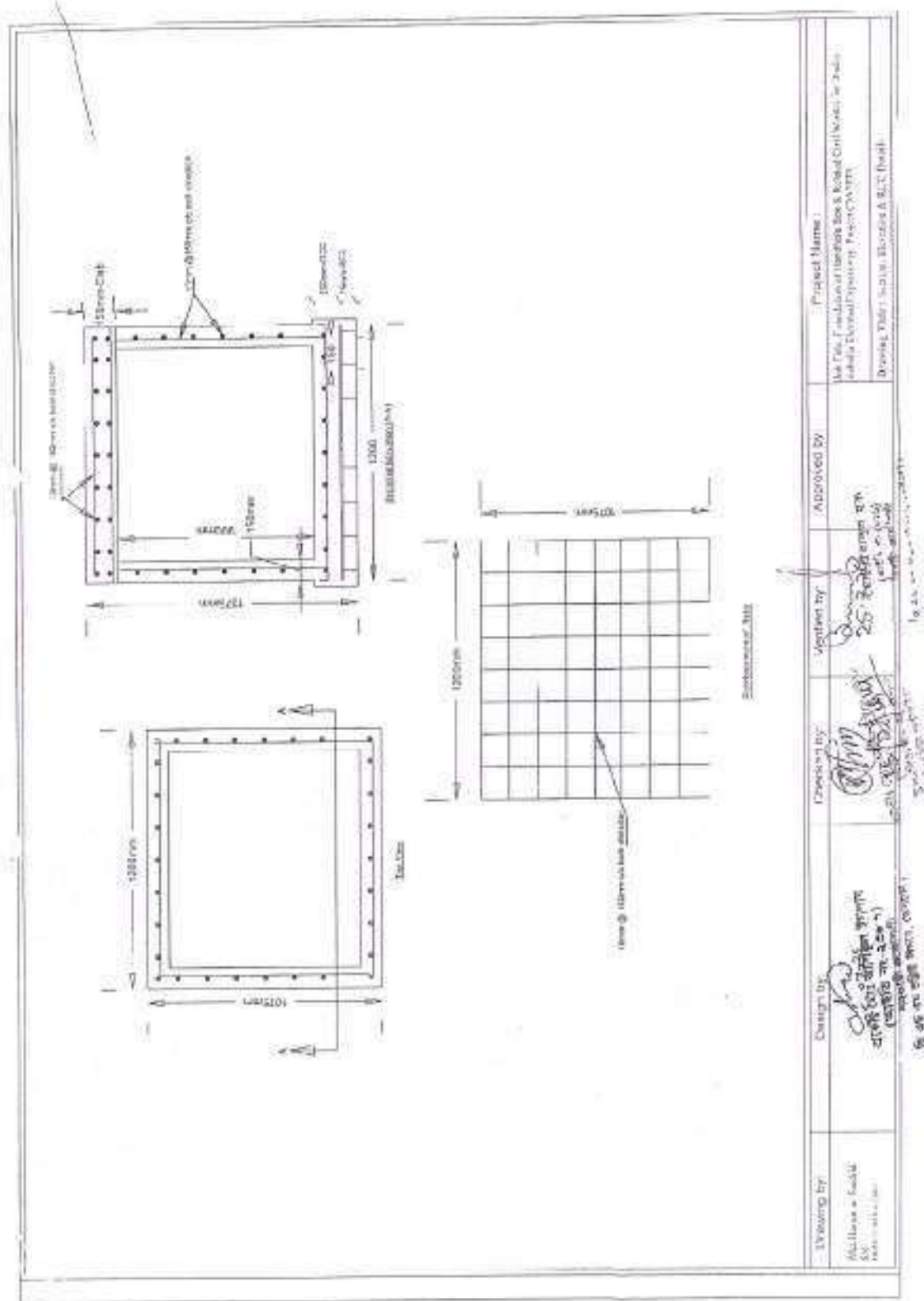
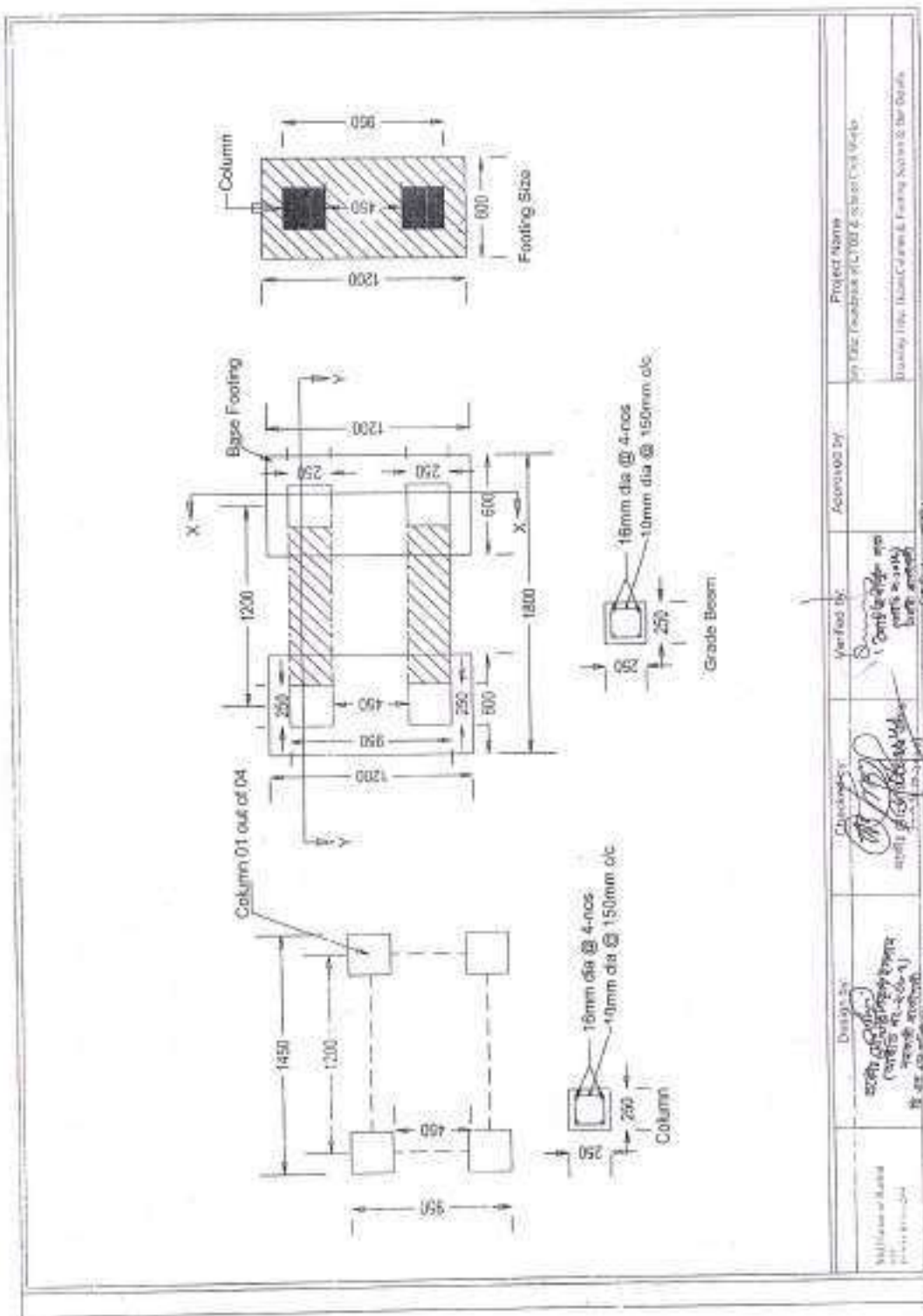
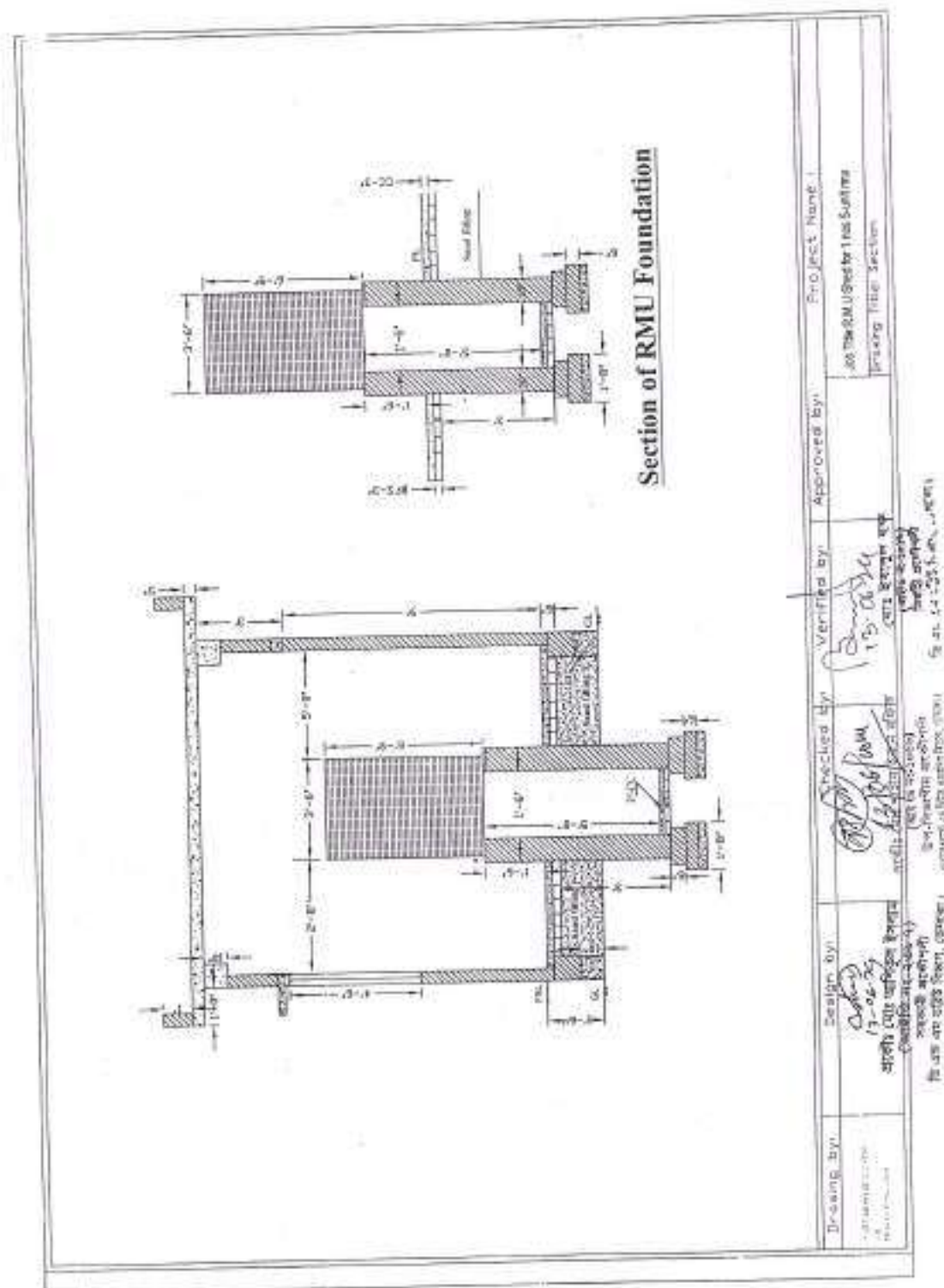


Section 9. Drawings



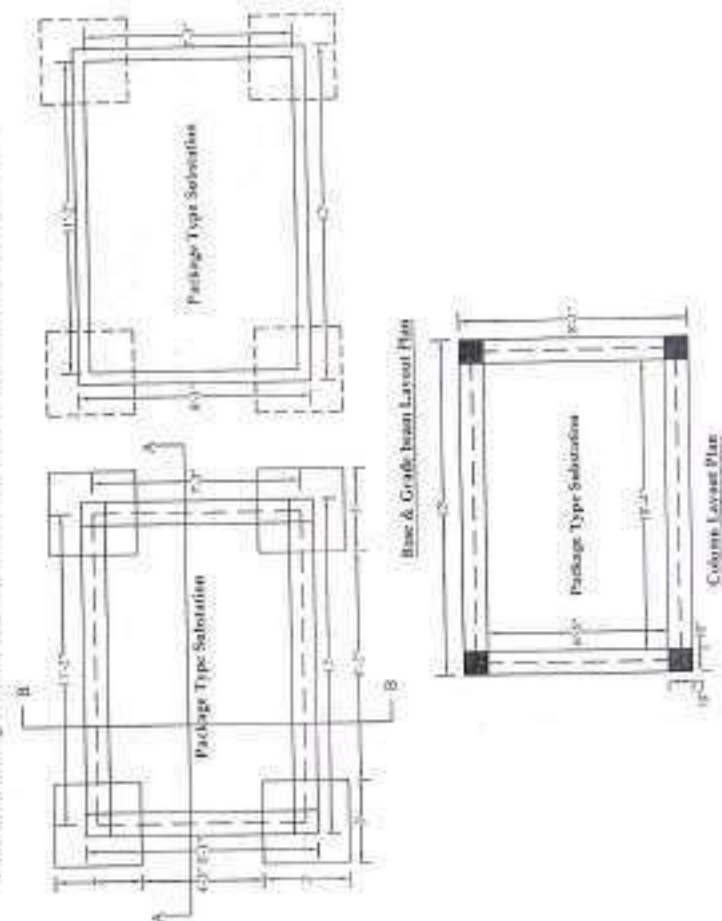






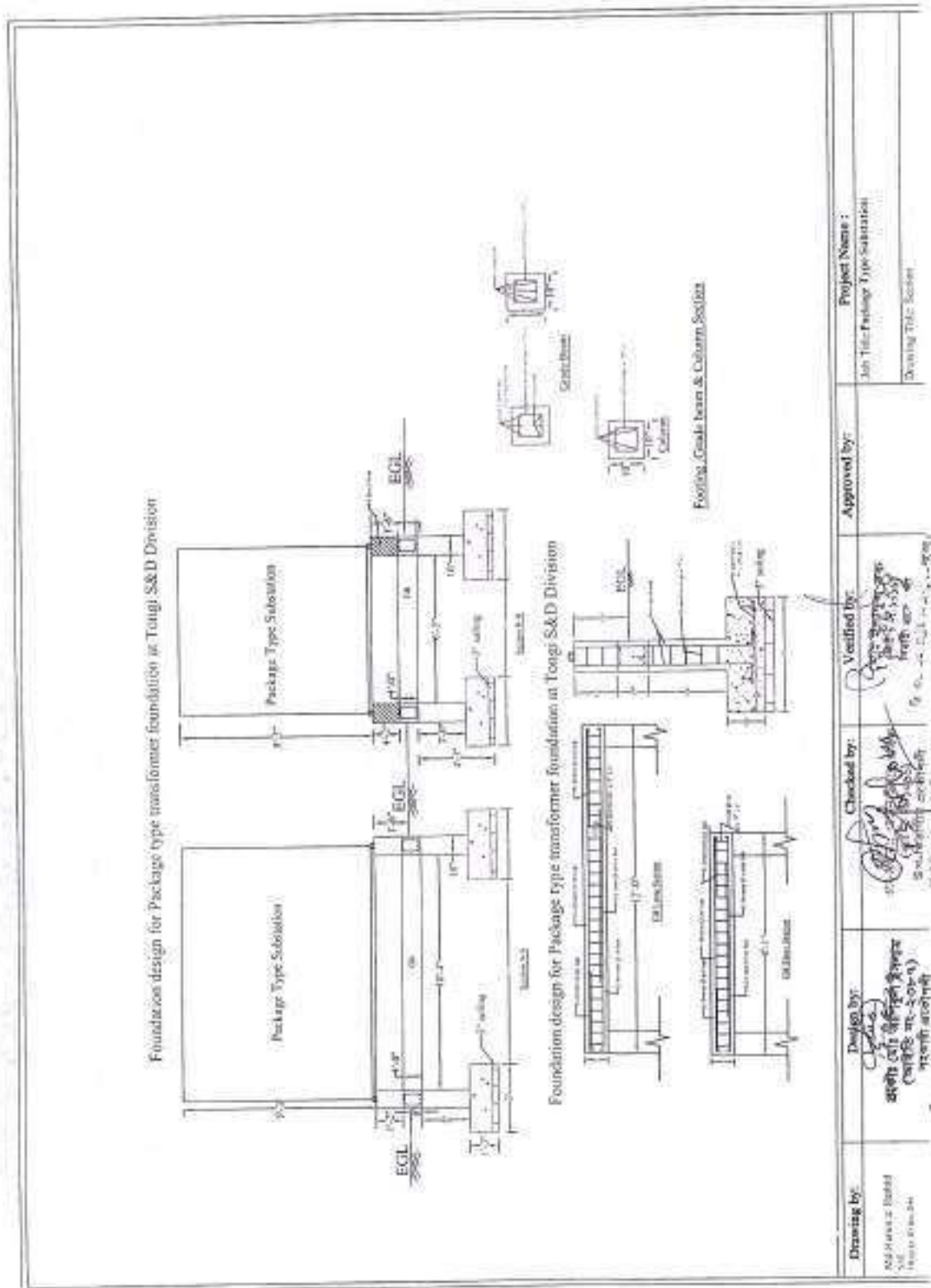
11-2

Foundation design for Package type transformer foundation at Tongi S&D Division

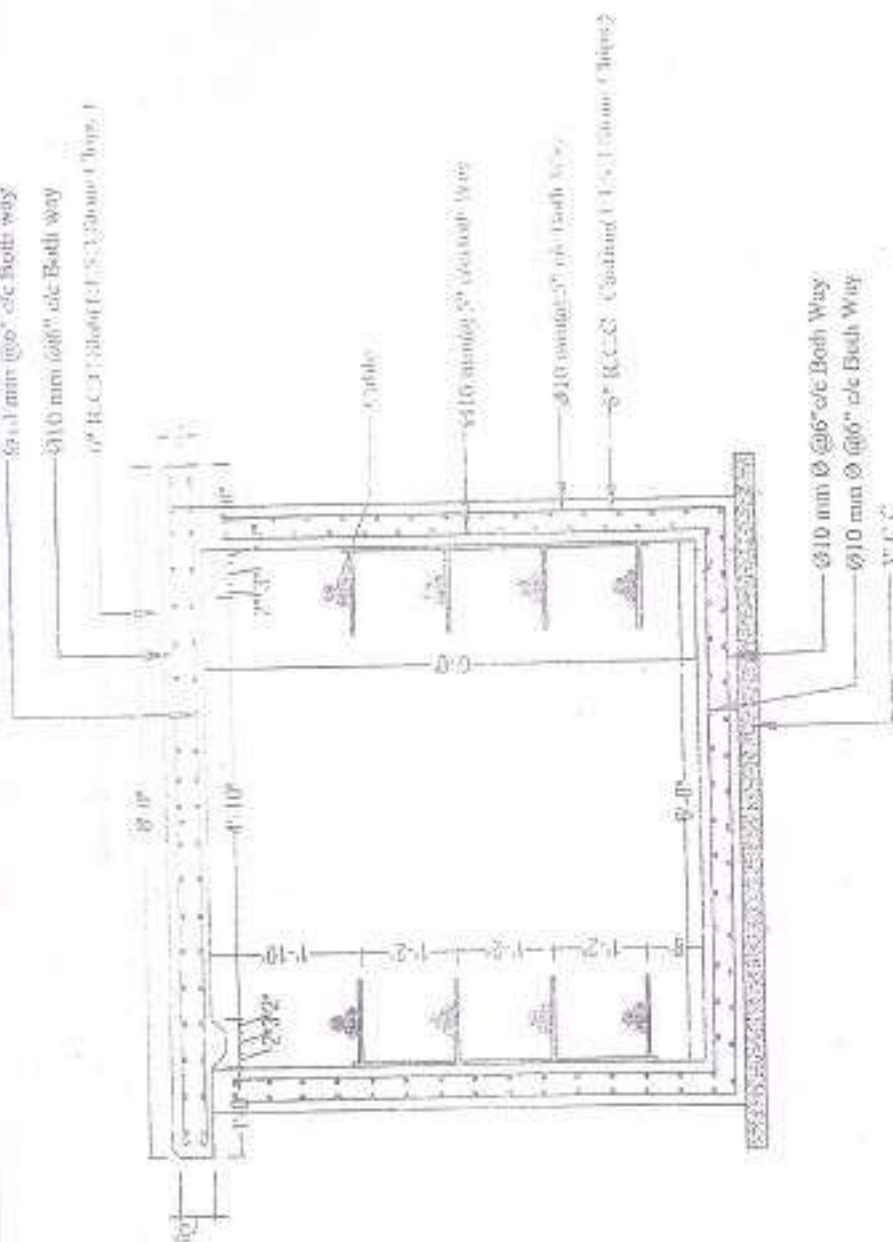


Designing by:	Design by:	Checked by:	Verified by:	Approved by:	Project Name:
Mr. Md. Rashedul Alam (Sd/-) (Sd/-)	Mr. Md. Rashedul Alam (Sd/-) (Sd/-)	Mr. Md. Rashedul Alam (Sd/-) (Sd/-)	Mr. Md. Rashedul Alam (Sd/-) (Sd/-)	Mr. Md. Rashedul Alam (Sd/-) (Sd/-)	1st Package Type Substation
					Drawing Title: Layout Plan

15



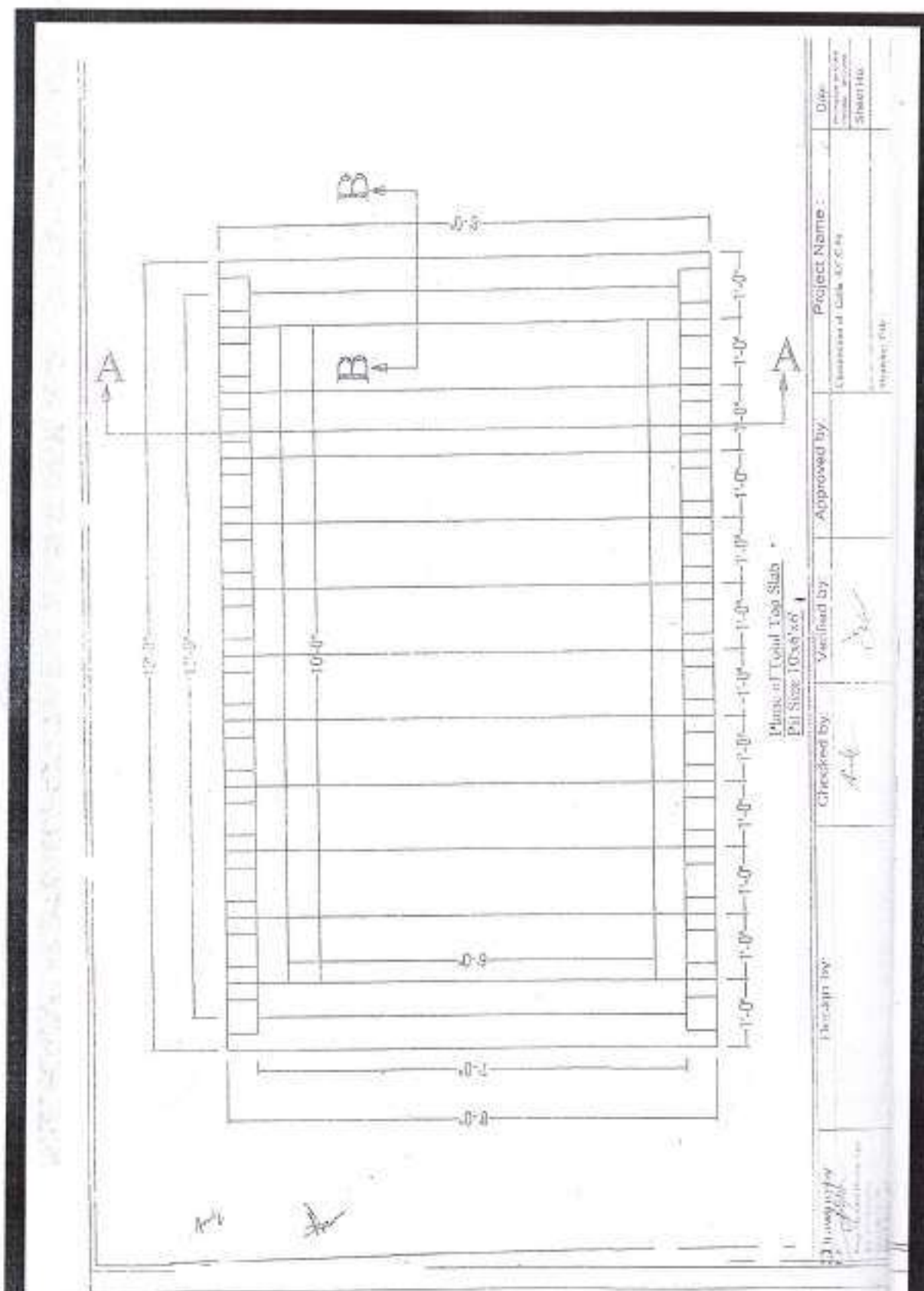
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 100 mm ϕ @ 6" c/c Both Way
 100 R.C.C. Slab (1.5 x 3.0 m) (Type 1)



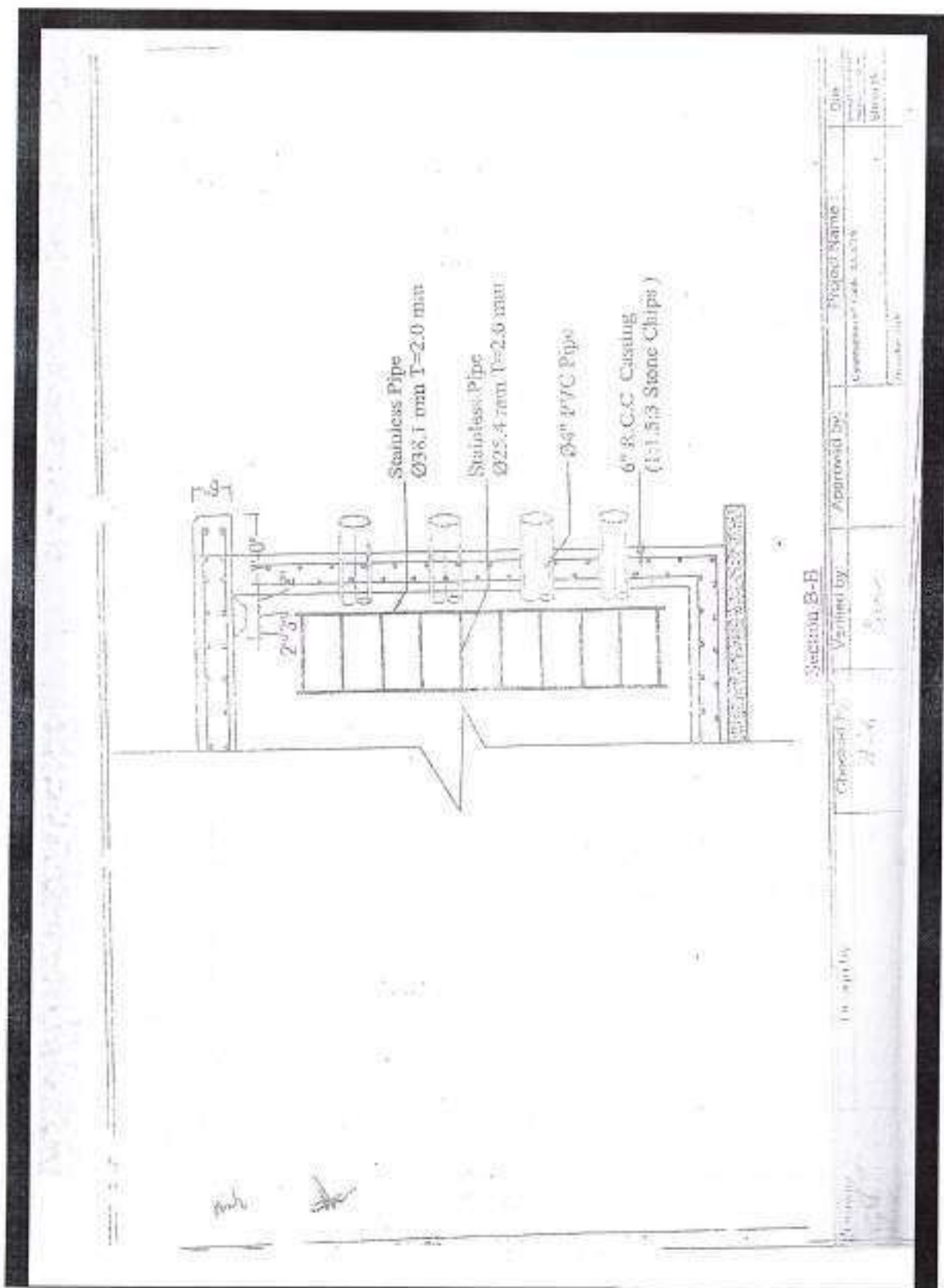
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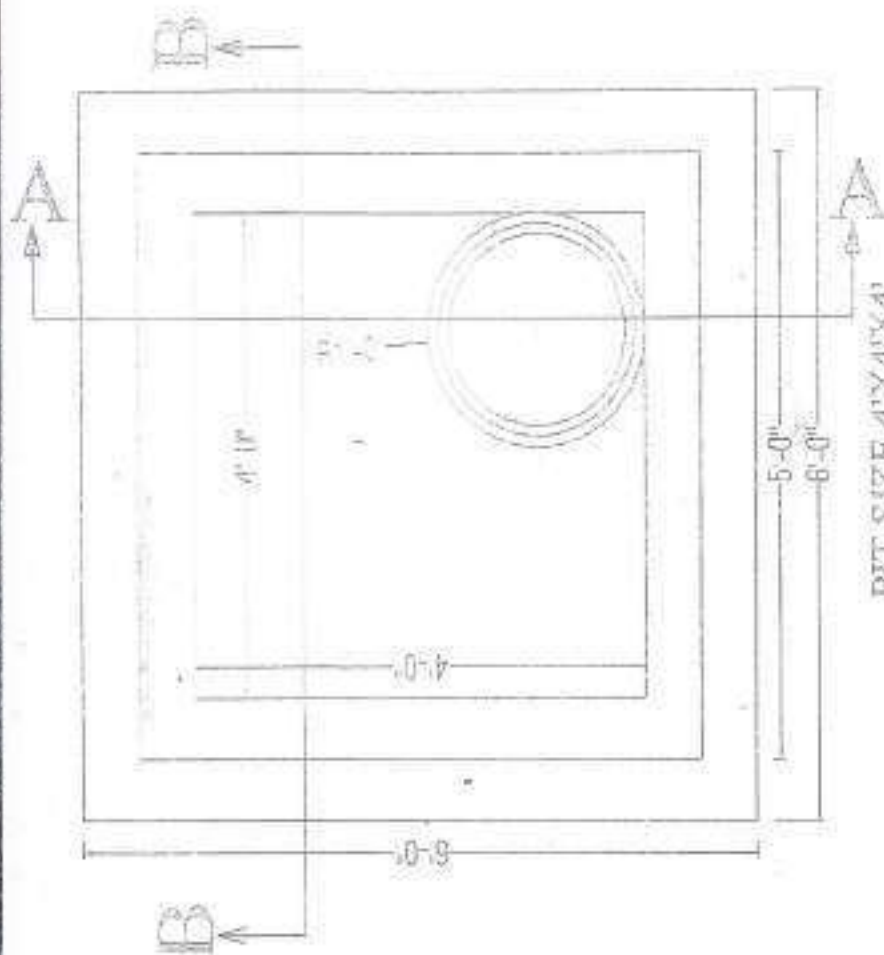
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Drawn by:	Checked by:	Verified by:	Approved by:	Project Name:	Date:
				Construction of Cable Tray	20/01/2020
				Sheet No.	

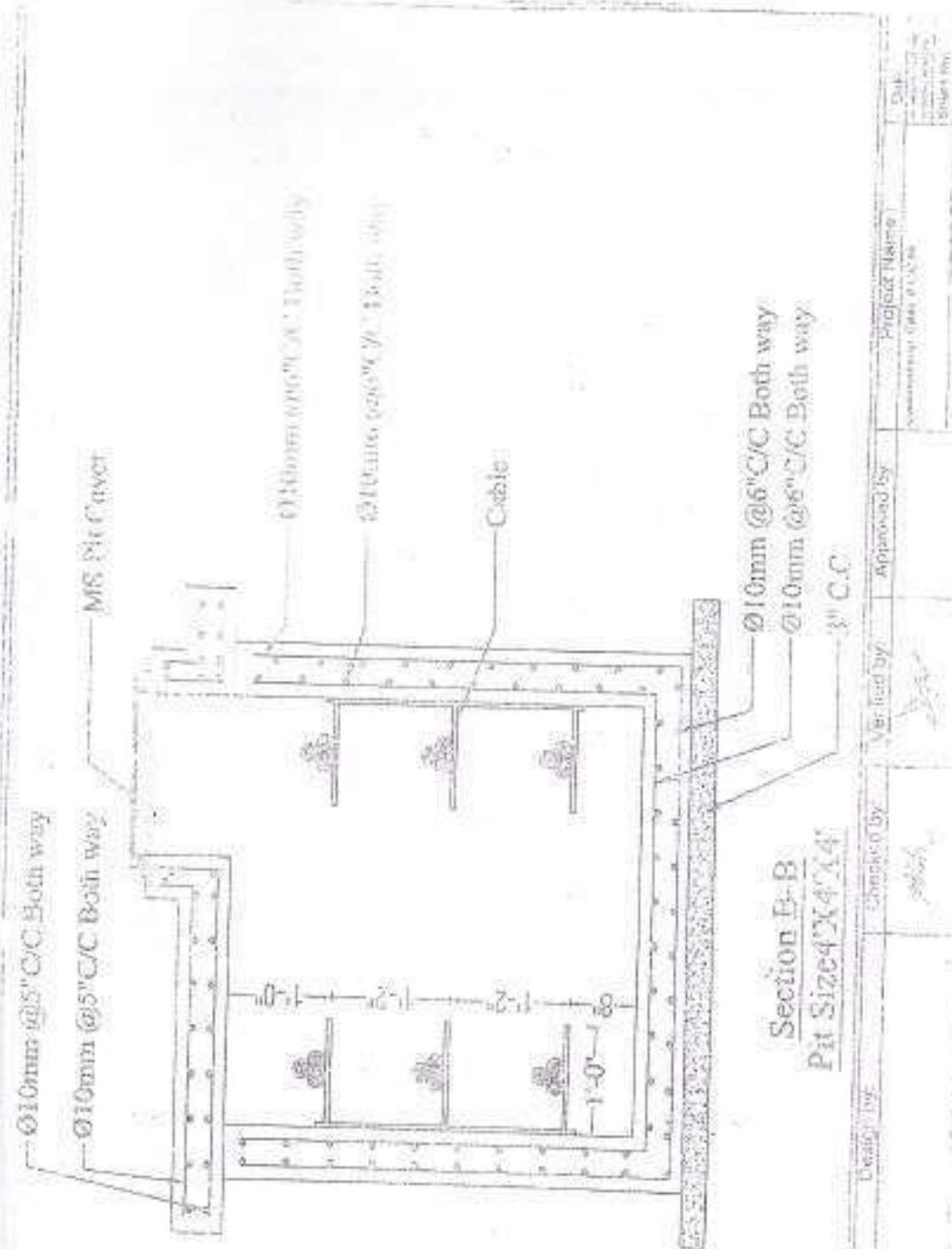


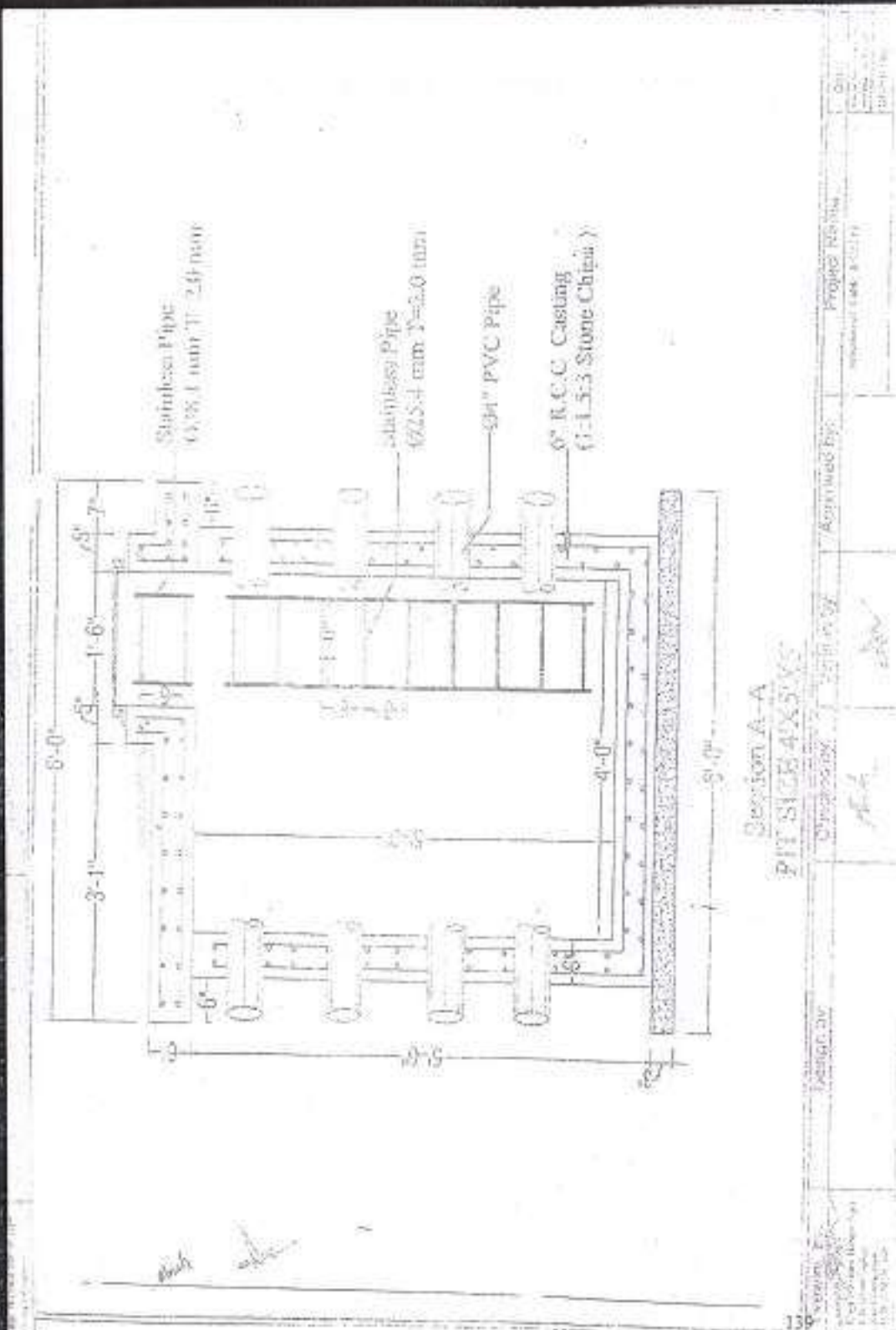
Drawn by:	Checked by:	Verified by:	Approved by:	Project Name:	Date:
				Installation of Cable Tray	
				Quantity of Cable Tray	
				Sheet No.	

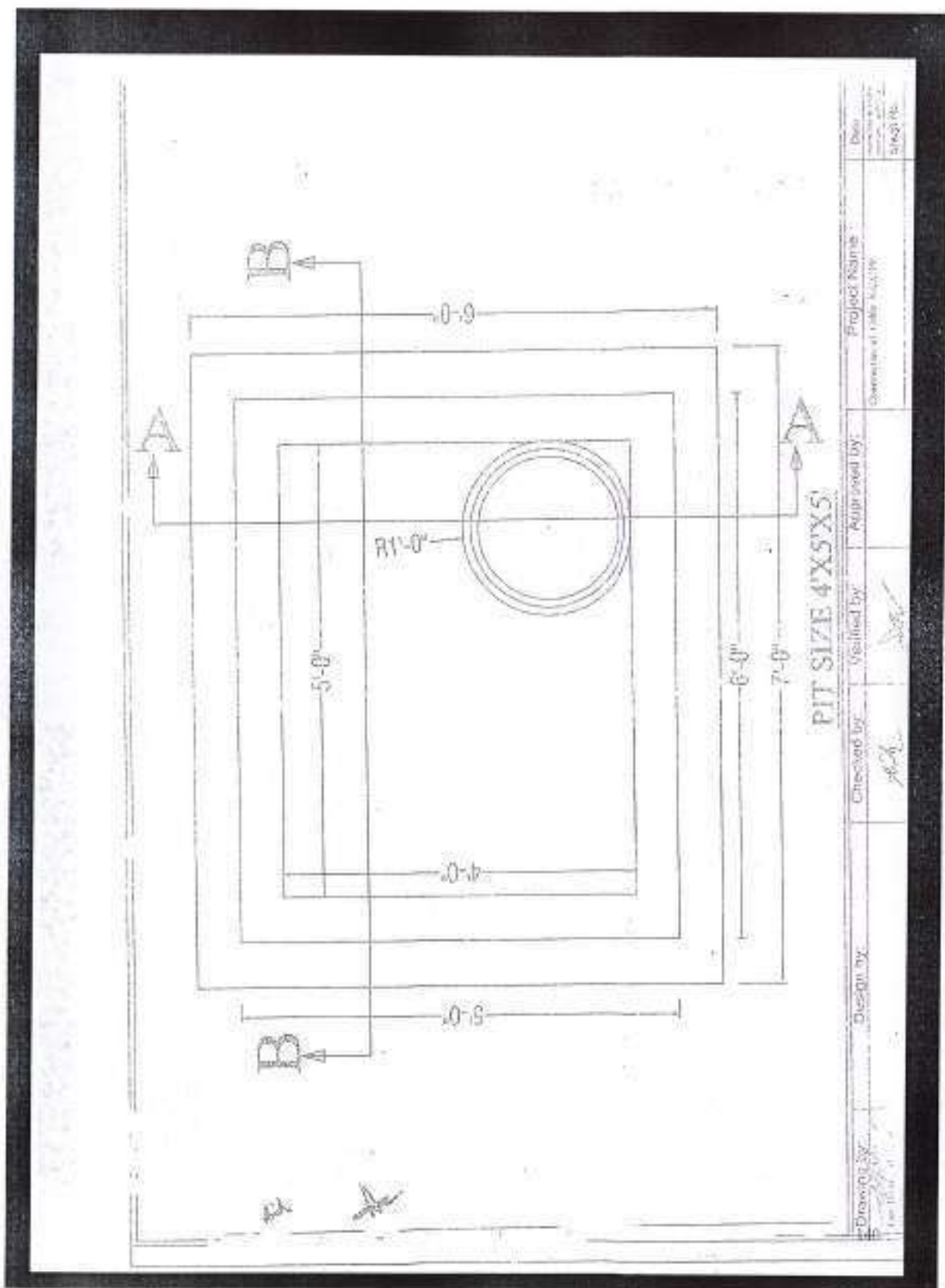




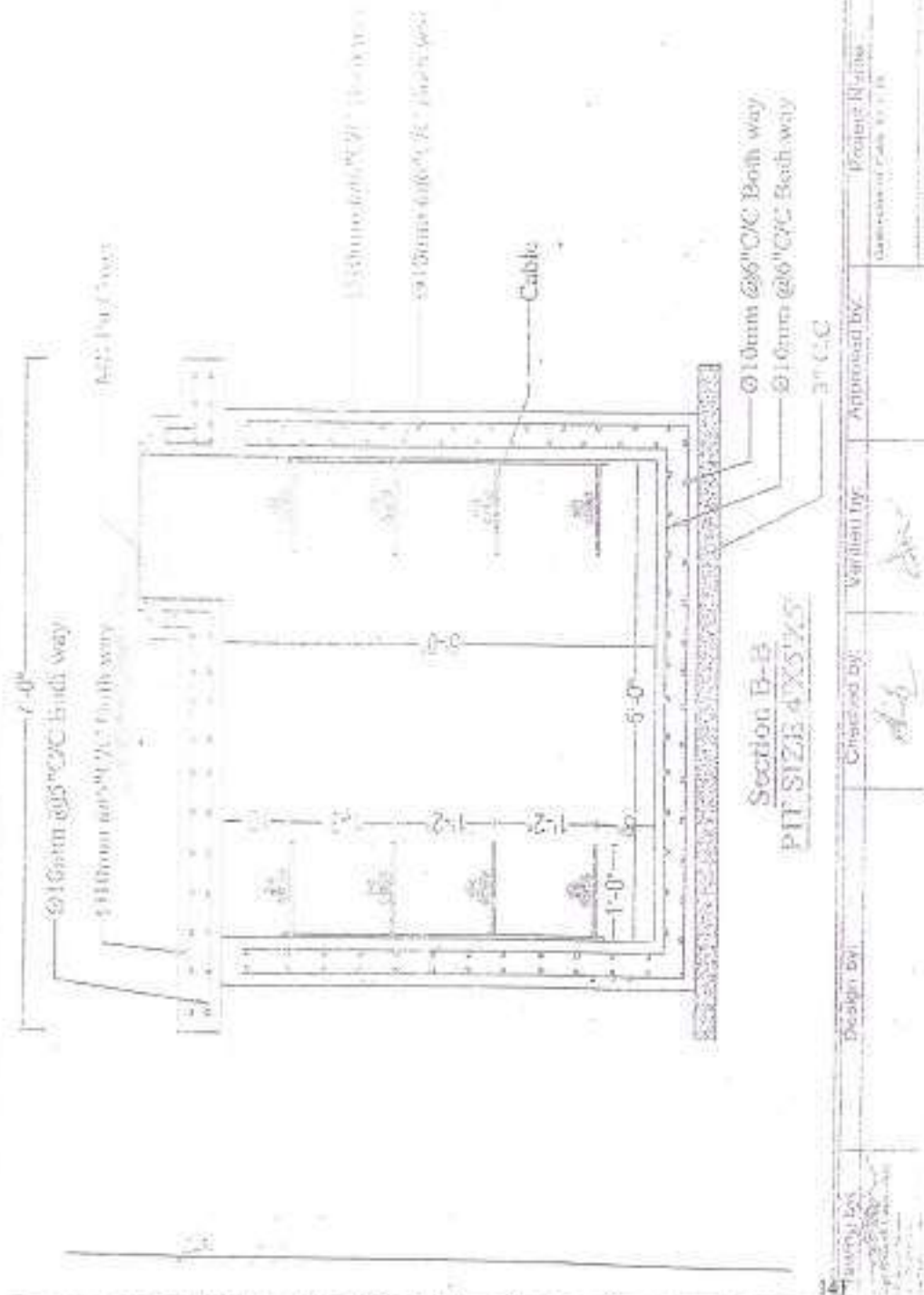
Designed by:	Checked by:	Verified by:	Approved by:	Project Number:	Office:
				Line/Sheet of Cable and JTB	Sheet 25
				Drawing Title:	

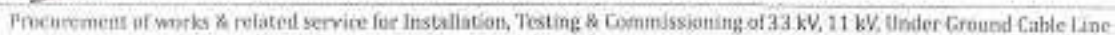






2





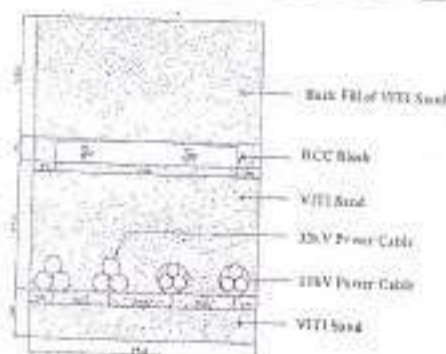


Fig. Trench Cross Section (6-30kV)



RCC Block Cross Section

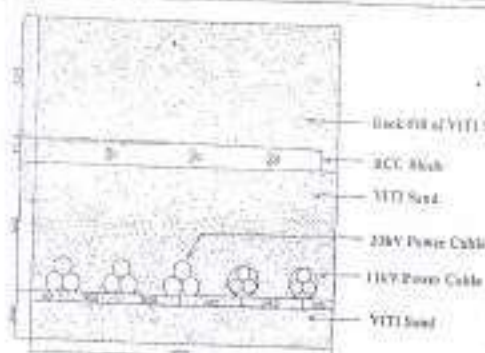
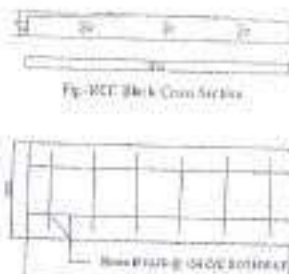


Fig. Trench Cross Section (1-5kV)



RCC Block Cross Section

Correction Factors for Depth of Laying
other than 0.8 m for Direct Buried Cables

Depth of Laying	Single Core	Three Core
0.8 m	1.00	1.00
1.0 m	0.97	0.98
1.22 m	0.95	0.96
1.38 m	0.92	0.93
1.52 m	0.89	0.90
1.83 m	0.80	0.82

Correction Factors for groups of
Three-core Cables in Horizontal Formation
and Direct in Ground

No. of Cables in Group	Spacing	Correction Factor
2	0.25	0.95
3	0.50	0.77
4	0.60	0.72
5	0.70	0.68
6	0.75	0.65
7	0.75	0.63

Correction Factors for groups of
Three-Phase Circuits of Single-Core
Cables laid Direct in Ground

No. of Cables in Group	Spacing	Correction Factor
2	0.25	0.85
3	0.40	0.73
4	0.50	0.68
5	0.60	0.62
6	0.70	0.58
7	0.75	0.55

N.B.: 1. When Spacing between Cables Greater than 0.8 m, the correction factor shall be unity.
2. If the number of cables in a group is more than 7, then the correction factor shall be 0.55 in Trench method only.

DES/CO

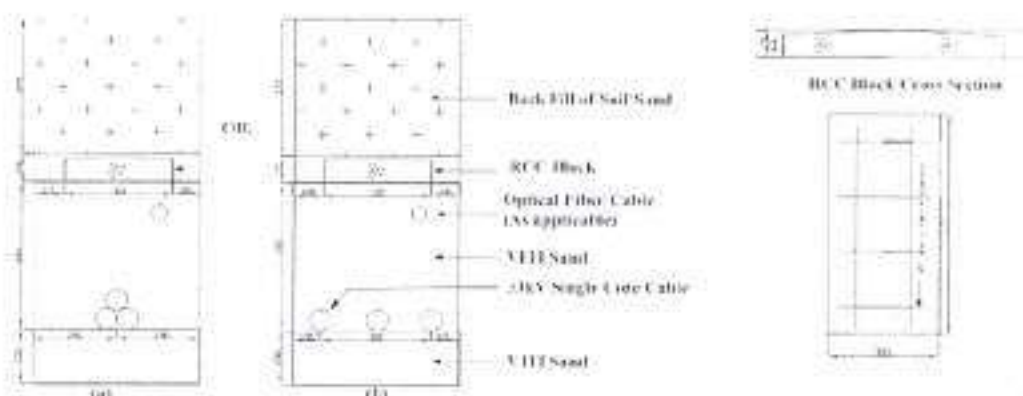


Fig- Trench Cross Section (0.50m)

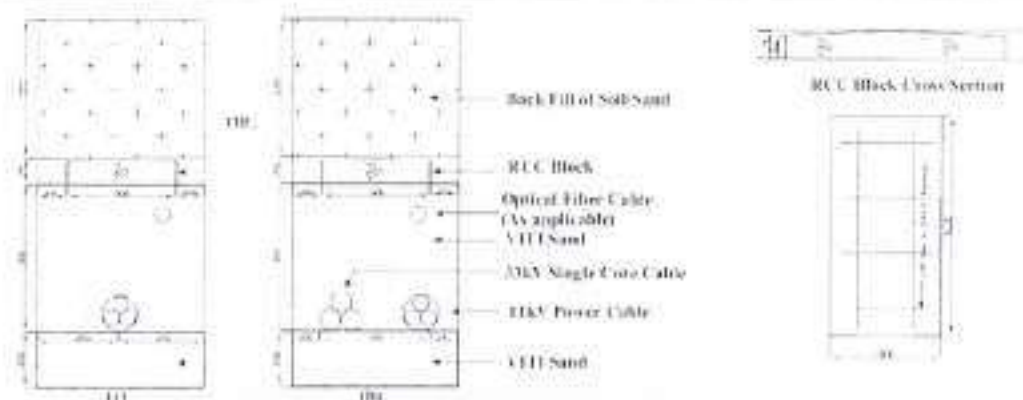


Fig- Trench Cross Section (0.75m)

Correction Factors for Depth of Laying other than 0.50m for Direct Buried Cables

Depth of Laying	Single Core Cable	Three Core Cable
0.6 m	1.04	1.03
1.0 m	0.97	0.96
1.22 m	0.95	0.94
1.50 m	0.93	0.92

Correction Factors for group of Three-core Cables in Horizontal formation laid Direct in Ground

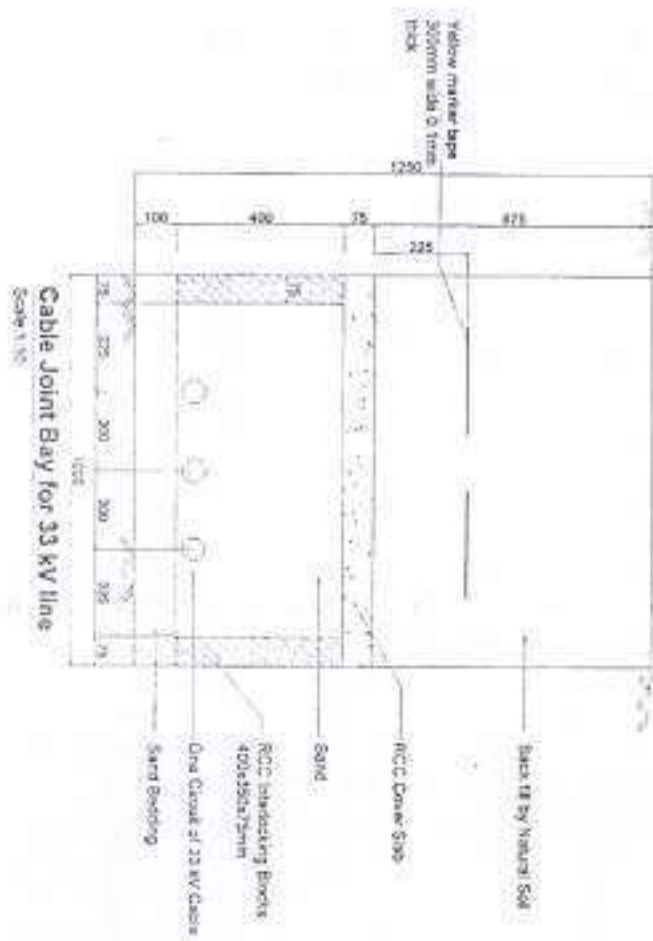
No. of Cables in Group	Spacing	Correction Factor
2	0.85	0.88
3	0.64	0.77
4	0.62	0.72
5	0.57	0.68

Correction Factors for group of Three-Phase Cables of Single Core Cables laid Direct in Ground

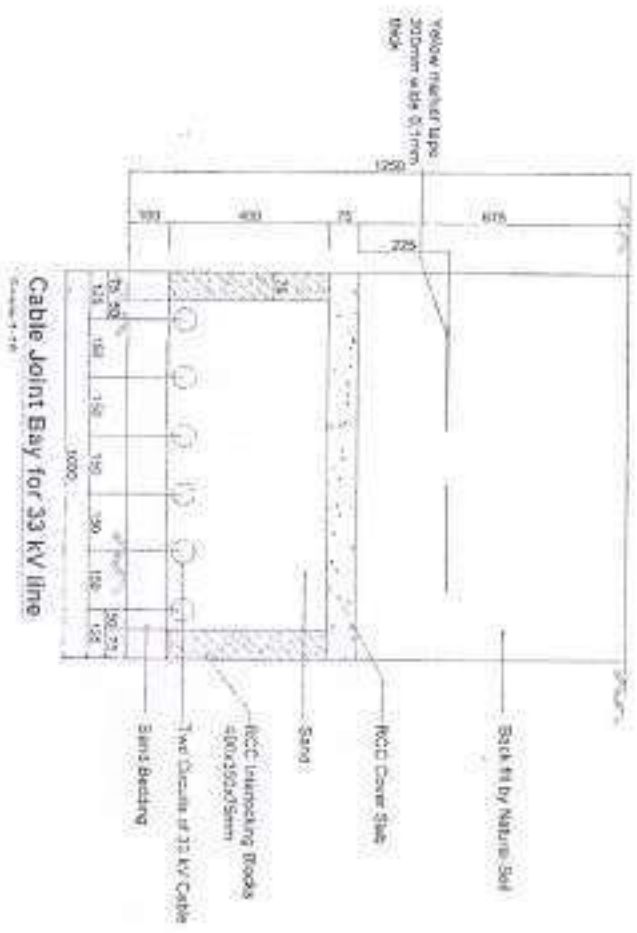
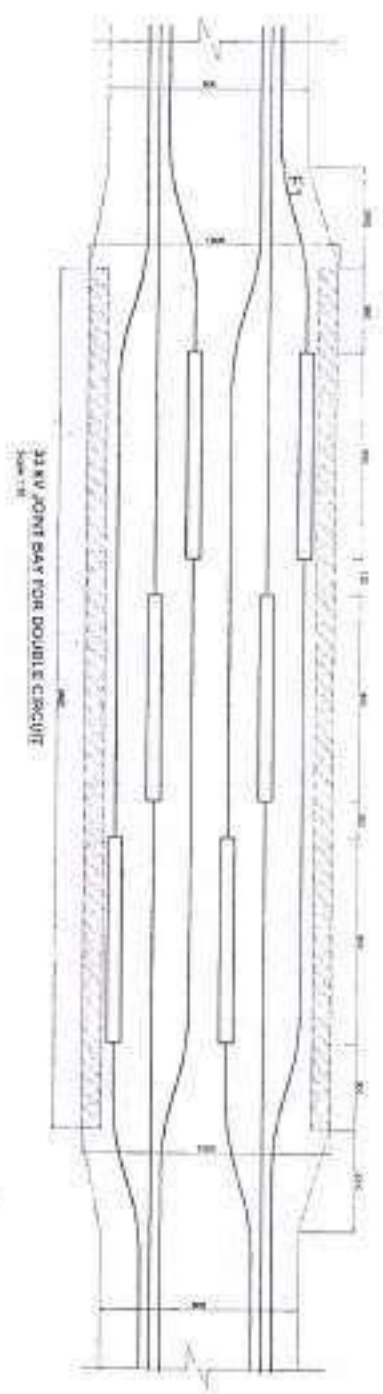
No. of Cables in Group	Spacing	Correction Factor
2	0.73	0.80
3	0.60	0.73
4	0.54	0.68
5	0.49	0.63

1. If the spacing between Cable Centers & Group Centers will increase the spacing accordingly as per IEC 60502-2:2014.

2. If the number of cables will be more than 4, then a combination of 0.50m & 0.75m Trench can be used.



- NOTE
1. All dimensions are in mm unless otherwise indicated.
 2. Concrete Compressive Strength : minimum 20 MPa
 3. Steel Reinforcement Grade 40



- Notes
1. All Dimensions in mm unless otherwise stated
 2. Loadable Capacitor String
 3. 500V Power Switch (Type 40)

FORMAT

LOGO

[Insert Full Contact Details of the Procuring Entity]

Commencement of Works

Office Memo No:

Date:

To:

[Name of Contractor]

[Address]

Contract Reference:

Pursuant to GCC Sub Clause 39.1 of the above-mentioned Contract Agreement, this is to notify you that the following precedent conditions have been duly fulfilled:

- (i) the Contract Agreement has been signed;
- (ii) the possession of the Site has been given; and
- (iii) the advance payment has been made *(delete if not appropriate)*.

You are therefore requested to:

1. Commence execution of the Works, in accordance with GCC Sub Clause 1.1(nn), within *(specify date)*;
2. Submit Insurance Policy Documents, in accordance with GCC Sub Clause 36.2, within *(specify date)*;
3. Submit Programme of Works, in accordance with GCC Sub Clause 41.1, within *(specify date)*.

Signed

Duly authorised to sign for and on behalf of
[name of Procuring Entity]

Date:

FORMAT

LOGO

[Insert Full Contact Details of the Procuring Entity]

CONTRACT AMENDMENT

Contract No.	
Amendment No.	
Approval Reference No.	

Contract No. [insert number/year] by and between the [insert Procuring Entity's name] and [insert Contractor's legal title] for the contract named [insert name of the Works and physical services] is amended as follows:

1. GCC Clause [insert clause no], is hereby revised as _____

2. GCC Clause [insert clause no], is hereby revised as _____

and so on.

The effective date of this Amendment is [insert effective date] or upon execution whichever is later.

ALL OTHER TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT SHALL REMAIN IN FULL FORCE AND EFFECT

THIS AMENDMENT, consisting of [insert number] page(s) and [insert number] attachment(s), is executed by the persons signing below who warrant that they have the authority to execute this Amendment under the original Contract.

IN WITNESS WHEREOF, the Procuring Entity and the Contractor have signed this Amendment.

[Contractor's Authorized Signatory]

[Procuring Entity's Authorized Signatory]

Signature

Signature

Title

Date

Title

Date



FORMAT
LOGO
[Insert Full Contact Details of Issuing Authority]

Office Memo no: _____

Date: _____

COMPLETION CERTIFICATE

01	Procuring Entity Details	
	(a) Division	:
	(b) Circle/Directorate	:
	(c) Zone/Region	:
	(d) Others (specify)	:
02	Name of Works	:
03	Contract No	:
04	Contractor's Legal Title	:
05	Contractor's Contact Details	:
06	Contractor's Trade License/Enlistment/Registration Details	:
07	Reference to NOA with Date	:
08	Original Contract Price as in NOA	:
09	Final Contract Price as Executed	:
10	Original Contract Period	
	(a) Date of Commencement	:
	(b) Date of Completion	:
11	Actual Implementation Period	
	(a) Date of Actual Commencement	:
	(b) Date of Actual Completion	:
12	Days/Months Contract Period Extended	:
13	Amount of Bonus for Early Completion	:
14	Amount of LD for Delayed Completion	:
15	Physical Progress in Percent (in terms of value)	:
16	Financial Progress in Amount (in terms of payment)	:
17	Special Note (if any)	:

Certified that the Works under the Contract has been executed and completed in all respects in strict compliance with the provisions of the Contract including all plans, designs, drawings, specifications and all modifications thereof as per direction and satisfaction of the Project Manager/Engineer-in Charge/Other (specify). All defects in workmanship and materials reported during construction have been duly corrected.

Name and Signature of the Issuing Authority with Designation
please turn over

Details of Works Completed

Contractor: [insert legal title]		
No	Major Components of Works	Total Value (in Contract Currency)

Joint Venture [delete, if not appropriate]

Leading Partner: [insert legal title]		
No	Components/Activities [reference drawn to JV Partner Information]	Value (in Contract Currency)

Co-partner: [insert legal title]		
No	Components/Activities [reference drawn to JV Partner Information]	Value (in Contract Currency)

Co-partner: [insert legal title]		
No	Components/Activities [reference drawn to JV Partner Information]	Value (in Contract Currency)

Note: Figures shown must correspond to Total Value

Sub-contractor [delete, if not appropriate]

Named Sub-contractor: [insert legal title] [delete, if not appropriate]		
No	Components/Activities [reference drawn to Sub-contractor Information]	Value (in Contract Currency)
Nominated Sub-contractor: [insert legal title] [delete, if not appropriate]		
No	Components/Activities [reference drawn to PCC of Contract Document]	Value (in Contract Currency)

Name and Signature of the Issuing Authority with Designation



Appendix



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	STANDARD PROCEDURE	Version No.: 01
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Dhaka Electric Supply Company Ltd. (DESCO)



Standard Operating Procedures (SOP) For Execution of Engineering Works

Revision No	Date	Checked by	Verified by	Approved by

[Handwritten signatures and initials]

DECO LIMITED	STANDARD OPERATING PROCEDURE	Document No.: SP-EEW
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	TITLE: PROCEDURE FOR EXECUTION OF ENGINEERING WORKS	Effective Date: 26 Aug. 2020
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7.2 Work Procedure of Development & Project Division

7.2.1 Overhead Line Construction Wing

Sl. No.	Activity (Including check points)	Ref. Doc.	Responsibility		Freq./Time	Output
	Overhead Line Construction		Key	Associates		
1.1	Job Assign					
1.1.1	File Reception: Overhead line construction related files sent by S&D or P&D division are received and registered.	S&D Division	O.A.	SAE	2 Days	SF-D&P-E29
1.2	Planning					
1.2.1	Approval for Construction: Note sheet is prepared for approval for executing the work. It is processed up to final approval from ED (Engg.)	P&D Division	SAE, AE, SDE, XEN, SE			
1.2.2	Entry on the Register: Files are registered serially as 'first come first registered' basis.	Registrar Books as S&D	SAE	AE/SDE	Two Working days basis on the present at office.	
1.2.3	Site Visit: Sites are visited prior to assigning work & viability of performing particular job is checked. The contractors are provided necessary instruction regarding execution of the job.		SAE	AE/SDE	7 days	SF-D&P-E08
1.2.4	Modification of Design/Drawing: If any work seems to be not executable then related file, with necessary recommended design/drawing is sent back to P&D or S&D for necessary correction or approval.	P&D/DESC O Line construction Design Manual	SAE/AE	SDE/XEN	As required During Execution Time	
1.2.5	Checking the availability of required materials: Availability of required materials is checked prior to issuing work order.	Inventory software.	SAE/AE	SDE	3days	
1.2.6	Issuance of Job Order: Line construction work is issued to the contractor in the name of 'Job order'.	Contract agreement & P&D	SAE, AE, SDE/XEN	SE	7days Or As required	SF-D&P-E09
1.2.7	Requisition for Materials: Requisition of necessary materials is approved by Project Division as per job order and sent to the store.	Inventory software.	SAE, AE, SDE, XEN, SE		As required	As per Store Management Software
1.2.8	Issuance of Materials: Materials are issued from central store & from S&D in some cases. (Central Store's procedure for issuing materials is to be followed.)	Inventory software.	Contractor.	Store, S&D (occasionally)	3 days (as required)	
1.2.9	Preparation of Schedule: Schedule of performing particular job is prepared but exceptions are found in-case of any emergency, system up-gradation activities etc.	S&D requirement	SAE, AE, SDE/XEN		As required	SF-D&P-E10

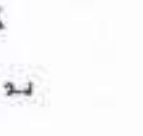
14

DESCO POWER TO PROGRESS	STANDARD OPERATING PROCEDURE	Document No.: SP-EEW
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Sl. No.	Activity (Including check points)	Ref. Doc.	Responsibility		Freq./Time	Output
1.3	Implementation (Job Execution)		Key	Associates		
1.3.1	Preparation for Performing Job: To perform particular line construction work, contractor's line construction gang reaches the site with all necessary equipments & materials. All prerequisite safety measures are taken and ensured by concerning DESCO officials.	POB/DESCO Standard	SAE	AE/SDE/XEN	As required	
1.3.2	Elimination of Local Obstacle: If any obstacle is raised from local people then measures are taken to eliminate the obstacles; e.g. consulting with the local S&D, ward commissioner, chairman, member, etc., attempting to make people understand mentioning the welfare obtainable afterwards.		SAE, AE/SDE	S&D Division/Local Delegates	15 days	
1.3.3	Issuing Letter to the Client: If the obstacle is not removed through the procedure mentioned above, consumer is issued with a letter mentioning a deadline for eliminating the obstacle. If the obstacle is not eliminated through the above processes then related file is sent back to concerning S&D and P&D.		SAE, AE/SDE	XEN	7 days	SF-D&P-E18
1.3.4	Modification in design/drawing due to Public Installation/utilities: If any problem to accommodate public installation/utilities arises, consultation with related organizations/clients is done and recommendations for necessary modification are submitted where applicable & sent back to P&D division.		SAE, AE	SDE/XEN	7 days/as required	
1.3.5	Issuance of Outage: Necessary request for outage letter is issued by Project Division & approved by concerning S&D Division.		SAE, AE, SDE, XEN	XEN	As required	SF-D&P-E11
1.3.6	Outage: Required LT/HT outage is arranged under supervision of engineer in charge.		S&D Division			
1.3.7	Performing line construction work: Line construction work is accomplished by concerning contractor's line construction gang under direct supervision of concerning DESCO officials.		SAE	AE/SDE	As required	







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Sl. No.	Activity (Including check points)	Ref. Coe.	Responsibility		Freq./ Time	Output
1.4.0	Testing & Commissioning		Key	Associates		
1.4.1	Maintenance of Standard: Upon successful completion of line construction, the standard of constructed line is ensured by the engineer in charge as per approved drawing & design.		SAE, AE		-	SF-D&P-E12
1.4.2	Line Energization: Constructed line, installed transformer etc. are charged and then observed to check whether any malfunctioning occurs or not.		SAE, AE		-	
1.4.3	Corrective Measures: If any flaw is detected then corrective directions and suggestions are given where necessary.		SAE, AE		03Days	SF-D&P-E13
1.4.4	Signing of Energization Form: 'Transformer/line equipment energization' form is signed after successful commissioning.		SAE, AE, SDE, XEN			SF-D&P-E14
1.5.0	Post Commissioning tasks					
1.5.1	Submission of As-Built: After the commissioning 'As-Built' drawing with installed 'Material list' is prepared & submitted by the concerning contractor immediately.		Contractor	SAE	As per contract agreement	SF-D&P-E15
1.5.2	Verification of As-Built: 'As-Built' drawing with installed 'Material list' of accomplished work is checked by concerning employee.		SAE	AE/SDE/XEN	05Days	
1.5.3	Entry of As-Built: Record of As-Built & Material list are kept on Excel Worksheet.		OA / SAE	AE/SDE/XEN		
1.5.4 a	Joint Inspection: Joint inspection is done & constructed line is handed over to the concerning S&D.		SAE (Project) SAE (S&D)	Contractor	07Days	SF-D&P-E16 SF-D&P-E30
1.5.4 b	Joint Inspection: After Joint Inspection if any rectification necessary, send a letter to D&P.		SAE/AE/SDE (S&D)	XEN/S&D)		SF-D&P-E24
1.5.5	Return of File: After completion of work, file is sent back to the S&D division for further processing.		SAE, AE,	SDE, XEN, SE	01Days	
1.6.0	Payment of Running Bill					
1.6.1	Contractor's Request for Running Bill: Contractors ask for & submit running bills when their bills reach a certain percentage of their contract value as mentioned in the contract.		Contractor			SF-D&P-E25
1.6.2	Document Checking: Submitted bill and supporting documents (As-Built, Gate-pass, Store Ticket etc.) required for paying the running bill are checked.		SAE, AE, SDE	XEN	03Days	
1.6.3	Sending Documents to F&A: After checking & verifying bill and other supporting documents, they are sent to F&A division for 'Bill-Payment' and bill is paid to contractor.			SE	04Days	SF-D&P-E19







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Sl. No.	Activity (Including check points)	Ref.Coc.	Responsibility		Freq./Time	Output
1.7.0	Close-Out & Final Bill Payment		Key	Assistants		
1.7.1	Submission of Close Out : Depending upon satisfactory completion of work 'Close out' documents are submitted by the contractor	Contract agreement	Contractor		30days	SF-D&P-E23
1.7.2	Collecting the Store Statement: Store statement is collected from Central Store & from S&D's where required for checking the amount of total issued materials to contractor & amount of materials received from contractor in the whole 'work order' period.	Contract agreement	SAE	AE, SDE, XEN, SE	15 days	
1.7.3	Return of Serviceable & Unserviceable Materials: Remaining serviceable & unserviceable materials after the stipulated work order period are returned to Central Store.	Contract agreement	Contractor		15days	As per store Management Software
1.7.4	Verification of Close Out: When all issued & used materials get balanced after returning remaining materials to central store, 'Close-out' is regarded satisfactory. Supporting documents with close out documents are checked properly to ensure their authentication.	Contract agreement	SAE, AE, SDE	XEN	30days	
1.7.5	Sending Close out documents to F&A : All checked & verified documents are sent to Finance & Accounts division for paying the final bill to contractor		SAE, AE, SDE	XEN, SE	7days	
1.7.6	Issuance of Work Completion Certificate: Work completion certificate is issued at the end of the 'Contract Period'.		SAE, AE, SDE	XEN, SE		SF-D&P-E17








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7.2.2 Underground Cable Installation Wing

Sl. No.	Activity (Including check points)	Ref.Coc.	Responsibility	Freq./Time	Output
1.0	Underground Cable Laying				
1.1.0	Arrival of Work				
1.1.1	File Reception: Cable Laying related files sent by P&D are received and registered.		OA	01 Day	SF-D&P-E29
1.2.0	Pre-Execution Planning				
1.2.1	Site Visit: Sites are visited prior to assigning work and viability of performing particular job is checked.		SAE, AE	01 Days	SF-D&P-E28
1.2.2	Modification of Design/Drawing: If any work seems to be not executable then related file, with necessary recommended design/drawing is sent back to P&D for necessary correction or approval.	When and as required	SAE, AE, SDE, XEN, SE	10 Days	
1.2.3	Approval: Files are approved for executing the work.		SAE, AE, SDE, XEN, SE	01 Days	
1.2.4	Checking the availability of required materials: Availability of required materials is checked prior to allowing the work to be performed. In case of insufficient stock of materials note shall be forwarded for procurement.		SAE, AE	02 Days	
1.2.5	Acquisition of Necessary Permission: 'Road Cutting Permission' & other necessary permissions are asked and acquired for underground cable laying. (In case of deposit work consumer shall arrange all necessary permissions)	As per necessity	SAE, AE, SDE, XEN, SE	Depends on respective agency	
1.2.5 a	Issuing Letter to Concerned Authority for Road Cutting Permission		SAE, AE, SDE, XEN, SE	04 Days	SF-D&P-E28
1.2.5 b	Receiving Demand Note for Road Cutting			-	
1.2.5 c	Checking Demand Note and send back to DMCC or other agency for modification, if required.		SAE, AE, SDE, XEN, SE	07 Days	
1.2.5 d	Sending a-Note to F&A Division for Issuing Check		SAE, AE, SDE, XEN, SE	03 Days	
1.2.5 e	Receiving Check From F&A Division			02 Days	
1.2.5 f	Sending Check to Concerned Authority		SAE, AE, SDE, XEN, SE	01 Day	
1.2.5 g	Receiving Road Cutting Permission Letter from Concerned Authority			-	
1.2.6	Issuance of Job Order: UG line construction/RMU installation work is issued to the contractor in the name of 'Job Order'. The book is also issued with the Job Order.	As per normal practice	SAE, AE, SDE, XEN, SE	02 Days	SF-D&P-E28 SF-D&P-E27
1.2.7	Preparation of Schedule: Schedule of performing particular job is prepared but exceptions should be considered in-case of any emergency situation, system up-gradation activities or natural calamities.		SAE, AE, Contractor	02 Days	SF-D&P-E18

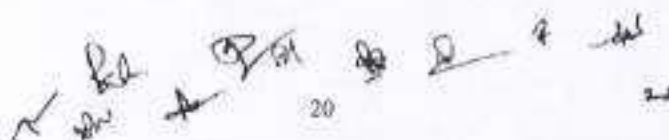




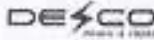


DESCO DISTRIBUTION & TRANSMISSION	STANDARD OPERATING PROCEDURE	Document No.: SP-EEW
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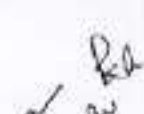
Sl. No.	Activity (Including check points)	Ref. Coc.	Responsibility	Freq./Time	Output
1.2.8	Requisition for Materials: Requisition of necessary materials is approved by Project/Development Division as per requirement and sent to the store.		SAE, AE, SDE, XEN, SE	As per schedule	As per Store Management Software
1.2.9	Issuance of Materials: Materials are issued from central store by contractor. (Central Store's procedure for issuing materials is to be followed)		Central Store, Contractor	Depends on central store	
1.3.0	Implementation (Job Execution)				
1.3.1	Preparation for Performing Job: To perform particular cable laying work, contractor's gang reaches the site with all necessary equipments & materials. All prerequisite safety measures are taken by contractor and ensured by concerned DESCO officials.	As per Agreement	Contractor's Gang, SAE, AE	As per schedule	
1.3.2	Elimination of Local Obstacles: If any obstacle is raised from local people or different public utilities, then measures are taken to eliminate the obstacles; e.g. consulting with the local S&D, ward commissioner, chairman, member, City Corporation, TSS Gas, TAT, B.T.C.L. WASA etc.	As per normal practice	SAE, AE, S&D Division/ Local Delegates/Public utilities	As per situation demand	
1.3.3	Modification in design/drawing due to Public Installation/utilities: If any problem to accommodate public installation/utilities arises, consultation with related organizations/clients is done and recommendations for necessary modification are submitted where applicable & sent back to P&D division.	If necessary	SAE, AE, S&D Division/ Public utilities	01 Days	
1.3.4	Performing Cable Laying/RMU Installation Work: Cable laying/RMU installation work is accomplished by contractor's gang under direct supervision of concerned DESCO officials.	As per Agreement	SAE, AE, Contractor	As per schedule (20 days)	SF-D&P-E20
1.3.5	Initiative for Joint Inspection: Notifying concerned S&D division to depute an engineer for joint inspection.	As per practice	AE, SDE, XEN	01 Days	SF-D&P-E16
1.3.6	Completion of Joint Inspection: After completion of joint inspection notification shall be obtained from concerned S&D division.		XEN(S&D), XEN(DSMW)	As per date	SF-D&P-E24
1.3.7	Issuance of Outage: Necessary request for outage is issued by Project/Development Division & approved by concerned S&D Division or Network Operation Division where necessary.	When and as required	SAE, AE, SDE, XEN, SE, Network Operation Division/ S&D Division	03 Days	SF-D&P-E11
1.3.8	Outage: Required outage is arranged under supervision of engineer in charge.	As per practice	Network Operation Division/ S&D Division	01 Day	
1.4.0	Testing & Commissioning				
1.4.1a	Notification for Cable Energization: To notify network operation and concerned S&D Division about scheduled date of cable energization and request to take necessary steps at their end.		SAE, AE	01 Day	



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Sl. No.	Activity (Including check points)	Ref.Coc.	Responsibility	Freq./Time	Output
1.4.1b	Cable Energization: Last cable is tested & charged and observed to check whether any malfunctioning occurs or not. After successful energization the last cable is handed over to concerned S&D Division.	-	SAE, AE/SDE, AE/SDE (N&Op.), AE/SDE (S&D)	-	SF-D&P-E2
1.4.1c	Notification for RMU Energization: To notify MVSSMC and concerned S&D Division about scheduled date of RMU energization and request to take necessary steps at their end.	-	SAE, AE	01 Day	
1.4.1d	RMU Energization: Installed RMU is tested and charged. After successful energization installed RMU is handed over to concerned S&D Division.	-	SAE, AE/SDE, AE/SDE (MVSSMC), AE/SDE (S&D)	-	SF-D&P-E2
1.4.3	Corrective Measures: If any flaw is detected then corrective directions and suggestions are given where necessary.	As per requirement	SAE, AE, SDE, XEN	03 Days	SF-D&P-E1
1.4.4	Conveying the information of Cable/RMU Energization: Information of cable/RMU energization is conveyed to Network Operation/MVSSMC Division after successful commissioning.		SAE, AE, SDE, XEN, SE	01 Day	
1.5.0	Post Commissioning tasks				
1.5.1	Submission of As-Built Drawing & Material List: After the commissioning 'As-Built' drawing with installed 'Material list' is prepared & submitted by concerned contractor immediately.	As per contract agreement	SAE, Contractor	As per contract agreement	SF-D&P-E15
1.5.2	Verification of As-Built: 'As-Built' drawing with installed 'Material list' of accomplished work is checked by concerned employee.	If necessary	SAE, AE	05 Days	
1.5.3	Preservation & Distribution of As-Built Drawing: 01 nos As-Built drawing shall be preserved in D&MW Division and 03 nos As-Built drawing shall be distributed to P&D, Network Operation and concerned S&D Division.	-	OA, XEN, SE	-	
1.5.4	Return of File: After completion of work, file is sent back to the Network Operation Division via P&D Division for further processing.		SAE, AE, SDE, XEN, SE, CE	01 Days	
1.6.0	Payment of Running Bill				
1.6.1	Contractor's Request for Running Bill: Contractors ask for & submit running bill when their bills reach a certain percentage of their contract value as mentioned in the contract.	As per contract	Contractor	As per contract agreement	SF-D&P-E25
1.6.2	Document Checking: Submitted bill and supporting documents (As-Built, Gate-pass, Store Ticket, site book etc.) required for paying the running bill are checked.	Must be checked	SAE, AE, SDE	01 Days	
1.6.3	Sending Documents to F&A: After checking & verifying bill and other supporting documents, they are sent to F&A division for 'Bill-Payment' and bill is paid to contractor.	As per requirement	SAE, AE, SDE, XEN, SE, F&A Division	04 Days	
1.7.0	Close-Out & Final Bill Payment				
1.7.1	Submission of Close Out Report: Depending upon satisfactory completion of work 'Close out' documents are submitted by the contractor.	As per contract	Contractor	As per contract agreement	SF-D&P-E23







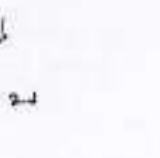


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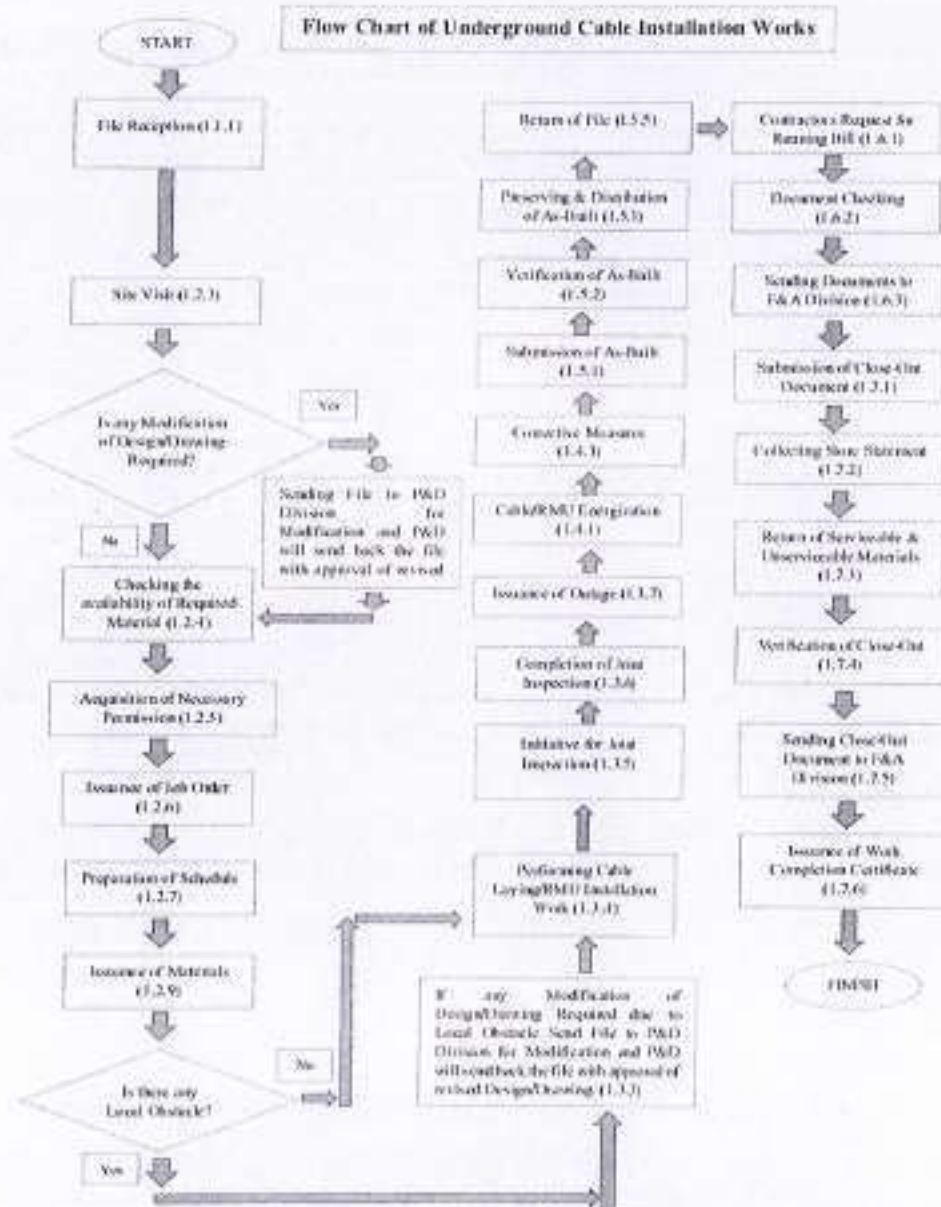
Sl. No.	Activity (Including check points)	Ref.Coc.	Responsibility	Freq./Time	Output
1.7.2	Collecting the Store Statement: Store statement is collected from Central Store & from S&D's where required for checking the amount of total issued materials to contractor & amount of materials received by contractor in the whole 'work order' period.	As per necessity	SAE, AE, SDE, XEN, SE	Within 14 days after completion of contract	
1.7.3	Return of Serviceable & Unserviceable Materials: Remaining serviceable & unserviceable materials after the stipulated work order period are returned to Central Store.		Contractor	As per contract agreement	
1.7.4	Verification of Close Out: When all issued & used materials get balanced after returning remaining materials to central store, 'Close-out' is regarded as satisfactory. Supporting documents with close out documents are checked properly to ensure their authentication.		SAE, AE, SDE		
1.7.5	Sending Close out documents to F&A: All checked & verified documents are sent to Finance & Accounts division for paying the final bill to contractor.		SAE, AE, SDE, XEN, SE	05 Days	
1.7.6	Issuance of Work Completion Certificate: Work completion certificate is issued at the end of the 'Contract Period.'	As per contract	S.E.	As per contract agreement	SP-D&P-E17







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7.2.3 Civil Works Wing

Sl. No.	Activity	Ref. Doc.	Responsibility	Time (day)	Output
1.0	Planning				
1.1	Works undertaken by Development and Project office as per requirements of DESCO which are included in APP and Budget. Proposal of repair and maintenance works and new construction works of others department. Different steps are given below.	-APP -Budget -Demand of other Division	CE/SE/XEN/SDE /AE		SF-D&P-C01
2.0	Preparation of Works				
2.1	Check list before preparation of estimate: -Existing structure (if any) condition -Primary layout check as per proposal -Apparent soil condition -Need for site improvement and approach road -Source of water supply -Sewerage disposal -Source of power supply -Need for boundary wall or retaining wall		AE/SDE	1 days	SF-D&P-C02
2.2	Structural Design: Design is prepared by following the standard reference document and considering structure type and structural system, special type foundation.	-BNBC -Soil test report (if applicable) -Procurement Guideline	AE/SDE Checked by-XEN Verified by-SE Approved by-CE	Consultant 730 days	SF-PRO-16 SF-PRO-22 (if soil test applicable)
2.3	Preparation of Detail Drawing: Detail building plan, elevation, section and structural drawing	BNBC	CAD Operator/SAE AE/SDE Checked by-XEN Verified by-SE Approved by-CE	As require/ 1 days	SF-D&P-C03
2.4	Preparation of Detail Estimate: Estimate is prepared by considering the following issues -Additional cost in foundation due to poor soil condition -Detail measurement of each individual item along with information in drawings, sites etc. -Rates of items not covered by schedule of rates shall be accompanied by analysis	-URSPD -PWDRS Up to date material price	SAE Checked by-AE/SDE Verified by-XEN Approved by-CE	As require/ 1 days	Cost Estimate
2.5	Specification of each item is compiled as per the reference document.	BNBC, BST/HBRI, UBC, BSPWD	AE Checked by-SDE Verified by-XEN	2 days	Standard Specification
2.6	Drawing, design, cost estimate and specification are forwarded for administrative approval to higher authority and purchase requisition for financial approval to higher authority.	Procurement Guide Line	SE/CE/ED/MD	As require / 15 days	Annexure-2A, 2B







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Sl. No.	Activity	Ref.Coc.	Responsibility	Time (day)	Output
2.1	After final approval from ED (Engg./MD, file is sending to procurement division for preparing tender document.	Procurement Guide Line of DESCO	SE/CE	As require	Tender document
2.8	After approval, procurement Dept. prepares a tender document and sends to review committee for finalization.		Review committee	As require	Final tender document
2.9	After review of the tender document, committee sends it to procurement Dept. for publishing the tender.		Procurement Division		
2.10	Tender evaluation, examination, approval and contract management are completed by procurement division and tenderer.	As per Tender Document	Procurement Division	28	
3	Execution of the Contract:				
3.1	Project manager/Engineer in charge is appointed by procurement division through administration dept.	As per contract agreement	Procurement & Administration Division	As require	
3.2	Contract document is sent to development division from procurement division for implementing the mentioned works.		Procurement Division		Contract agreement, Maintain a record register
4	Implementation				
4.1	Possession of the site: Project Manager/Engineer in charge shall give possession of the site within the stipulated date in contract document. If Engineer in charge does not give the access to or possession of the site. Engineer in charge modifies the schedule through the approval of PE	As per contract agreement	AE/SDE/XEN	As required/ 15 days	SF-D&P-CO
4.2	Access to the site: Project Manager may delegate any of his duties and responsibilities to his representatives for site supervision	As per contract agreement	AE/SDE/XEN	2 days (If required)	
4.3	Approval of the temporary works: The project manager shall give the approval of submitted specification and drawings of the temporary works.	As per contract agreement	AE/SDE/XEN	2 days	SF-D&P-CO SF-D&P-CO
4.4	Instructions: Project Manager shall give the instruction to contractors that comply with the applicable law. The project manager, on behalf of the PE, will clarify queries on the condition of contract	As per contract agreement	AE/SDE/XEN	1 day	
4.5	Safety, security and protection of the environment: Project Manager will ensure the safety security and environmental issues by the contractor	As per contract agreement	AE/SDE/XEN	1 day	







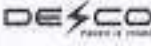
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Sl. No.	Activity	Ref.Coc.	Responsibility	Time (day)	Output
4.6	Progress Meeting: Project Manger will arrange/conduct the progress meeting and review the progress and plans for remaining works and to deal with matters raised in accordance with the early warning.	As per contract agreement	AE/SDE/XEN	15 days	SF-D&P-C00
5	Time control				
5.1	Commencement of works: The project manger shall ensure the start date of work, which is not later than 15 days from the date of signing	As per contract agreement	AE/SDE/XEN	15 days	SF-D&P-C04
5.2	Program of works: The contractor shall submit to the project manager for approval a program me of works showing the general methods, arrangements, order and timing for all the activities in the works.	As per contract agreement	AE/SDE/XEN	1 days	SF-D&P-C07
5.3	Extension of intended Completion date: The project manager shall decide whether or how much to extend the intended completion date with in 21 (twenty one) days of the contractor asking the project manager for decision upon the effect of a compensation event or variation and submitting full supporting information.	As per contract agreement	AE/SDE/XEN	As require	
5.4	Delays order: The project manager may instruct the contractor to delay the start or progress of any activity within the works	As per contract agreement	AE/SDE/XEN	As require	
5.5	Suspension of work: The project manger may at any time instruct the contractor to suspend the progress of part or all of the works	As per contract agreement	AE/SDE/XEN	As require	
6	Quality Control				
6.1	Execution Works: All works are executed, completed and maintained in accordance with bill of quantity, specification and drawings.	As per contract agreement	AE/SDE/XEN	Within contract period	SF-D&P-C08
6.2	Examination of Works: All works shall be open to examination, inspection, measurements, testing and supervision. The contractor shall give notice to the project manager whenever any such part of the works is ready for examination.	As per contract agreement	AE/SDE/XEN		SF-D&P-C09 SF-D&P-C10 SF-D&P-C11








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Sl. No.	Activity	Ref.Coc.	Responsibility	Time (day)	Output
6.3	Rejection of works: The project manager shall check the works and notify the contractor of any defect found. Project manager instructs to carry out test, if defect found, project manager may reject the works by giving notice to the contractor and subsequently ensure the rejected works comply with the contract.	As per contract agreement	AE/SDE/XEN		SF-D&P-C1
6.4	Correction of Defects: The project manager shall give notice to the contractor of any defects before the end of the defects liability period. The defect liability period shall be extended for as long as defects remain to be corrected.	As per contract agreement	AE/SDE/XEN		SF-D&P-C1
6.5	If the contractor has not corrected a defect, the project manager shall assess the cost of having the defect corrected by it, and the contractor shall remain liable to pay the expenditures incurred on account of correction of such defects.	As per contract agreement	AE/SDE/XEN		
7	Cost Control				
7.1	Changes in the quantities and unit rate: If the final quantity of the work done for any particular item increases from the quantity in the bill of quantity by more than 25%, provided the change in case exceeds one (1%) of the original contract price, the project manager shall adjust the rate to allow for the change.	As per contract agreement	AE/SDE/XEN	Within contract period	
7.2	Variations: All variations and extra work order under the contract shall be included in the work programme of works produced by the contractor.	As per contract agreement	AE/SDE/XEN	Within contract period	
7.3	Retention Money: Project manager will issue a defect correction certificate after passing defect liability period for realizing retention money.	As per contract agreement	AE/SDE/XEN		SF-D&P-C1
7.4	Payment Certificates: The basis for payment certificates shall be bill of quantity used to determine the contract price. The project manager shall check the contractor's monthly statement and certify the amount to be paid to the contractor. The value of work executed shall be determined by the project manager through measurement book.	As per contract agreement	AE/SDE/XEN		SF-D&P-C1 SF-D&P-C1 SF-D&P-C1
7.5	Payment to the Contractor: The PE shall pay the contractor the amount certified by the project manager within twenty eight (28) days of the date of each certificate.	As per contract agreement	AE/SDE/XEN	28 days	
8	Completion of the Contract				

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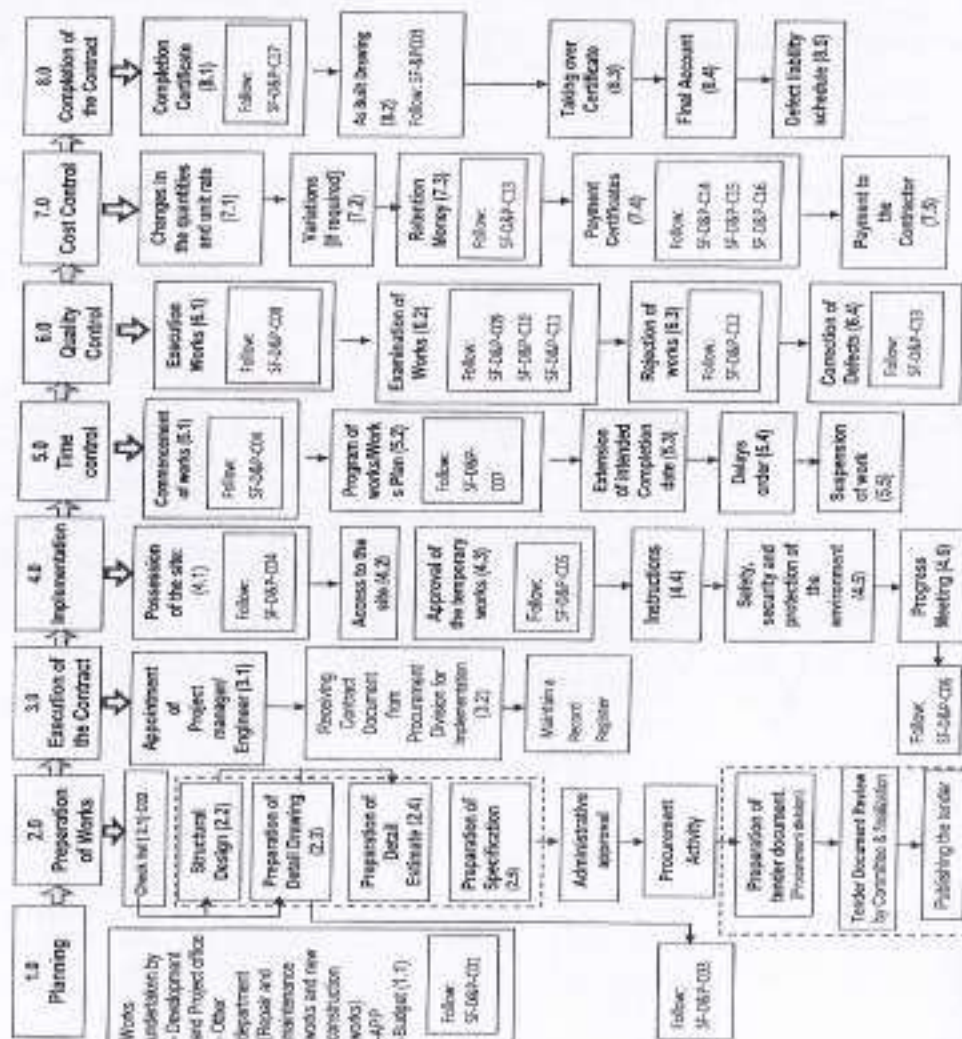
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Sl. No.	Activity	Ref.Coc.	Responsibility	Time (day)	Output
8.1	Completion Certificate: The project manager shall issue a completion certificate upon deciding that the work is completed	As per contract agreement	AE/SDE/XEN		SF-D&P-C17
8.2	As- Built Drawing: If "As Built" Drawings are required, the contractor shall them by the date stated in the document	As per contract agreement	AE/SDE/XEN		SF-D&P-C03
8.3	Taking Over: The PE shall take over the site and works after issuing a completion certificate	As per contract agreement		1	
8.4	Final Account: The project manager shall certify the final payment within fifty six (56) days of receiving the contractor account	As per contract agreement (56 days)	AE/SDE/XEN	As require/56 days	
8.5	If it is not, the project manager shall issue within 56 fifty six days a defect liability schedule that states the scope of the correction	As per contract agreement (56 days)	AE/SDE/XEN	As require/56 days	

Civil Work Flow Chart: The project manager will follow this chart for taking necessary action in every stage.

Handwritten signatures and initials:
 ~ R.R. ~ P.M. ~ S. ~ P. ~ del ~

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Standard Operating Procedure for Execution of Engineering Works

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7.2.4 Project Wing

The project implementation will be followed as per DPP, Government Rules, PPR-2008, Donor's Guideline (foreign aided project), document of contract agreement and Procurement Guidelines of DESCO which is applicable.

8. References

- I. Approved DPP
- II. Bangladesh National Building Code
- III. Book of Specification (PWD)
- IV. Citizen Charter of DESCO
- V. Contract Agreement
- VI. Development Project Proposal (DPP) Standard Document
- VII. DESCO Standard Document under ISO 9001:2015
- VIII. PDB line construction manual.
- IX. Policy Guideline on creating facilities of Electric Distribution lines
- X. Procurement Guidelines of DESCO
- XI. Public Works Department Rate Schedule
- XII. Revised Project Proposal (DPP) Standard Document
- XIII. Uniform Rate Schedule of Power Division

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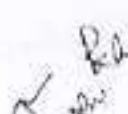
9. Attachment

9.1 Forms of Planning and Design Division

Sl. No.	Quality Form No.
1	QF-P&D-01
2	QF-P&D-02
3	QF-P&D-03
4	QF-P&D-04
5	QF-P&D-05
6	QF-P&D-06
7	QF-P&D-07

9.2 Forms of Development and Project Division

Electrical Works		Civil Works	
Sl. No.	System Form No.	Sl. No.	System Form No.
8	SF-D&P-E08	32	SF-D&P-C01
9	SF-D&P-E08A	33	SF-D&P-C02
10	SF-D&P-E09	34	SF-D&P-C03
11	SF-D&P-E10	35	SF-D&P-C04
12	SF-D&P-E11	36	SF-D&P-C05
13	SF-D&P-E12	37	SF-D&P-C06
14	SF-D&P-E13	38	SF-D&P-C07
15	SF-D&P-E14	39	SF-D&P-C08
16	SF-D&P-E15	40	SF-D&P-C09
17	SF-D&P-E16	41	SF-D&P-C10
18	SF-D&P-E17	42	SF-D&P-C11
19	SF-D&P-E18	43	SF-D&P-C12
20	SF-D&P-E19	44	SF-D&P-C13
21	SF-D&P-E20	45	SF-D&P-C14
22	SF-D&P-E21	46	SF-D&P-C15
23	SF-D&P-E22	47	SF-D&P-C16
24	SF-D&P-E23	48	SF-D&P-C17
25	SF-D&P-E24		
26	SF-D&P-E25		
27	SF-D&P-E26		
28	SF-D&P-E27		
29	SF-D&P-E28		
30	SF-D&P-E29		
31	SF-D&P-E30		









QUALITY MANAGEMENT SYSTEM

QUALITY FORM

TITLE: DRAWING

Document No.: QF-P&O-07

Revision No.: 01

Effective Date: 26 Aug. 2020

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Drawing Title:

Reference No:

Division:

Date:

Sheet No:

Drawn by

Checked by

Approved by

Legend

Standard Operating Procedure (SOP)

Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E03
	SYSTEM FORM		Revision No.: 01
	TITLE: SITE VISIT		Effective Date: 20 Sep. 18
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SITE VISIT (D&P Division)

Name of the Sub Assistant Engineer:

Name of the S&D:

Date of Visit	File No. (P&D No. & D&P No.)	Description of Work (Feeder + Pole no. + Location)	Viability Checklist (put tick mark on the square box if ok)	Executable or Not (write Y=yes, N=not & S=to be sent back to P&D for correcting design)	Remarks
			☐ Road ok ☐ Materials available ☐ Design ok ☐ No gas or sewerage network beneath the pole installation/cable laying spot ☐ No right of way required ☐ No local obstacle		
			☐ Road ok ☐ Materials available ☐ Design ok ☐ No gas or sewerage network beneath the pole installation/cable laying spot ☐ No right of way required ☐ No local obstacle		
			☐ Road ok ☐ Materials available ☐ Design ok ☐ No gas or sewerage network beneath the pole installation/cable laying spot ☐ No right of way required ☐ No local obstacle		
			☐ Road ok ☐ Materials available ☐ Design ok ☐ No gas or sewerage network beneath the pole installation/cable laying spot ☐ No right of way required ☐ No local obstacle		



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	SYSTEM FORM		Revision No.: 01
	TITLE: SITE VISIT		Effective Date: 20 Sep. 18
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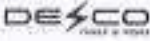
SITE VISIT
(Development & Meter Workshop Division, Electrical Works)

Name of the Sub Assistant Engineer:..... Name of the S&D:.....

Date of Visit					
File No. (P&D No.)			File No. (D&MW No.)		
Description of Work					
Work Type	☐ Development ☐ Deposit				
Source Information	For Cable		For RMU		
	Source is from	☐ Sub-station ☐ RMU ☐ In-out from Existing Cable	Source is from	☐ Sub-station ☐ RMU ☐ In-out from Existing Cable	
	Source Sub-station/RMU/Existing Cable Name		Source Sub-station/RMU/Existing Cable Name		
	Source Cable voltage level, size & type (Al/Cu)		Source Cable voltage level, size & type (Al/Cu)		
Road Condition (mark on drawing if necessary)	☐ Bitumen ☐ RCC ☐ CCC ☐ Brick Pavement ☐ Kacha ☐ Other				
Is there any visible obstacle above ground for road cutting?					
Road Authority (Mark on drawing if multiple authority exist)					
Estimated Trench length in meter (attach Google map, if necessary)			Estimated Cable Length (Meter)		
Place of Road/Yat Crossing (if any, mark on drawing)					
Number of Section (nos.)					
Estimated Jointing Kits (nos.)			Estimated Termination Kits (nos.)		
Condition of RMU Room					
Dimension of RMU Room	Length (ft)		Width (ft)		Height (ft)
Condition of RMU Base					
Executable or Not (write Yes/No/Not & Smt to be sent back to P&D for correcting design)					
Remarks					

Standard Operating Procedure (SOP)

Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E09
	SYSTEM FORM	Revision No.: 01
	TITLE: ISSUANCE OF WORK	Effective Date: 20 Sep. 18
		Page 1 of 1

Date :, 20....
Memo No : DESCO / S.E(Project/Dev.)20...../

To :
M/S.

Sub: Issuance of Work.

With Reference to the above subject, please be informed that following staking sheet/files are hereby issued in favor of you against contract agreement DESCO/PI&T/ Procurement /20.../...., Date: .../.../20... for completion.

Sl. No.	Job No.	P&D No.	D&P No.	Name & Address	Construction Nature	Type Of Work	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

You are requested to submit a work schedule with ISO form within very next day & complete the above-mentioned jobs within .../.../20.... Failure to execute the assigned job within the allocated time period (other than any justified reason) will be penalized as per GCC 42.2. You are also requested to submit as-built drawing with material list using prescribed ISO form & drawing of P&D Division after completion of each job.

Thanking you,

(Engr.)
Executive Engineer (Project/Development), DESCO

Copy for Kind information:

1. Superintendent Engineer (Project/Development/P&D), DESCO
2. Executive Engineer (S & D Division).....
3. Assistant Engineer (Project/Development)
4. Office Master Copy

Standard Operating Procedure (SOP)

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Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E11
	SYSTEM FORM	Revision No.: 01
	TITLE: REQUEST FOR OUTAGE	Effective Date: 20 Sep. 18
		Page 1 of 1

 **DHAKA ELECTRIC SUPPLY COMPANY LTD. (DESCO)**

REQUEST FOR OUTAGE

Job No: _____

SE / Executive Engineer (Project/Development)

Requested by: _____ Date: _____

Description of the proposed Work: _____

Line / Equipment to be isolated: _____

Transformer No: _____ Feeder: _____ Sub-station: _____

Location of Line / Equipment: _____

Area Affected: _____

Outage Period:

(HT) Outage Date: _____ Duration: _____ Time: _____

(LT) Outage Date: _____ Duration: _____ Time: _____

Is this work related with installation/relocation of Transformer? (Yes/No). If yes, the approving authority from S & D shall confirm to witness the energization of Transformer.

Signature of Requesting Person: _____

SAE (D&MW)

AE (D&MW)

SOE (D&MW)

XEN (D&MW)

Approved by:

XEN (S & D): _____

Control Room: _____

Outage Information

*To be Announced
*SMS to be sent

Shut down: _____

Requested by: _____

Name: _____ Designation: _____ organization: _____

Time: _____ Date: _____

Duty Officer (Control Room): _____ Duty Officer (Sub-station): _____

Name: _____ Name: _____

Withdrawn:

Time: _____ Date: _____

Duty officer (Control Room): _____ Duty officer (Sub-station): _____

Name: _____ Name: _____

Standard Operating Procedure (SOP)

Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E12
	SYSTEM FORM		Revision No.: 01
	TITLE: CERTIFICATION OF STANDARD		Effective Date: 20 Sep. 18
			Page 1 of 1

Certification of standard

This is to certify that, the overhead distribution network constructed/shifted under the job no..... at the location named which belongs to the feeder & transformer has been performed by the contractor M/S. Satisfactorily. The above mentioned job comprises constructing/installing/ shifting/recovery of

Now it can be declared that the constructed/shifted network meets the minimum standard after having assured by getting ok at every item in the following checklist.

Checklist

- ☐ Sag ok
- ☐ Jumper connection ok
- ☐ Clearance of the constructed/shifted network from ground & public installation ok
- ☐ Installation of line hardware ok
- ☐ Installed Quantity of line hardware is as per design requirement
- ☐ Planting depth of pole ok
- ☐ For cable laying excavation of earth is as per design requirement
- ☐ Covering by earth for laid cable ok
- ☐ Laid cable shows no trouble while energized

Therefore, the bill against the completed work may be paid upon the submission of As-Built of the completed Job.

Sub-Asst. Engr. (Dist. Project) Asst. Engr. (Dist. Project) XEN (Dist. Project) PD (Dist. Project)

[Handwritten signatures and initials]

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Standard Operating Procedure (SOP)

Execution of Engineering Works

DESCO DISTRIBUTION & TRANSMISSION	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-S-13
	SYSTEM FORM	Revision No.: 01
	TITLE: DEFECT CORRECTION IN COMPLETED JOB	Effective Date: 20 Sep. 16
		Page 1 of 1

Date:/20.....

Memo No.: DESCO/SE (Project/D&MW)/20.../.....

M/S.....

.....

Sub: Defect Correction in Completed Job

It is to attract your kind attention that, the work of constructing/shifting/installing/laying.....under Job no..... which has been performed by M/S. on...../...../20..... appeared to be unsatisfactory due to..... Hence, you are advised to correct the defect found in its work within...../...../20..... & to inform project division thereon.

By the order of authority,

(Engr.)

Executive Engineer (Project/Development)

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works

[Handwritten mark]

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E14
	SYSTEM FORM		Revision No.: 01
	TITLE: TRANSFORMER ENERGIZATION FORM		Effective Date: 20 Sep. 18
			Page 1 of 1

TRANSFORMER ENERGIZATION FORM

(Project)

It is hereby declare that the following line/ equipment are completely ready for Energization.

Substation Feeder Job No Lot

No.

Contractor W/O No:

Scheduled line Energization Date : Time :

Description of line equipment/ Transformer

..... Span LT/HT line construction (New/Shifting (Relocation)/Dismantling (Recovery)/Renovations/Under built

Information of line equipment/ Transformer :

Sl No	Name of equipment	Material Name & Manufacturer Date (Year)	Equipment S/Ns & KVA Rating	Conditioning of equipment work	Equipment Accessories	Location Sl No of nearest equipped Transformer	Remarks
				(a) New Installation : ☐ (b) Relocation/ Shifting : ☐ (c) Change : ☐ (d) Renovation : ☐	(i) Loop : Yes / No (ii) DOPC : Yes / No (iii) LVA : Yes / No (iv) Earthing : Yes / No (v) Flow : Yes / No		

Notified that the line Section/ equipment is ready for energization

.....
Signature of the Contractor Representative

.....
Certified that the above line/equipment is ready for energization

Sub-Assistant Engineer
(Project)

Asst. Engineer
(Project)

Sub Divisional Engineer
(Project)

Executive Engineer
(Project)

The Line Section /Equipment Energization form is forwarded for Necessary action please.

Part-02 (S & D Division)

Sub-Assistant Engineer

Assistant Engineer

Sub Divisional Engineer

Executive Engineer

S & D

S & D

S & D

S & D

[Handwritten signatures and initials]

**INTEGRATED MANAGEMENT SYSTEM****SYSTEM FORM**
TITLE: REQUEST FOR JOINT INSPECTION OF COMPLETED WORK

Document No.: SF-D&P-E16

Revision No.: 01

Effective Date: 20 Sep. 18

Page 1 of 1

Date:, 20....

Memo No: DESCO / SE (Project/Development)/20...../

Executive Engineer

Sales & Distribution Division

Dhaka Electric Supply Company Ltd.(DESCO).

Sub: Request for Joint Inspection of Completed Work

Ref: DESCO/Procurement/20....., Date:, 20....

Sir,

With due respect please be informed that, the following works have been completed by M/S. under supervision of D&P Division of DESCO. Before taking over it is required to complete a joint inspection of that works as below.

Sl. No.	Job No.	P&D No.	D&P No.	Area / Location	Construction nature	Date of Joint Inspection	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

You are requested to depute officer for joint inspection on above-mentioned date and duly fill up Joint Inspection form according to Form No. SF-D&P-E30.

By the order of authority,

Thanking you,

(Engr.)

Executive Engineer (Project/Dev.), DESCO

Distribution:

M/S.

Copy For Kind information to:

1. Superintendent Engineer (Project/D&MW/P&D), DESCO
2. Assistant Engineer (Project/D&MW)
3. Officer/Master Copy

Standard Operating Procedure (SOP)

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Execution of Engineering Works

DESCO	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E17
	SYSTEM FORM	Revision No.: 01
	TITLE: WORK COMPLETION CERTIFICATE	Effective Date: 20 Sep. 18
		Page 1 of 1

Date:/20.....

Memo : DESCO/S.E (Project/Dev.)/20...../

M/S

Sub: Work completion certificate for the construction, renovation and dismantling of 33 KV, 11KV, 11/04KV, 0.4 KV O/H & U/G lines and 11/0.4KV distribution transformer.
 Ref : 1) Work Order No-DESCO/Procurement/20...../..... Dated:...../20.....
 2) Your Application received no.SE (Project/D&MW) Dated:...../20.....

Dear Sir,

With reference to above, the work completion certificate is hereby issued in favor of you for the construction, renovation and dismantling of 11KV, 11/0.4KV O/H and 11/0.4 KV distribution transformer under group-.....against above mentioned work order. You have successfully completed the works in time and have completed by-.....-20.....

Thanking you,

(Engr.)
 Superintendent Engineer (Project/Development)
 DESCO.

Copy for kind information to :

1. Executive Director (Procurement/Engineering / F & A), DESCO.
2. Chief Engineer (Development & Project).
3. Deputy General Manager (Finance/Accounts).
4. Executive Engineer, Project/Development, DESCO.
5. Office/Master Copy.

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E19
	SYSTEM FORM	Revision No.: 01
	TITLE: Bill Process Check List (Running/Final Bill)	Effective Date: 20 Sep. 18
		Page 1 of 1

1. Work order Name
2. Tender No
3. Management Approval Copy Attachment/Contract Doc. : Yes
4. Supplier's/ Contractor's/Consultant's Name
5. Work order Number : DISCO/PL&T/Procurement / / ,
Date: / /
6. Revised Work order Number : N/A
7. Work order Value : TK.
8. Date of Work Completion (Validity of Contract) : / /
9. Delivery Challan Attachment : N/A
10. 1st Running Bill (Paid) : TK.
11. 2nd Running Bill (Paid) : TK.
12. 3rd Running Bill (Paid) : TK.
13. Summation of Certified previous Bill : TK.
14. Running/ Final bill : TK.
15. Amount payable against running/Final Bill : TK.
16. Joint Inspection Sheet Attachment : Yes
17. Quotation with Evaluation Sheet attached : N/A
18. Deduction: payment certified against running bills : N/A

If Applicable

19. Certificate of Payment : DISCO/PL&T/Procurement / / ,
Date: / /
20. Time Extension memo Attachment : Attached
21. Entry Stock Register / RR Copy attachment : N/A
22. Comments :

The total certified amount against Running bill is TK. (In Words: only). The bill may be forwarded for payment after usual deductions by accounts department.

Necessary documents are enclosed herewith.

SAE (Project/Development)
Sign with Seal

AE (Project/ Development)
Sign with Seal

Standard Operating Procedure (SOP)

Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E21
	SYSTEM FORM	Revision No.: 01
	TITLE: CABLE ENERGIZATION AND HANDOVER FORM	Effective Date: 20 Sep. 18
		Page 1 of 1

Part-01 (Development)

Substation/Location Job No
 Contractor W/O No:
 Scheduled Energization Date : Time :

a. Information of Cable:

Sl No	Cable Size	Source/Order Name	Manufacturer Name	Manufacturing Year	Remarks

b. Check List:

Sl. No.	Item to be check	Status		Remarks
01	Cable Termination	Ok	Not Ok	
02	Relay setting of the Regarding CB	Yes	No	
03	Earthing Connection	Ok	Not Ok	

c. Test result:

Insulation Resistance Test	Equipment Details (manufacturer & Model):	
	Measured at: Temperature°C Humidity:%	
	R to Y phase= MΩ	R-phase to Earth= MΩ
	Y to B phase= MΩ	Y-phase to Earth= MΩ
	B to R phase= MΩ	B-phase to Earth= MΩ

Hipot Test	Equipment Details (manufacturer & Model):			
Cable Length	Test Voltage/Time	Phase	Leakage Current	Result
		R	μA	
		Y	μA	
		B	μA	

Notified that the Cable is ready for Energization.

Certified that the above line is ready for energization.

Signature of the Contractor Representative

.....
SAE (Development & MW)

.....
SAE (S&D)

.....
SAE (Network Operation)

.....
AE/ SDE (Development & MW)

.....
AE/ SDE (S&D)

.....
AE/ SDE (Network Operation)

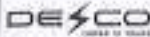
Forwarded for future Operation & Maintenance.

.....
Executive Engineer (Development & MW)

.....
Executive Engineer (S&D)

Standard Operating Procedure (SOP)

Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SP-D&P-E22
	SYSTEM FORM		Revision No.: 01
	TITLE: RMU ENERGIZATION AND HANDOVER FORM		Effective Date: 20 Sep. 18
			Page 1 of 1

Part-01 (Development)

Substation/Location Job No
 Contractor W/O No:
 Scheduled Energization Date : Time :

a. Information of Equipment:

Sl No.	Manufacturer Name	Manufacturing Year	Equipment SL No.	No. at CH Unit	Remarks

b. Check List:

Sl No.	Item to be check	Status		Remarks
01	Earthing Connection	Ok	Not Ok	
02	No. of Termination Kit		Nos.	
03	Manual and Electrical operation of CBs	Ok	Not Ok	
04	Manual and Electrical operation of isolators	Ok	Not Ok	
05	Indicators	Ok	Not Ok	
06	Gas pressure	Ok	Not Ok	
07	Cable Termination	Ok	Not Ok	
08	Earthing resistance		Ω (Ohm)	

Notified that the Cable is ready for Energization.

.....
Signature of the Contractor Representative

Certified that the above line is ready for energization.

.....
SAE (Development & MW)

.....
SAE (S&D)

.....
SAE (Network Operation)

.....
AE/ SDE (Development & MW)

.....
AE/ SDE (S&D)

.....
AE/ SDE (Network Operation)

Forwarded for future Operation & Maintenance.

.....
Executive Engineer (Development & MW)

.....
Executive Engineer (S&D)

Standard Operating Procedure (SOP) *58*

Execution of Engineering Works



INTEGRATED MANAGEMENT SYSTEM

SYSTEM FORM

TITLE: JOINT INSPECTION COMPLETED

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Revision N
Effective T
Page 1

Date:, 20...

Memo No: DESCO / S&D Division/20...../

SE (Project/Development)

Dhaka Electric Supply Company Ltd. (DESCO),

22/A, Faruque Sarani, Nikunja-2, Khilkhet, Dhaka-1229.

Sub: Joint Inspection Completed.

Ref: DESCO/Procurement/20...../....., Date:/.../20.....

Sir,

With due respect please be informed that, joint inspection of the following works have been completed by our team. Respective suggestion, correction and rectification are given of these works.

Sl. No.	Job No.	P&D No.	D&P No.	Area / Location	Construction nature	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Thanking you.

(Engr.)

Executive Engineer

S&D Division....., DESCO

Distribution:

M/S.

Copy For Kind information to:

1. Superintendent Engineer (Project/DSMW/P&D), DESCO.
2. Assistant Engineer (Project/DSMW).
3. Office/Master Copy.

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E25
	SYSTEM FORM		Revision No.: 01
	TITLE: SUBMISSION OF RUNNING BILL		Effective Date: 20 Sep. 18
			Page 1 of 1

Date:

Memo No:

Project Director/Superintendent Engineer (Project/Development)
Dhaka Electric Supply Company Ltd (DESCO)
22/A, Faruk Sarani, Nikunja-2.

Sub: Submission of 1st/2nd/3rd Running Bill for Construction, Renovation and Dismantling of 33kV, 11KV, 0.4KV, O/H or U/G Lines and 11/0.4KV Distribution Transformers.

Ref: DESCO/PI&T/procurement/20..... Date:

Sir,

With subject and reference to the above, the following works have been completed by M/S.under supervision of Project/D&MW Division of DESCO. Line is taken over by respective S&D as joint inspection of these works is completed.

Sl. No.	Job No.	P&D No.	D&MW No.	Area/Location	Construction Nature	Remarks
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Hence, we are submitting here with the Running bill for the Construction, Renovation and Dismantling of 33KV, 11KV, 0.4KV O/H or U/G Lines and 11/0.4KV Distribution Transformers. You are requested to take necessary action for early payment.

Thanking you

(.....)

CEO

Contractor Firm

Enclosure:

- As-Built Drawing of completed job
- As-Built Material List (SF-D&P-15)
- BOQ
- Duly signed Site Book (SF-D&P-27)

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works

DESCO	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E26
	SYSTEM FORM	Revision No.: 01
	TITLE: SUBMISSION OF RUNNING BILL	Effective Date: 20 Sep. 16
		Page 1 of 1

তারিখ:
স্মারক নং-২৭.২৪.০০০০.০১৭.১৪.....

নির্বাহী প্রকৌশলী
অফিস
ঢাকা উত্তর সিটি কর্পোরেশন/.....

বিষয়: কু-গর্ভস্থ বৈদ্যুতিক ১১/০০ কেভি ক্যাবল স্থাপনের নিমিত্তে সড়ক খননের অনুমতি প্রদান প্রসঙ্গে।

উপর্যুক্ত বিষয় ও সূত্রের প্রেক্ষিতে জানানো যাচ্ছে যে, উদ্যোগমূলক কাজের আওতায় আপনার নিয়ন্ত্রনধীন এলাকায় সার্বজনিক ও নিরবধি বিদ্যুৎ সরবরাহের জন্য কু-গর্ভস্থ ক্যাবল পেইং এর নিমিত্তে নিম্নলিখিত ছক অনুযায়ী রাস্তা খনন করা প্রয়োজন।

ক্র নং	রাস্তার নাম/কাজের নাম	বৈধতা (মিঃ)	প্রস্থ (মিঃ)
১.			

এমতাবস্থায়, সংযুক্ত নকশা অনুযায়ী ঢাকা উত্তর সিটি কর্পোরেশনের আওতাধীন এলাকায় উল্লেখিত সড়ক খননের অনুমতি প্রদানের প্রয়োজনীয় ব্যবস্থা গ্রহণের অনুরোধ করা হলো।

ডেসকো'র সার্বিক কর্মকাণ্ডে আপনার সহযোগিতা প্রদান কাম্য।

ধন্যবাদে,

(প্রকৌঃ.....)
অধিবাসনিক প্রকৌশলী
ডেপুটি ম্যানেজিং এন্ড বিচার ওয়ার্কশপ বিভাগ

অনুলিপি: সভায় অবস্থিত জন

১. নির্বাহী পরিচালক (প্রকৌঃ), ডেসকো।
২. প্রধান প্রকৌশলী (উন্নয়ন ও প্রকল্প), ডেসকো।
৩. প্রকল্প পরিচালক (বিতরণ), ডেসকো।
৪. নির্বাহী প্রকৌশলী, বি ও বি বিভাগ, ডেসকো।
৫. প্রায় অফিসার টু এমডি, ডেসকো।
৬. অফিস কপি।

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works



DESCO Dhaka Electric Supply Company Limited	INTEGRATED MANAGEMENT SYSTEM	Document No.: SF-D&P-E27
	SYSTEM FORM	Revision No.: 01
	TITLE: Site Book for Underground Cable Laying Work	Effective Date: 20 Sep. 18
		Page 1 of 4

Dhaka Electric Supply Company Limited (DESCO)
Development & Meter Workshop Division

Site Book for Underground Cable Laying Work

Tender Number	
Name of Tender	
Name of Contractor	
Contract Number	
Job Number	
Job Details	

✓ 20/9/18
R/S
2-4-18

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-DSP-E27
	SYSTEM FORM		Revision No.: 01
	TITLE: Site Book for Underground Cable Laying Work		Effective Date: 20 Sep. 18
			Page 2 of 4

Total number of pages: Nos.

Date of Opening:

Opened by:

SDE / XEN








Standard Operating Procedure (SOP)

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Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E27
	SYSTEM FORM		Revision No.: 01
	TITLE: Site Book for Underground Cable Laying Work		Effective Date: 20 Sep 18
			Page 3 of 4

Sl. No.	Date	Type of Work	Location	Description of Work	Comments	Signature of Contractor Representative	Signature of DESCOD Representative
01							
02							
03							
04							

 +  +  + 

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Page number

Execution of Engineering Works

Standard Operating Procedure (SOP)

INTEGRATED MANAGEMENT SYSTEM

SYSTEM FORM

Document No.: SP-D&P-E27

Revision No.: 01

Effective Date: 20 Sep. 18

Page 4 of 4

TITLE: Site Book for Underground Cable Laying Work

Job Summary

Type of Work	Reference		Unit	Calculation	Total
	Page No.	SL No.			
Indoor/ Outdoor Overhead Termination Kits			Set		
Installation of Straight Through Joints			Set		
Breaking of Peccet Surface			Sqm		
Excavation & Back-filling			Cum		
Transportation & Laying of all size Litz Cable			Meter		
Supplying & Laying of Sand			Cum		
Supply, Carrying & Laying of RCC Slab			Cum		
Supply, cutting, bending, joining & fitting of MS rod			Kg		
Supply, Carrying & Laying of GILCCPVC Pipe			Meter		
Thrust Boring for Railway/ Road Crossing			Meter		
Supply of Glass P/B Tape			Nos		
RMC Installation			Nos		
11KV Switchgear Panel Installation			Nos		
33KV Switchgear Panel Installation			Nos		

Jr. Engineer

Sr. Engineer

Assistant Engineer

Sub-Divisional Engineer

Executive Engineer

Superintending Engineer

Standard Operating Procedure (SOP)

Execution of Engineering Works

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Dhaka Electric Supply Company Limited (DESCO)
Development & Meter Workshop Division

Site Book for Overhead Line Construction Work

Tender Number	
Name of Tender	
Name of Contractor	
Contract Number	
Lot Number	
Name of S&D	
Job Numbers	



DEECCO POWER CO.	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E26
	SYSTEM FORM		Revision No.: 01
	TITLE: Site Book for Overhead Line Construction Work		Effective Date: 20 Sep. 18
			Page: 2 of 4

Total number of pages: Nos.

Date of Opening:

Opened by:

SDE / XEN

[Handwritten signatures and initials]

Standard Operating Procedure (SOP)

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Execution of Engineering Works

	INTEGRATED MANAGEMENT SYSTEM		Document No.: SF-D&P-E28
	SYSTEM FORM		Revision No.: 01
	TITLE: Site Book for Overhead Line Construction Work		Effective Date: 20 Sep. 18
			Page 3 of 4

Sl. No.	Date	Job Number	Location	Type/Description of Work	Comments	Signature of Contractor Representative	Signature of DESCO Representative
01							
02							
03							
04							



Standard Operating Procedure (SOP)

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Execution of Engineering Works

Page number:

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INTEGRATED MANAGEMENT SYSTEM

SYSTEM FORM

TITLE: JOINT INSPECTION FORM

Document No.: SF-D&P-E30

Revision No.: 01

Effective Date: 20 Sep. 18

Page 1 of 1

Date:

Name of S&D:

Contractor:

Job number:

File No. with Date	SE (P&D)	SE (D&MW)	S&D

Description of Work		Remarks
Materials Used (Quantity with Specification)	☐ Pole: ☐ Pole Fittings ☐ Conductor: ☐ Conductor Fittings: ☐ Transformer: ☐ Transformer Fittings: ☐ Lightning Arrester: ☐ DOFC: ☐ Loop: ☐ Earthing: ☐ Guy: ☐ Insulator:	

Single Line Diagram (Hand drawing):

Site Engineer

Project Engineer

SAE (S&D)

SAE (D&MW)

AE (S&D)

AE (D&MW)

Standard Operating Procedure (SOP)

Execution of Engineering Works

	Standard Operating Procedures	Document No.: SF-D&P-C17
	System Form	Version No.: 01
	Title: Completion Certificate	Effective Date: 26 Aug, 2020
		Page 1 of 1

Date:

Memo No.:

.....

Sub: Completion Certificate

In response to your above mentioned reference letter this is to certify that, the works for "....." has completed within the schedule time as per specification underContract No.

In view of the above, completion certificate is hereby issued in favor of you for further necessary action.

Thanking you,

(.....)

Copy to:

1.
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Standard Operating Procedure (SOP)

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Execution of Engineering Works

