

**THE KINGDOM OF NEPAL  
DETAIL DESIGN REPORT  
ON  
THE ESTABLISHMENT PROGRAMME  
OF  
MEDIUM WAVE RADIO BROADCASTING NETWORK**

**VOLUME III  
BILL OF QUANTITIES FOR BUILDINGS AND TOWERS**

**MARCH 1981**

**JAPAN INTERNATIONAL COOPERATION AGENCY**



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial reporting and auditing. The text notes that incomplete or inaccurate records can lead to significant errors and discrepancies, which may have legal and financial consequences.

2. The second part of the document outlines the various methods and tools used for data collection and analysis. It mentions the use of spreadsheets, databases, and specialized software to manage large volumes of information. The text also discusses the importance of data security and privacy, highlighting the need for robust protocols to protect sensitive information from unauthorized access and breaches.

3. The third part of the document focuses on the process of data validation and quality control. It describes the steps involved in verifying the accuracy and reliability of the collected data, including cross-checking, reconciliation, and the use of statistical techniques. The text stresses that high-quality data is crucial for making informed decisions and drawing valid conclusions from the analysis.

4. The fourth part of the document addresses the challenges and limitations of data analysis. It identifies common issues such as missing data, outliers, and biases that can affect the results of the analysis. The text provides suggestions for how to address these challenges, such as using imputation techniques for missing data and conducting sensitivity analyses to assess the impact of potential biases.

5. The fifth and final part of the document discusses the importance of clear communication and reporting of the results. It emphasizes that the findings of the analysis should be presented in a clear, concise, and accessible manner, using appropriate visual aids and tables. The text also notes that the results should be interpreted in the context of the research objectives and the limitations of the data.

**THE KINGDOM OF NEPAL**  
**DETAIL DESIGN REPORT**  
**ON**  
**THE ESTABLISHMENT PROGRAMME**  
**OF**  
**MEDIUM WAVE RADIO BROADCASTING NETWORK**

**VOLUME III**  
**BILL OF QUANTITIES FOR BUILDINGS AND TOWERS**

JICA LIBRARY



1060416[3]

MARCH 1981

**JAPAN INTERNATIONAL COOPERATION AGENCY**

S D S

C R (3)

81 - 27

國際協力事業団	
受入 月日 84.5.19 6	1/6
登録No. 05930	79
	SBS

VOLUME III  
BILL OF QUANTITIES FOR BUILDINGS AND TOWERS  
C O N T E N T S

(Preliminaries)

- A Building construction work
- B Electric work
- C Plumbing work
- D Air conditioning work
- E Tower work
- F General temporary work
- G Packing & Transportation expenses
- H Management expenses
- I Overhead expenses



A-1	Kathmandu Studio Centre building construction work	Page
(1)	Temporary work	6
(2)	Earth work	8
(3)	Reinforced concrete work	10
(4)	Structural steel work	20
(5)	Masonry	22
(6)	Metal work	23
(7)	Carpentry	31
(8)	Roofing work	35
(9)	Doors, windows & glazing	39
(10)	Finish work	50
(11)	Specialities	69
A-2	Kathmandu Transmitting Station building construction work	
(1)	Temporary work	72
(2)	Earth work	73
(3)	Reinforced concrete work	75
(4)	Structural steel work	82
(5)	Masonry	84
(6)	Metal work	85
(7)	Carpentry	102
(8)	Roofing work	103
(9)	Doors, windows & glazing	106
(10)	Finish work	115
(11)	Specialities	136
A-3	Pokhara Transmitting Station building construction work	
(1)	Temporary work	139
(2)	Earth work	140
(3)	Reinforced concrete work	142
(4)	Structural steel work	149

	Page
(5) Masonry	151
(6) Metal work	152
(7) Carpentry	169
(8) Roofing work	172
(9) Doors, windows & glazing	175
(10) Finish work	185
(11) Specialities	208
B-1 Kathmandu Studio Centre electric work	
(1) Feeder wiring installation	212
(2) Power wiring installation	216
(3) Earthing installation	220
(4) Lighting & Socket outlet installation	224
(5) Clock conduit installation	230
(6) Telephone conduit installation	232
(7) Interphone installation	234
(8) Radio monitor conduit installation	236
(9) Fire alarm system	238
(10) Piping for studio	241
(11) Temporary work	
B-2 Kathmandu Transmitting Station electric work	
(1) Feeder wiring installation	245
(2) Power wiring installation	249
(3) Earthing installation	252
(4) Lighting & Socket outlet installation	254
(5) Telephone conduit installation	259
(6) Interphone installation	261
(7) Fire alarm system	263
(8) Temporary work	
B-3 Pokhara Transmitting Station electric work	
(1) Feeder wiring installation	267
(2) Power wiring installation	271



(3)	Earthing installation	274
(4)	Lighting & Socket outlet installation	276
(5)	Telephone conduit installation	281
(6)	Interphone installation	283
(7)	Fire alarm system	285
(8)	Piping for studio	288
(9)	Temporary work	
C-1	Kathmandu Studio Centre plumbing work	
(1)	Water supply system	292
(2)	Drainage & vent work	296
(3)	Sanitary fixture work	304
(4)	Oil tank installation work	306
(5)	Temporary work	
C-2	Kathmandu Transmitting Station plumbing work	
(1)	Water supply system	309
(2)	Hot water supply system	313
(3)	Drainage & vent work	316
(4)	Sanitary fixture work	324
(5)	Oil tank installation work	326
(6)	Temporary work	
C-3	Pokhara Transmitting Station plumbing work	
(1)	Water supply system	329
(2)	Hot water supply system	333
(3)	Drainage & vent work	336
(4)	Sanitary fixture work	344
(5)	Oil tank installation work	346
(6)	Temporary work	
D-1	Kathmandu Studio Centre air conditioning work	
(1)	Air conditioning equipment work	350
(2)	Air conditioning duct work	357

(3)	Ventilating equipment work	369
(4)	Ventilating duct work	372
(5)	Automatic controlling work	376
(6)	Temporary work	
D-2	Kathmandu Transmitting Station air conditioning work	
(1)	Air conditioning equipment work	384
(2)	Air conditioning duct work	387
(3)	Ventilating equipment work	394
(4)	Ventilating duct work	398
(5)	Automatic controlling work	402
(6)	Temporary work	
D-3	Pokhara Transmitting Station air conditioning work	
(1)	Air conditioning equipment work	408
(2)	Air conditioning duct work	412
(3)	Ventilating equipment work	420
(4)	Ventilating duct work	424
(5)	Automatic controlling work	428
(6)	Temporary work	
E-1	Tower work for Kathmandu Transmitting Station	
(1)	Tower foundation & anchor block work	436
(2)	Tower fabrication & erection work	439
(3)	Radial earth work	440
E-2	Tower work for Pokhara Transmitting Station	
(1)	Tower foundation & anchor block work	442
(2)	Tower fabrication & erection work	444
(3)	Radial earth work	446
E-3	Tools & equipment for tower erection	447

## Preliminaries

### P-1 General items

This bill of quantities is based on design drawings prepared for the building and tower construction work of the radio studio center and transmitting stations. Unless otherwise specified, this bill of quantities presents the net quantities of work or materials or both and does not include the following items.

- (1) Labour
- (2) Customs clearance, land transport, storage, unloading, and insurance of materials to be shipped from Japan.
- (3) Maintenance and operation after completion of the work.

anchors, fittings, fastenings or the like to be used for fitting materials or structural members at required positions shall not be included in the bill of quantities unless specifically noted. These items shall be included in related work or materials.

The following symbols and abbreviations are used throughout this bill of quantities.

LM, m : meter

SM, m<sup>2</sup>: square meter

CM, m<sup>3</sup>: cubic meter

mm : millimeter

cm : centimeter

P-2 Temporary work

Area calculation shall be made on the basis of design drawings by taking off the building area for leveling porfiling, the total floor area for marking off and the area to be covered by the circumstance one meter outside the building circumstance for outside scaffolding.

P-3 Earth work

Depth of excavation shall be measured from the existing ground level shown in design drawings. Unless otherwise specified, the circumference formed by 30cm outside the footing beams or the circumference of the underground wall shall be used as the circumference of excavation and a width equal to 0.3 times as large as depth shall be taken off for the width of excavation.

- (1) Excavation of all types of soil and ground and excavation to all depths
- (2) Ground leveling, tampering, curbing, and grading
- (3) Back filling around foundations and walls and walls and under concrete slabs with suitable soil produced by excavation or carried in from outside the site.

P-4 Reinforced concrete work

The quantities of concrete and reinforced concrete shall be taken off on the basis of net volumes indicated in design drawings.

For small openings, cuts, projections, or holes including those to be produced by piping and those not, within face areas of  $1m^2$  deduction of concrete is not made.

The quantities of forms shall be taken off by the net areas of forms in contact with concrete. For openings with areas not exceeding  $1\text{m}^2$  (including those to be produced by piping and those not), deduction of forms shall not be made.

For reinforcing bars, quantities shall be taken off by net weight. However, 5% of the total weight shall be added in consideration of loss by cutting. Lengths necessary for lap joints, hooks at ends, and anchors shall be included in the quantities through conversion to net weight.

P-5 Structural steel work

Quantities for structural steel work shall be taken off by net weights. However, loss by cutting shall be included for respective types of steel : 7% for steel plates, and 5% for other structural steel, bolts, etc.,

P-6 Brick masonry

Quantities for masonry shall be taken off by net areas of surfaces produced by masonry. For areas less than  $0.5\text{m}^2$  (including those to be produced by piping and those not), deduction of masonry is not employed.

The work for beams on brick walls shall be included in the reinforced concrete work.

Brick masonry shall include setting cement plastering, joint filling, and anchor work (when necessary).

P-7 Metal work

Unless otherwise specified, metal work shall include the specified or necessary materials of various types, jointing, welding, fitting of anchors and caps, fastening by screws, fastening by bolts, galvanization and shop painting, and painting at the site.

P-8 Carpentry

Quantities of structural wood members shall be taken off by first calculating the volumes of respective members from dimensions specified in design drawings and summing up these volumes into a total net volume. However, the total volume thus obtained shall be increased by 10% in consideration of loss by cutting or edge processing.

Unless otherwise specified, the carpentry shall include specified or necessary nails, wood screws, bolts, anchors, fasteners, clamps, finishing hardware, auxiliary hardware, and accessories. Quantities for the backing of suspended ceilings shall be taken off by the net area of suspended ceilings.

P-9 Roofing work

Quantities of precoated galvanized steel sheet shall be taken off by the net areas to be covered. The quantities for the roofing work shall include necessary allowance in consideration of lap, rising, and loss by cutting. Quantities for metal plate work shall include necessary allowance on account of lap joint, seam, flashing and similar members, cutting, and mounting.

P-10 Doors, windows & glazing

Wood windows and wood doors shall include all specified hardware. Metal doors and metal windows shall include all hardware described in specifications and indicated in design drawings. The quantities of glass shall be taken off by the net areas of such openings to be glazed at transoms, screens, and door frames and these net areas are summed. Necessary allowance for glazing shall be included.

P-11 Finish work

- 1) Quantities for asphalt layers shall be taken off by the net areas of horizontal and vertical surfaces. All allowance to be required on account of lap joint, cutting, loss by processing, covering around drainage pipes and similar work shall be included.
- 2) Quantities for plastering shall be taken off by the net areas to be plastered, for areas of less than  $0.5\text{m}^2$  (including those to be produced by piping and those not), deduction of plastering shall not be made. Plastering shall include metal and wire laths to be applied to such joints of masonry brick, iron, and different materials that shall be plastered.
- 3) Quantities for tiling on floors and walls shall be taken off by the net areas to be tiled. Allowance shall be included for loss to be caused by cut and other work.
- 4) Quantities for terrazzo tile and laying of terrazzo on floor shall be taken off by the net areas to be covered by terrazzo work. For terrazzo work, loss to be caused by cutting and other work shall be considered. The terrazzo work shall include fitting, indicated or specified or necessary anchors, joint filling, polishing, and specified or necessary reinforcement of terrazzo blocks.
- 5) Quantities for the painting work shall be taken off by the net areas to be painted. The painting work shall include all processings of all bed surfaces.
- 6) Quantities for the interior finish work shall be taken off on the basis of areas obtained by subtracting areas by the inside dimensions or indicated dimensions

of the openings of fittings and others from net areas by design dimensions or indicated dimensions. For areas of openings of less than 0.5m (including those to be produced by piping and those not), deduction of interior finish work is not employed.

P-12 Miscellaneous work

The miscellaneous work shall include assembly, fixing members by bolt, fastening by screws and by nails, fitting of wood members, height adjustment, fixing members to walls or floors or both, finishing units into complete ones, and specified or necessary finished hardware, shop painting, and painting in the construction site.

P-13 Electrical work

Quantities for wires, cables, and conduits shall be taken off by actual lengths (indicated in drawings and not including lengths for connection) plus 20% necessary on account of loss.

For boxes, piping fixtures, lighting fixtures, etc., actual quantities (obtained from drawings) shall be taken off.

P-14 Plumbing work

For material other than cast steel pipes, quantities obtained by adding 10% to actual quantities shall be taken as design quantities. The required quantities shall be obtained by adding 10% to the design quantities. In the case of cast steel pipes, actual quantities shall be equal to design quantities which shall be equal to the required quantities. For valves and fittings, actual quantities shall be taken off for the required quantities.



P-15 Air conditioning work

For piping materials, design quantities shall be obtained by adding 10% of quantities for actual lengths and the required quantities shall be obtained by adding 10% of the design quantities.

For electric wiring and piping of automatic control equipment, quantities to be obtained for actual lengths shall be used as design quantities. The required quantities shall be obtained by adding allowance and loss, which shall be respectively 10% and 15% of the design quantities. For air ducts, design quantities shall be obtained by adding 10% of actual quantities and the required quantities shall be obtained by adding the loss of 30% of the design quantities. For equipment, valves and fixtures, actual quantities shall be used as the required quantities.

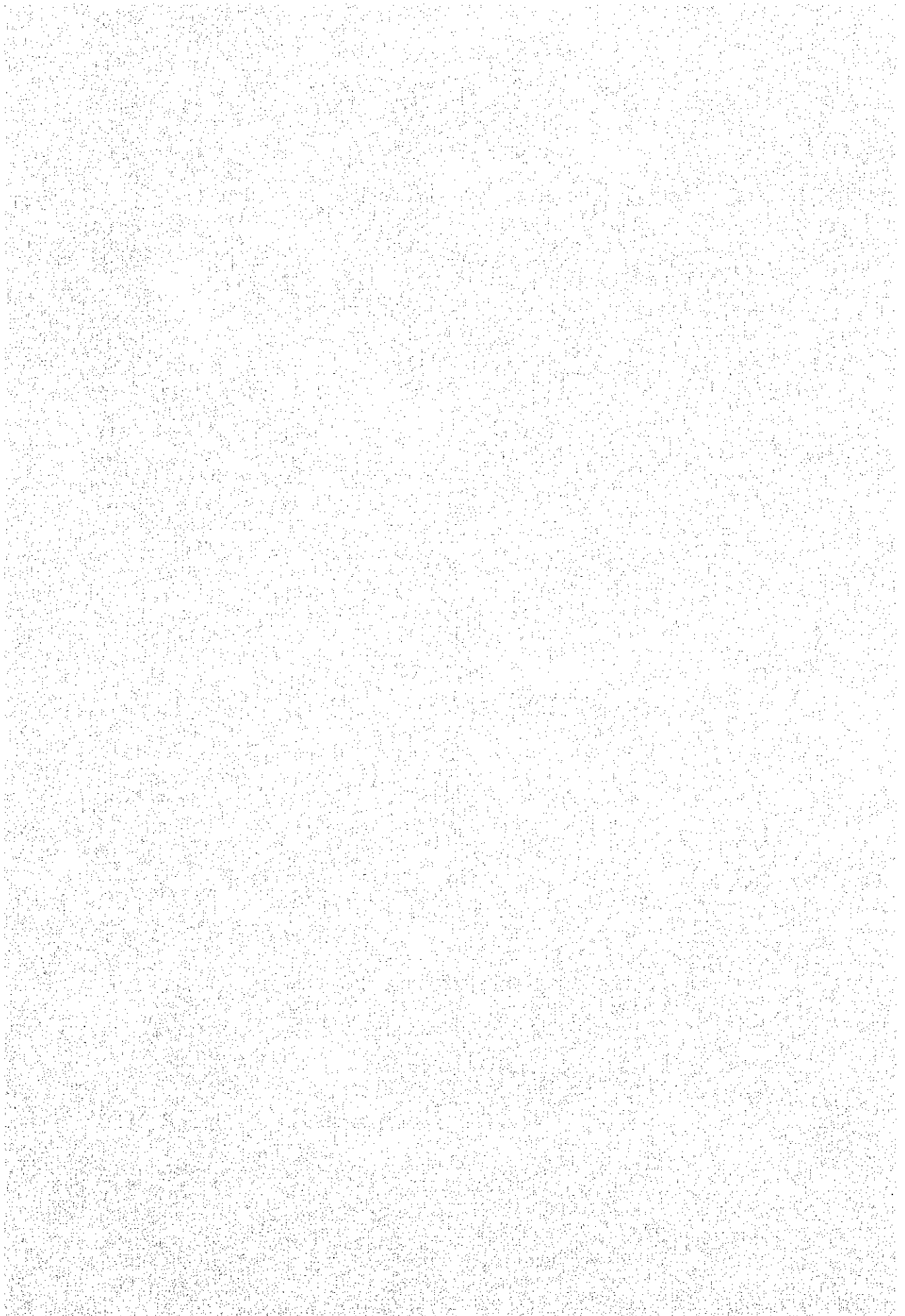
P-16 Tower work

For those items of work included in earth work, reinforced concrete work, and other works and yet applicable to this work, remarks given in the respective work shall apply to quantities to be taken off and items of work to be included, unless otherwise specified.

Quantities for steel work shall be taken off by net weights. However, loss by cutting shall be included for respective types of steel: 5% for angle steel of L-50 x 50 x 4, L-75 x 75 x 9, 7% for angle steel of L-90 x 90 x 7, L-150 x 150 x 19, 15% for steel plates, 6% for flat steel, 7% for channel steel, and 10% for steel pipes, bolts, etc.



A. BUILDING CONSTRUCTION WORK



I T E M	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
A 建築工事 (BUILDING CONSTRUCTION WORK)							
A-1 カトマンス送信所建築工事 (KATHMANDU STUDIO CENTRE BUILDING CONSTRUCTION WORK)	LS	1					
A-2 カトマンス送信所建築工事 (KATHMANDU TRANSMITTING STATION BUILDING CONSTRUCTION WORK)	LS	1					
A-3 ポカウ送信所建築工事 (POKHRA TRANSMITTING STATION BUILDING CONSTRUCTION WORK)	LS	1					
計 (TOTAL)							

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial reporting and compliance with regulatory requirements. The text notes that incomplete or inconsistent records can lead to misunderstandings, disputes, and potential legal consequences.

2. The second section focuses on the role of clear communication and collaboration among all stakeholders involved in the process. It highlights that effective communication is key to ensuring that everyone is on the same page and that information is shared in a timely and accurate manner. The document suggests that regular meetings and open lines of communication can help prevent misunderstandings and ensure that all necessary information is captured and documented.

3. The third part of the document addresses the need for a standardized approach to data collection and reporting. It argues that having a common set of metrics and reporting formats allows for easier comparison and analysis of data across different departments or projects. This standardization is particularly important for large organizations or those operating in highly regulated industries where consistency is crucial.

4. The fourth section discusses the importance of data security and privacy. It notes that as organizations collect and store more data, the risk of data breaches and unauthorized access increases. Therefore, it is essential to implement robust security measures, such as encryption, access controls, and regular security audits, to protect sensitive information and maintain the trust of customers and partners.

5. The fifth part of the document explores the benefits of using technology to streamline data management and reporting processes. It mentions that modern data management systems can automate many tasks, reduce the risk of human error, and provide real-time insights into data trends. The text suggests that investing in technology can lead to more efficient operations and better decision-making based on accurate and up-to-date information.

6. The sixth section discusses the importance of training and education for staff involved in data management. It notes that even the most advanced technology is only as good as the people using it. Therefore, providing regular training and education on data management best practices, security protocols, and the use of new tools is essential for ensuring that the organization is getting the most out of its data and maintaining high standards of accuracy and security.

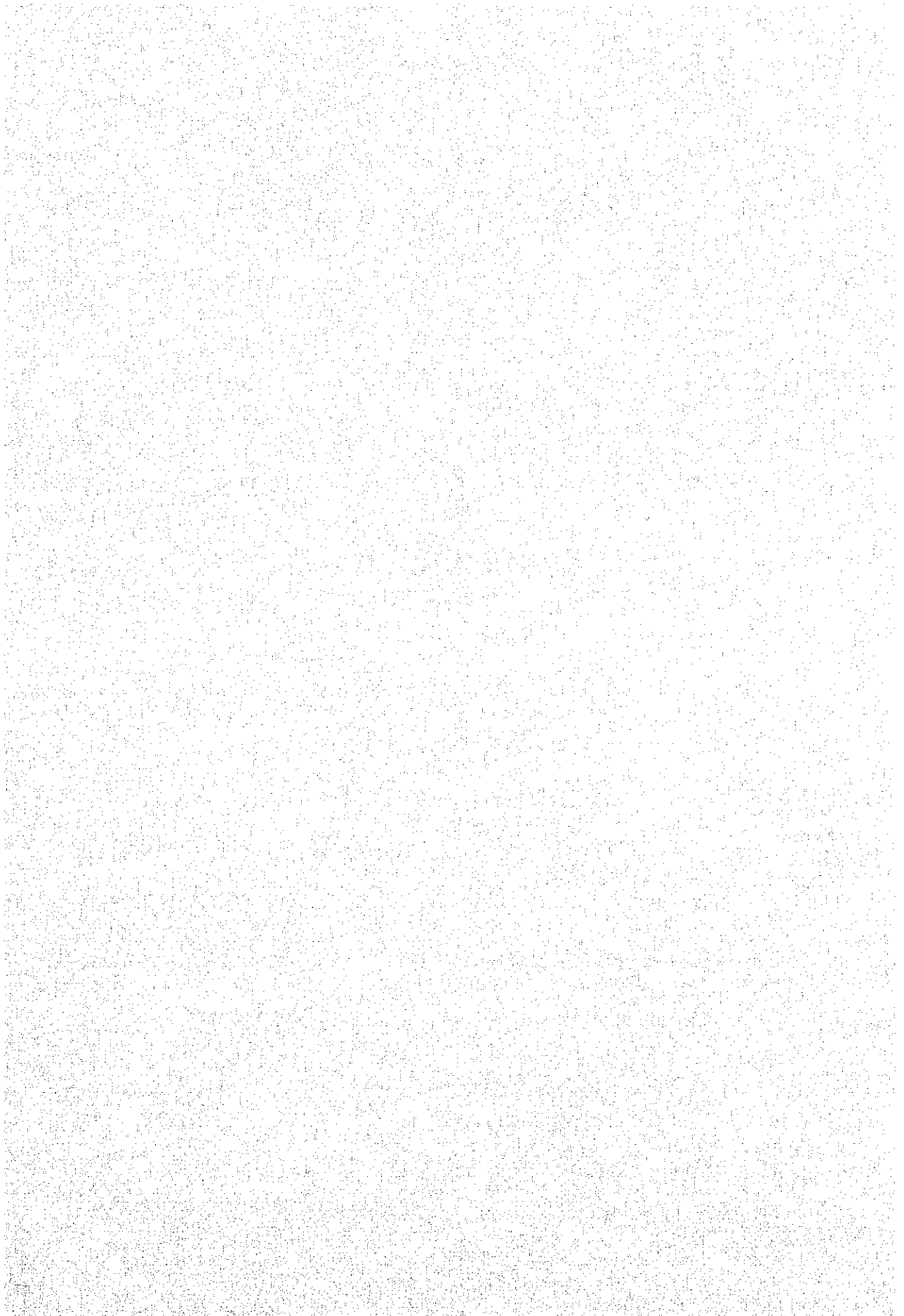
7. The seventh part of the document addresses the need for a clear governance structure for data management. It suggests that having a designated team or individual responsible for overseeing data management activities can help ensure that all necessary policies and procedures are in place and followed. This governance structure should also be responsible for monitoring and reporting on data management performance and identifying areas for improvement.

8. The eighth section discusses the importance of regular audits and reviews of data management processes. It notes that over time, processes can become outdated or inefficient, and data quality can decline. Regular audits and reviews can help identify these issues and provide an opportunity to make necessary adjustments and improvements to ensure that data management remains effective and aligned with the organization's goals.

9. The ninth part of the document explores the role of data in driving business growth and innovation. It notes that data provides valuable insights into customer behavior, market trends, and operational efficiency. By analyzing this data, organizations can identify new opportunities, optimize their operations, and develop innovative products and services that better meet the needs of their customers.

10. The tenth and final section of the document summarizes the key points discussed and emphasizes the importance of a holistic approach to data management. It notes that successful data management requires a combination of accurate record-keeping, clear communication, standardized processes, robust security, effective technology use, staff training, clear governance, and regular audits. By implementing these best practices, organizations can ensure that their data is accurate, secure, and used effectively to drive business success.

A-1 Kathmandu Studio Centre  
Building Construction Work





STUDIO

I T E M	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
A-1 カトマンス演義所 建築工事 (KATHMANDU STUDIO SENTRE)							
(1) 仮設工事 (TEMPORARY WORK)	LOT	1					
(2) 土工事 (EARTH WORK)	"	1					
(3) 鉄筋コンクリート工事 (REINFORCED CONCRETE WORK)	"	1					
(4) 鉄骨工事 (STRUCTURAL STEEL WORK)	"	1					
(5) 組積工事 (MASONRY)	"	1					
(6) 金属工事 (METAL WORK)	"	1					
(7) 木工事 (CARPENTRY)	"	1					
(8) 屋根工事 (ROOFING WORK)	"	1					
(9) 建具工事 (DOORS, WINDOWS & GLAZING)	"	1					



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(1) 仮設工事 (TEMPORARY WORK)							
1 水盛遣方 (LAYOUT OF BUILDING)	SM	1/143					
2 墨出 (FINISH MARKING)	"	1/143					
3 コンクリート足場架取 (SCAFFOLDING FOR CONC WORK)	"	1/143					
4 鉄筋足場架取 (SCAFFOLDING FOR RE-BAR WORK)	"	1/143					
5 外部足場架取 (SCAFFOLDING OF EXTERIOR WALL)	"	1,295					
6 内部足場架取 (INTERIOR SCAFFOLDING)	"	1,029					
7 " (DITTO)	"	1/14					
8 型枠支保工 (SHORING)	CM	6417					
9 片付清掃費 (CLEANING)	SM	1/143					



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(2) 土工事 (EARTH WORK)							
1 根切 (BUILDING EXCAVATION)	C M	702					
2 残土処分 (DISPOSAL)	"	258					
3 埋戻 (BACKFILL)	"	431					
4 砕石敷 (CRUSHED STONE)	"	288					
基礎・地中梁 (BELOW FOUNDATION & BEAM)							
5 土間下 (DITTO)	"	160					
6 盛土 (SOIL BANKING)	"	122					
7 床付 (GRADING & COMPACTION)	S M	672					
基礎・地中梁 (FOUNDATION & TIE BEAM)							

Studio

I T E M	UNIT	QUANTITY	LOCAL ( RUPPEE )		JAPAN ( YEN )		( YEN ) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
A-1(2)							
小 計 ( SUB TOTAL )							

STUP/0

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(3) 鉄筋コンクリート工事 (REINFORCED CONCRETE WORK)							
1 コンクリート工事 (CONCRETE WORK)	LOT	1					
2 型枠工事 (FORM WORK)	LOT	1					
3 鉄筋工事 (REINFORCING STEEL BAR WORK)	LOT	1					
A-1(3) 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(3)-1 コンクリート工事 (CONCRETE WORK)							
1 捨コンクリート (MUD CONCRETE)	C.M	24.0					
	150 kg/cm <sup>2</sup>						
2 鉄筋コンクリート (REINFORCED CONCRETE)	C.M	422					
(基礎・地中梁) 200 <sup>mm</sup> (FOUNDATION & TIE BEAM)							
3	( DITTO )	44.5					
( 1 階柱 )	( GROUND FLOOR COLUMN )						
4	( DITTO )	12.4					
( 2 階柱 )	( 1ST. FLOOR COLUMN )						
5	( DITTO )	6.5					
( 3 階柱 )	( 2ND. FLOOR COLUMN )						
6	( DITTO )	78.5					
( 2 階梁 )	( 1ST. FLOOR GIRDER )						



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
7 鉄筋コンクリート (REINFORCED CONCRETE) (3階梁) 180 <sup>3</sup> / <sub>100</sub> (2ND FLOOR GIRDER)	C M	59.0					
8 " " (DITTO) (1階床) (GROUND FLOOR SLAB)	"	136					
9 " " (DITTO) (2階床) (1ST FLOOR SLAB)	"	72.0					
10 " " (DITTO) (3階床) (2ND FLOOR WALL)	"	56.4					
11 " " (DITTO) (1階壁) (GROUND FLOOR WALL)	"	202					
12 " " (DITTO) (2階壁) (1ST FLOOR WALL)	"	62.2					
13 " " (DITTO) (3階壁) (2ND FLOOR WALL)	"	27.1					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
14 鉄筋コンクリート (REINFORCED CONCRETE)	CM	33.3					
( 兼 ) 180kg/cm <sup>2</sup> ( MISCELLANEOUS )							
15 土間コンクリート ( FLOOR CONCRETE )	CM	39.7					
150kg/cm <sup>2</sup>							
(3)-1 小計 ( SUB TOTAL )							

STUDIO

I T E M	U N I T	Q U A N T I T Y	L O C A L ( R U P E E )		J A P A N ( Y E N )		( Y E N )
			U N I T P R I C E	A M O U N T	U N I T P R I C E	A M O U N T	
(3)-2 型 枠 工 事 ( F O R M W O R K )							
1 型 枠 組 立 ( F O R M S E T T I N G & R E M O V A L )	S M	1841					
( 基 礎 地 中 梁 ) ( F O U N D A T I O N T I E B E A M )							
2 " ( D I T T O )	"	605					
( 2 階 梁 ) ( 1 S T F L O O R G I R D E R )							
3 " ( D I T T O )	"	395					
( 3 階 梁 ) ( 2 N D F L O O R G I R D E R )							
4 " ( D I T T O )	"	905					
( 1 階 床 ) ( G R O U N D F L O O R S L A B )							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
5 型 枠 取 払 (FORM SETTING & REMOVAL)	S M	600					
( 2 階 床 ) ( 1ST FLOOR SLAB )							
6 " ( DITTO )	"	376					
( 3 階 床 ) ( 2ND FLOOR SLAB )							
7 " ( DITTO )	"	244					
( 1 階 壁 ) ( GROUND FLOOR WALL )							
8 " ( DITTO )	"	691					
( 2 階 壁 ) ( 1ST FLOOR WALL )							
9 " ( DITTO )	"	361					
( 3 階 壁 ) ( 2ND FLOOR WALL )							
10 " ( DITTO )	"	299					
( 雑 ) ( MISCELLANEOUS )							
11 " ( DITTO )	"	310					
( 土 間 止 木 枠 ) ( GROND FLOOR SLAB )							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
12 型枠組立 (FORM SETTING & REMOVAL)	S.M	386					
(1階柱)							
13 " (DITTO)	"	190					
(2階柱)							
14 " (DITTO)	"	57.6					
(3階柱)							
(3)-2 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(3)-3 鉄筋工事 (REINFORCING STEEL BAR WORK)							
1 鉄筋加工組立 (RE BAR ARRANGEMENT) (基礎・地中梁) S030 (FOUNDATION TIE BEAM)	KG	40.611					
2 " " (DITTO) (1階柱) " (GROUND FLOOR COLUMN)	"	8.236					
3 " " (DITTO) (2階柱) " (1ST FLOOR COLUMN)	"	2.524					
4 " " (DITTO) (3階柱) " (2ND FLOOR COLUMN)	"	1.046					
5 " " (DITTO) (2階梁) " (1ST FLOOR GIRDER)	"	11.957					
6 " " (DITTO) (3階梁) " (2ND FLOOR GIRDER)	"	8.403					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
7 鉄筋加工組立 (RE-BAR ARRANGEMENT)	KG	13.004					
(1階床) SD30 (GROUND FLOOR SLAB)							
8 " " (DITTO)	"	4.704					
(2階床) " (1ST FLOOR SLAB)							
9 " " (DITTO)	"	4.830					
(3階床) " (2ND FLOOR SLAB)							
10 " " (DITTO)	"	26.202					
(1階壁) " (GROUND FLOOR WALL)							
11 " " (DITTO)	"	12.175					
(2階壁) " (1ST FLOOR WALL)							
12 " " (DITTO)	"	2.191					
(3階壁) " (2ND FLOOR WALL)							
13 " " (DITTO)	"	4.807					
(雑) " (MISCELLANEOUS)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
14 714 - 100 x 100 (WELDED MESH)	SM	24.8					
6 φ - 100 x 100							
(3)-3 小計 (SUB TOTAL)							



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(4) 鉄骨工事 (STRUCTURAL STEEL WORK)							
1 鋼材費 (STEEL COST)	KG	35,260					
2 ハイテンションボルト (HIGH TENSION BOLT) M16 (15)	"	23					
3 工場製作 (SHOP FABRICATION)	"	33,548					
4 副資材 (SUB MATERIAL)	"	33,548					
5 工場溶接 (SHOP WELDING) 2mm	LM	571					
6 現場組立 (FIELD ERECTION)	KG	33,548					
7 錆止塗装 (PAINT)	KG	33,459					
8 ベース下均丸 (LEVELING BASE MORTAR)	SM	43.7					

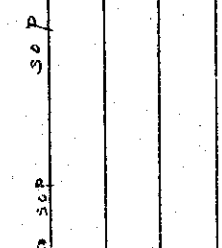
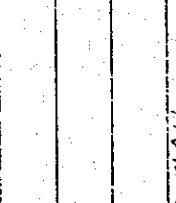
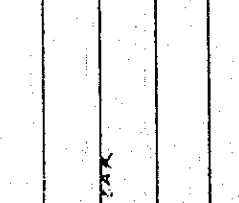
STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL
9	EA	912					
	アンカーボルト取付手間 (ANCHOR BOLT INSTALLATION)						
10	KG	33,548					
	建方 (ERECTION)						
11	LOT	1					
	機械器具 (MACHINE)						
12	′	1					
	運搬 (TRANSPORTATION)						
(4)	小計 (SUB TOTAL)						

STUDIO

I T E M	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)	
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	TOTAL
(5) 組積工亭 (MASONRY)								
1 壁 V-D 積 (WALL BRICK LAYING)	SM	52/						
T-220								
2 —— " —— ( D I T T O )	"	88						
T-105								
A-1-(5) 小計 (SUB TOTAL)								



ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
3 網目地障 (NET FENCE DOOR) 960 x 1,700 	EA	1					
4 真鍮目地障 (BRASS JOINTER) 3 x 25 FLOOR	LM	25					
5 屋根 (EXPANSION JOINT COVER) 150 x 4 ALUMINIUM (READY MADE) 	"	53					
外壁 EXTERIOR WALL (O.I.T.O.) 	"	132					
90x90x10 ANCHORED STEEL BAR CAULKING 4x1.5							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
7 鉄塔 (STEEL TOWER) H=8.000	EA	1					
8 鉄塔 (STEEL TOWER) H=12.000	EA	1					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
内 部 (INTERIOR)							
9 床 敷 材 目 地 棒 (FLOOR BRASS JOINTER) LM 3x25	LM	142					
10 床 工 事 用 伸 縮 接 合 点 (EXPANSION JOINT COVER) FLOOR " 2.9	"	2.9					
壁 工 事 用 伸 縮 接 合 点 (EXPANSION JOINT COVER) WALL " 5.0	"	5.0					
天 井 工 事 用 伸 縮 接 合 点 (EXPANSION JOINT COVER) CEILING " 2.9	"	2.9					
13 マンホール (MANHOLE) 600φ	EA	1					
14 9 段 用 7° (LADDER) ステンレス 16φ 1180	"	4					

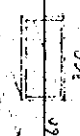
STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL
15 配線ボックス (FLOOR PIT COVER)	LM	86					
27-IV CR-4.5 W-500 CHEQUERED PLATE T-4.5							
CR-4.5							
DWG NO. A-124							
SOP	SM	83					
16 配線ボックス (WIRING DUCT COVER)	LM	246					
27-IV CR-4.5 W-300 GALVANIZED STEEL PLATE							
DWG NO. A-119							
SOP	SM	224					
17 配線ボックス (WIRING DUCT COVER)	LM	10					
27-IV CR-4.5 W-200 GALVANIZED STEEL PLATE							
DWG NO. A-119							
SOP	SM	0.2					





ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
18 <del>ロ</del> ットカバー (PIT COVER FLAME) STEEL PLATE L-45*15 L-30*20*3 SOP	LM SM	20 24					
19 <del>ロ</del> ットカバー (PIT COVER FLAME) STEEL PLATE L-25*25*2 L-25*25*3 SOP	LM SM	126 180					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
20 配線用 9" x 7" ( WIRING DUCT )	EA	10					
27-IV B-1.2 STEEL PLATE T-1.2 M W 50x300 L=800 DWG NO A-119							
							
21 刀 - 7 x L-IV ( CURTAIN RAIL )	LM	50.9					
22 7-1" 棒 ( HOOD FLAME )	EA	1					
27-IV L-50x50x4 STEEL 1000x1000 DWG NO A-124							
23 7x11" 水板 NO.170 ( VINYL PIPE )	EA	1					
VP 500 L=150 DWG NO A-124							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
24 軽鉄野添受(7°)V (STEEL ANGLE)	EA	14					
L-50x50x4 L=1900 DWG NO. L-1900							
25 1) 7° " 7° (SAFETY TREAD NOSING HARD ALUMINIUM)	LM	2.7					
N=88							
26 L-カサリ口補強 (REINFORCEMENT AROUND WALL OPENING)	LM	244					
 L-100x100x4							
3.2 x 40 8900							
27 省摺金物 (SADDLE STAINLESS STEEL)	LM	56					
DWG NO. A-121							
 6x30							
STEEL L-30x30x3							
STAINLESS 6x30							
SYNTHETIC RUBBER							
A-1-(6) 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(7) 木工事							
1 本造天井下地 (WOODEN OF CEILING) BELOW BOARD	SM	139					
2 窓、巾、方、材 (WOODEN WINDOW CASING)	LM	198					
	SOP	29					
3 ———— (DITTO)	LM	198					
	SOP	22					
4 ———— (DITTO)	LM	84					
	SOP	25					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
5 出入口 三 窓 枠 (WOODEN DOOR HEAD FRAME) 75 1228 30	LM	49					
	SM	06					
6 " " " " (DITTO) 100 1228 45	LM	432					
	SM	82					
7 " " " " (DITTO) 345 1228 30	LM	149					
	SM	58					
8 " " " " (DITTO) 385 1228 30	LM	147					
	SM	63					
9 " " " " (DITTO) 315 1228 30	LM	294					
	SM	165					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
10 出入口三才枠 (WOODEN DOOR HEAD & JAMB) 595	LM	98					
	SOP SM	63					
11 " " (DITTO) 675	LM	149					
	SOP SM	107					
12 " " (DITTO) 300	LM	48					
	SOP SM	17					
13 窓四才枠 (WOODEN WINDOW CASING) 180	LM	132					
	SOP SM	29					
14 出入口四才枠 (WOODEN DOOR CASING) 集成材 180 x 100 LAMINATED LUMBER	LM	643					

STUDIO

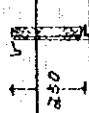

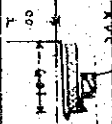
ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
15 壁脚線組 (WOODEN STUD & FURRING STRIP) (29.4 m <sup>2</sup> )	CM	0.6					
A-1-(17) 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(8) 屋根工事 (ROOFING WORK)							
1 着色亜鉛鍍鉄板瓦葺き T-0.4 PRECOATED GALVANIZED STEEL SHEET PATIEN SEAM ROOFING T-0.4	SM	1.189					
2 7.77mm厚 7.127 22kg ASPHALT ROOFING FELT 22kg	"	1.189					
3 工口工 - 板 - T-18 (HAND CEMENTED CHIP BOARD T-18)	"	1.189					
4 棟押元: 着色亜鉛鍍鉄板 T-0.4 RIDGE: STEEL SHEET T-0.4 工口工 - 板 - T-18 CHIP BOARD T-18 (WITH WOOD)	LM	83.2					
5 100mm 50x30							



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
5 專販V:着色鉛鉄板 T-04 FASCIA: PRECOATED GALVANIZED STEEL SHEET T-04 HARD CEMENTED CHIP BOARD T-18 色: 赤 (赤) T-18 	LH	159					
6 専販: 着色鉛鉄板 T-04 COPING: PRECOATED GALVANIZED STEEL SHEET T-04 (木下地共) 300 T-300x50  ANCHOR BOLT 9φ φ500	"	914					
7 水切: 着色鉛鉄板 T-04 FLASHING: PRECOATED GALVANIZED STEEL SHEET T-04 HARD CEMENTED CHIP BOARD T-18 色: 赤 (赤) T-18 (木下地共) 	"	638					
8 工 - 赤 = 7" ISXIS (CAULKING)	"	159					





ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9) 建具工事 (DOORS, WINDOW & GLAZING)							
1 木製建具工事 (WOODEN DOOR & WINDOW WORK)	LOT	/					
2 鋼製建具工事 (STEEL DOOR & WINDOW WORK)	LOT	/					
3 アルミ製建具工事 (ALUMINIUM DOOR & WINDOW WORK)	LOT	/					
4 ガラス工事 (GLAZING WORK)	LOT	/					
5 建具雑工事 (SPECIALITIES)	LOT	/					
A-1-9) 小計 (SUB TOTAL)							

STUDIO

I T E M		UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
				UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9)-1 木製建具工事 (WOODEN DOOR & WINDOW WORK)								
1	WN-1 木製窓 500 x 2535 (WOODEN WINDOW)	EA	3					
2	WN-2 木製窓 500 x 2535 (WOODEN WINDOW)	EA	10					
3	WN-3 木製窓 (WOODEN WINDOW)	EA	4					
4	WN-4 木製窓 500 x 1915 (WOODEN WINDOW)	EA	1					
5	WD-1 木製扉 800 x 600 (WOODEN DOOR)	EA	6					
6	WD-2 木製扉 800 x 2000 (WOODEN DOOR)	EA	1					
7	WD-3 木製扉 800 x 2000 (WOODEN DOOR)	EA	2					
8	WD-4 木製扉 550 x 1820 (WOODEN DOOR)	EA	4					
9	WD-5 木製扉 800 x 2000 (WOODEN DOOR)	EA	1					

ST 010

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
10 GS-1 硝子入り (GLASS SCREEN) W H 5370 x 2700	EA	1					
11 GS-2 硝子入り (GLASS SCREEN) W H 5370 x 2700	EA	1					
12 WW-1 ステンレス網戸 (STAINLESS STEEL WIRE) FIXED SCREEN W H 500 x 1295	EA	3					
13 WW-2 ステンレス網戸 ( - DITTO - ) W H 500 x 1295	EA	10					
14 WW-3 ステンレス網戸 ( - DITTO - ) W H 500 x 1295	EA	4					
15 WD-1 木製カーテン (WOODEN LOUVER) W H 600 x 800	EA	2					
16 WD-2 木製カーテン ( - DITTO - ) W H 600 x 500	EA	4					
17 WD-3 木製カーテン ( - DITTO - ) W H 600 x 500	EA	2					
(9)-1 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9)-2 鋼製建具工事 (STEEL DOOR & WINDOW WORK)							
1 SD-1 24-14 17 W 900 x 2000 H	EA	3					
2 SD-2 24-14 17 W 800 x 2000 H	EA	1					
3 SD-3 24-14 17 W 900 x 2000 H	EA	1					
4 SD-4 24-14 17 W 2000 x 2000 H	EA	3					
5 SD-5 24-14 17 W 1500 x 2000 H	EA	1					
6 SL-1 24-14 17 W 1500 x 500 H	EA	1					
7 SL-2 24-14 17 W 1100 x 500 H	EA	1					
8 SL-3 24-14 17 W 1000 x 700 H	EA	1					
9 SL-4 24-14 17 W 500 x 500 H	EA	2					





STUDIO

ITEM		UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)	
				UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	TOTAL	
(9)-3		ALUMINIUM DOOR & WINDOW WORK							
1	PAD-C-1 700 x 2000 W H T (ALUMINIUM DOOR)	EA	5						
2	PAD-C-2 1100 x 2000 W H T (ALUMINIUM DOOR)	EA	1						
3	PAD-D-1 700 x 2000 W H T (ALUMINIUM DOOR)	EA	6						
4	PAD-D-2 1100 x 2000 W H T (ALUMINIUM DOOR)	EA	1						
5	PAD-Dg-1 700 x 2000 W H T (ALUMINIUM DOOR)	EA	5						
6	PW-B-1 1500 x 900 W H R (ALUMINIUM WINDOW)	EA	1						
7	PW-B-2 1200 x 600 W H R (ALUMINIUM WINDOW)	EA	1						
8	PW-B-3 2400 x 900 W H R (ALUMINIUM WINDOW)	EA	3						



STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9)-4 ガラス工事 (GLAZING WORK)							
1 透明硝子 (CLEAR SHEET GLASS) 3M/M	SM	0.5					
2 透明硝子 (CLEAR SHEET GLASS) 5M/M	SM	1.5					
3 透明硝子 (CLEAR SHEET GLASS) 8M/M	SM	8.6					
4 透明硝子 (CLEAR SHEET GLASS) 10M/M	SM	8.6					
5 型硝子 (PATTERNED SHEET GLASS) 4M/M	SM	12.7					
6 透明70-ト硝子 (CLEARED FLOAT SHEET GLASS) 5M/M	SM	38.3					
7 リーニング (CLEANING)	SM	80.2					
(9)-4 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9)-5 建具雜工事 (SPECIALITIES)							
1 建具廻りモルタル詰入 (MORTAR GROUTING AROUND DOOR AND FRAME)	LM	423					
2 建具廻り工事下塗り (CAULKING GROUTING AROUND DOOR AND FRAME)	LM	488					
3 鋼製建具塗装 (PAINTING FOR STEEL CASE)	SM	141					
4 木製建具塗装 (PAINTING FOR WOODEN DOOR, WINDOW AND FRAME)	SM	131					
5 木製建具金具 (HARDWARE)	LOT	1					
6 ステンレスプレート (STAINLESS STEEL PLATE)	LM	24					
(9)5 小計 (SUB TOTAL)							

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN)
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
(9)-5-1 木製建具金物 (HARD WARE)							
1 丁番 (HINGE)	EA	87					
2 ラバトリ-ヒンジ (LABATORY HINGE)	SET	4					
3 ドアクローズ (DOOR CLOSER)	EA	10					
4 シリンダ-彫込錠 (CYLINDER MORTISE LOCK)	EA	8					
5 シリンダ-彫込錠用 鍵錠式本錠 (CYLINDER MORTISE DEADLOCK)	EA	1					
6 面付付スライドボルト (RIM SLIDE BOLT)	EA	4					
7 用窓用付乱金物 (CASEMENT FASTENERS)	EA	17					
8 用窓用付乱金物 (CASEMENT OPERATOR & HOLDER)	EA	17					
9 カムロックハンドル (CAM LATCH HANDLE)	EA	6					

STUDIO

ITEM	UNIT	QUANTITY	LOCAL (RUPEE)		JAPAN (YEN)		(YEN) TOTAL
			UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	
10 取付金具 (DOORSTOP & HOOK HOLDER)	EA	11					
11 当り (DOOR LOCK & BUMPER)	EA	4					
12 握り玉 (KNOB)	EA	7					
13 押し板 (PUSH PLATE)	EA	4					
14 木口ニス (DOOR HANDLE)	EA	1					
SUS							
15 7ヶ目 (CRESCENT SASH LOCK)	EA	1					
16 取付金具 (INSULATION COST)	EA	34					
(9)5-1 小計 SUB TOTAL							