDED TO STEEL STRUCTURE, THEN ADDITIONAL EARTHING IS NOT REQUIRED.

ITEM	DESCRIPTION
2	16mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 16mm sq. EARTHING CABLE



E23 EARTHING OF CRANE FRAME

ITEM	DESCRIPTION
4	70mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
3	CABLE LUG, COMPRESSION TYPE FOR 70mm sq. EARTHING CABLE
2	25mm sq. EARTHING CABLE, SINGLE CORE, GREEN WITH YELLOW STRIPE, PVC INSULATED, 600/1000V GRADE.
1	CABLE LUG, COMPRESSION TYPE FOR 25mm sq. EARTHING CABLE



E24 TYPICAL ELECTRICAL EARTHING FOR INSTRUMENTATION & ELECTRICAL EQUIPMENT

SECTION A–A

ITEM	DESCRIPTION
4	BUSBAR, HARD DRAWN & TINNED COOPER 10 x 60 x 500, ø12mm DRILL HOLE EVERY 50mm C/W BOLT, NUT, FLAT WASHER (SS 316)
3	STEEL PLATE 100 x 100 x 6mm THK. CARBON STEEL.
2	COPPER CONDUCTOR 70Sqmm, 600V GRADE GREEN/ YELLOW STRIPES, FLAME RETARDANT, SHF1, INSULATED, GROUNDING CABLE.
1	L75x 75 x 9mm THK. PAINTED CARBON STEEL.

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL CABLE LADDER AND TRAYS SHALL HAVE EARTHING JUMPERS ACROSS EACH JOINT AND SHALL BE EARTHED TO THE PLATFORM STRUCTURE AT INTERVALS NOT EXCEEDING 25 METERS.

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

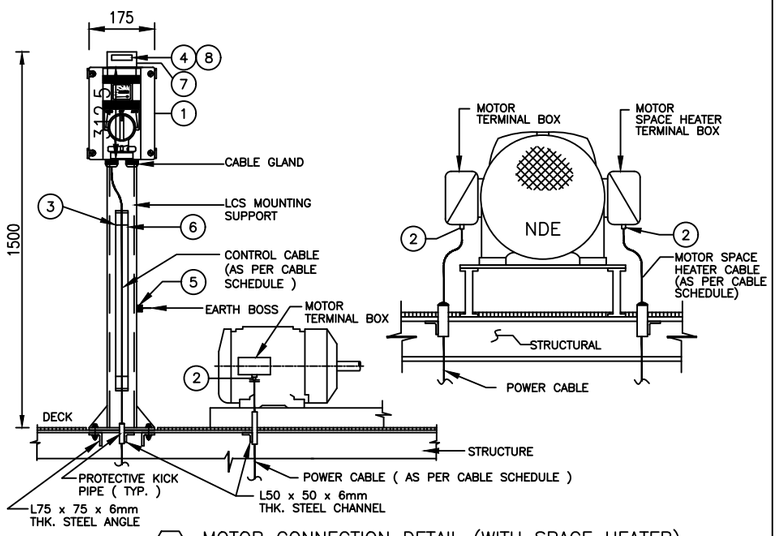
DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 15/19

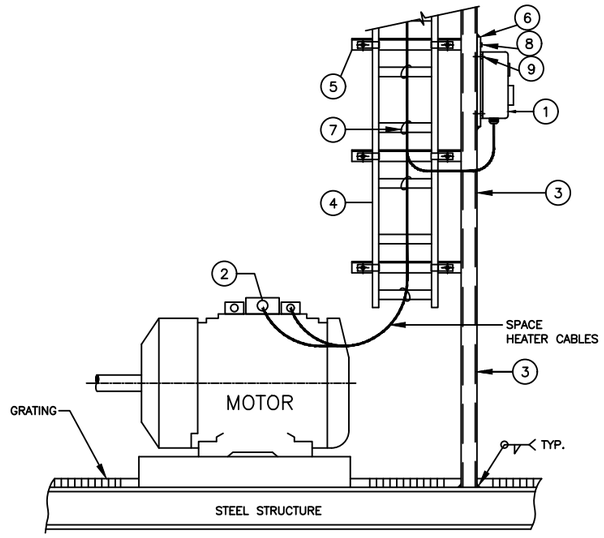
PHASE: DE



M1 MOTOR CONNECTION DETAIL (WITH SPACE HEATER)

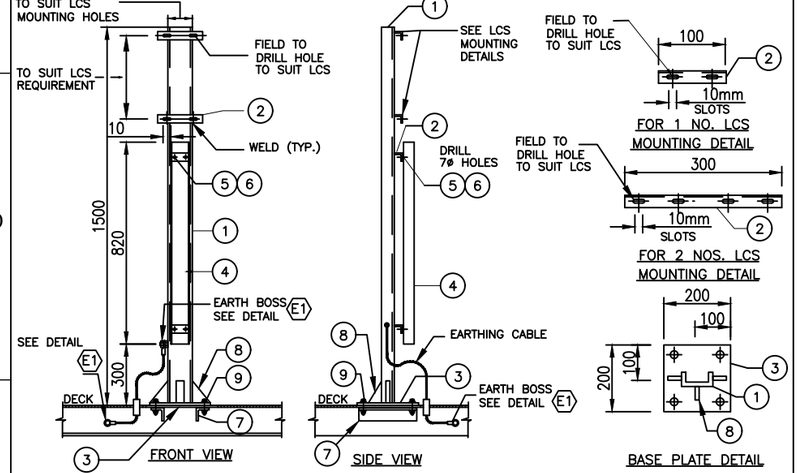
NOTE: MOTOR MAY EITHER BE VERTICAL OR HORIZONTAL

ITEM	DESCRIPTION
8	M4 x 20mm LONG HEX. HEAD SCREW C/W NUTS & FLAT WASHER (SS316)
7	3mm THK. STEEL PLATE (CS)
6	50 x 3mm THK. FLAT BAR (CS)
5	EARTH BOSS
4	NAMEPLATE – MADE OF 2.5mm THK. LAMINATED TRAFFOLYTE AND FIXED WITH SELF TAPPING SCREWS (SS 316)
3	NYLON COATED STAINLESS STEEL CABLE TIES
2	NICKEL PLATED BRASS CABLE GLAND
1	LOCAL CONTROL STATION Ex'de' IIA, T3, IP56 (MIN).



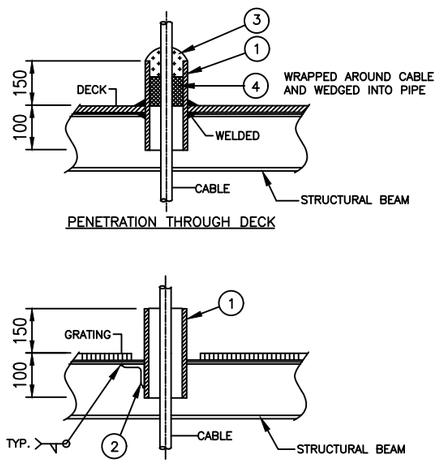
M2 MOTOR CONNECTION DETAILS WITH CABLES COMING FROM ABOVE

ITEM	DESCRIPTION
9	M4 x 20mm LONG HEX. HEAD SCREW C/W NUTS & FLAT WASHER (SS316)
8	NAMEPLATE – MADE OF 2.5mm THK. LAMINATED TRAFFOLYTE AND FIXED WITH SELF TAPPING SCREWS (SS 316)
7	STAINLESS STEEL NYLON COATED CABLE TIES.
6	6mm THK. STEEL PLATE (CS)
5	L75 x 75 x 6mm THK. STEEL ANGLE (CS)



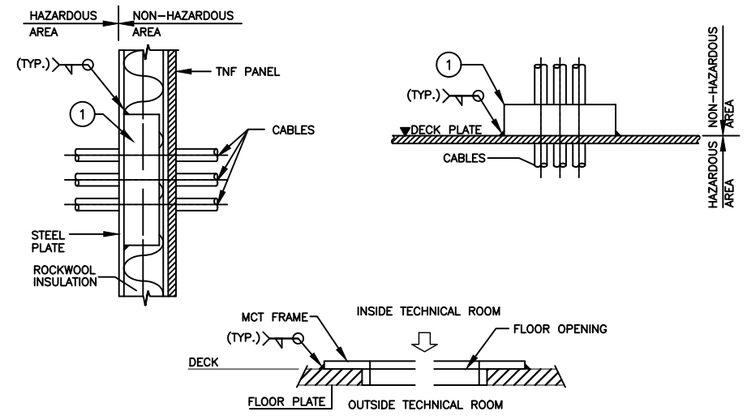
SEE BASE PLATE DETAIL M3 LOCAL CONTROL STATION (LCS) SUPPOST DETAIL

ITEM	DESCRIPTION
9	M12 x 60mm LONG HEX. HEAD SCREW c/w NUTS, FLAT & SPRING WASHERS (SS316)
8	6mm THK. STEEL WEB. (CS)
7	L75 x 75 x 6mm THK. STEEL ANGLE (CS)
6	NEOPRENE PAD
5	M6 x 20mm LONG MUSHROOM HEAD SCREW, NUT & WASHER (SS316)
4	CABLE TRAY, STRAIGHT SECTION
3	200 x 200 x 10mm THK. STEEL PLATE WITH 4 Nos. 14mm DIA. HOLES (CS)
2	L50 x 50 x 6mm THK. STEEL ANGLE (CS)
1	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)



M4 PROTECTIVE KICK PIPE DETAIL

ITEM	DESCRIPTION
4	DENSO TAPE
3	SEALING COMPOUND SOFT SETTLING TYPE
2	L50 x 50 x 6mm THK. STEEL ANGLE (CS)
1	CARBON STEEL PIPE API 5L GRADE B, SEAMLESS (SIZE TO SUIT CABLE DIAMETER)



M5 MULTI–CABLE TRANSITS FIXING DETAIL

ITEM	DESCRIPTION
1	WELDED STEEL FRAME TYPE MULTI–CABLE TRANSIT

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
3. ALL SUPPORT SHALL BE PAINTED.
4. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
5. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
6. ALL WELDS TO BE 6MM FILLET (CONTINUOUS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

PREPARED: SVYATOKHO

REV.	DES.	DATE
0	IFA	

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

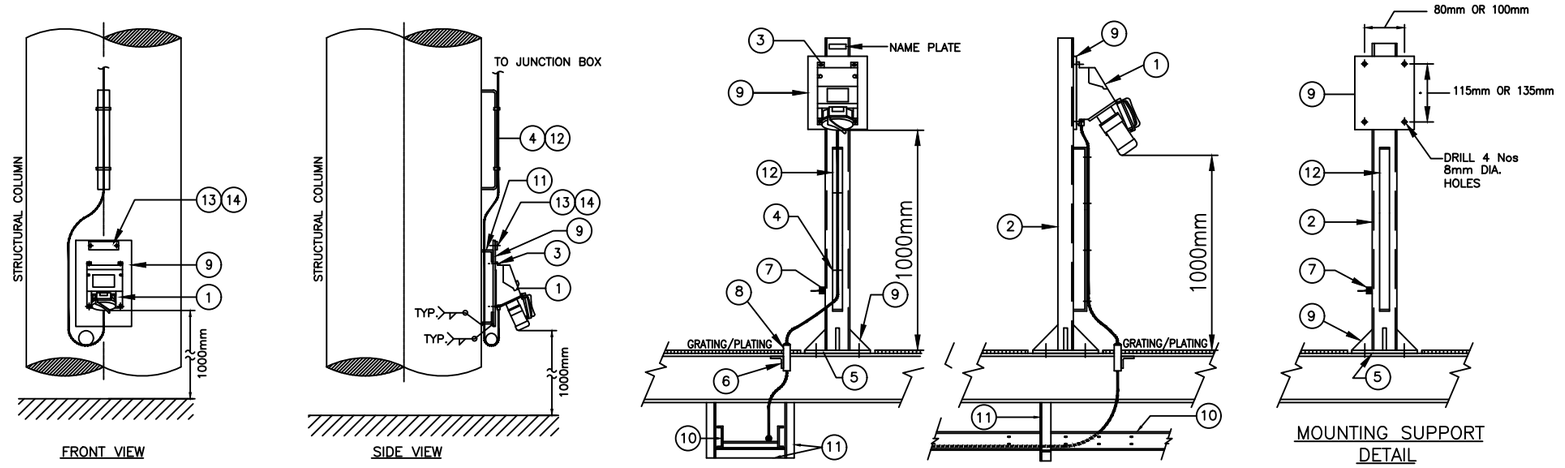
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 16/19

PHASE: DE

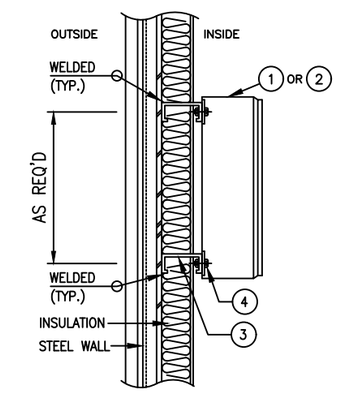
FORMAT: A3



M6 SOCKET OUTLET MOUNTING DETAIL

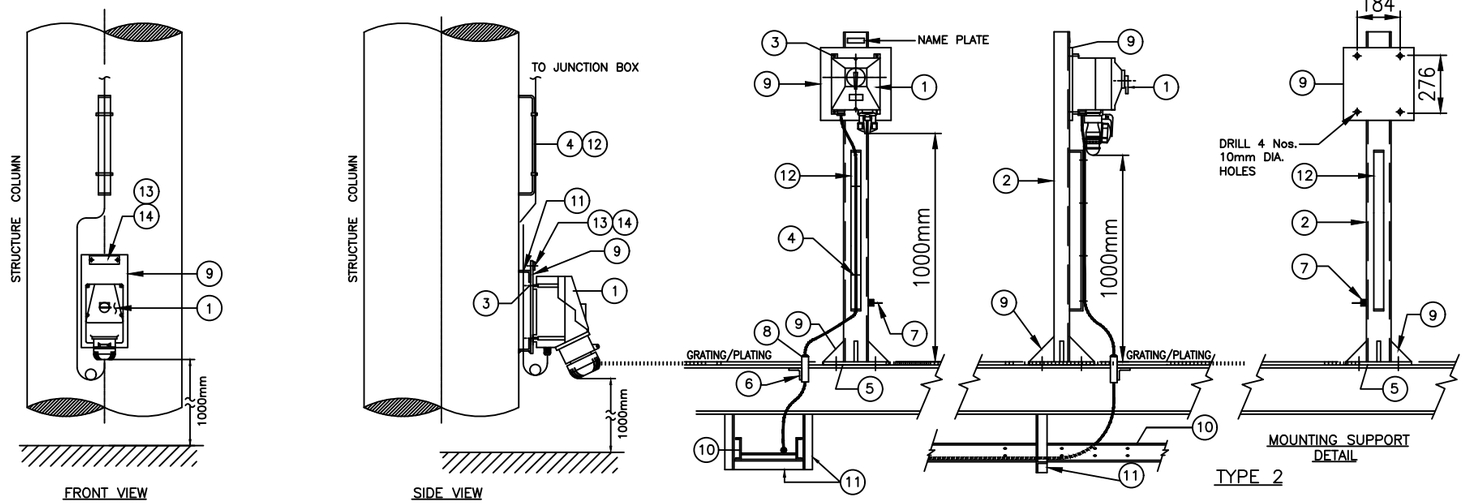
NOTE:
SOCKET OUTLET SHALL BE MOUNTED APPROXIMATELY 1m ABOVE GRATING LEVEL

ITEM	DESCRIPTION	ITEM	DESCRIPTION
7	M10 EARTH BOSS	14	M4 x 20mm LONG HEX. HEAD SCREW C/W NUTS & FLAT WASHER (SS316)
6	L50 x 50 x 6mm THK. STEEL ANGLE (CS)	13	NAMEPLATE – MADE OF 2.5mm THK. LAMINATED TRAFFOLYTE AND FIXED WITH SELF TAPPING SCREWS (SS 316)
5	200 x 200 x 10mm THK. STEEL PLATE (CS)	12	50 x 6mm THK. STEEL FLAT BAR (CS)
4	NYLON COATED STAINLESS STEEL CABLE TIES	11	L75 x 75 x 6mm THK. STEEL ANGLE (CS)
3	M6 x 20mm LONG HEX. HEAD SCREW C/W NUT & FLAT WASHER (SS316)	10	CABLE LADDER STRAIGHT SECTION (SIZE AS REQUIRED)
2	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)	9	6mm THK. STEEL PLATE (CS)
1	230V, 2P+E, 16A EXPLOSION PROTECTED SOCKET OUTLET.	8	PROTECTIVE KICK PIPE



M8 ELECTRICAL PANEL/JUNCTION BOX MOUNTED ON INTERNAL WALL PLATE

ITEM	DESCRIPTION
4	M10 x 32mm LONG HEX. SCREW c/w NUT & WASHERS (SS316)
3	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)
2	JUNCTION BOX
1	ELECTRICAL CONTROL PANEL



M7 3-PHASE SOCKET OUTLET MOUNTING DETAIL

NOTE : SOCKET OUTLET SHALL BE MOUNTED APPROXIMATELY 1m ABOVE GRATING LEVEL

ITEM	DESCRIPTION	ITEM	DESCRIPTION
7	M10 EARTH BOSS	14	M4 x 20mm LONG HEX. HEAD SCREW C/W NUTS & FLAT WASHER (SS316)
6	L50 x 50 x 6mm THK. STEEL ANGLE (CS)	13	NAMEPLATE – MADE OF 2.5mm THK. LAMINATED TRAFFOLYTE AND FIXED WITH SELF TAPPING SCREWS (SS 316)
5	200 x 200 x 10mm THK. STEEL PLATE (CS)	12	50 x 6mm THK. STEEL FLAT BAR (CS)
4	NYLON COATED STAINLESS STEEL CABLE TIES	11	L75 x 75 x 6mm THK. STEEL ANGLE (CS)
3	M8 x 25mm LONG HEX. HEAD SCREW C/W NUT & FLAT WASHER (SS316)	10	CABLE LADDER STRAIGHT SECTION (SIZE AS REQUIRED)
2	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)	9	6mm THK. STEEL PLATE (CS)
1	400V, 3P+N+E, 63A EXPLOSION PROTECTED SOCKET OUTLET	8	PROTECTIVE KICK PIPE

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
3. ALL SUPPORT SHALL BE PAINTED.
4. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
5. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
6. ALL WELDS TO BE 6MM FILLET (CONTINUOUS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

PREPARED: SVYATOKHO

REV.	DES.	DATE
0	IFA	

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

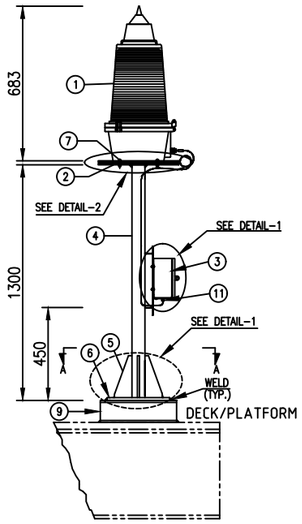
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

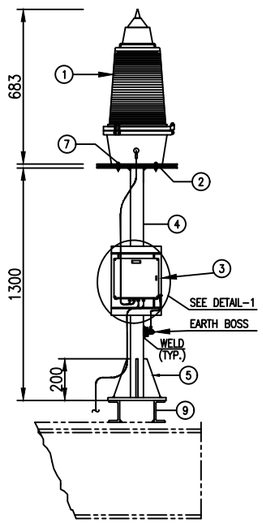
SHEET: 17/19

PHASE: DE

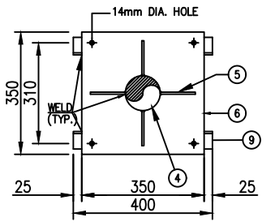
BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG



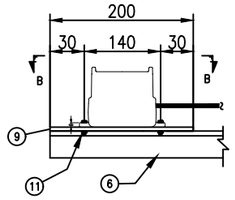
SIDE VIEW

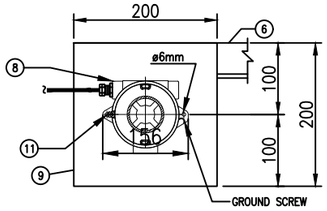


FRONT VIEW



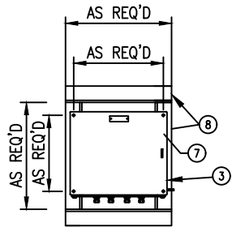
SECTION A – A



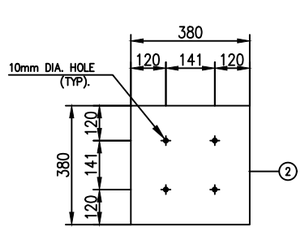


SECTION B – B

PHOTOCELL MOUNTING



DETAIL–1



DETAIL–2

NAV.1

NAVIGATION AIDS MARINE LANTERN MOUNTING DETAIL

ITEM	DESCRIPTION	QTY.
9	C100 x 50 x 6mm THK. STEEL CHANNEL (CS)	AS REQ'D
8	L50 x 50 x 6mm THK. STEEL ANGLE (CS)	AS REQ'D
7	M10 x 25mm LONG HEX. HEAD SCREW C/W NUT & WASHERS (SS 316)	AS REQ'D
6	350 x 350 x 10mm THK. STEEL PLATE (CS)	1 PCS
5	200 x 100 x 8mm THK. STEEL PLATE (STIFFENER)	4 PCS
4	100mm DIA. NOMINAL CARBON STEEL PIPE	AS REQ'D
3	JUNCTION BOX (Ex'e' Zone 1 IIA T3, IP66)	1 PCS
2	380 x 380 x 10mm THK. STEEL PLATE (CS)	2 PCS
1	NAV. AIDS LANTERN SUITABLE FOR Ex d Zone 1 IIA T3, C/W 1xM20, 1xM25 CABLE ENTRIES	1 PCS
ITEM	DESCRIPTION	QTY.

ITEM	DESCRIPTION	QTY.
10	PHOTOCELL C/W BOLT & WASHER (SS316)	1 PCS
11	M4 x 30mm LONG HEX. HEAD SCREW C/W NUT & WASHERS (SS 316)	AS REQ'D
12	200 x 200 x 10mm THK. STEEL PLATE (CS)	1 PCS
13	L50 x 50 x 6mm THK. STEEL ANGLE (CS)	1 PCS
ITEM	DESCRIPTION	QTY.

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
3. ALL SUPPORT SHALL BE PAINTED.
4. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
5. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
6. ALL WELDS TO BE 6MM FILLET (CONTINUOUS).

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

CHECKED: ISATOV

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREPARED: SVYATOKHO
0	IFA		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 18/19

PHASE: DE

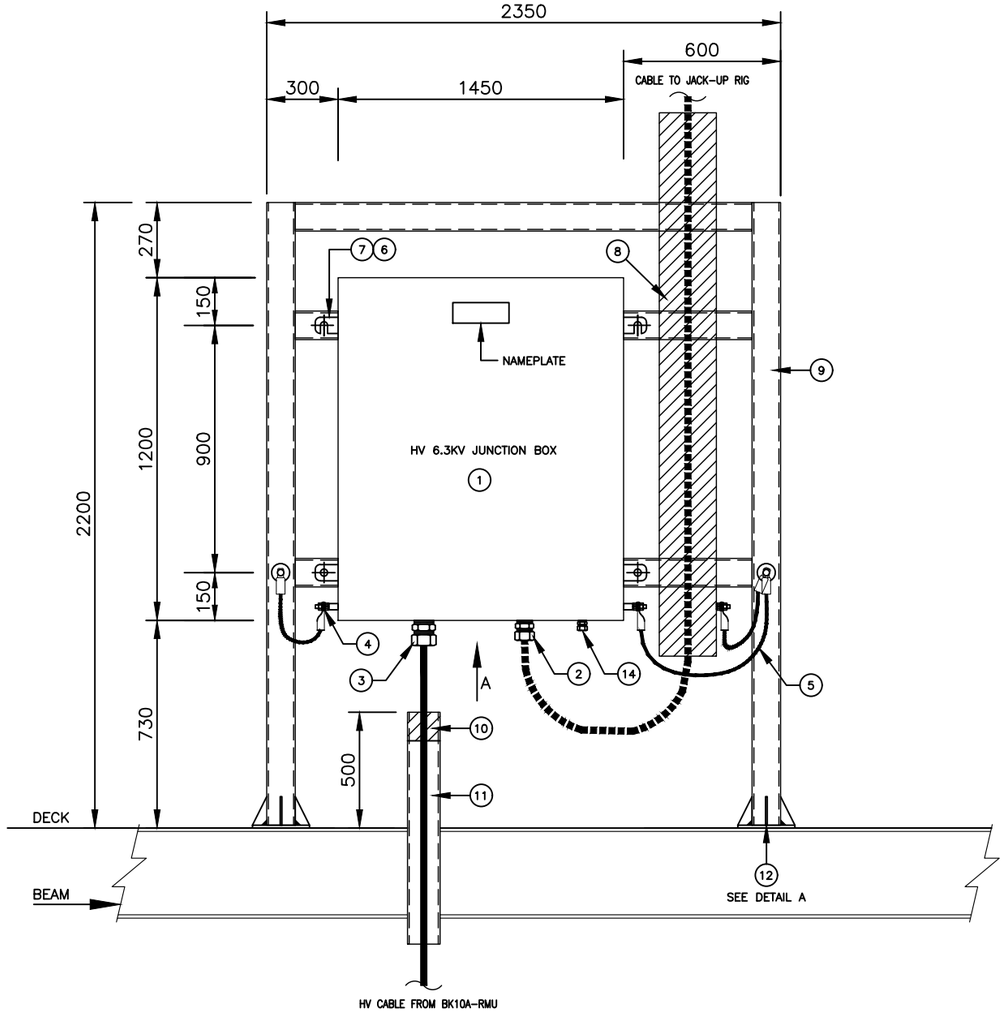
FORMAT: A3

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

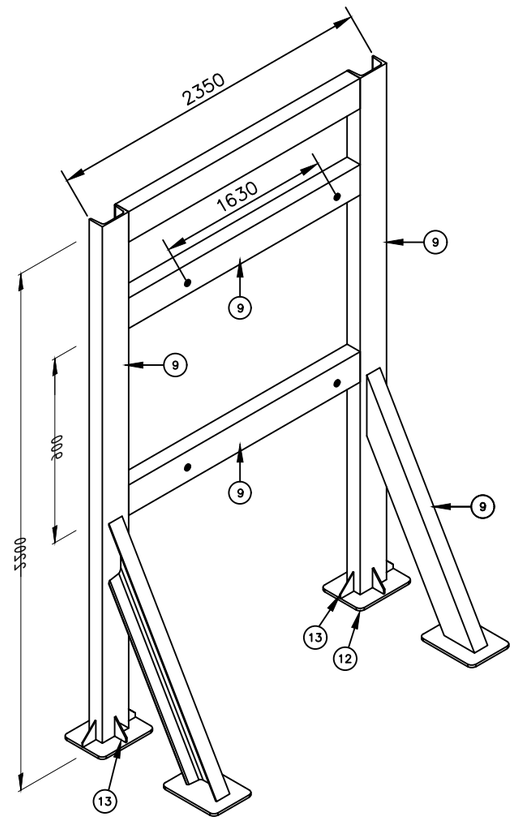
FORMAT: A3

BK1.BK10.BK10A-001-GE-ES2-LD-001_0_STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS.DWG

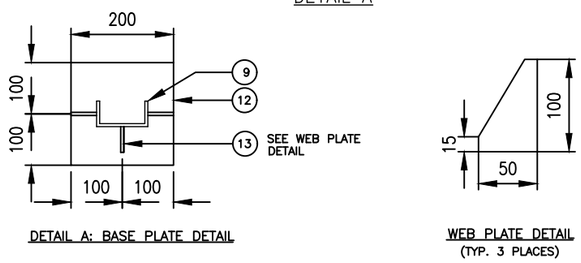
INSTALLATION DETAIL FOR 6.3kV JUNCTION BOX FOR JACK-UP RIGS



6.3kV JUNCTION BOX SUPPORT FOR JACK-UP RIGS



DETAIL A



DETAIL A: BASE PLATE DETAIL

WEB PLATE DETAIL (TYP. 3 PLACES)

1. ALL DIMENSION ARE IN MILIMETER UNLESS OTHERWIRE NOTES.
2. ALL MOUNTING HOLES TO BE DRILLED BEFORE PAINTING.
3. REMOVE ALL BURN AND SHARP EDGES AFTER FARICATIONS.
4. TO PREVENT GALVANIC CORROSION NEOPRENE SHEET SHALL BE INSTALLED IN BETWEEN CARBON STEEL (C.S) AND STAINLESS STEEL (SS).
5. ALL WELDS TO BE 6MM FILLET (CONTINUOUS).
6. THE DIMENSIONS SHALL BE UPDATED ACCORDING TO VENDOR DATA LATE.

ITEM	QTY.	DESCRIPTION
1	1 SET	HIGH VOLTAGE 6.3KV JUNCTION BOX FOR OUTDOOR, SS316, IP56
2	1 PCS	CABLE GLAND SIZE M63, IP56
3	1 PCS	CABLE GLAND SIZE M75, IP56
4	4 PCS	EARTH BOSS WELDED 40mm DIA. X 30mm SS316 EARTHING BOSS WITH M10 THREADED HOLE. WITH M10 THREADED HOLE. C/W BOLT M10, NUTS & PLAIN WASHER
5	1.5M	70sq mm EARTHING CONDUCTOR, GREEN/YELLOW STRIPES
6	4 PCS	HEX. HEAD BOLT C/W NUT & WASHERS SS316 (TO SUIT JB) C/W INSULATING SLEEVE
7	4 PCS	NEOPRENE PAD
8	2M	200mm WIDE CABLE TRAY, SS316, H=100mm
9	13M	C100 x 50 x 6mm THK. STEEL CHANNEL ASTM A36 (PAINTED)
10	2 SET	ROUND SEAL WITHOUT CORE FOR SINGLE CABLE OD UP TO 50mm. C/W PRIMED STEEL SLEEVE
11	1M	STEEL PIPE 4" SCH 40 (Ø114.3x6.02mm)
12	4 PCS	200 x 200 x 10mm THK. STEEL BASE PLATE (PAINTED)
13	6 PCS	6mm THK. STEEL WEB PLATE, ASTM A36 (PAINTED)
14	1 PCS	CABLE GLAND SIZE M20, IP56

CONTROLLED

Signed by: Исатов Дмитрий Олегович
Date: 12/03/2026 13:31:55
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 12/03/2026 08:11:45
Certified by: Vietsovpetro CA

REV.	DES.	DATE	
			CHECKED: ISATOV
0	IFA		PREPARED: SVYATOKHO

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-GE-ES2-LD-001

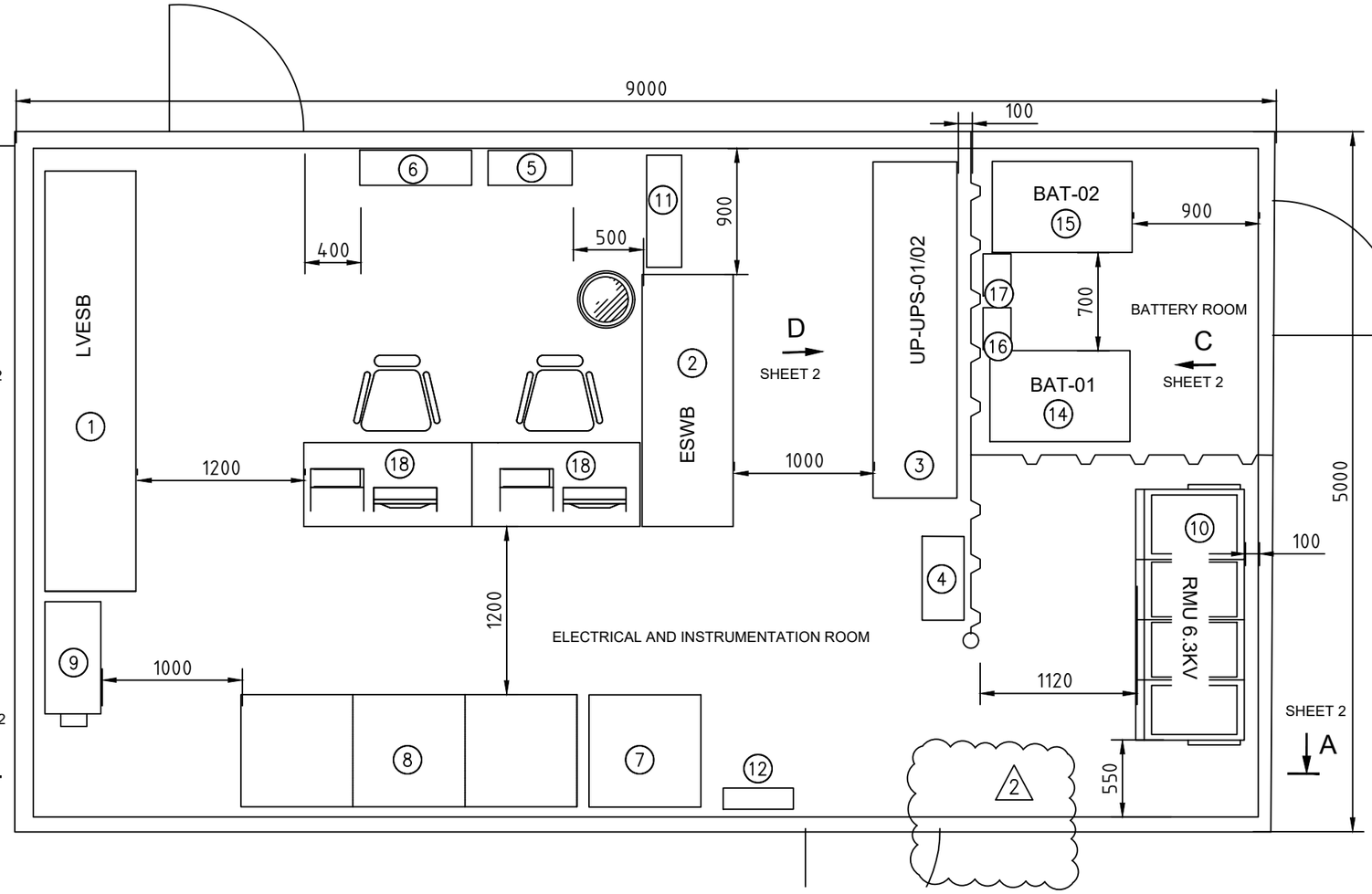
DRAWING TITLE: STANDARD FOR ELECTRICAL INSTALLATION DRAWINGS

SCALE: -

SHEET: 19/19

PHASE: DE

FORMAT: A3



MAIN DECK EL.+15.000

No.	EQUIP. TAG	DESCRIPTION OF EQUIPMENT	OVERALL DIMENSION, mm			WEIGHT (kg)
			L	D	H	
1	BK10A-LVSWB	LOW VOLTAGE SWITCHBOARD	3000	650	2200	VTA
2	BK10A-ESWB	ESSENTIAL SWITCHBOARD	1800	650	2200	VTA
3	BK10A-UPS-1/2/BP	UPS	2400	600	2000	VTA
4	BK10A-UDB	UPS DISTRIBUTION BOARD	600	250	900	VTA
5	BK10A-ELDB	ESSENTIAL LIGHTING & SMALL POWER DISTRIBUTION BOARD	600	250	1000	VTA
6	BK10A-MLDB	NORMAL LIGHTING & SMALL POWER DISTRIBUTION BOARD	800	250	1200	VTA
7	BK10A-TEL/PA-01	TELECOM & PAGA CABINET	800	800	2000	VTA
8	BK10A-ICSS	ICSS CABINETS	2400	800	2100	VTA
9	BK10A-CR-P	CRANE CONTROL PANEL	800	400	1600	VTA
10	BK10A-RMU	6.3KV RMU (MV SWITCHGEAR)	1800	800	2000	VTA
11	BK10A-HDB	HEAT TRACING DISTRIBUTION BOARD	800	250	1200	VTA
12	BK10A-FO	FIBER OPTICAL PANEL	500	150	500	VTA
~~13~~	~~BK10A-FP~~	~~FIRE PANEL~~	~~500~~	~~150~~	~~400~~	~~VTA~~
14	BK10A-BAT-01	BATTERY RACK N0.1	1000	650	1500	VTA
15	BK10A-BAT-02	BATTERY RACK N0.2	1000	650	1500	VTA
16	U-SW-01	BATTERY SAFETY SWITCH N0.1	300	200	400	VTA
17	U-SW-02	BATTERY SAFETY SWITCH N0.2	300	200	400	VTA
18	PC	PC WORKSTATION TABLE	1200	600	750	VTA

NOTES:
1. ALL DIMENSIONS ARE IN MILIMETERS UNLESS OTHERWISE STATED.
2. THE DIMENSIONS AND WEIGHTS OF THE EQUIPMENTS ARE PRELIMINARY AND NEED TO BE CONFIRMED WITH THE FINAL VENDOR DATA DURING DETAIL DESIGN.
3. THE ACCURATE LOCATION OF E & I EQUIPMENT SHALL BE CORRECTED AT SITE.
4. VTA: VENDOR TO ADVISE

CONTROLLED

REV.	DES.	DATE	PRP. SVYATOKHO	CHK. ISATOV	DPT.MGR ISATOV
			DC L.T.HANG	ENG.MGR GAYNUTDINOV	PRO.MGR AVDEEV
2	IFA	25.03.2026	Signed by: Lê Thị Hằng Date: 27/03/2026 07:32:09 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 27/03/2026 09:45:05 Certified by: Vietsovpetro CA	Signed by: Авдеев Андрей Сергеевич Date: 27/03/2026 05:57:29 Certified by: Vietsovpetro CA
1	IFA	25.02.2026	Signed by: Святохо Вячеслав Вениаминович Date: 26/03/2026 15:04:09 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 26/03/2026 15:16:24 Certified by: Vietsovpetro CA	
0	IFA	28.10.2025			

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

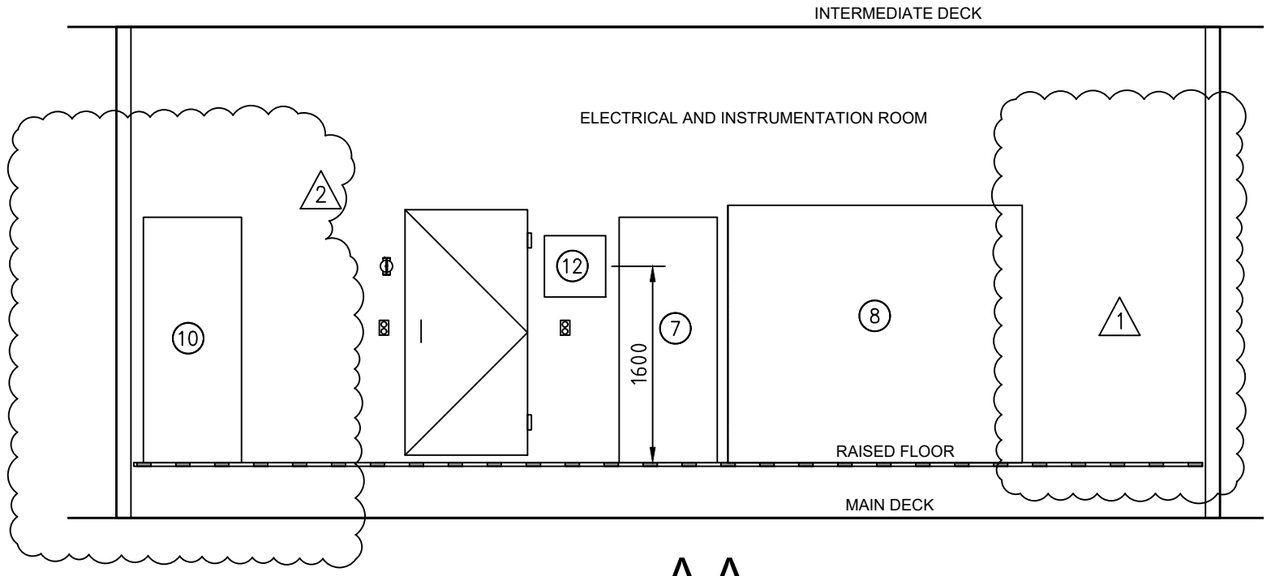
PROJECT: BK-10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001 SCALE: 1:40

DRAWING TITLE: BK10A. ELECTRICAL EQUIPMENT LAYOUT SHEET: 1/5

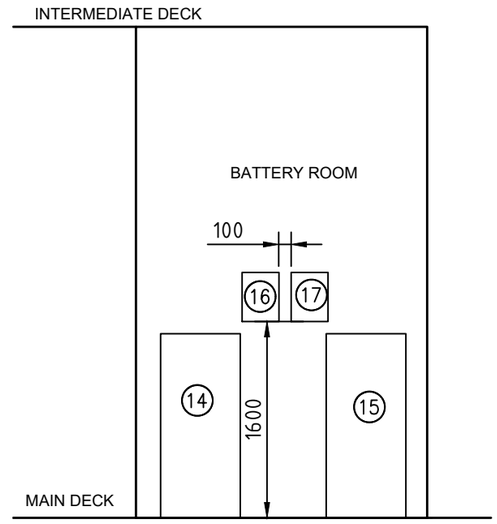
PHASE: DE

FORMAT: A3



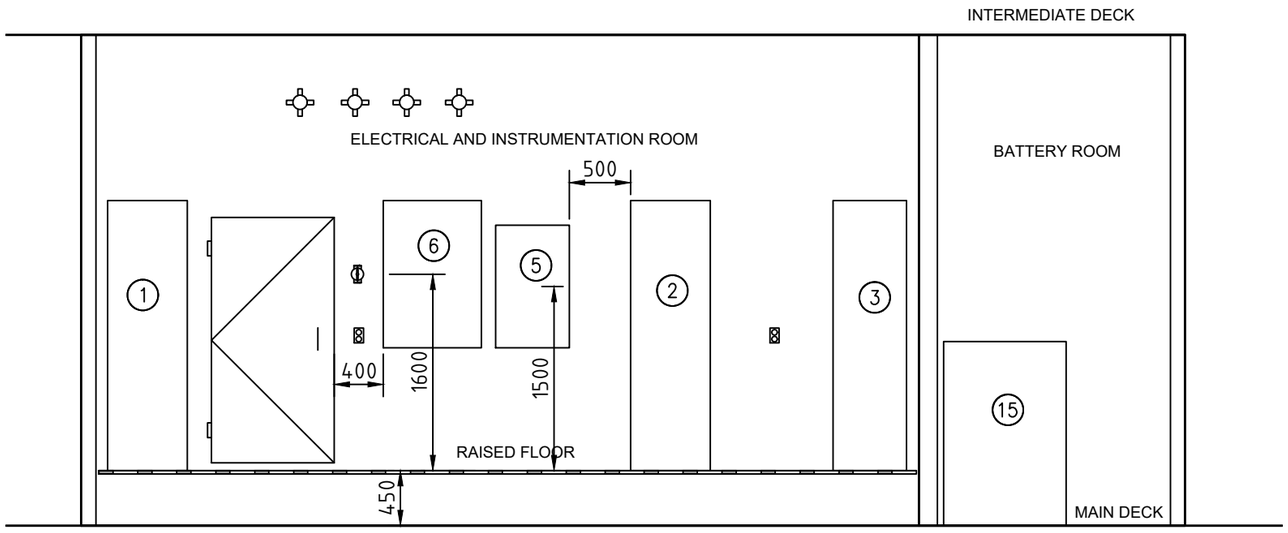
A-A

SHEET 1



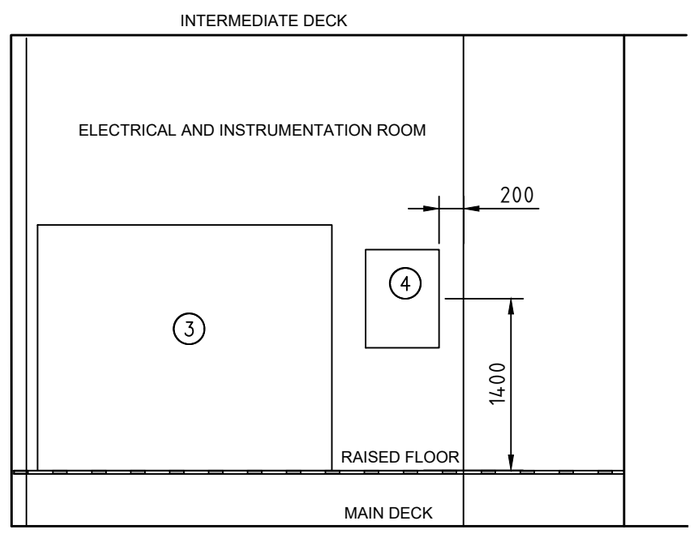
C

SHEET 1



B-B

SHEET 1



D

SHEET 1

NOTES:

1. ALL DIMENSIONS ARE IN MILIMETERS UNLESS OTHERWISE STATED.
2. SWITCHBOARDS MOUNTING HEIGHT IS SHOWN TO CENTER OF THE ENCLOSURE.

REV.	DES.	DATE	PREP. SVYATOKHO	CHK. ISATOV
2	IFA	25.03.2026		
1	IFA	25.02.2026		
0	IFA	28.10.2025		

CONTROLLED

Signed by: Гайнутдинов Евгений Ильгизиевич
Date: 26/03/2026 15:16:24
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 26/03/2026 15:04:09
Certified by: Vietsovpetro CA

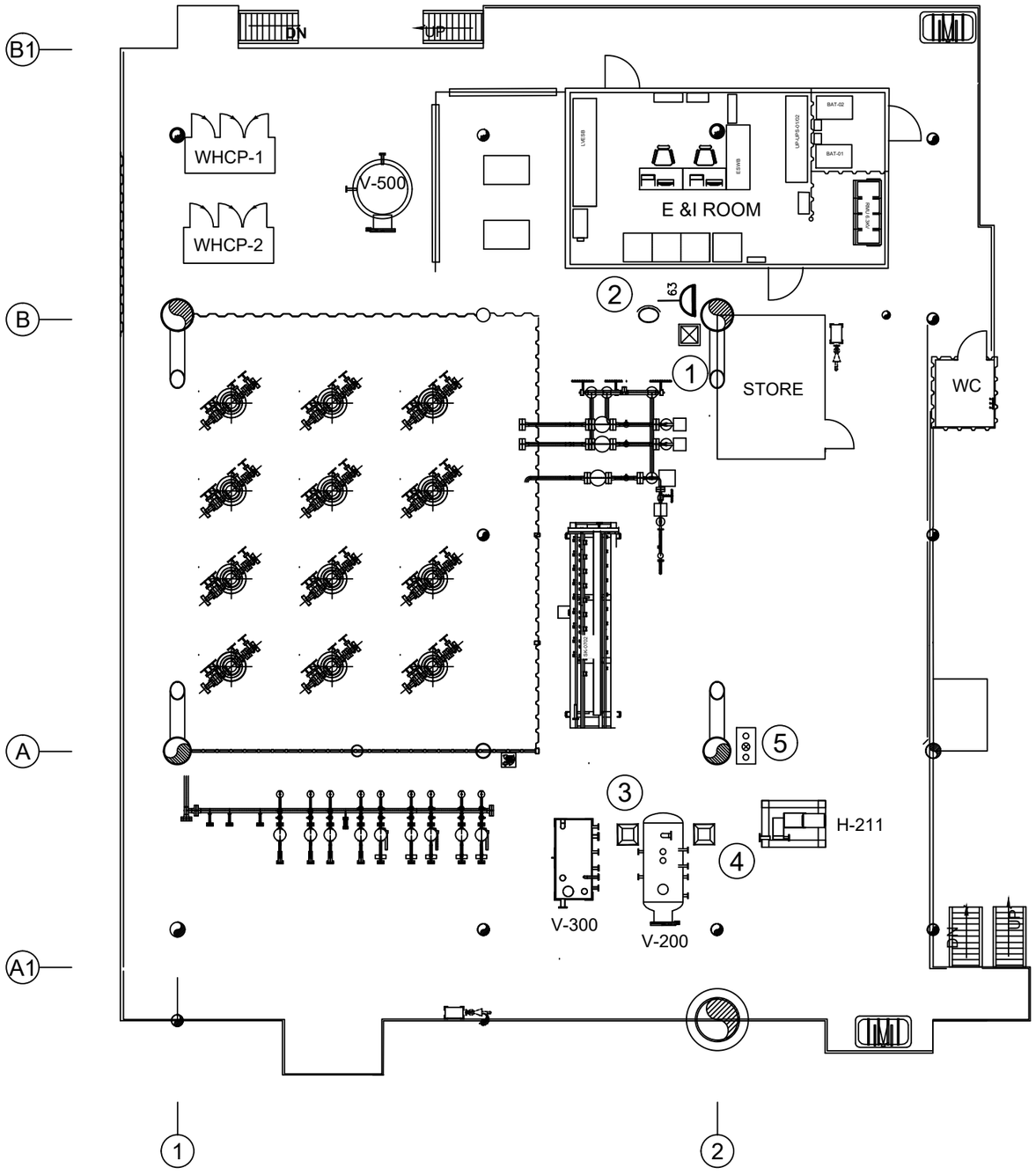
RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK-10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001 | SCALE: 1:50

DRAWING TITLE: BK10A. ELECTRICAL EQUIPMENT LAYOUT | SHEET: 2/5 | PHASE: DE

FORMAT: A3



SYMBOL	DESCRIPTION	QTY
	HEAT TRACING JUNCTION BOX	3
	JUNCTION BOX WITH FOUR CABLE ENTRY M40 Ex'e', Zone 2, IIA, T3, IP56.	1
63	63A, 220V, IP56, WELDING SOCKET.	1
	PUSH BUTTONS CONTROL STATION	1

ITEM	TAG	HEIGHT FROM DECK T.O.S. EL.
1	BK10A-JB-XS-01	2500mm
2	BK10A-MP-XS-01	1200mm
3	HT-JB-01	3400mm
4	HT-JB-02	2200mm
5	H211-LCS	1400mm

MAIN DECK EL.+15.000

CONTROLLED

Signed by: Гайнутдинов Евгений Нурлыгалиевич
Date: 26/03/2026 15:16:24
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 26/03/2026 15:04:09
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREP. SVYATOKHO	CHK. ISATOV
2	IFA	25.03.2026		
1	IFA	25.02.2026		
0	IFA	28.10.2025		

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

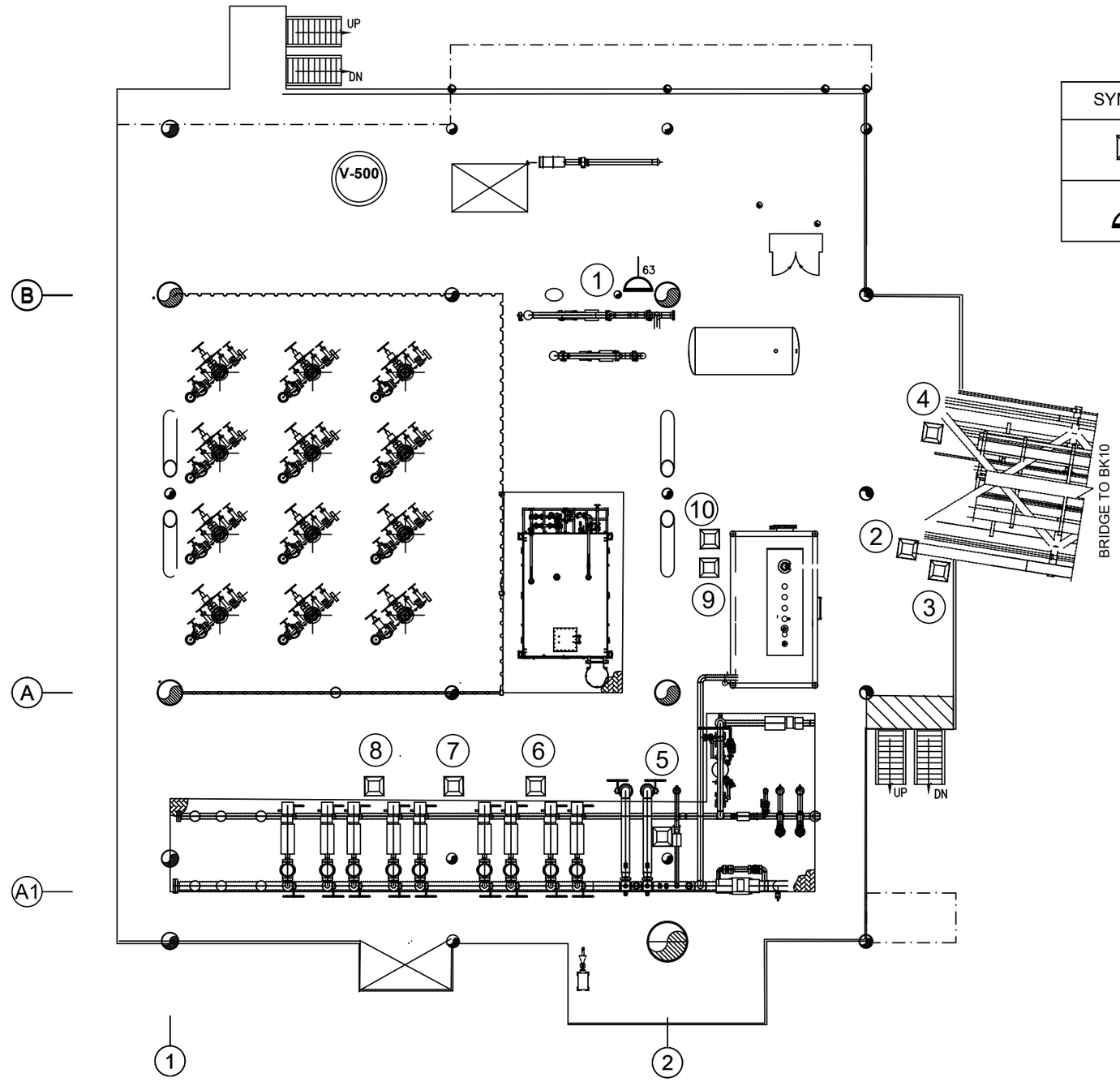
PROJECT: BK-10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001 SCALE: 1:150

DRAWING TITLE: BK10A. ELECTRICAL EQUIPMENT LAYOUT SHEET: 3/5

PHASE: DE

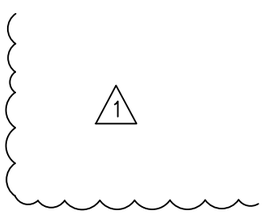
FORMAT: A3



SYMBOL	DESCRIPTION	QTY
	HEAT TRACING JUNCTION BOX	9
63	63A, 220V, IP56, WELDING SOCKET.	1

ITEM	TAG	HEIGHT FROM DECK T.O.S. EL.
1	BK10A-MP-XS-02	1200mm
2	HT-JB-03	1700mm
3	HT-JB-04	1700mm
4	HT-JB-05	1200mm
5	HT-JB-06	1500mm
6	HT-JB-07	400mm
7	HT-JB-08	400mm
8	HT-JB-09	400mm
9	HT-JB-10	1200mm
10	HT-JB-11	1800mm

INTERMEDIATE DECK EL.+19.000



CONTROLLED

Signed by: Гайнутдинов Евгений Нургалиевич
Date: 26/03/2026 15:16:24
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 26/03/2026 15:04:09
Certified by: Vietsovpetro CA

REV.	DES.	DATE	PREP.	SVYATOKHO
			CHK.	ISATOV
2	IFA	25.03.2026		
1	IFA	25.02.2026		
0	IFA	28.10.2025		

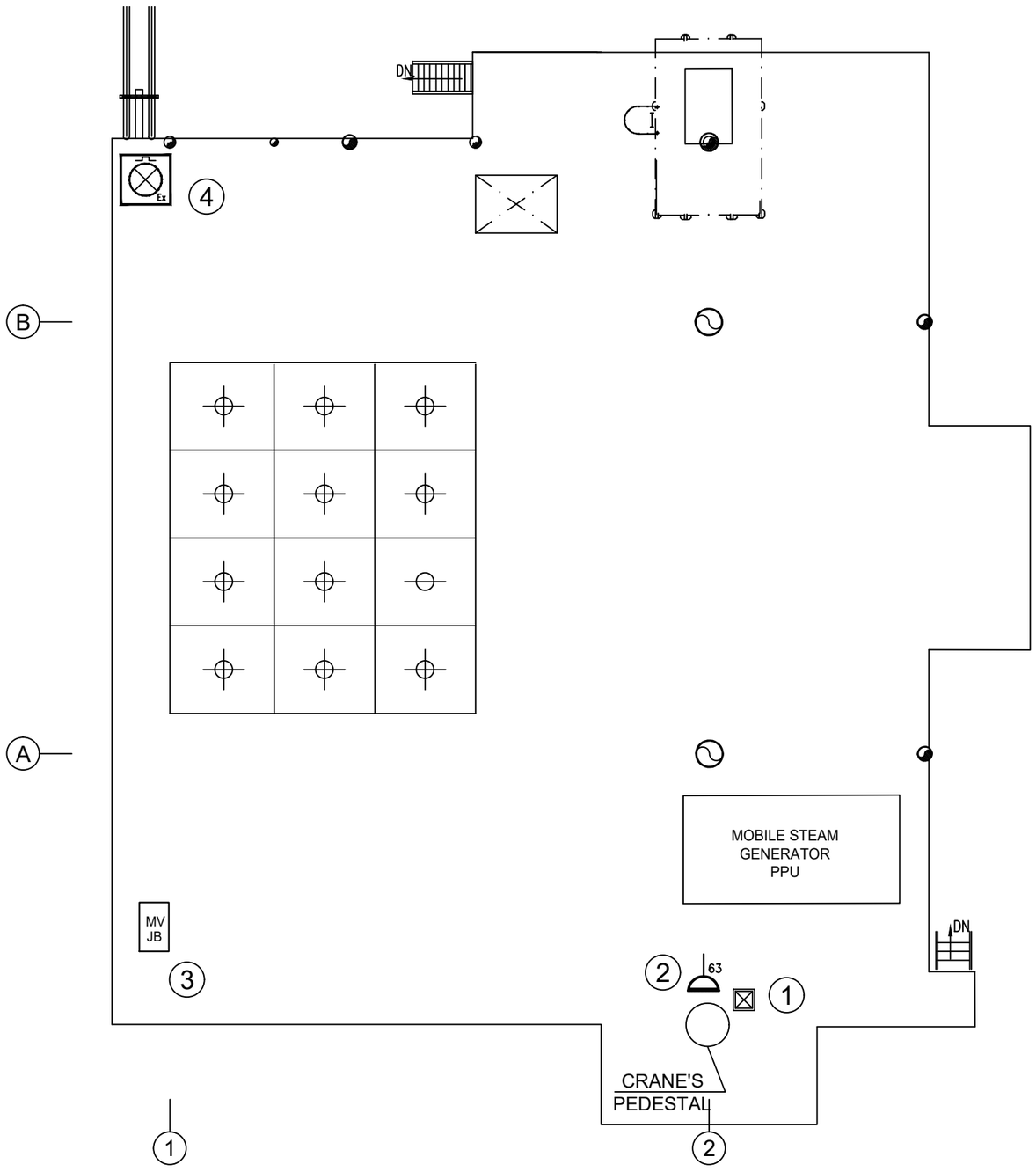
RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK-10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001 | SCALE: 1:150

DRAWING TITLE: BK10A. ELECTRICAL EQUIPMENT LAYOUT | SHEET: 4/5 | PHASE: DE

FORMAT: A3



SYMBOL	DESCRIPTION	QTY
	JUNCTION BOX WITH FOUR CABLE ENTRY M40 Ex'e', Zone 2, IIA, T3, IP56.	1
63	63A, 220V, IP56, WELDING SOCKET.	1
MV JB	6.3KV JACK UP JUNCTION BOX, IP56	1
Ex	MAIN WARNING LANTERN, WHITE, VISIBILITY RANGE 10 MILES, IP56	1

ITEM	TAG	HEIGHT FROM DECK T.O.S. EL.
1	P-LVJB-01	800mm
2	BK10A-MP-XS-03	1000mm
3	BK10A-MV-JB	1200mm
4	NA-WL-02	1500mm

UPPER DECK EL.+23.000

REV.	DES.	DATE	PREP.	CHK.
				ISATOV
2	IFA	25.03.2026		
1	IFA	25.02.2026		
0	IFA	28.10.2025	SVYATOKHO	

CONTROLLED
Signed by: Гайнутдинов Евгений Нурыгалиевич
Date: 26/03/2026 15:16:24
Certified by: Vietsovpetro CA

Signed by: Святохо Вячеслав Вениаминович
Date: 26/03/2026 15:04:09
Certified by: Vietsovpetro CA

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT: BK-10A WELLHEAD PLATFORM

DRAWING NO.: BK1.BK10.BK10A-001-TS.BK10A-ES2-LD-001 | SCALE: 1:150

DRAWING TITLE: BK10A. ELECTRICAL EQUIPMENT LAYOUT | SHEET: 5/5 | PHASE: DE

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT NAME : **BK-10A WELLHEAD PLATFORM**

DOCUMENT TITLE : **SPECIFICATION FOR ELECTRICAL CABLE**

DOCUMENT NO. : **BK1.BK10.BK10A-001-GE-ES2-SP-007**

PHASE : **DE**

Applied Document	VSP-NIPI-TYP-TS-ES2-SP-09	Rev.	0

			CONTROLLED Signed by: Lê Thị Hằng Date: 16/06/2025 14:56:43 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 17.06.2025 07:11:50 Certified by: Vietsovpetro CA	Signed by: Авдеев Андрей Сергеевич Date: 17.06.2025 12:27:08 Certified by: Vietsovpetro CA
			DC: L.T.HANG	**ENG. MGR: GAYNUTDINOV**	**PRO.MGR: AVDEEV**
0	IFA		Signed by: Святохо Вячеслав Вениаминович Date: 16.06.2025 11:04:10 Certified by: Vietsovpetro CA		Signed by: Исатов Дмитрий Олегович Date: 16.06.2025 11:09:52 Certified by: Vietsovpetro CA
REV.	**DES.**	**DATE**	**PREPARED: SVYATOKHO**	**CHECKED: SVYATOKHO**	**DEPT.MGR: ISATOV**

TRACK CHANGES

No	Rev.	Content of Change	Note
1	0	Issued for approve	

TABLE OF CONTENTS

1. INTRODUCTION

BK-10A Wellhead Platform belongs to Vietsovpetro JV. It will be located in Block 09-1, White Tiger oil field, offshore the Socialist Republic of Vietnam.

BK-10A is connected with BK-10 by a linking bridge. BK-10A is an unmanned platform with 12 slots (03 spare slots) and will be remotely controlled from the host platform BK-10 via fiber optic cable.

There will be 09 production wells on BK-10A (02 wells will be converted into water injection wells in future as planned) and 03 wells can be added in the future.

Based on the criterion of the need for production and maximizing the return on investment, BK-10A will be considered to have the minimum facilities. The full well stream of BK-10A will be gathered together with the produced fluid of BK-10 and BK-1, preliminarily separated on BK-10 and then transferred to CPP-2.
The scope of this project is detailed engineering design for the BK-10A Wellhead Platform, Linking Bridge and modification of BK-10.

Location of BK-10A and related platforms as below.

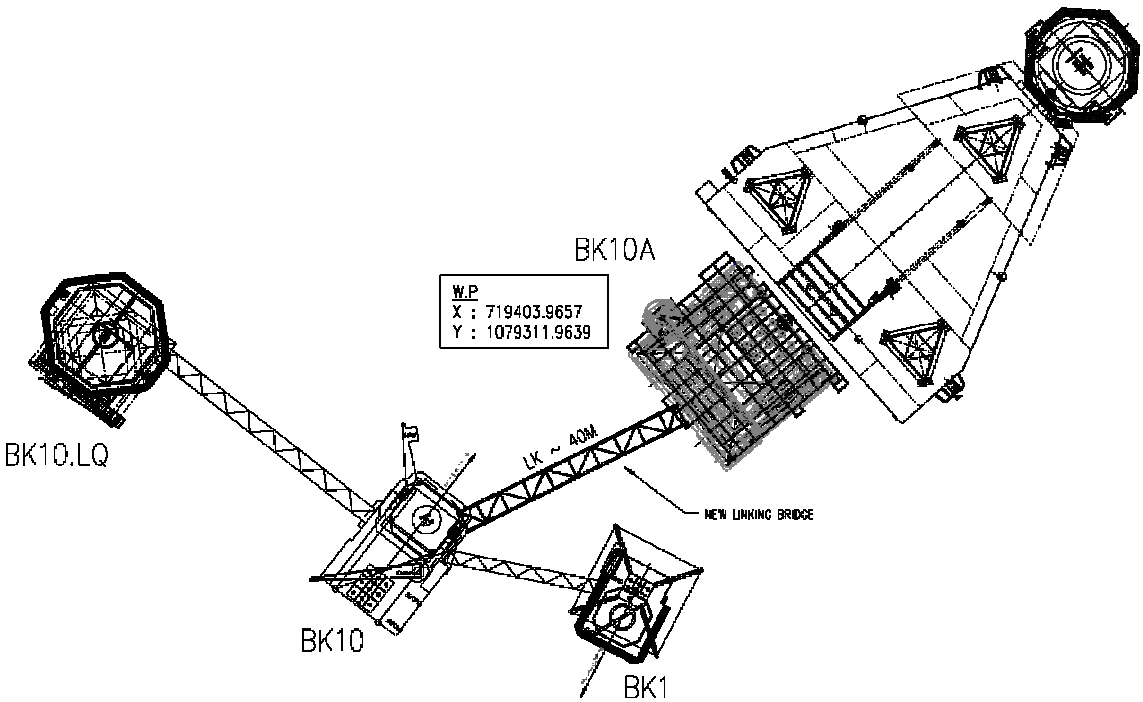


Figure 1: Location of the BK-10A Wellhead Platform and related platforms

2. ADDENDUM

This document uses the Typical Engineering Documentation for this Project. However, some design intends or requirements may require to be revised to fit with Project's purpose. This section lists changes in the applied typical documents, originating in Typical Engineering Documentation for any reason including those indicated in Table 1. These changes are identified in this Addendum to the applied typical document, identifying the document and section affected and the required change.

VENDOR shall review the required changes in conjunction with the referenced document and project's engineering documents.

The type of modification shall be defined and indicated in subsequent text as follows:

- ✓ "ADD" - Indicates the following statement(s) is/are added to the Company referenced text.
- ✓ "DELETE" - Indicates the following statement(s) is/are deleted from the Company referenced text.
- ✓ "REPLACE WITH" - Indicates the following statement(s) is/are revision(s) to the Company referenced text.

Table – 1: List of changes

Section	Current Statement or Requirement	Revised to
Page 11/18, sec 5.5.3, (b) Fire resistant layer	"b) Fire resistant layer: Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750°C for 3 hours"	"b) Fire resistant layer: Fire resistant layer to IEC 60331-1 (for cable with D>20mm), IEC 60331-2 or -21 (for cable with D<=20mm)"

VIETSOVPETRO

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

VIETSOVPETRO
RESEARCH & ENGINEERING INSTITUTE

AGREED BY
Deputy General Director of Vietsovpetro

Tran Xuan Hoang

03 / 04 /2020

APPROVED BY
Chief Engineer of Vietsovpetro

LIÊN DOANH VIỆT - NGA VIETSOVPETRO

Tran Van Vinh

/2020

TYPICAL ENGINEERING DOCUMENTATION

DOCUMENT TITLE : SPECIFICATION FOR ELECTRICAL CABLES

DOCUMENT No. : VSP-NIPI-TYP-TS-ES2-SP-09

AGREED:	Name	Date
Capital Construction Department		1/4/20
Material and Equipment Department		24/3/20
Mechanical and Energy Division		19/03/20

CONTROLLED

REV.	DESCRIPTION	DATE	PREPARED	CHECKED	CHIEF DEPART.	ENG. MANAGER	PRO. MANAGER
0	IFA	28/02/2020	P.X.VUONG	T.N.BINH	T.H.TOAI	T.D.HAI	B.T.HAN

Change Log

REV	SECTION	PAGE	CHANGE DESCRIPTION

Reference Documents

TABLE OF CONTENTS

SCR	Screen made by Aluminium plated Polyethylene Terephtalate tape and Stranded copper drain core

1.3 Statement of Compliance

Vendor shall guarantee the cables complies with this specification and is properly designed, constructed and suitable for the specified requirements.

The cables shall be tested in the Vendor's works to prove capability and compliance with this specification. All tolerances shall be in accordance with this specification, and relevant IEC standards.

If the cables fail to comply with the specification, COMPANY/CONTRACTOR reserves the rights to reject the cables, or allow the Vendor to rectify the problem and retest, free of charge to the COMPANY/CONTRACTOR.

The Vendor shall notify the CONTRACTOR of any apparent conflict between this Specification, Drawings, Datasheets, Codes and Standard, and any other relevant documents. Resolution and/ or interpretation precedence shall be obtained from CONTRACTOR in writing before proceeding with design/ manufacture.

All deviations from the requirements of the specification shall be clearly stated in the Bid Documentation using the 'Manufacturer/Supplier Deviation Form'. In the absence of such a statement, it shall be deemed that all requirements of this specification are fulfilled without exception.

All deviations from the requirements of the specifications shall be obtained approval from COMPANY/CONTRACTOR in writing before proceeding with design/ manufacture.

2.0 CODES, STANDARDS AND APPLICABLE DOCUMENTS

The Vendor shall comply with all applicable sections of the latest edition/ revision of drawings, specifications, datasheets, regulations and international codes as listed below.

CODES AND STANDARDS

IEC 60092 - 350	Shipboard power cables – General Construction and Test Requirements
IEC 60092 - 353	Single and multicore non-radial field power cables with extruded solid insulation for rated voltages 1 kV and 3 KV
IEC 60092 - 354	Single and three core power cables with extruded solid insulation for rated voltages 6kV(U_m = 7.2kV) up to 30 kV (U_m = 36kV)
IEC 60092 - 360	Insulation and Sheathing materials for shipboard power and telecommunication cables
IEC 60092 - 375	Shipboard telecommunication cables and radio-frequency cables – General instrumentation, control and communication vables
IEC 60092 - 376	Cables for control and instrumentation circuits 150/250 V (300 V)
IEC 60228	Conductors of insulated cables
IEC 60331	Fire-resisting characteristics of electric cables
IEC 60332	Tests on electric cables under fire conditions
IEC 60446	Identification of conductors by colours or numerals

IEC 60754	Test on gas evolved during combustion of materials from cables
IEC 61034	Measurement of smoke density of cables burning under defined conditions
IEC 61892	Mobile and fixed offshore units – Electrical installations
NEK 606	Cables for offshore installation halogen-free and/or mud resistant Technical Specification
ASTM D2863	Standard test method for measuring the minimum oxygen concentration to support candle-like combustion of plastics (Oxygen Index)
ASTM E662	Standard test method foe specific optical density of smoke generated by solid materials
UL 1581	Reference standard for electrical wires, cables and flexible cord – limited to clauses relating to physical properties after immersion in oil

Order of precedence in case of conflict between documents shall generally be:

- This Specification
- Reference Drawings
- Reference Project Standards and Specifications
- International Codes and Standards

The above order of precedence is only a general guide, where a conflict and/or discrepancy exist between this specification and the above documents, drawings, codes, and/or standards, it is the responsibility of the Vendor to bring it to the attention of the COMPANY/CONTRACTOR immediately for decision and disposition of the discrepancy or conflict.

In the event that the Vendor fails to highlight any discrepancies and/or conflicts, the most stringent requirements shall apply. COMPANY/CONTRACTOR's decision shall be binding on the Vendor without any additional cost and schedule impact.

3.0 SCOPE OF WORK AND SUPPLY

Vendor shall supply Electrical Power, Lighting, Control and Earthing Cables including all drawings and documents in accordance with this specification.

The Vendor shall, wherever possible, draw upon his existing, pre-engineered or standard designs to satisfy the requirements of the specifications.

The scope of work and supply shall in addition include but not limited to the following:

a) Provision of quality assurance scheme in accordance to the ISO 9001 or equivalent to ensure all work performed conforms to this Specification;

b) Relevant documentation and drawings;

c) Inspection and testing in accordance with this Specification;

d) Packing, preservation, preparation for shipment and delivery of equipment.

All cables shall be at least flame retardant, low smoke and halogen free. Cables used for system that remain operation in fire condition i.e fire & gas alarm system, emergency lighting, fire fighting, charging UPS, navigation light etc. and cable pass through high fire risk area shall be fire resistant type.

Cables that necessarily are located so they may come into contact with mud are to be constructed of materials resistant to oil based mud to comply with Nek 606.

Cable conductors of LV cables shall be made of Class 2, concentric stranded, continuous copper conductor made up from fully annealed stranded tinned round copper wires, free from slivers, splinters, scales or other imperfections in accordance to IEC 60228.

Non-hygroscopic fillers shall be used to maintain a circular formation (i.e. filled the cable cross section).

Cable armour for multi-core cables shall be tinned Copper Wire Braided (TCWB);

The cable inner and outer sheath shall be extruded over the insulation and armour.

The conductor shall have a temperature rating of 90°C for continuous operation, 130°C for emergency overload, and 250°C under short circuit conditions.

All cable outer sheaths shall be resistant to direct sunlight (ultra-violet) in accordance with UL 1581, colour fading, scuffing and rough handling.

Conductors shall be formed to minimise interior voids or if circular, the interior voids shall be homogeneous filled with non-hydroscopic fillers.

The minimum cross section for power and lighting/control cables shall be 2.5 mm^2 and 1.5 mm^2 respectively.

Cable voltage designation U_o/U (U_m) as per IEC 60502 is defined as:

U_o = is the rated power frequency voltage between conductor and earth or metallic screen, for which the cable is design;

U = is the rated power frequency voltage between conductors, for which the cable is design;

U_m = is the maximum value of the 'highest system voltage' for which the equipment may be used.

5.2 Cable Colour and Identification

The electrical cables outer sheath colour shall be as follows:

Low voltage cables	-	BLACK
High voltage cables	-	RED
Fire Resistant cables	-	ORANGE
Earthing cables	-	YELLOW/GREEN

The identification colour for power cables insulation shall be as follows:

Outer Sheath	-	see details above
Single Conductor	-	BLACK
Twin Conductors	-	BROWN (L) and BLUE (N)
Twin Conductors + PE stripe	-	BROWN (L1), BLUE (N) and GREEN with YELLOW
Three Conductors	-	BROWN (L1), BLACK (L2) and GREY (L3)

Three Conductors + PE	-	BROWN (L1), BLACK (L2), GREY (L3) and GREEN with YELOW stripe
Four Conductors	-	BROWN (L1), BLACK (L2), GREY (L3) and BLUE (N)
Four Conductors + PE	-	BROWN (L1), BLACK (L2), GREY (L3), BLUE (N) and GREEN with YELLOW stripe

5.3 High Voltage Cables – Cable Type H1

The high voltage H1 (U>1kV, for final voltage level refer to technical requirement for each project), Tinned Copper Wire Braided (TCWB) power cables for indoor/ outdoor hazardous and non-hazardous areas, shall be Cu/EPR/LSZH/TCWB/LSZH SHF or SHF Mud if required, LSZH rated 90°C for 50Hz service and constructed as follows:

(a)	Conductors	:	Circular, stranded/solid and tinned annealed copper as per IEC 60228, Class 2.
(b)	Conductor screen	:	Layer of semi-conducting material.
(c)	Insulation	:	EPR to IEC 60092-360.
(d)	Insulation screen	:	A semi-conducting compound layer and metallic screen (or tinned copper tape).
(e)	Core identification	:	By colour or coloured tape on the insulation screen.
(f)	Bedding	:	Flame retardant and halogen free thermoset compound.
(g)	Armour	:	Tinned Copper Wire Braided (TCWB).
(h)	Outer sheath	:	Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound accordance with NEK TS 606 (If required for mud resistance).
(i)	Requirement	:	IEC 60092-360, IEC 60092-354, IEC 60092-754, IEC 60228, IEC 60332-3 Cat. A, IEC 61034, NEK 606 (If required).

5.4 High Voltage VFD Cable - Type H2

The VFD high voltage H2 (U>1kV, for final voltage level refer to technical requirement for each project), halogen free and mud resistant (if required for mud resistant), Tinned Copper Wire Braided (TCWB) VFD power cables for indoor/ outdoor hazardous and non-hazardous areas, shall be EPR/TCWB/LSZH SHF or SHF Mud (if required), LSZH rated 90°C for 50Hz service and constructed as follows:

(a)	Conductors	:	Circular, stranded tinned annealed copper as per IEC 60228, Class 2. 3C - Phase 3E – Earth
(b)	Conductor screen	:	Layer of semi-conducting material compatible with insulation bonded to the insulation.
(c)	Insulation	:	EPR to IEC 60092-360.
(d)	Insulation screen	:	A semi-conducting compound (1 mm nominal radial thickness) + metallic screen layer(s).

(e)	Core identification	:	By colour or coloured tape on the insulation screen.
(f)	Bedding	:	Flame retardant and halogen free thermoset compound
(g)	Armour	:	Tinned Copper Wire Braided (TCWB).
(h)	Outer sheath	:	Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound accordance with NEK TS 606 (If required for mud resistance).
(i)	Requirement	:	IEC 60502, IEC 61892, IEC 60092-354, IEC 60228, IEC 60092-360, IEC 60332-1, IEC 60332-3-22 Cat. A, IEC 60754-1/2, IEC 61034-1/2, NEK 606 (If required).

5.5 Low Voltage Cables

5.5.1 Power Low Voltage Cable - Cable Type P1

The low voltage 600/1000V flame retardant, mud resistance (if required), Tinned Copper Wire Braided (TCWB) multi-core/single core power cables and control circuit cables for indoor/ outdoor hazardous and non-hazardous areas, shall be Cu/EPR/LSZH/TCWB/LSZH SHF or SHF Mud if required, rated 90°C for 50Hz service and constructed as follows:

(a)	Conductors	:	Circular shaped, tinned annealed stranded copper as per IEC 60228, Class 2.
(b)	Insulation	:	EPR to IEC 60092-360.
(c)	Core identification	:	By colour code.
(d)	Inner sheath	:	LSZH compound to IEC 60092-360.
(e)	Armour	:	Tinned Copper Wire Braided (TCWB).
(f)	Outer sheath	:	Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound accordance with NEK TS 606 (If required for mud resistance).
(h)	Requirement	:	IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606 (If required).

5.5.2 Power Low Voltage Cable for VFD application - Cable Type P2

The low voltage 600/1000V [1.8/3kV] flame retardant, halogen free and mud resistant, Tinned Copper Wire Braided (TCWB), VFD driven motor feeder cables for indoor/ outdoor hazardous and non-hazardous areas shall be EPR/TCWB/ LSZH SHF or SHF Mud if required, rated 90^{0}C for 50Hz service and constructed as follows:

(a)	Conductors	:	Circular shaped, Tinned annealed stranded copper as per IEC 60228, Class 2. 3C - Phase 3E – Earth

(b)	Insulation	:	EPR to IEC 60092-360.
(c)	Core identification	:	3C - Phase [1.8/3kV]: Brown, Black, Grey 3E – Earth [.6/1kV]: G/Y stripe
(d)	Common screen	:	Tinned copper wire braid & Cu/PS tape overlap combination 100% shield screen
(e)	Bedding	:	Halogen free SHF2 compound to IEC 60092-360.
(f)	Armour	:	Tinned Copper Wire Braided (TCWB).
(g)	Outer sheath	:	Extruded layer of flame retardant to IEC 60332-3 Cat. A (reduced propagation), LSZH SHF mud outer sheath compound accordance with NEK TS 606 (If required for mud resistance).
(h)	Requirement	:	IEC 60092-350, IEC 61892, IEC 60092-353, IEC 60228, IEC 60092-360, IEC 60332-1, IEC 60332-3-22 Cat. A, IEC 60754-1/2, IEC 61034-1/2. NEK 606 (If required).

5.5.3 Power Low Voltage Cable - Cable Type P3

The low voltage 600/1000V fire resistant and flame retardant, mud resistance (if required), Tinned Copper Wire Braided (TCWB), Low Smoke Zero Halogen (LSZH) power cables and control cables for indoor/ outdoor hazardous and non-hazardous areas for critical services, shall be Cu/MGT/EPR/LSZH/TCWB/LSZH SHF or SHF Mud (if required), rated 90°C for 50Hz service and constructed as follows:

(a)	Conductors	:	Circular shaped, tinned annealed stranded copper as per IEC 60228, Class 2.
(b)	Fire resistant layer	:	Fire resistant layer to IEC 60331 shall be mica glass tapes applied over the conductor. Cable must be able to withstand 750°C for 3 hours.
(c)	Insulation	:	EPR to IEC 60092-360.
(d)	Core identification	:	By colour code.
(e)	Inner sheath	:	LSZH compound to IEC 60092-360.
(f)	Armour	:	Tinned Copper Wire Braided (TCWB).
(g)	Outer sheath	:	Extruded layer of flame retardant compound outer sheath to IEC 60332-3 Cat A (reduced propagation). LSZH SHF mud outer sheath compound accordance with NEK TS 606 (if required).
(h)	Requirement	:	IEC 60092-350, IEC 60092-360, IEC 60092-353, IEC 60228, IEC 60331, IEC 60332-3 Cat. A, IEC 60754, IEC 61034, NEK 606 (If required).

5.5.4 Earthing Cable – Cable Type E1

600/1000V voltage grade, high conductivity tinned annealed stranded copper conductor, LSZH SHF2 insulated, green colour with yellow stripe in accordance with IEC equivalent for living quarters and general services.

(a)	Conductors	:	Circular shaped, tinned annealed stranded copper as per IEC 60228, Class 2.
(b)	Insulation	:	LSZH SHF2 to IEC 60092-360.
(c)	Core identification	:	By colour code.
(d)	Requirement	:	IEC 60092-360, IEC 60228, IEC 60332-3 Cat. A, IEC 60754, IEC 61034.

5.6 Cable Reels and Identification

The following information shall be indelibly printed in English (all dimensions in metric), on the surface of the cable jacket at one meter interval over the entire length of the cable for each of identification.

- Vendor's Name
- Cable Type
- Conductor Size/Sizes
- Number of Conductors
- Voltage Rating
- Size of Grounding Conductor (if applicable)
- Ultra Violet Resistant
- Compliance to all IEC standards e.g. IEC 60332, IEC 60331 (where applicable).

The cable shall be placed on individual reels. Reels shall be of substantial construction to withstand multiple handling in transit. The reels shall be non-returnable.

Each cable reel shall have a permanently attached, weatherproof UV resistant (stainless steel or plastic) tag attached to the flange indicating the following information:

- Purchase Order Number
- Drum Number
- Vendor's Name
- Cable Type
- Date of Manufacture
- Conductor Size/Sizes
- Number of Conductors
- Voltage Rating
- Insulation Type
- Temperature Rating
- Total Cable Length
- Gross Weight
- Cable Net Weight
- Tag Number/ Drum Number

Actual lengths of cable on a reel should be about 5% more than specified, on the Purchase Order. No negative tolerances shall be allowed.

All cables shall be wound on drum in continuous length. Spliced cables are not acceptable. The cable drum radius should not be less than 125% of the minimum bending radius of the cables.

5.7 Information Required from Vendor

Vendor shall submit with his bid the information listed below for every cable size included and specified in the Specification.

a) The standards applicable to the cables offered.

b) Oxygen index and acidic emission factor of inner and outer sheath.

c) Standard drum length, size and weight.

d) Maximum cable length per drum, size and weight.

e) Dimensions.

- Number and size of conductors making up then cross-sectional area of each core
- Nominal section area (mm^2)
- Composition or shape (no./mm)
- Outer diameter
- Insulation thickness
- Diameter under and over amour
- Diameter of armour wire
- Outer sheath thickness
- Overall diameter with maximum and minimum tolerance

f) Weight per meter.

g) Current capacity.

h) De-rating factor for:

- Ambient temperature
- Spacing and group
- Connection in trefoil
- Connection in parallel
- Etc.

i) Reactance per meter at 50Hz.

j) Capacitance per meter at 50Hz.

k) Short circuit withstand capacity with respect to time.

l) Maximum allowable pulling tension for each size and type of cables.

m) Minimum allowable bending radius for each size and type of cables.

n) Test certificates.

6.0 INSPECTION, TESTING AND CERTIFICATION REQUIREMENTS

6.1 General

COMPANY or its representative shall have free access to the plants of Vendor and his Sub-Vendor's during fabrication, assembly, and testing of the equipment. Inspection visit shall be coordinated thru Vendor's Project Manager.

Prior to shipment, the Vendor shall carry out the required Factory Acceptance Tests (FAT) in the presence of COMPANY/CONTRACTOR engineers or their appointed representatives. The COMPANY/CONTRACTOR will specify to the Vendor the extent of his participation in the inspection and testing. Detailed requirements, procedures and documentation are listed in Appendix 1 – Source & Factory Inspection.

COMPANY/CONTRACTOR may require additional testing if test results are unsatisfactory or marginal at no additional cost to the COMPANY/CONTRACTOR. Any rejected cables shall be replaced to COMPANY/CONTRACTOR's satisfaction and test shall be repeated at Vendor's cost.

COMPANY/CONTRACTOR shall be given the opportunity to inspect Vendor's manufacturing facilities including Sub-Vendor's facilities to confirm that satisfactory quality assurance (Q.A) and production procedures are being implemented. Vendor shall make available all relevant Q.A. procedures for review.

All rights of COMPANY/CONTRACTOR in respect of Inspection and Testing shall also, upon COMPANY/CONTRACTOR's request, be extended to any and all third parties authorised by COMPANY.

Vendor shall furnish, immediately on award of order, the names of:

a) The Works Manager and his assistants to whom contact should be made for inspection of the equipment.

b) The Office Engineer and his assistants to whom contact should be made for technical queries, and manufacturing and expediting progress.

During manufacturing of the cables, Vendor shall establish and maintain an inspection and quality control program to ensure adherence to the applicable codes and this specification.

Any unsatisfactory material, cables, or workmanship shall be replaced to COMPANY/CONTRACTOR's satisfaction at Vendor's cost.

All pre-requisites for test such as temporary interconnections, test instruments, etc. as well as the actual conduct and documentation of tests shall be the responsibility of Vendor.

The Vendor shall inform COMPANY/CONTRACTOR as part of the Bid, if any of the specified tests cannot be performed. In the absence of such a statement, it shall be understood that all requirements of this specification are fulfilled without exception.

6.2 Inspection and Testing

The cables shall be tested in accordance to the codes & standards listed in Section 2.0. The tests shall include but not limited to the following:

Type Tests

a) The Vendor shall supply copies of certificates indicating the results of the type tests. These type tests must have been performed at the Vendor's plant or by a recognized testing authority to IEC requirements.

Routine Test

These tests shall be performed on each reel of wire or cable before shipping. Routine tests shall be conducted based on IEC requirements. Both ends of each wire or cable shall be accessible after it is wound on its reel to allow final testing on the reel. These tests shall include, but not limited to the following:

a) High potential test, minimum voltage shall be in accordance to the relevant IEC standards.

b) Conductor resistance tests.

c) Conductor, armour, screen/drain wire continuity tests.

d) All low voltage power, control and instrument wire and cables shall have megger testing carried out using a 500V DC megger unit. Cables shall be meggered conductor to conductor, conductor to armour, and conductor to shield (for shielded cables). The insulation value shall be a minimum of 100 Mega-ohms per 1000 meters.

Any unsatisfactory or rejected cables shall be replaced to COMPANY/CONTRACTOR's satisfaction at Vendor's cost.

After testing, the ends of the cables or wires shall be sealed to prevent the ingress of moisture.

Certificates of Test shall be provided for the cables to prove that it has been satisfactorily tested to meet all requirements of its appropriate manufacturing standards, whether or not witnessed by the COMPANY/CONTRACTOR. Where appropriate, test certificates shall state values for all test results.

Vendor shall be responsible to carry out all inspection and tests as required at the Vendor's Works.

The overall responsibility for cables inspection rests with the Vendor. However, COMPANY/CONTRACTOR and COMPANY/CONTRACTOR's inspection representative, reserve the right to inspect the cables at any time during manufacture to ensure that materials and workmanship are in accordance with the requirements of this specification, the applicable codes and other associated standards. Inspection by COMPANY/CONTRACTOR or its representatives will in no way relieve the Vendor of any of his responsibilities for ensuring that the cables meets all the requirements of this specification.

7.0 PREPARATION FOR SHIPMENT

The Vendor shall be responsible for preparation of the cables for export shipment and completion of all required preservation for storage in tropical climates for a maximum period of 12 months.

Splicing of any individual conductor in the cable is not acceptable. All cable ends must be sealed against the ingress of moisture, dirt and inserts, and cables rated over 1000V must have Nitrogen pressurised watertight seals applied to the ends of the cable to prevent entrance of moisture during shipment or outdoor storage at the job site.

The end projecting from the drum shall be adequately protected against mechanical damage during transportation, intermediate storage and site handling.

All reels shall have lagging to prevent damage to the finished cable. Wood lagging shall be minimum of 50mm thick. Cable reels with diameter larger than 1.5m shall not be made from timber, they shall be made from carbon steel.

Cables shall be wound on shipping reels with both ends readily accessible for inspection or testing.

A careful inspection shall be made to ensure that all operating instructions and label plates are in place, legible and have not been obscured. Each item shall be clearly identified with the Vendor's name, address, Purchase Order and tag number.

The shipping crates shall be constructed of wood and suitably packed to protect all items against damage during the shipment and storage. Miscellaneous shall be tagged or marked with the tag item number for which they are intended. All such parts shall be suitably boxed, firmly attached to the main item and shipped with the unit.

Protection shall be provided against atmospheric corrosion while in transit and while in outdoor storage. All exposed machined surfaces shall be protected with an easily removable rust preventative compound.

The contents of all boxes or packages shall be recorded in detail on the packing list. The transported package shall have the necessary fastenings, protections and lifting facilities to satisfy lifting and sea fastening loads and restraints. Two complete set of the installation, operating and maintenance instructions shall be packed and shipped with the unit.

8.0 GUARANTEE

The Vendor shall guarantee all cables furnished to be in compliance with this specification.

The Vendor shall guarantee all cables against defective material, design, damage or non-conformity and/ or workmanship.

9.0 QUALITY ASSURANCE

The Vendor and his Sub-Vendors shall operate a quality system satisfying the latest ISO 9001 Quality Standards, or agreed equivalent standard, commensurate with the goods and services provided.

The Vendor shall demonstrate evidence of Quality Assurance in all aspects of the Vendor's current design and manufacturing practises. Quality Control procedures covering all aspects of design, manufacturing, inspection and test relevant to the equipment shall be included.

10.0 CERTIFICATE AND DOCUMENTATION

The Vendor documentation requirements together with the required quantities are given on the SDRL forms. As a minimum, Vendor is responsible to provide documentations as defined in this specification. Vendor is responsible for all documentation in strict accordance with the requirements of the specifications suitable for marine/offshore application.

CONTRACTOR/COMPANY reserves the right to request additional drawings and documents or copies of drawings and documents to verify Purchase Order compliance without cost variation.

Vendor shall identify the planned and actual submissions to CONTRACTOR/ COMPANY on their master drawing and document schedules i.e. computerised Supplier Master Document List (SMDL). The responsibility of updating the SMDL shall rest with Vendor.

The Vendor shall furnish soft copies of drawings/documents that are of suitable first generation quality. Drawings that are, in COMPANY/CONTRACTOR's opinion, not of suitable quality will be returned to the Vendor for resubmission.

Approval of drawings/documents by the CONTRACTOR/COMPANY shall in no way relieve the Vendor responsibility for the correctness of information, their conformance with stated requirements or acceptability of equipment and materials. This responsibility rests solely with the Vendor.

The Vendor shall allow the CONTRACTOR/COMPANY five (5) working days to review and respond to the Vendor's submission of documentation. The fifteen working days is defined as from time of receipt by the CONTRACTOR/COMPANY to the time of despatch. Vendor shall allow this review period in his production schedule. However work shall proceed without delay in the event of late return of the documentation by the CONTRACTOR/COMPANY.

A review status will be assigned by the CONTRACTOR/COMPANY to documents submitted by the Vendor for review or approval. The following review status codes will be used:

- Code 1: Approved
- Code 1*: Approved with comments as noted
- Code 2: Opened comment. Document shall be resubmitted before proceeding
- Code 3: Document is rejected, to be resubmitted before proceeding
- Code 4: For information only

Within 10 working days of receipt of a marked-up document, the Vendor shall issue a revised document incorporating all comments and other specified details not included in the first issue. The CONTRACTOR/COMPANY will review documents and return with any further comments. If documents are revised, all sheets under cover of one project document number shall have a new revision number and be resubmitted. The document must be complete even if the revision is minor. All such resubmissions (irrespective of the number of times) are part of the Vendor's Lump Sum Price.

All documents furnished by the Vendor shall have a revision code following the document number. For specifications, technical reports and other written material, the following shall apply: Changes in one official issue from the last shall be clearly indicated by a vertical line in the right hand margin adjacent to the current change and in addition the revision number code is to be indicated within a triangle. All changes from the last previous issue shall be thus indicated. Changes to drawings are to be shown in a similar fashion by "clouding in" the change and placing the revision code in a triangle inside the "cloud".

Within 2 weeks after delivery of Equipment/Materials, 1 copy of Final Factory As Built Documentation (draft set) shall be transmitted to CONTRACTOR/COMPANY for review. The

required number of sets of Final Documentation shall be submitted after the draft set is accepted. Replacements of any Final Factory As Built documentation with onshore or offshore as builts as a result of changes is part of Vendor's Lump Sum Price.

Vendor shall submit as a minimum the following information:

- Type test certificates (copies) issue by a recognized testing agency shall be supplied for the Cables.
- Type approval certificates (copies) issued by recognized certifying agencies (DNV, ABS, Lloyd, UL, GL,...) for cables.
- Vendor's final technical offer, technical clarifications and brochures
- Purchase Order
- Cable datasheets
- Cable cross section drawings
- Inspection and Test Plan
- Factory Acceptance Test Procedures
- Factory Acceptance Test Report
- Operation, maintenance and commissioning manual (if applicable)
- Vendor Data Book (Binding containing all drawings, documents and certificates)

Vendor shall at all times, maintain at the Vendor works/site office and update to current status a master set of red lined as-built drawings as work progresses. This set of master red lined drawings shall not be removed from the Vendor's works/site office. COMPANY/CONTRACTOR reserves the rights to inspect and review this set of master red lined as-built drawings. If Vendor needs a set of drawings for field installation, a separate set with "Field Use Only" stamped on every page of the drawings shall be used.

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT NAME : **BK-10A WELLHEAD PLATFORM**

DOCUMENT TITLE : **SPECIFICATION FOR ELECTRICAL BULK MATERIALS**

DOCUMENT NO. : **BK1.BK10.BK10A-001-GE-ES2-SP-009**

PHASE : **DE**

Applied Document	VSP-NIPI-TYP-TS-ES2-SP-11	Rev.	0

			CONTROLLED Signed by: Lê Thị Hằng Date: 16/06/2025 14:56:41 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 17.06.2025 07:11:47 Certified by: Vietsovpetro CA	Signed by: Авдеев Андрей Сергеевич Date: 17.06.2025 12:27:05 Certified by: Vietsovpetro CA
			DC: L.T.HANG	**ENG. MGR: GAYNUTDINOV**	**PRO.MGR: AVDEEV**
0	IFA		Signed by: Святохо Вячеслав Вениаминович Date: 16.06.2025 11:04:09 Certified by: Vietsovpetro CA		Signed by: Исатов Дмитрий Олегович Date: 16.06.2025 11:09:51 Certified by: Vietsovpetro CA
REV.	**DES.**	**DATE**	**PREPARED: SVYATOKHO**	**CHECKED: SVYATOKHO**	**DEPT.MGR: ISATOV**

TRACK CHANGES

No	Rev.	Content of Change	Note
1	0	Issued for approve	

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1. INTRODUCTION

BK-10A Wellhead Platform belongs to Vietsovpetro JV. It will be located in Block 09-1, White Tiger oil field, offshore the Socialist Republic of Vietnam.

BK-10A is connected with BK-10 by a linking bridge. BK-10A is an unmanned platform with 12 slots (03 spare slots) and will be remotely controlled from the host platform BK-10 via fiber optic cable.

There will be 09 production wells on BK-10A (02 wells will be converted into water injection wells in future as planned) and 03 wells can be added in the future.

Based on the criterion of the need for production and maximizing the return on investment, BK-10A will be considered to have the minimum facilities. The full well stream of BK-10A will be gathered together with the produced fluid of BK-10 and BK-1, preliminarily separated on BK-10 and then transferred to CPP-2.
The scope of this project is detailed engineering design for the BK-10A Wellhead Platform, Linking Bridge and modification of BK-10.

Location of BK-10A and related platforms as below.

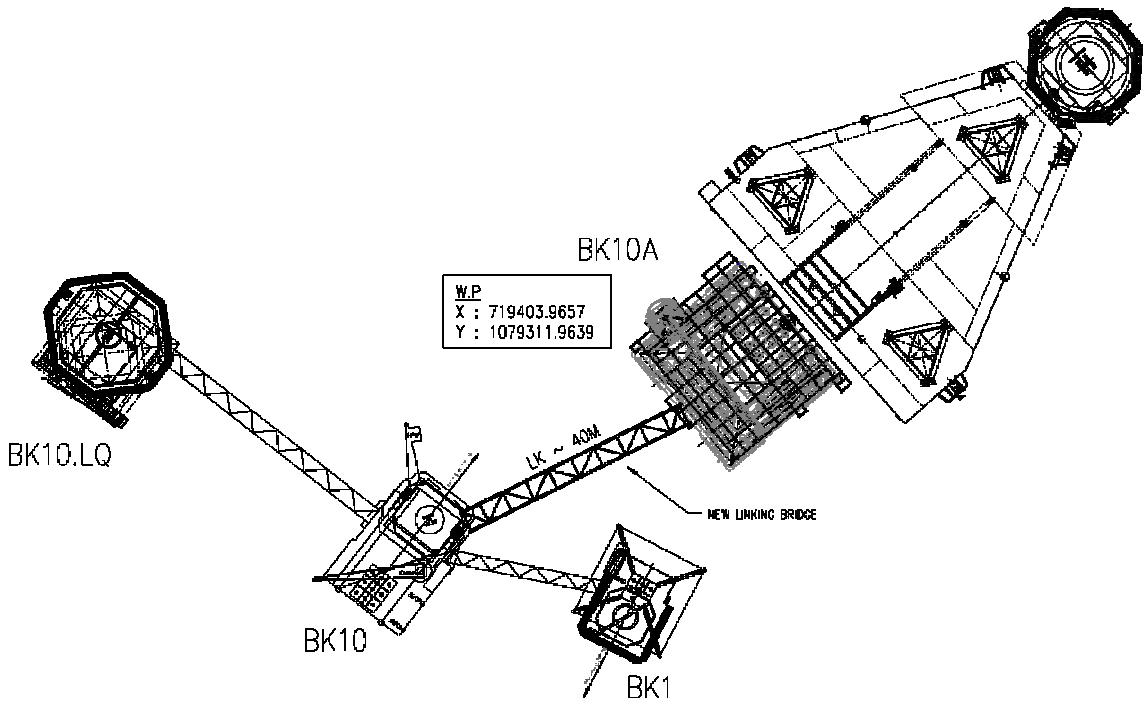

Figure 1: Location of the BK-10A Wellhead Platform and related platforms

2. ADDENDUM

This document uses the Typical Engineering Documentation for this Project. However, some design intends or requirements may require to be revised to fit with Project's purpose. This section lists changes in the applied typical documents, originating in Typical Engineering Documentation for any reason including those indicated in Table 1. These changes are identified in this Addendum to the applied typical document, identifying the document and section affected and the required change.

VENDOR shall review the required changes in conjunction with the referenced document and project's engineering documents.

The type of modification shall be defined and indicated in subsequent text as follows:

- ✓ "ADD" - Indicates the following statement(s) is/are added to the Company referenced text.
- ✓ "DELETE" - Indicates the following statement(s) is/are deleted from the Company referenced text.
- ✓ "REPLACE WITH" - Indicates the following statement(s) is/are revision(s) to the Company referenced text.

Table – 1: List of changes

Section	Current Statement or Requirement	Revised to
Page 9/16 Sec. 4.3.1	"Shall be suitable for Zone 1"	REPLACE WITH: "Shall be suitable for Zone 1 or Zone 2 (where applicable)"
Page 9/16 Sec. 4.3.3	"In order to maintain the fire-rating of the ceiling, indoor, ceiling-mounted and recessed-type, fluorescent luminaires shall be certified for SOLAS B-15 fire rating"	DELETE
Page 10/16 Sec. 4.3.4	"In order to maintain the fire-rating of the ceiling, indoor, ceiling-mounted and recessed-type, fluorescent luminaires shall be certified for SOLAS B-15 fire rating."	DELETE
Page 11/16 Sec. 4.3.5 and 4.3.6	"Shall be suitable for Zone 1"	REPLACE WITH: "Shall be suitable for Zone 1 or Zone 2 (where applicable)"
Page 13/16 Sec.4.8	"An Ex-certified breather/drain device shall be installed in each outdoor enclosure that is higher than 8 litres in volume"	DELETE
Page 13/16	"shall be made of 316L stainless	REPLACE WITH:

Sec. 4.9	steel”	“shall be made of 316 stainless steel”

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AGREED BY
Deputy General Director of
Vietsovpetro

Tran Xuan Hoang

30 / 03 /2020

APPROVED BY
Chief Engineer of Vietsovpetro

Tran Van Vinh

/ /2020

TYPICAL ENGINEERING DOCUMENTATION

DOCUMENT TITLE : **SPECIFICATION FOR ELECTRICAL BULK MATERIALS**

DOCUMENT No. : **VSP-NIPI-TYP-TS-ES2-SP-11**

AGREED:	Name	Date
Capital Construction Department		27/3/20
Material and Equipment Department		25/3/20
Mechanical and Energy Division		19/03/2020

CONTROLLED

REV.	DESCRIPTION	DATE	PREPARED	CHECKED	CHIEF DEPART.	ENG. MANAGER	PRO. MANAGER
0	IFA	03/03/2020	P.X.VUONG	T.N.BINH	T.H.TOAI	T.D.HAI	B.T.HAN

Change Log

REV	SECTION	PAGE	CHANGE DESCRIPTION

Reference Documents

TABLE OF CONTENTS

1.0 PURPOSE

This specification defines the minimum requirements for the supply, design, materials, manufacture, inspection and testing, preparation for shipment and documentation for the electrical bulk materials for VSP's project.

1.1 Definition of Terms

Within this document the following definitions shall apply:

COMPANY	Vietsovpetro Joint Venture
CONTRACTOR	The company or consortium, which is awarded the main EPC Contract for the project
VENDOR	The party that manufactures or supplies equipment and services to perform the duties specified by the CONTRACTOR
SHALL	Indicates a mandatory requirement
SHOULD	Indicates a recommendation

1.2 Abbreviations

The abbreviations (and their definitions) listed below may be used in this document:

DIN	Deutsches Institut für Normung (German Institute for Standardization)
EOL	End Of Life (of lighting controlgear)
Ex'd'	Explosion Protection Technique – Flameproof Enclosure
Ex'e'	Explosion Protection Technique – Increased Safety
Ex 'ed'	Explosion Protection Technique - Increased safety enclosure with Ex'd' internal components
Ex 'm'	Explosion Protection Technique – Encapsulation 'm'
Ex'n'	Explosion Protection Technique – Non-sparking
FAT	Factory Acceptance Test
GRP	Glass Reinforced Polyester
IEC	International Electrotechnical Commission
IP	Ingress Protection
LCS	Local Control Station
LED	Light Emitting Diode
MCT	Multi Cable Transit
N	Neutral

P	Phase
PE	Protective Earth
PVC	PolyVinyl Chloride
SON	High Pressure Sodium Vapour
SWL	Safe Working Load
VSP	Vietsovpetro

1.3 Statement of Compliance

VENDOR shall guarantee the equipment complies with this specification and is properly designed, constructed and suitable for the specified requirements.

The equipment shall be tested in the VENDOR's works to prove capability and compliance with this specification. All tolerances shall be in accordance with this specification, and relevant IEC standards.

If the equipment fails to comply with the specification, COMPANY/CONTRACTOR reserves the rights to reject the equipment, or allow the VENDOR to rectify the problem and retest, free of charge to the COMPANY/CONTRACTOR.

The VENDOR shall notify the CONTRACTOR of any apparent conflict between this Specification, Drawings, Datasheets, Codes and Standard, and any other relevant documents. Resolution and/or interpretation precedence shall be obtained from CONTRACTOR in writing before proceeding with design/ manufacture.

All deviations from the requirements of the specification shall be clearly stated in the Bid Documentation using the "VENDOR Deviation Form'. In the absence of such a statement, it shall be deemed that all requirements of this specification are fulfilled without exception.

All deviations from the requirements of the specifications shall be obtained approval from COMPANY/CONTRACTOR in writing before proceeding with design/ manufacture.

2.0 CODES, STANDARDS AND APPLICABLE DOCUMENTS

The electrical system design shall generally comply with the latest revision and relevant sections of the following regulations, standards and codes of practices.

The applicable international codes and standards are as follows:

IEC International Electrotechnical Commission

ISO International Organization for Standardisation

API American Petroleum Institution

DNV GL Det Norske Veritas AS

Note: Unless specifically designated by date, the latest edition of each publication shall be used, together with amendments, supplements or revision thereto.

2.1 IEC Standards

IEC 60038	IEC Standard Voltages
IEC 60079-1	Explosive Atmosphere – Part 1: Equipment Protection by Flameproof Enclosures 'd'
IEC 60079-7	Explosive Atmosphere – Part 7: Equipment Protection by Increased Safety 'e'
IEC 60079-14	Explosive Atmospheres – Part 14: Electrical Installation Design, Selection and Erection
IEC 60079-15	Explosive Atmosphere – Part 15: Equipment Protection by Type of Protection 'n'
IEC 60079-18	Explosive Atmosphere – Part 18: Equipment Protection by Encapsulation 'm'
IEC 60092-306	Electrical Installation in Ships – Part 306: Equipment – Luminaires and Lighting Accessories
IEC 60309	Plugs, Socket Outlets and Couplers for Industrial Purposes
IEC 60529	Degrees of Protection Provided by Enclosures (IP Code)
IEC 60598	Luminaires
IEC 60669	Switches for Household and Similar Fixed-electrical Installations
IEC 60928	Auxiliaries for Lamps – A.C. Supplied Electronic Ballast for Tubular Fluorescent Lamps – General and Safety Requirements
IEC 60947-5-5	Low Voltage Switchgear and Controlgear – Part 5-5: Control Circuit Devices and Switching Elements – Electrical Emergency Stop Device with Mechanical Latching Function
IEC 60947-7-1	Low Voltage Switchgear and Controlgear – Part 7-1: Ancillary Equipment – Terminal Blocks for Copper Conductors
IEC 60947-7-2	Low Voltage Switchgear and Controlgear – Part 7-2: Ancillary Equipment – Protective Conductor Terminal Blocks for Copper Conductors
IEC 61537	Cable Management – Cable Tray Systems and Cable Ladder Systems
IEC 61892	Mobile and Fixed Offshore Units – Electrical Installations

2.2 Other Standards

ISO 3864	Graphical Symbols Safety Colors and Sfety Signs
API 505	Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as

- Maximum : 100 %
- Minimum : 20 %
- Average : 80 %

Indoor

- Indoor Ambient Temperature: 24°C ± 2°C (Switchgear & MCC Room with air conditioning)

4.0 TECHNICAL REQUIREMENTS

4.1 General

The equipment shall be suitable for operating satisfactorily in the environment conditions and power supply specified in this specification. All equipment shall be protected for operation in tropical climate i.e. they shall be moisture and fungus proof.

Where the equipment is to be installed in a hazardous area, the VENDOR shall ensure that all electrical equipment and installations forming part of the system meet the requirements of IEC 60079.

All hardware such as fasteners, screws, bolts, nuts, washers, hinges, handles and etc shall be made of 316 stainless steel.

4.2 Electrical Equipment in Hazardous Area

Proof of compliance of electrical equipment selected for use in hazardous areas, with the applicable protection technique standards detailed in section 5 of IEC 60079-14 shall be provided by means of certificate of conformity:

- Carrying IEC Ex certification in accordance with the IEC Ex scheme rule and certified to the IEC Standards recognised by such scheme,
- The use of other types of certification (e.g. ATEX) must have written approval from the COMPANY. In order for other types of certification to be accepted by the COMPANY, the VENDOR may be required to provide a Conformity Assessment Document from a Third Party.

Certifications shall indicate the suitability of the equipment for use in that Zone at maximum site ambient temperature.

Classified area certificates shall be submitted by VENDOR to the COMPANY for review and acceptance at enquiry stage. The certificates are to be arranged and compiled in a dossier by the CONTRACTOR including a Table of Contents for ease of reference.

Unless specified otherwise, electrical equipment installed outdoors shall generally be suitable for installation in a Zone 2, Gas Group IIA and Temperature Class T3 area.

4.3 Lighting

All lighting luminaires, unless otherwise specified in Technical Requirement or Purchase Requisition, shall be rated for 220VAC, 1-phase & neutral, 50Hz operation.

4.3.1 Floodlight

Hazardous classified outdoor floodlight luminaires shall be 150W, 250W or 400W high pressure sodium vapour (SON) and/or metal halide lamps with wide beam asymmetric reflectors. Luminaire shall be complete with twin arc tube lamp, internal control gear, and suitable mounting bracket/ stirrup. Lamp compartment shall have a removable metal cover or lens cover that allows easy lamp replacement. It shall be possible to attach protective wire guard and anti-glare shield, if required to the floodlight housing.

Cable entries shall be ISO Metric threaded holes and fitted with Ex-rated nickel-plated brass stopping plugs. Floodlight shall be suitable for Zone 1, minimum IP56, Gas Group IIA, Temperature Class T3 hazardous area applications. The floodlight luminaire shall comply with IEC 60598 and IEC 60079. Luminaire enclosure material shall be SS316/ Marine grade Aluminum or LM6 aluminum alloy.

If required in Purchase Requisition, LED luminaire shall be provided. LED shall be High Energy Efficient type. Electronic Driver shall be used for control gear. Cable entries shall be ISO Metric threaded holes and fitted with Ex-rated nickel-plated brass stopping plugs. Floodlight shall be suitable for Zone 1, minimum IP56, Gas Group IIA, Temperature Class T3 hazardous area applications. The floodlight luminaire shall comply with IEC 60598 and IEC 60079. Luminaire enclosure material shall be SS316/ Marine grade Aluminum or LM6 aluminum alloy.

4.3.2 Well-glass

Hazardous classified outdoor well-glass luminaires shall be from 70W to 250W high pressure sodium vapour (SON) and/or metal halide lamps with toughened boro-silicate glass dome globe. Luminaire shall be complete with twin arc tube lamp, internal control gear, guard and suitable mounting bracket / stirrup. It shall be possible to attach protective wire guard and external reflector, if required to the well-glass luminaire housing

Cable entries shall be ISO Metric threaded holes and fitted with Ex-rated nickel-plated brass stopping plugs. Well glass luminaires shall be suitable for Zone 1, minimum IP56, Gas Group IIA, Temperature Class T3 hazardous area applications. The well-glass luminaire shall comply with IEC 60598 and IEC 60079. Luminaire enclosure material shall be SS316/ Marine grade Aluminum or LM6 aluminium alloy.
If required in Purchase Requisition, LED luminaire shall be provided. LED shall be High Energy Efficient type. Electronic Driver shall be used for control gear. Cable entries shall be ISO Metric threaded holes and fitted with Ex-rated nickel-plated brass stopping plugs. Well glass luminaires shall be suitable for Zone 1, minimum IP56, Gas Group IIA, Temperature Class T3 hazardous area applications. The well-glass luminaire shall comply with IEC 60598 and IEC 60079. Luminaire enclosure material shall be SS316/ Marine grade Aluminum or LM6 aluminium alloy.

4.3.3 Fluorescent Luminaire

Indoor, ceiling-mounted, recessed-type, fluorescent luminaries shall be 2 x 36W type, IP21 (with HVAC system) and IP44 (without HVAC system) as a minimum. Luminaire shall comply to IEC 60598 and shall be complete with lamps, high frequency electronic ballast, mirror reflector, low glare louvers and mounting accessories. Lamps shall be T8, 26mm diameter, bi-pin, 36W, cool daylight, 3200 lumens high output, with colour rendering index >85%. Electronic ballast shall be equipped with End-Of-Life (EOL) shut-off feature. Power factor shall be >0.95. Power factor correction capacitor shall not be used. Enclosure shall be made of powder-coated sheet steel or GRP. Knock-outs for cable entries shall be provided on the enclosure. Luminare shall fit the standard (600mm x 600mm) and (1200mm x 600mm) suspended ceiling grid. Terminal blocks shall be suitable for directly terminating 2.5mm² to 4.0mm² wires sizes with 690VAC rating.

In order to maintain the fire-rating of the ceiling, indoor, ceiling-mounted and recessed-type, fluorescent luminaires shall be certified for SOLAS B-15 fire rating.

Hazardous classified fluorescent luminaires shall be 2 x 36W type, minimum IP56, They shall be suitable for Zone 1 or Zone 2 (where applicable), Gas Group IIA, Temperature Class T3 hazardous area applications. Luminaire shall be complete with lamps, high

frequency electronic ballast, reflector, polycarbonate diffuser and mounting accessories. Lamps shall be T8, 26mm diameter, bi-pin, 36W, cool daylight, 3200 lumens high output, with colour rendering index >85%. The luminaire shall comply with IEC 60598 and IEC 60079.

Electronic ballast shall comply with IEC 60928 and IEC 60929, and equipped with End-Of-Life (EOL) shut-off feature. Power factor shall be >0.95. Power factor correction capacitor shall not be used. Enclosure shall be made of SS316/ Marine grade Aluminum or LM6 aluminium alloy for outdoor fluorescent luminaires. . Luminaire shall be equipped with limit switch to cut-off power when diffuser is opened, e.g. for replacing lamp. Single-ended wiring shall be provided with screw connection type terminal blocks suitable for directly terminating 2.5mm² to 4.0mm² wires sizes with 690VAC rating. Cable entries shall be made suitable for installation of metal glands. Luminaires shall be delivered with all cable entries plugged with Ex-rated nickel-plated brass blanking plugs. Security key / special tool shall be included in the scope of supply if such key / tool is required for opening the diffuser.

All escape route fluorescent luminaires shall have the same requirements as the classified fluorescent luminaires and shall be equipped with battery power pack for a minimum 90 minutes backup duration. When operating on battery supply, only one lamp shall be in operation. The battery pack shall be replaceable externally without having to dismantle the luminaire. The battery pack shall have built-in battery monitoring function to show if the battery is faulty.

Proprietary type mounting brackets shall be provided to allow the luminaires to be mounted in different configurations and positions, e.g. ceiling mounting bracket for flat mounting to wall or ceiling, pipe clamp for pole mounting, eye bolt for suspended mounting, etc.

4.3.4 LED Luminaire

LED shall be High Energy Efficient type. Electronic Driver shall be used for control gear. Lifetime 100,000 hours is minimum.

Indoor, ceiling-mounted, recessed-type, luminaries shall be IP21 (with HVAC system) and IP44 (without HVAC system) as a minimum. Luminaire shall comply to IEC 60598 and shall be complete with lamps, electronic driver, mirror reflector, low glare louvers and mounting accessories. Lamps shall be T8, bi-pin, cool daylight, 4500 lumens high output, with colour rendering index >85%. Enclosure shall be made of powder-coated sheet steel or GRP. Knock-outs for cable entries shall be provided on the enclosure. Luminare shall fit the standard (600mm x 600mm) and (1200mm x 600mm) suspended ceiling grid. Terminal blocks shall be suitable for directly terminating 2.5mm² to 4.0mm² wires sizes with 690VAC rating.

In order to maintain the fire-rating of the ceiling, indoor, ceiling-mounted and recessed-type, fluorescent luminaires shall be certified for SOLAS B-15 fire rating.

Hazardous classified luminaires shall be minimum IP56, They shall be suitable for Zone 1 or Zone 2 (where applicable), Gas Group IIA, Temperature Class T3 hazardous area applications. Luminaire shall be complete with lamps, electronic driver, reflector, polycarbonate diffuser and mounting accessories. Lamps shall be T8, bi-pin, 4500 lumen, cool daylight, with colour rendering index >85%. The luminaire shall comply with IEC 60598 and IEC 60079. Enclosure shall be made of SS316/ Marine grade Aluminum or LM6 aluminum alloy for outdoor fluorescent luminaires. . Luminaire shall be equipped with limit switch to cut-off power when diffuser is opened, e.g. for replacing lamp. Single-ended wiring shall be provided with screw connection type terminal blocks suitable for directly terminating 2.5mm² to 4.0mm² wires sizes with 690VAC rating. Cable entries shall be made suitable for installation of metal glands. Luminaires shall be delivered with all cable entries

plugged with Ex-rated nickel-plated brass blanking plugs. Security key / special tool shall be included in the scope of supply if such key / tool is required for opening the diffuser.

All escape route luminaires shall have the same requirements as the classified luminaires and shall be equipped with battery power pack for a minimum 90 minutes backup duration. When operating on battery supply, only one lamp shall be in operation. The battery pack shall be replaceable externally without having to dismantle the luminaire. The battery pack shall have built-in battery monitoring function to show if the battery is faulty.

Proprietary type mounting brackets shall be provided to allow the luminaires to be mounted in different configurations and positions, e.g. ceiling mounting bracket for flat mounting to wall or ceiling, pipe clamp for pole mounting, eye bolt for suspended mounting, etc.

4.3.5 Exit Light

Luminaire shall be 8W or 11W fluorescent, or LED type with self-contained battery pack for 90-minutes backup. Battery pack shall be long life nickel cadmium type. Enclosure shall be made of powder-coated sheet steel or impact resistant GRP

With the exception of indoor installed emergency exit lights, which may be general industrial fixtures with IP 23 ingress protection, all outdoor installed emergency exit lights shall comply with IEC 60079 and shall be minimum IP56, suitable for Zone 1, Gas Group IIA, Temperature T3 hazardous area applications.

Luminaire shall have an illuminated 'EXIT' sign with direction arrow showing from one side. Luminaire shall also illuminate the escape route below. Enclosure of outdoor installed emergency exit lights shall be SS316/ Marine grade Aluminum or LM6 aluminum alloy with metric threaded holes suitable for metal cable gland entries and Ex-rated nickel plated brass blanking plug. Terminal block shall be suitable for directly terminating 2.5mm² to 4.0mm² wires sizes with 690VAC rating.

If required in Purchase Requisition, LED luminaire shall be provided. LED shall be High Energy Efficient type. Electronic Driver shall be used for control gear.

4.3.6 Hand Lamp

Rechargeable type hand lamps complete with charging station shall be supplied by vendor.

Each hand lamps shall comprise a fixed wall mounted battery charger and shall be suitable for zone 1, Gas Group IIA, Temperature Class T3. The unit shall be kept on float when not in use and fed from emergency lighting distribution board. The battery shall be rated to energize the hand lamp for not less than 5 hours.

If required in Purchase Requisition, LED luminaire shall be provided. LED shall be High Energy Efficient type. Electronic Driver shall be used for control gear.

4.3.7 Lighting Switch

Indoor, non-hazardous lighting switches shall be rated 220VAC, 16A, single-pole, toggle-type, flush mounted, with metallic steel cover plate and complete with recessed steel mounting box. Lighting switches shall comply with IEC 60669.

Outdoor lighting switches shall be rated for 220VAC, 16A, single pole, toggle-type, Shall be minimum IP56 and suitable for Zone 1 & Zone 2, Gas Group IIA, Temperature Class T3. Lighting switches shall be surface mounted, with metric threaded holes at bottom suitable for metal cable gland entries and Ex-rated nickel plated brass blanking plug.

4.4 Plug, Convenience Outlet, Power Outlet and Welding Outlet

In non-hazardous indoor areas, domestic-type twin socket outlets shall have 3-pin (1P+N+PE) with configuration similar to Clipsal C-Concept Series (catalogue number:

3426UEST2M) or the equivalent. The socket outlets shall be rated 220VAC, 16A, single-pole switched, flush mounted, with metallic steel cover plate and complete with steel mounting box. These socket outlets shall be 2-gang type. Industrial-type convenience socket outlets and matching plugs shall have minimum IP41. The socket outlets shall conform to IEC 60309 and shall be switched, surface mounted, with metric threaded holes at the bottom suitable for metal cable gland entries and blanking plug.

In hazardous outdoor areas, power and convenience socket outlets and matching plugs shall conform to IEC 60309 and IEC 60079 and shall be minimum IP56, suitable for Zone 1 & Zone 2, Gas Group IIA and Temperature T3 hazardous application. The socket outlets and matching plugs shall be made of either GRP or 316L stainless steel material.

Power socket : 63A and/or 32A, 380/220V, 50 Hz, 3 phase + neutral + earth

Convenience socket : 16A, 220V, 50 Hz, 1 phase + neutral + earth

Socket outlets shall be surface mounted, with metric threaded holes at the bottom suitable for metal cable gland entries and Ex-rated nickel plated brass blanking plug. The matching plugs shall interlock with the socket outlets' switches so that the plugs can only be inserted or removed when the switches are in the OFF-position. Switches shall be padlockable in the both ON and OFF-position.

In hazardous outdoor areas, welding outlets and matching plugs shall conform to IEC 60309 and IEC 60079 and shall be minimum IP56, suitable for Zone 2, Gas Group IIA and Temperature T3 hazardous area applications. The socket outlets and matching plugs shall be rated 380VAC, 63A, 50Hz, with 5-pins (3P+N+PE), made of either GRP or 316L stainless steel material . Welding outlets shall be surface mounted, with metric threaded hole at the bottom suitable for metal cable gland entry and up to 35 mm2 terminals, as a minimum size. The matching plugs shall interlock with the welding outlets' switches so that the plugs can only be inserted or removed when the switches are in the OFF-position. Switches shall be padlockable in the both ON and OFF-position.

4.5 Local Control Station (LCS)

Classified LCS shall conform to IEC 60947-5-5 and IEC 60079 and shall be minimum IP56 suitable for Zone 1 and Zone 2, Gas Group IIA and Temperature T3 hazardous area applications. An ammeter shall be provided on LCS for motor rated ≥ 30kW. Enclosures shall be surface mounted with metric threaded hole at the bottom suitable for metal cable gland entry. LCS enclosures located at open areas exposed to direct sun ray and rain shall be made from 316L stainless steel or aluminium alloy (LM6). Polyester Glass Reinforced Fibre (GRP) can also be used as alternative material for LCS enclosures installed in shaded areas. LCS with push button switch type and running indicating light shall be provided for all electric motors. Terminal blocks shall be provided inside the LCS for terminating external cable. Conductor terminals shall conform to IEC 60947-7-1, IEC 60947-7-2 and IEC 60079. Mounting plate and label holder shall be provided.

4.6 Multi Cable Transit (MCT)

Fire rated and/or blast resistant type MCT systems shall be provided.

MCT frames shall be galvanized steel suitable for offshore application.

MCT shall be complete with all accessories to make a complete MCT system, e.g. frame, wedge, stay plates, "fire-resistant, low-smoke halogen free rubber" insert modules and insert spare modules. Lubricant shall also be included for installation of insert modules.

Insert modules shall come in two-halves with multilayer bore, which and can be peeled off to fit the installed cable outside diameter.

4.7 Earthing Material

All earthing conductors, cable lugs, busbars and conductive fittings, shall be high conductivity copper. All earthing cable terminations shall be made using compression cable lugs. Cable lugs shall be coated and suitable for earthing cable size.

Earth bar shall be hard drawn tinned copper bar, with stand-off insulators (resin or polyester), stainless steel mounting bracket, disconnecting links and threaded brass studs for external earth cable connections. Threaded studs shall be complete with nuts, flat & spring washers. The quantity of studs for outgoing earth cables shall be as shown in installation detail drawing.

Earth bosses shall be stainless steel material of 30 mm by 40 mm diameter with M10 drilled and tapped holes and M10 x 60 mm long stainless steel threaded studs complete with stainless steel nuts, flat and spring washers.

All cable ladders/trays shall be bonded to main steel structures at interval not exceeding 25 metres.

Branch connection through parallel compression branch connector is not acceptable. After connection and testing, all exposed copper shall be coated with protective coating compound or to be wrapped with insulation tape.

4.8 Junction Box

Junction boxes for indoor application shall have minimum IP44. Enclosure shall be made of high impact resistant, flame retardant, glass reinforced black polyester with internal ground continuity plate and suitable for installation of metal glands. JB with GRP enclosure can be used where they are not exposed to direct sunlight.

Outdoor junction boxes shall conform to IEC 60079 and shall be minimum IP56, suitable for Zone 1 and Zone 2, Gas Group IIA and Temperature Class T3 hazardous area applications. Enclosures shall be surface mounted, made of electro-polished 316L stainless steel/ Marine grade Aluminum or LM6 aluminum alloy, with removable gland plates. No holes or entrance provisions shall be provided on top of junction boxes even if they are sealed with plugs.

Terminal blocks shall be rated 690VAC, non-loosening screw type, DIN rail mounted, complete with separators, end-stops and labels. Junction box covers shall have captive screw and include metal earthing plate for nickel plated cable glands. Conductor terminals (terminal blocks) shall conform to IEC 60947-7-1, IEC 60947-7-2 and IEC 60079.

An Ex-certified breather/drain device shall be installed in each outdoor enclosure that is higher than 8 litres in volume.

4.9 Cable Ladder, Tray and Accessories

Cable ladder and tray systems shall comply with IEC 61537 and shall be made of 316L stainless steel. Supports for cable ladders and cable trays shall be painted or galvanized carbon steel.

Resistance against corrosion for ladder and tray is classified as 9D in accordance to IEC 61537.

Safe Working Load (SWL) tests shall be carried out for cable ladder and cable tray at minimum temperature of -20°C and maximum temperature of 60°C respectively.

Free base area classification for perforation in cable tray length shall be class 'B'. For cable ladder length, free base area classification shall be class 'X'.

System component for cable ladder and cable tray shall offer impact resistance up to 50J.

Cable ladders/tray covers in excess of 300mm shall have supplementary fastening using two stainless steel bands per length. Maximum side rail height shall be 100mm for ladders and 40mm for trays.

Stainless steel cable trays / cable ladders shall be heavy duty type with minimum 1.5 mm thickness. Straight lengths shall be standard 3-metres long. Maximum rung spacing for ladders shall be 300mm. Cable ladders shall be return flange type.

Installed cables shall be fastened by means of Nylon sheathed stainless steel cable tie wraps, in which it shall be provided to every 3m of horizontal trays and every 1m of vertical ladders.

Suitable insulating packers shall be provided to galvanically isolate stainless steel cable ladders and cable trays from support structures.

4.10 Conduits and Accessories

Outdoor conduit/conduit fittings including condulet boxes shall be of rigid epoxy coated galvanized feraloy. All conduit termination shall have a minimum of five threads fully engaged. Conduit shall be heavy duty type. Pipe and pipe fittings are not permitted in any conduit installation.

4.11 Cable Glands and Accessories

All -braided armoured cable entries into equipment shall be made by means of suitable Nickel Plated brass double compression cable glands with an armour-clamping feature, with inner and outer seals providing minimum ingress protection of IP56, ISO metric threads, complete with locknut and earth tags. Barrier glands shall be used if the cables are not of the effectively filled type.

Cables shall be terminated, glanded.

Ex'e' and Ex'd' certified adaptors shall be used to match metric glands to non-metric entries.

Cable glands shall be provided to suit the type of cable and termination box/ enclosure, and shall be of the appropriate type of protection, e.g. Ex'd', Ex'e'. Effective earth continuity shall be ensured between the cable armour/braid and the gland plate or the internal earth terminal.

Outdoor cable glands should be IP56, Ex'e' as minimum. Indoor cable glands (including LQ indoor) should be IP54 as minimum.

All HV terminations shall be carried out using appropriate termination kits.

When required, heat shrinkable sleeves shall be used to prevent the ingress of moisture into the cable termination and cable end.

5.0 NAMEPLATES AND LABELS

All equipments, and enclosures, including explosion-proof panel boards shall be provided with a general equipment nameplate. The materials nameplates and labels material shall be 316L stainless steel, and the lettering shall be engraved and then coloured black. It shall be mounted on the outside of the equipment and riveted or screwed to the outside with stainless steel fasteners.

Nameplates and tags shall be provided for panels and devices, including all push buttons, selector switches, circuit breakers, starters, distribution panels and cables.

The information given on the nameplate shall include the following:

- Manufacturer's name and trademark.

- The year of manufacture.
- The purchase order number.
- Type designation or identification number making it possible to obtain relevant information from the manufacturer.
- Equipment tag number.
- Rated voltages of auxiliary circuits.
- Rated current.
- Maximum peak and thermal short-circuit ratings with withstand time in seconds.
- Number of phase.
- Frequency.
- Degree of protection.
- Area classification rating
- Service conditions.

Labels shall be of the following background colour and engraving:

- Identification nameplates - White background with black engraving
- Caution nameplates - Yellow background with black engraving
- Warning nameplates - Red background with white engraving

Signs alerting personnel of voltage levels present shall be posted at the following locations:

- All equipment and enclosures which may be accessed without the use of a tool and contain non-insulated conductors or other devices operating at over 50 V.
- All equipment and enclosures which contain non-insulated conductors or other devices operating at and over 220V and which do not bear a manufacturer's label stating operating voltages.
- All equipment and enclosures with operating voltages at and over 380V.

Wording shall be, "CAUTION XXX VOLTS" for voltages 1000V and below or, "DANGER - HIGH VOLTAGE" for voltages above 1000V.

6.0 SPARE PARTS

The VENDOR shall include in their scope of supply the spares required for pre-commissioning, commissioning and start-up as required. A list of pre-commissioning, commissioning and start-up spares considered for each package shall be submitted to COMPANY/CONTRACTOR for review.

A recommended spare parts list for two (2) years of operation shall also be submitted for CONTRACTOR's review and purchase separately.

Recommended spares shall take into account related factors of equipment reliability, costs of parts and availability of equipment service facilities.

All spare parts furnished by the VENDOR shall be wrapped and packed to preserve items as new condition under normal storage anticipated in tropical climates. The same parts

shall be properly tagged by stainless steel tags and coded so that later identification as to their intended usage will be facilitated.

All items supplied shall be packaged separately and clearly marked as 'Spare Parts' and shipped with the equipment. Packing lists shall be furnished complete and in detail so that parts can be handled without un-crating, if desired.

VENDOR shall provide adequate and all commissioning and start-up spares including all VENDOR recommended spares.

7.0 QUALITY INSPECTION AND TESTING

VENDOR shall provide a detailed Factory Acceptance Test (FAT) and inspection procedure for the COMPANY's approval prior to actual Inspection & Testing. VENDOR's approved FAT procedure and COMPANY specification shall form the basis for the inspection and testing requirements. This shall be approved by the COMPANY before testing can commence.

COMPANY or COMPANY's authorised representative shall be granted access to VENDOR's premises for inspection and verification of materials and work at any time. All material and test certificates and test report shall be presented to the Inspector for verification.

VENDOR shall ensure that all necessary equipment, services, etc that may be required for the inspection and test are available at no extra cost. All defective components shall be replaced immediately and re-tested.

8.0 GUARANTEE

The VENDOR shall guarantee all equipment furnished to be in compliance with this specification and drawings.

The VENDOR shall guarantee all the equipment against defective material, design, damage or non-conformity and/ or workmanship.

9.0 QUALITY ASSURANCE

The VENDOR and his Sub-VENDOR shall operate a quality system satisfying the latest ISO 9001 Quality Standards, or agreed equivalent standard, commensurate with the goods and services provided.

The VENDOR shall demonstrate evidence of Quality Assurance in all aspects of the VENDOR's current design and manufacturing practices.

10.0 DOCUMENTATION

The following documents shall accompany the electrical bulk materials that are delivered:

- Installation and Operation Manual.
- Valid Ex certification (if applicable).
- Component / parts list.

The above mentioned documents shall be compiled by Vendor, bound and delivered together with the relevant materials.

RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

PROJECT NAME : **BK-10A WELLHEAD PLATFORM**

DOCUMENT TITLE : **SPECIFICATION FOR ELECTRICAL HEAT TRACING**

DOCUMENT NO. : **BK1.BK10.BK10A-001-GE-ES2-SP-011**

PHASE : **DE**

Applied Document	VSP-NIPI-TYP-TS-ES2-SP-13	Rev.	0

			CONTROLLED Signed by: Lê Thị Hằng Date: 16/06/2025 14:56:40 Certified by: Vietsovpetro CA	Signed by: Гайнутдинов Евгений Нурлыгалиевич Date: 17.06.2025 07:11:46 Certified by: Vietsovpetro CA	Signed by: Авдеев Андрей Сергеевич Date: 17.06.2025 12:27:03 Certified by: Vietsovpetro CA
			DC: L.T.HANG	**ENG.MGR: GAYNUTDINOV**	**PRO.MGR: AVDEEV**
0	IFA		Signed by: Святохо Вячеслав Вениаминович Date: 16.06.2025 11:04:09 Certified by: Vietsovpetro CA		Signed by: Исатов Дмитрий Олегович Date: 16.06.2025 11:09:50 Certified by: Vietsovpetro CA
REV.	**DES.**	**DATE**	**PREPARED: SVYATOKHO**	**CHECKED: SVYATOKHO**	**DEPT.MGR: ISATOV**

TRACK CHANGES

No	Rev.	Content of Change	Note
1	0	Issued for approve	

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1. INTRODUCTION

BK-10A Wellhead Platform belongs to Vietsovpetro JV. It will be located in Block 09-1, White Tiger oil field, offshore the Socialist Republic of Vietnam.

BK-10A is connected with BK-10 by a linking bridge. BK-10A is an unmanned platform with 12 slots (03 spare slots) and will be remotely controlled from the host platform BK-10 via fiber optic cable.

There will be 09 production wells on BK-10A (02 wells will be converted into water injection wells in future as planned) and 03 wells can be added in the future.

Based on the criterion of the need for production and maximizing the return on investment, BK-10A will be considered to have the minimum facilities. The full well stream of BK-10A will be gathered together with the produced fluid of BK-10 and BK-1, preliminarily separated on BK-10 and then transferred to CPP-2.
The scope of this project is detailed engineering design for the BK-10A Wellhead Platform, Linking Bridge and modification of BK-10.

Location of BK-10A and related platforms as below.

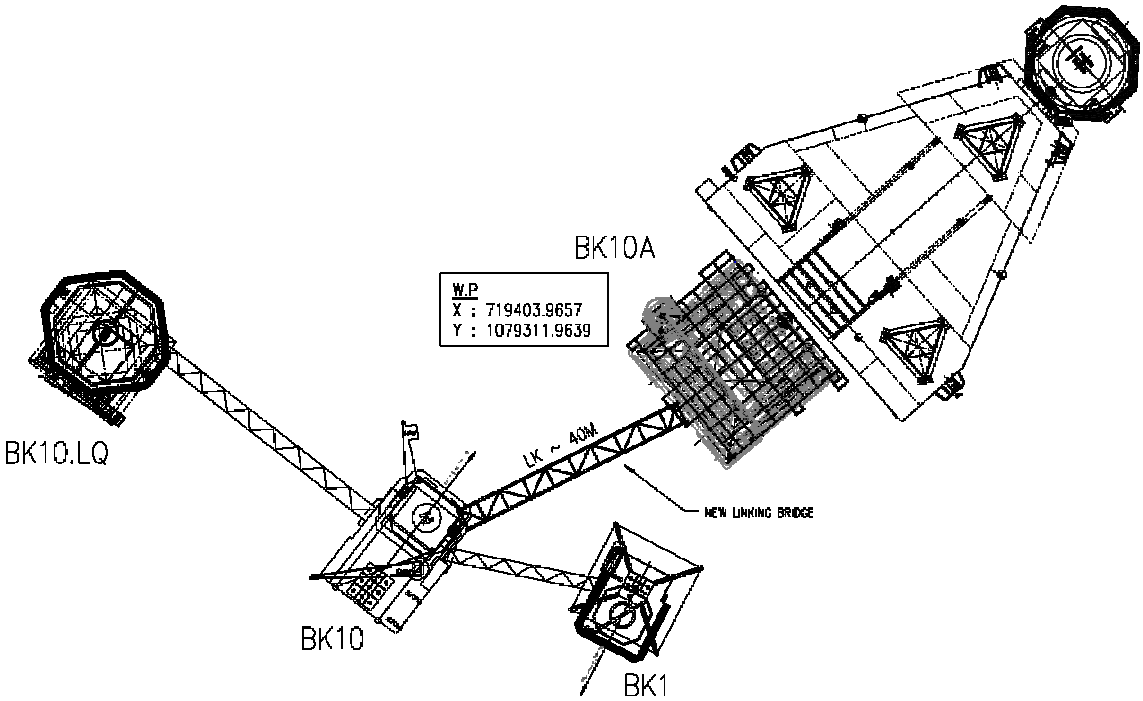

Figure 1: Location of the BK-10A Wellhead Platform and related platforms

2. ADDENDUM

This document uses the Typical Engineering Documentation for this Project. However, some design intends or requirements may require to be revised to fit with Project's purpose. This section lists changes in the applied typical documents, originating in Typical Engineering Documentation for any reason including those indicated in Table 1. These changes are identified in this Addendum to the applied typical document, identifying the document and section affected and the required change.

VENDOR shall review the required changes in conjunction with the referenced document and project's engineering documents.

The type of modification shall be defined and indicated in subsequent text as follows:

- ✓ "ADD" - Indicates the following statement(s) is/are added to the Company referenced text.
- ✓ "DELETE" - Indicates the following statement(s) is/are deleted from the Company referenced text.
- ✓ "REPLACE WITH" - Indicates the following statement(s) is/are revision(s) to the Company referenced text.

Table – 1: List of changes

Section	Current Statement or Requirement	Revised to
Page 9/21 Sec. 4.2	The electrical heat tracing system shall be designed for an expected lifetime of fifteen (15) years.	The electrical heat tracing system shall be designed for an expected lifetime of twenty five (25) years.

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RESEARCH AND ENGINEERING INSTITUTE FOR OFFSHORE OIL AND GAS

VIETSOVPETRO

AGREED BY
Deputy General Director of Vietsovpetro

Tran Xuan Hoang

03/04/2020

APPROVED BY
Chief Engineer of Vietsovpetro

Tran Van Vinh

/2020

TYPICAL ENGINEERING DOCUMENTATION

DOCUMENT TITLE : **SPECIFICATION FOR ELECTRICAL HEAT TRACING**

DOCUMENT No. : **VSP-NIPI-TYP-TS-ES2-SP-13**

AGREED:	Name	Date
Capital Construction Department		3/3/20
Material and Equipment Department		24/3/20
Mechanical and Energy Division		17/03/20

CONTROLLED

REV.	DESCRIPTION	DATE	PREPARED	CHECKED	CHIEF DEPART.	ENG. MANAGER	PRO. MANAGER
0	IFA	28/02/2020	P.X.VUONG	T.N.BINH	T.H.TOAI	T.D.HAI	B.T.HAN

Change Log

REV	SECTION	PAGE	CHANGE DESCRIPTION

Reference Documents

VSP-NIPI-TYP-TS-ES2-SP-10	SPECIFICATION FOR ELECTRICAL REQUIREMENT FOR PACKAGE EQUIPMENT
VSP-NIPI-TYP-TS-ES2-SP-11	SPECIFICATION FOR ELECTRICAL BULK MATERIALS

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1.0 PURPOSE

This specification covers the design, manufacture, fabrication, inspection and testing, preparation for shipment and documentation for Electrical Heat Tracing System including all items of equipment and materials necessary to complete the assembly to be installed for VSP's Project.

Electrical heat tracing within the scope of this specification shall be designed and constructed so as to ensure electrical, thermal and mechanical durability and reliable performance so that, in normal use, it poses no danger to the user or the surroundings.

The provided heat tracing system shall be suitable for the site environmental conditions where the system will be installed and operated.

1.1 Definitions and Abbreviations

1.1.1 Definitions

PROJECT	VSP's Project
COMPANY	The party which initiates the project and ultimately pays for its design and construction and owns the facilities. Here the COMPANY is Vietsovpetro (Referred to as VSP)
CONTRACTOR	The party which carries out all or part of the design, engineering, procurement, construction and commissioning of the project
VENDOR	The party on which the order or contract for supply of the equipment / package or services is placed

1.1.2 Abbreviations

DNV	Det Norske Veritas
VSP	Vietsovpetro
AC	Alternating Current
BS	British Standards
DC	Direct Current
DCS	Distributed Control System
ESD	Emergency Shut Down
FAT	Factory Acceptance Test
FGS	Fire and Gas System
IEC	International Electrotechnical Commission
IEC Ex	IEC certification scheme for hazardous area equipment
IP	Ingress Protection
ITP	Inspection and Test Plan
LED	Light Emitting Diode

LV	Low Voltage
MCB	Miniature Circuit Breaker
MCCB	Moulded Case Circuit Breaker
PTC	Positive Temperature Coefficient
QA	Quality Assurance
RTV	Room Temperature Vulcanizing
SDRL	VENDOR Document Requirement List
SMDL	VENDOR Master Document List

1.2 Reference Documents

VENDOR shall generally comply with the latest revision and relevant sections of the following regulations, standards and codes of practices.

The applicable international codes and standards are as follows:

IEEE Std 515 - 2004	IEEE Standard for the Testing, Design, Installation, and Maintenance of Electrical Resistance Heat Tracing for Industrial Applications
DNVGL-OS-D201	Electrical Installation
NEMA VE 1	Metallic Cable Tray Systems
API RP 505	Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1 and Zone 2.
IEC 60079	Electrical Apparatus for Explosive Gas Atmosphere
IEC 60079-7	Electrical Apparatus for Explosive Gas Atmosphere – Part 7: Increased safety "e"
IEC 60079-18	Explosive Atmospheres – Part 18: Equipment Protection by encapsulation "m"
IEC 60079-30-1	Explosive Atmospheres – Part 30-1: Electrical Resistance Trace Heating – General and Testing Requirements
IEC 60079-30-2	Explosive Atmospheres – Part 30-2: Electrical Resistance Trace Heating – Application Guide for Design, Installation and Maintenance
IEC 60228	Conductors of Insulated Cables
IEC 60331	Fire Resisting Characteristics of Electric Cables
IEC 60332	Tests on Electric Cables Under Fire Conditions
IEC 60332-3	Tests on Electric Cables under Fire Conditions – Part 3: Tests on Bunched Wires or Cables
IEC 60529	Degrees of Protection Provided by Enclosures (IP Code)

IEC 60947-2	Low-voltage Switchgear and Controlgear – Part 2: Circuit Breakers
IEC 61241	Electrical Apparatus for Use in Presence of Combustible Dust
IEC 61241-1	Electrical Apparatus for Use in Presence of Combustible Dust – Part 1: Electrical Apparatus protected by Enclosures and Surface Temperature limitation
IEC 61892	Mobile and Fixed Offshore Units – Electrical Installations
IEC 61892-6	Mobile and Fixed Offshore Units – Electrical Installations – Part 6: Installation
IEC 62086-1	Electrical apparatus for explosive gas atmospheres - Electrical resistance trace heating - Part 1: General and testing requirements

The design and engineering of the electrical installation shall satisfy all statutory requirements of the national and/or local authorities.

The electrical installation shall be suitable for the site conditions.

In the event of contradiction between the requirements of this document, IEC, ISO, or IP, the IEC shall prevail, provided the statutory obligations are satisfied.

Note: Unless specifically designated by date, the latest edition of each publication shall be used, together with amendments, supplements or revision thereto.

Order of precedence in case of conflict between documents shall generally be:

- Relevant Data Sheet
- This Specification
- Reference Project Standards, Specifications and Drawings
- International Codes and Standards

The above order of precedence is only a general guide, where a conflict and/or discrepancy exist between this Specification and the above documents, drawings, codes, and/or standards, it is the responsibility of VENDOR to bring it to the attention of the COMPANY/CONTRACTOR immediately for decision and disposition of the discrepancy or conflict.

In the event that VENDOR fails to highlight any discrepancies and/or conflicts, the most stringent requirements shall apply. COMPANY/CONTRACTOR's decision shall be binding on VENDOR without any additional cost and schedule impact.

2.0 SCOPE OF WORK AND SUPPLY

VENDOR shall design and supply the Electrical Heat Tracing System including all drawings and hook-up materials, in accordance with this Specification.

VENDOR shall, wherever possible, draw upon his existing, pre-engineered or standard designs to satisfy the requirements of this Specification.

The scope of work and supply shall include completed Electrical Heat Tracing System but not limited to the following:

a) Self-regulating/self-limiting heating cables or tapes;

b) Heat Tracing Distribution Panel including isolation transformer and control panel (If required in Technical Requirement – TR);

c) Junction Boxes;

d) Power connection kit & box support bracket for use with power connection kit;

e) Spice & Tee connection;

f) End seal;

g) RTD temperature indicator;

h) Conduit hub;

i) Mounting plate;

j) Self adhensive warning labels;

k) Provision of quality assurance scheme in accordance to the ISO 9001 or equivalent to ensure all work performed conforms to this Specification;

l) Complete documentation submitted in accordance with the Specification;

m) Packing, preservation, preparation for shipment and delivery of equipment.

n) All the identified certificates including but not limited to materials and design verification; Third party certification for complete package shall be required.

o) Completed inspection, QA/QC and testing requirements including performance acceptance test as defined in the Specification along with all supporting documentation;

p) Commissioning, initial operation (start-up) spares and a list of recommended operating (insurance) spares including special tools for operation, installation and maintenance;

q) Two year operational spares (optional);

r) Training; (if required)

s) Provision of additional services as may be agreed at the time of order placement.

All materials used shall be in accordance with the COMPANY/CONTRACTOR approved VENDOR's list.

VENDOR shall provide comprehensive material take off list. The list shall have clear material descriptions and stated material quantities.

VENDOR shall submit full technical details of the Electrical Heat Tracing System, which meet the requirements detailed herein. Aspects of the requirements, which cannot be met, shall be identified and the variances explained using the 'Manufacturer/Supplier Deviation Form'.

VENDOR may quote alternate arrangements and Specifications if they are equal to or exceeds the general requirements of this Specification. These alternates shall be clearly highlighted in VENDOR Bid for COMPANY/CONTRACTOR evaluation and approval.

3.0 OPERATING CONDITIONS

The Electrical Heat Tracing System shall function without any effect on its reliability under ambient conditions.

The atmosphere shall be assumed to be salt-laden, corrosive and humid.

The environmental conditions in which the Electrical Heat Tracing System is operated in are summarised as below:

Outdoor

- Atmosphere : Saliferous and Marine
  - Ambient Temperature
    - Maximum : 39°C
    - Minimum : 20.5 °C
    - Average : 27.1 °C
    - Design : 40 °C
  - Relative humidity
    - Maximum : 100 %
    - Minimum : 20 %
    - Average : 80 %

Indoor

- Indoor Ambient Temperature : 24°C ± 2°C (Switchgear & MCC Room with air conditioning)

Where VENDOR's standard design does not meet the operating conditions, VENDOR shall give details of the technical changes and commercial impact of complying with stated conditions.

4.0 GENERAL REQUIREMENTS

4.1 Technical Integrity

The VENDOR shall be responsible for the technical integrity of the system, including: design, material, manufacture, assembly, testing, performance and specified engineering services in accordance with the project's specifications, data sheets and relevant IEC standards.

The VENDOR shall design and carry out calculation for the electrical heat tracing system to meet the heating requirements of the protected equipment specified in the requisition. The system shall be designed such that the number of circuits required is kept to a minimum. A safety factor of 20% shall be used to determine the heat loss of equipment. Heat loss calculations shall consider that the thermal insulation may be oversized to allow space for the heating cables.

4.2 Operating Conditions

The electrical heat tracing system shall be designed for an expected lifetime of fifteen (15) years. The system shall function without any effect on its reliability under ambient conditions. The equipment shall be tropicalised. All components shall be protected from operation in tropical climate, i.e. they shall be moisture & fungus proof.

The equipment shall be suitable for operating satisfactorily outdoors, based on the environmental conditions and power supply specified in this specification or project data sheets. All components shall be protected for operation in tropical climate i.e. they shall be moisture and fungus proof.

Where the equipment is to be installed in a hazardous area, the VENDOR shall ensure that all electrical equipment and installations forming part of the system meet the requirements of IEC 60079. Electrical equipment to be installed in outdoor non-hazardous areas within process facilities shall be suitable for installation in Zone 2, Gas Group IIA, Temperature Class T3 areas.

Where the VENDOR's standard design does not meet the operating conditions, the VENDOR shall give details of the technical changes and commercial impact of complying with stated conditions.

4.3 Electrical Characteristics

The design and testing requirements for the heat tracing system shall be in accordance with IEC 60079-30, IEEE Std 515 or equivalent.

The distribution voltage to heat tracing distribution control panel and heat tracing circuits shall be 380V/3-phase and 220V/1-phase, 50Hz respectively (if other voltage level is required, it shall be specified in TR/ RQ for each project). Under steady state condition, the Electrical Heat Tracing System shall be designed based on the following:

- The voltage at all points on the system shall be kept between ±5% of the nominal voltage
- The frequency shall be maintained within ±2% of rated frequency

The heating of pipes and equipment shall be accomplished by utilising where possible a self regulating system. The self regulating heat tracing system shall be capable of:

- Maintaining the process temperature;
- Withstanding the intermittent exposure temperatures (power on and off);
- Withstanding the continuous exposure temperature (power off), specified in the requisition data sheet.

5.0 TECHNICAL REQUIREMENTS

5.1 General

The design of electrical heat tracing system shall incorporate safeguards and protective devices to ensure safe operation of the system with regard to personnel as well as equipment. Process temperature consideration for this system shall be of Type II according to IEC 60079-30-2.

If required in requisition, the source of electric power to heat tracing circuits shall be from isolation transformers. This is done in order that (i) any instance of earth fault in any of the heat trace circuits downstream of the isolating transformer will not cause upstream breakers to trip-out and (ii) fault current in heat trace circuits is limited by the transformer capacity.

Heating equipment shall be designed to withstand a temperature of 20^0C above the 'maximum process temperature', which can occur under all process conditions. The heat density of the heating elements shall be such that the temperature limits for pipe and heaters are not exceeded.

Sufficient heater capacity shall be installed to ensure that, towards the end of the heating cable, the output does not drop below the minimum design value owing to the voltage drop in the heater conductors.

The size, length, process/fluid and thermal insulation data of each pipe requiring trace heating will be given in the P&I Diagrams, Line List and Isometric Drawing. Sufficient length shall be provided to allow for pipe expansion and contraction.

All exterior hardware, junction boxes, hinges, etc shall be made of 316L stainless steel.

Thermal insulation to the trace heated pipes will be carried out by others.

The equipment shall be located such that it can easily be maintained in its service position.

5.2 Self Regulating / Self Limiting Heating Cables

Self-regulating/self-limiting heating cables or tapes shall be utilized wherever possible, within the restrictions of heat output and operating temperatures. This is the preferred method for electrical heat tracing.

The self regulating/self-limiting heating cables shall be constructed as follows:

a) Conductors :	:	1.2 mm2 nickel plated, stranded copper busbars
b) Self-limiting heating element	:	Synthetic polymer
c) Insulation	:	Fluoropolymer
d) Armour	:	Tinned copper braiding
e) Outer jacket	:	Fluoropolymer
f) Requirements	:	IEC 60079-0, IEC 60079-7, IEC 60079-18, IEC 60079-30-1, IEC 61241-0, IEC 61241-1, IEC 62086-1

The self regulating / self-limiting heating cables or tape shall consist of two parallel nickel-plated copper conductors. A self-limiting synthetic polymer heating element is extruded over and between these parallel conductors, forming a continuous matrix heating element. A high temperature fluoropolymer jacket is then extruded over the heating element core. The jacket shall electrically insulate the heating element and provide corrosion resistance.

The heating cable shall be covered by means of a metallic braid of tinned-copper for additional mechanical protection and a positive earth path. The braid shall provide a nominal coverage of no less than 70% with an impact load withstand of 7 J when tested in accordance with IEC 60079-30-1. The braid will exhibit a resistance not exceeding 0.01Ω/m. The cable shall be covered with a high temperature fluoropolymer outer jacket to provide additional corrosion resistance.

The heating cable shall be capable of being cut to a desired length to suit the installation physical conditions, without changing its power output per unit length. Additional length of heating cable shall be provided by the VENDOR for all in-line components including, but not limited to, power connections, tee or splice connections, valves, flanges, orifices, and other piping components. The heating cable shall be arranged so that these components may be dismantled without cutting the heating cable or excessively bending it.

Heat tracing cables should not be overlapped on itself.

5.3 End-of-Line Package

End-of-Line package shall be provided to terminate the heat tracing cable ends.

The end-of-line components shall be certified for located classified areas. Degree of protection for these components shall also be suitable for specified site conditions, with minimum IP56.

The end of the heat tracing cable shall be brought out of the insulation and into a termination package. The heat tracing cables shall then be connected into the end-of-line package and left the cables open circuit.

5.4 In-Line Splice and Tee Connectors

In-line splice and tee connectors shall be provided for the heat tracing cables to provide altermatives in the cable layouts to suit vessel or pipe to be installed.

These connectors shall be certified for located classified areas. Degree of protection for these components shall also be suitable for specified site conditions, with minimum IP56.

5.5 Attachment Components

Heat tracing cables shall be attached to pipe or vessel using an approved non-metallic adhesive tape which shall maintain proper tension and shall not be damaged by heated vessel or pipe temperature up to 200°C.

The attachment tapes shall be applied at intervals no greater than 300 mm.

5.6 Warning Labels

Warning labels with wording "CAUTION ELECTRIC HEAT TRACED" shall be provided for each heat traced vessel or pipe at every 5 m. These labels shall be flexible and suitable for adhesive fixing to outer jacket of the vessel or pipe thermal insulation.

5.7 Junction Boxes

All junction boxes shall be electro-polished 316L stainless steel (GRP if specified), IP56 and certified Ex'e'. Each junction box shall have breather and drain fittings.

Junction boxes shall be used for one or more of the following functions:

- Connections between supply cable and heater cable.
- Distribution of supply from one circuit of the distribution board to subcircuits.

Junction boxes shall be installed as close as possible to the pipe to limit the heating cable length outside the thermal insulation. All cable entries shall be from bottom.

5.8 Heat Tracing Distribution Control Panel (If required in requisition)

The heat tracing system shall be connected to heat tracing main distribution control panel.

The main distribution panel shall be provided with a molded case circuit breaker (MCCB) to isolate the incoming power supply feeding into a panel installed isolating transformer which energizes the outgoing distribution busbars. This isolation transformer also serves to prevent ground faults occurring in the heat tracing circuits from cascading upstream, thereby preventing unintended tripping of switchboard main circuit breakers. The VENDOR shall size isolating transformer for present and future heating loads with at least 30% overload margin.

The outgoing feeders of the main distribution control panel shall consist of a number of 1-phase circuit breakers and padlockable isolating switches. Sub-distribution panels may be installed nearer to the heat tracing cable, however, prior approval from the COMPANY shall be obtained. These panels shall be suitable for outdoor installation as outlined in IEC 60079. The outgoing heat tracing circuits shall be individually protected from earth fault by 30mA ELCB. The circuits may be double pole for single phase circuits.

Each heat tracing circuit shall be provided with a set of red and amber status indicators of the push-to-test equal intensity type. The internal control circuitry shall be designed such that the

5.10 Enclosures

Enclosures installed outdoors, shall be constructed of grade 316 stainless steel/ Marine grade Aluminum/ Aluminum Alloy or LM6 with a protection degree of no less than IP56. For indoor enclosures, a minimum of IP 41 is acceptable. Enclosures shall be provided with a lockable door and handle.

Enclosures shall be sized to accommodate the cables and terminals contained therein with adequate room for installation/maintenance purposes. The terminals shall be sized and located to suit the cable requirements specified in the requisition data sheet. Cable glands shall be provided by the CONTRACTOR.

Enclosures shall be supplied with certified stopping plugs for unused entries. The stopping plugs shall be suitably rated for the conditions specified in the requisition data sheet.

All parts which are live in normal service or exposed conductive parts which may become live under fault conditions shall be suitably protected in accordance with IEC 61892.

5.11 Circuit Protection

All circuit breakers shall be category C in accordance with IEC 60947-2. Main circuit switches (mechanical) shall comply with IEC 60947 and be of the independent manually operated air-break type for continuous duty. The utilisation category shall be not less than AC-23 and DC-23 for AC and DC switches, respectively. The minimum short circuit breaking capacity of circuit breakers shall be 10kA with current limiting capabilities.

Contactors shall comply with IEC 60947 and be rated for uninterrupted duty and intermittent duty of at least class 0.1. The utilisation category shall be not less than AC-3 and DC-5 for AC and DC contactors, respectively. The minimum short circuit breaking capacity of the circuit breakers shall be 10kA.

5.12 Wiring and Termination

All internal wiring and terminations shall be carried out in accordance with IEC 61892-6.

The wiring system shall be of single-core insulated cables with stranded copper conductors. The minimum cross sectional area shall be 2.5 mm2. The minimum insulation grade shall be 600/1000 V, halogen free, flame retardant to IEC 60332-3.

The panel wiring conductor shall be stranded, tinned, annealed copper with a cross-sectional area not less than 1.5 mm2. The wiring insulation shall be robust to allow pulling, twisting and bending of the wire resulting in no damage to the insulation.

Terminals shall be exclusively provided for all external connections. As a result, no external connections shall be made directly to the component terminals. Terminals shall either be of the pressure clamp or bolted lug type. Pinch screw terminals where the screw bores directly onto the conductor are not acceptable. Space shall be provided for 20% additional spare terminals. Insulating shields shall be used to separate terminals belonging to different circuits.

The VENDOR shall clearly indicate COMPANY-provided cables on all documentation. The VENDOR shall specify the copper conductor size (in mm2) required for COMPANY-supplied cables, based on IEC 61892 and the route lengths as specified in the requisition data sheet.

5.13 Earthing

Earthing arrangements shall be carried out in accordance with IEC 61892-6.

An earth rail of high conductivity copper, with a suitable number of earthing bolts or screws, shall be provided. The dimensions of the earth rail shall be suitable to carry the prospective earth fault currents. The earth rail shall be connected to the structure of the cabinet, effectively bonding the entire cubicle.

Earth bonding conductors shall be utilised between enclosures and doors, and wherever else required to achieve effective protection.

The gland plate for termination of outgoing cables shall be securely bonded to the earth rail. For armoured cables, an earth plate and earth stud shall be provided.

The earth facility shall be clearly marked with the appropriate symbol.

5.14 Marking

All terminals of equipment and components shall be identifiable by numerical and/or alphabetical markings in accordance with the VENDOR's drawings. Terminals of input and output cables shall be clearly and uniquely marked to indicate the nominal system voltage and the phase/polarity of the supply.

The VENDOR shall provide warning labels that read "CAUTION – ELECTRICAL HEAT TRACING". These labels will be installed at 3 m intervals along the protected pipe or equipment. The labels shall be of the self adhesive type suitable for the conditions specified in the requisition data sheet.

The VENDOR shall provide a grade 316 stainless steel nameplate, fixed to the front, for all enclosures. Inscription shall be in the English language. The nameplate shall specify:

- COMPANY's purchase order number;
- VENDOR's model number;
- COMPANY's tag number;
- Service description;
- VENDOR;
- Year built;
- Operating voltage;
- Rated current (steady-state);
- Statement 'Bond the metal braid of this trace heater to a suitable earth terminal';
- Hazardous area certification (if applicable).

5.15 Painting and Protective Coating

Painting and coating shall generally be the manufacturer's standard suitable for the site conditions.

The treatment and protection of metalwork shall include cleaning, degreasing, rust resisting primers and paint finishes that provide effective protection against corrosion under the adverse effects of the humid, tropical, salt-laden and corrosive environment, normally encountered in offshore installations. Where special treatment is needed because of extreme environmental conditions, additional information shall be provided.

A careful inspection shall be made to ensure all operating instructions and label plates are in place, legible and have not been obscured during the painting process.

Painting damaged during transit shall be repaired by the VENDOR/SUPPLIER. The VENDOR/SUPPLIER shall supply paint, matching the colour used, for field touch-up purpose.

5.16 Installation

All heating cables shall be fixed to ensure continuous and permanent contact with the surface to be heated over the entire length.

Attachment of the heating cable to the surface to be heated shall, in general, be accomplished by the use of suitably rated glass fibre tape at approximately 300 mm intervals. The length of tape provided shall allow for the tape to be wound at least two times around the protected equipment at each interval.

Each branch circuit of heating cable shall be provided with an end termination kit and stainless steel strap for securing it to the protected equipment. The straps will be installed under the heating cable and shall be designed to prevent damage to the heating cable. The kit shall be supplied complete with a RTV-type sealant and end cap. The kit shall be marked with the statements 'Bond the metal braid of this trace heater to a suitable earth terminal' and 'Refer to installation instructions'.

Overlapping of self-regulating heaters shall be avoided.

End-seals and 'cold-lead' connections can be made underneath the thermal insulation, whereas through connection or 'Tee-offs' are not allowed. All other connections shall be made in junction boxes.

6.0 INSPECTION, TESTING AND CERTIFICATION REQUIREMENTS

6.1 General

COMPANY or its representative shall have free access to the plants of VENDOR and his Sub-Supplier's during fabrication, assembly, and testing of the equipment. Inspection visit shall be coordinated through VENDOR's Project Manager.

Prior to shipment, VENDOR shall carry out the required Factory Acceptance Tests (FAT) in the presence of COMPANY/CONTRACTOR engineers or their appointed representatives.

COMPANY/CONTRACTOR may require additional testing if test results are unsatisfactory or marginal at no additional cost to the COMPANY/CONTRACTOR. Any equipment rejected shall be repaired or replaced to COMPANY/CONTRACTOR's satisfaction and test shall be repeated at VENDOR's cost.

COMPANY/CONTRACTOR shall be given the opportunity to inspect VENDOR's manufacturing facilities including Sub-Supplier's facilities to confirm that satisfactory quality assurance (Q.A) and production procedures are being implemented. VENDOR shall make available all relevant Q.A. procedures for review.

All rights of COMPANY/CONTRACTOR in respect of Inspection and Testing shall also, upon COMPANY/CONTRACTOR's request, be extended to any and all third parties authorised by COMPANY.

Manufacturer/ Supplier shall furnish, immediately on award of order, the names of:

- The Works Manager and his assistants to whom contact should be made for inspection of the equipment.
- The Office Engineer and his assistants to whom contact should be made for technical queries, and manufacturing and expediting progress.

During construction of the Equipment, VENDOR shall establish and maintain an inspection and quality control program to ensure adherence to the applicable codes and standards as well as this Specification.

Any unsatisfactory material, equipment, installation, or workmanship shall be replaced or repaired to COMPANY/CONTRACTOR's satisfaction at Manufacturer/Supplier's cost.

All pre-requisites for test such as temporary interconnections, test instruments, etc. as well as the actual conduct and documentation of tests shall be the responsibility of Manufacturer/Supplier.

VENDOR shall inform COMPANY/CONTRACTOR as part of the bid, if any of the specified tests cannot be performed. In the absence of such a statement, it shall be understood that all requirements of this Specification are fulfilled without exception.

6.2 Inspection and Testing

Inspection and tests shall be carried out on the final system that is completely assembled and wired. Prior to the commencement of tests, the VENDOR shall make all relevant adjustments to the protection and control circuit components of the Electrical Heat Tracing System, as necessary to fulfil the requirements of the purchase order and this specification.

Type tests and routine tests shall be carried out in accordance with the applicable sections of IEC 62086-1. Documentary evidence in the form of a COMPANY authorised "Type Test Certificate" may be accepted in lieu of the type test. The COMPANY/CONTRACTOR shall specify in the Inspection Test Plan issued with the Material Requisition which, if any, of the tests will be witnessed.

Type Tests

The following type tests shall be required:

a) Dielectric test;

b) Electrical insulation resistance test;

c) Flammability test;

d) Impact test;

e) Deformation test;

f) Cold bend test;

g) Moisture resistance test (heating cables only);

h) Verification of rated output;

i) Thermal stability of electrical insulation;

j) Determination of maximum sheath temperature;

k) Verification of start-up current;

l) Verification of resistance of metallic covering.

m) VENDOR shall supply copies of certificates indicating the results of the type tests. These type tests must have been performed at the VENDOR's plant or by a recognized testing authority to IEC requirements.

Routine Test

The following routine tests shall be required:

a) Dielectric test;

b) Verification of rated output.

VENDOR shall be responsible to carry out all inspection and tests as required at the VENDOR's Works.

7.0 SPARE PARTS

VENDOR shall include in their scope of supply the spares required for pre- commissioning, commissioning and start-up AS REQUIRED. A list of pre-commissioning, commissioning and

start-up spares considered for each package shall be submitted to COMPANY/CONTRACTOR for review.

A recommended spare parts list for two (2) years of operation shall also be submitted for CONTRACTOR's review and purchase separately.

Recommended spares shall take into account related factors of equipment reliability, costs of parts and availability of equipment service facilities.

All spare parts furnished by VENDOR shall be wrapped and packed to preserve items as new condition under normal storage anticipated in Socialist Republic of Vietnam. The same parts shall be properly tagged by stainless steel tags and coded so that later identification as to their intended usage will be facilitated.

All items supplied shall be packaged separately and clearly marked as 'Spare Parts' and shipped with the equipment. Packing lists shall be furnished complete and in detail so that parts can be handled without un-crating, if desired.

VENDOR shall provide adequate and all commissioning and start-up spares including all VENDOR's recommended spares.

8.0 PREPARATION FOR SHIPMENT

VENDOR shall be responsible for preparation of the equipment for export shipment and completion of all required preservation for storage in tropical climates for a maximum period of 12 months.

A careful inspection shall be made to ensure that all operating instructions and label plates are in place, legible and have not been obscured during painting operations. Each item shall be clearly identified with the Manufacturer's name, address, Purchase Order and tag number.

The shipping crates shall be constructed of wood and suitably packed to protect all items against damage during the shipment and storage. Miscellaneous shall be tagged or marked with the tag item number for which they are intended. All such parts shall be suitably boxed, firmly attached to the main item and shipped with the unit.

Protection shall be provided against atmospheric corrosion while in transit and while in outdoor storage. All exposed machined surfaces shall be protected with an easily removable rust preventative compound.

The contents of all boxes or packages shall be recorded in detail on the packing list. The transported package shall have the necessary fastenings, protections and lifting facilities to satisfy lifting and sea fastening loads and restraints. Two complete set of the installation, operating and maintenance instructions shall be packed and shipped with the unit.

9.0 GUARANTEE

VENDOR shall guarantee all equipment furnished to be in compliance with this Specification and drawings.

VENDOR shall guarantee all the equipment against defective material, design, damage or non-conformity and/ or workmanship.

10.0 QUALITY ASSURANCE

VENDOR and his Sub-VENDOR shall operate a quality system satisfying the latest ISO 9001 Quality Standards, or agreed equivalent standard, commensurate with the goods and services provided.

VENDOR shall demonstrate evidence of Quality Assurance in all aspects of the VENDOR's current design and manufacturing practises. Quality Control procedures covering all aspects of design, manufacturing, inspection and test relevant to the equipment shall be included in accordance with the requirements.

11.0 DOCUMENTATION

VENDOR documentation requirements together with the required quantities are given on the SDRL forms. As a minimum, VENDOR is responsible to provide documentations as defined in this Specification. VENDOR is responsible for all documentation in strict accordance with the requirements of the Specifications.

CONTRACTOR/COMPANY reserves the right to request additional drawings and documents or copies of drawings and documents to verify Purchase Order compliance without cost variation.

VENDOR shall identify the planned and actual submissions to CONTRACTOR/ COMPANY on their master drawing and document schedules i.e. computerised Supplier Master Document List (SMDL). The responsibility of updating the SMDL shall rest with VENDOR.

VENDOR shall furnish soft copies of drawings/documents that are of suitable first generation quality. Drawings that are, in COMPANY/CONTRACTOR's opinion, not of suitable quality will be returned to VENDOR for resubmission.

Approval of drawings/documents by the CONTRACTOR/COMPANY shall in no way relieve VENDOR responsibility for the correctness of information, their conformance with stated requirements or acceptability of equipment and materials. This responsibility rests solely with the VENDOR.

VENDOR shall allow the CONTRACTOR/COMPANY five (05) working days to review and respond to the VENDOR's submission of documentation. The fifteen working days is defined as from time of receipt by the CONTRACTOR/COMPANY to the time of despatch. VENDOR shall allow this review period in his production schedule. However work shall proceed without delay in the event of late return of the documentation by the CONTRACTOR/COMPANY.

A review status will be assigned by the CONTRACTOR/COMPANY to documents submitted by VENDOR for review or approval. The following review status codes will be used:

- Code 1: Approved.
- Code 1*: Approved with comments as noted.
- Code 2: Document is reviewed and commented.
- Code 3: Document is rejected, to be resubmitted before proceeding.

Within 10 working days of receipt of a marked-up document, VENDOR shall issue a revised document incorporating all comments and other specified details not included in the first issue. The CONTRACTOR/COMPANY will review documents and return with any further comments. If documents are revised, all sheets under cover of one project document number shall have a new revision number and be resubmitted. The document must be complete even if the revision is minor. All such resubmissions (irrespective of the number of times) are part of VENDOR 's Lump Sum Price.

All documents furnished by VENDOR shall have a revision code following the document number. For Specifications, technical reports and other written material, the following shall apply: Changes in one official issue from the last shall be clearly indicated by a vertical line in the right hand margin adjacent to the current change and in addition the revision number code is to be indicated within a triangle. All changes from the last previous issue shall be thus

indicated. Changes to drawings are to be shown in a similar fashion by "clouding in" the change and placing the revision code in a triangle inside the "cloud".

Within 2 weeks after delivery of Equipment/Materials, 1 copy of Final Factory As-Built Documentation (draft set) shall be transmitted to CONTRACTOR/COMPANY for review. The required number of sets of Final Documentation shall be submitted after the draft set is accepted. Replacement of any Final Factory As-Built documentation with offshore As-Built as a result of changes is part of VENDOR's Lump Sum Price.

VENDOR shall submit as a minimum the following information:

- VENDOR's final technical offer, technical clarifications and brochures
- Purchase Order
- Equipment data sheet
- Detailed wiring and schematic diagrams
- Outline and General arrangement drawings including weight and floor cut-out drawing
- Interfacing connection diagram
- Electrical single line diagram
- List of electrical consumers with estimated loads
- Inspection and Test Plan
- Factory Acceptance Test Procedures
- Factory Acceptance Test Report
- List of pre-commissioning, commissioning and start up spares
- List of spare parts for 2 years operation (optional)
- Operation, maintenance and commissioning manual
- VENDOR Data Book (Binding containing all drawings, documents and certificates)

VENDOR shall at all times, maintain at the Manufacturer works/site office and update to current status a master set of red lined as-built drawings as work progresses. This set of master red lined drawings shall not be removed from the Manufacturer's works/site office. COMPANY/CONTRACTOR reserves the rights to inspect and review this set of master red lined as-built drawings. If VENDOR needs a set of drawings for field installation, a separate set with "Field Use Only" stamped on every page of the drawings shall be used.

12.0 TECHNICAL ASSISTANCE

If required, VENDOR shall provide technical assistance and support at the integration yard jobsite (onshore fabrication yard) and at site (offshore platform) to successfully complete the work. As a minimum, the VENDOR technical assistance is required for equipment installation, pre-commissioning, commissioning, offshore hook-up, site acceptance test and training (if applicable).

VENDOR shall provide procedures and checklist for equipment pre-commissioning and commissioning including parameters for performance acceptance test.

VENDOR to quote rates including mobilisation/demobilisation, daily rates and response time for onshore fabrication yard and offshore platform technical assistance/support during Bid.

For offshore assistance, the VENDOR personnel shall possess a valid medical and sea survival training certificate.

BK-10A WELLHEAD PLATFORM

Approved by
Deputy General Director
"VIETSOVPETRO"
Signed by: Đặng Đức Phong
Date: 07/11/2025 08:16:34
Certified by: Vietsovpetro CA

DANG DUC PHONG

TECHNICAL EVALUATION CRITERIA FOR ELECTRICAL BULK MATERIALS PACKAGE

DOC.NO : OCD-BK10A-TE-18

DATE : 10/2025

REV : 0

ISSUE FOR BID

N

Tender technical proposal shall be evaluated through 2 steps for each Group, detailed as below:

Step 1: Technical proposal shall be passed step 1 if it meet all the condition as below:

1. Year of Manufacture (Section 2 of Technical Requirement): Comply as required in Technical Requirement.
2. Warranty (Section 2 of Technical Requirement): Comply as required in Technical Requirement.
3. Certificates (Section 10 of Technical Requirement): Comply as required in Technical Requirement.

Step 2 : Step 2 shall be evaluated in case the Technical proposal passed prerequisites in step 1

Detailed scores of Technical evaluation for Step 2 described as table below:

Item according to rating levels			Evaluation Criteria	Offer content	Score			Reject point	Reasons for score reduction for each item	Note
					Level I	Level II	Level III			
Level I	Level II	Level III			Point	%	%			
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*		*9*	*10*
1			**Technical Requirements** (Section 3 of Technical Requirement)		**55**					Note 1
	1.1			Fully comply as r equired in Technical Requirement.		100				
	1.2			Comply with minor concern but acceptable		60-90				Note 2,3,4
	1.3			Not comply		0		R		
2			**Manufacturer** (Section 4 of Technical Requirement)		**10**					Note 3
	2.1			Comply as required in Recommended Manufacturer List		100				

	2.2			Manufacturer is not belongs to Recommended Manufacturer List but Bidder provides full information about Manufacturer's capacity, catalogs, profiles, providing materials meets the requirement		40				
	2.3			Not belong to the cases above		0		R		
3			**Country of Origin** (Section 5 of Technical Requirement)		**15**					Note 3,5
	3.1			G7/ Russia/ Europe		100				
	3.2			Australia, Korea,Turkey		70				
	3.3			Singapore, Thailand, Malaysia, Indonesia, China, India, Vietnam, Taiwan		50				
	3.4			Other countries		20				
4			**Time and Location of Delivery** (Section 6 of Technical Requirement)		**10**					
	4.1			Comply as required in Technical Requirement		100				
	4.2			No later than 15 calendar days and delivery at Vietsovpetro Port/warehouse as required in Technical Requirement Document		50				

	4.3			Later than 15 calendar days or Not delivery at Vietsovpetro Port/warehouse as required in Technical Requirement Document		0		R		
5			**Technical Documentation** (Section 9 of Technical Requirement)		**10**					
	5.1		Provide documents along with bid			60				Note 2,3,4,5
		5.1.1		Provide full documentation as required			100			
		5.1.2		Providing incomplete documents as requested but not affecting the assessment			10-90			
		5.1.3		Not provide documents as requested			0			
	5.2		Providing technical documentation upon delivery			40				Note 2,3,4,5
		5.2.1		The Bidder commits to provide all documents as requested			100			
		5.2.2		Commit to provide documents, not fully as requested but does not affect the use of goods			10-90			
		5.2.3		Not commit to provide documents as requested			0			
6			**TOTAL SCORES (100 as maximum)**		**100**					

Notes:

1. For this item is subject to evaluate in range of 0-100% that correspond to bidder's technical proposal
2. Fully meet the requirements will be evaluated as 100% and 0% if not.
3. For this item is picked from each stated case that correspond to bidder's technical proposal
4. a. Each "minor concern" shall be minus 10%. "Minor concern" is defined as not fully comply as required in Technical Requirement Document but acceptable (check for each statement of requirement).

   b. Each "Fully not comply" shall be score 0. "Fully not comply" is defined as completely not comply as required in Technical Requirement Document (check for each statement of requirement).
5. Technical Requirement for Electrical Bulk Package is referred to Doc.No. OCD-BK10A-TR-18.

   Passed Conditions: All of the below conditions:

   - Passed in **"Step 1"**
   - No Item in Step 2 that score at Level II is equal 0 point
   - And total score of Item "6" of Step 2 is equal or higher than **80** points

   Disqualified Conditions: One of the below conditions:

   - Disqualified in **"Step 1"**
   - Passed in "Step 1" but Total score of Item "6" of Step 2 is below **80** points
   - Any Item in Step 2 that score at Level II is equal 0 point.