

Project Repair and Upgrading of Roof Canopy at the Student's Queuing Area at University Registrar and Admission Division BENGUET STATE UNIVERSITY Owner Location BSU Compound, Km. 5 Balili, La Trinidad, Benguet **Detailed Estimates** ITEM No. **GENERAL REQUIREMENTS and SITE WORKS** Ι. Mobilization/Demobilization 1 LOT a. 1 material & description quantity unit cost amount 2 labor no. daily rate amount 3 equipment (rental based on ACEL rates) no of days daily rental unit amount output rate days to complete Elf Truck /day 4 Total Direct Cost (1 + 2 + 3) 5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES) of item 4 6 Contractor's Profit of item 4 7 Tax 7% of item 4 + 5 + 6 8 **Total Unit Cost** (4 + 5 + 6 +7) Php cost per item b. Project Billboard 1 LOT 1 material & description auantity unit cost amount Printed Tarpulin (8ft x 8ft) 5.76 sq.m. /sq.m. Ordinary Plywood /pc pcs Good lumber /bd.ft 39.5 bd.ft. Assorted CWN kg /kg 2 labor daily rate no. amount Skilled laborer 1 man/hr. Unskilled laborer man/hr. 3 equipment (rental based on ACEL rates) no of days unit daily rental amount output rate days to complete minor tools (10% of Labor Cost) 4 Total Direct Cost (1 + 2 + 3) 5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES) of item 4 6 Contractor's Profit of item 4 of item 4 + 5 + 6 7 Tax 8 **Total Unit Cost** (4 + 5 + 6 +7) Php cost per item Occupational Safety and Health Program 1 LOT 1 material & description quantity unit cost amount assorted warning and safety signages lot /lot canvass (for jobsite perimeter enclosure/fencing) roll /roll 8 pcs. /pc. safety shoe/ boots pcs. /pc. safety gloves 8 pcs. /pc. skull guard/ hard hat 8 pcs. safety harnes 8 DCS. /pc. first aid kit lot /lot fire extinguisher, 5lbs. (refill) unit /unit 2 labor daily rate amount Part time Safety Officer /day 3 equipment (rental based on ACEL rates) no of days unit daily rental amount output rate days to complete minor tools (10% of Labor Cost) 4 Total Direct Cost (1 + 2 + 3) 5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES) of item 4 6 Contractor's Profit of item 4 7 Tax of item 4 + 5 + 6 8 Total Unit Cost (4 + 5 + 6 +7) Php cost per item



II.	EARTHWORKS						
a.	General Excavation- Common Soil	1.536	cu.m.				
1	1 material & description	qua	antity	unit	t cost	amount	
	) Johan		1 4	ailu rota			
	2 labor Skilled laborer	no. 1	Ū.	aily rate		amount	-
	Unskilled laborer	2		/day /day		-	
	Oriskilled laborer			/uay		<del>-</del>	
3	B equipment (rental based on ACEL rates)	unit	da	nily rental	no of days	amount	-
		output rate				days to complete	
	minor tools (10% of Labor Cost)					-	
	4 Total Direct Cost (1 + 2 + 3)				_		
	5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
	6 Contractor's Profit			of item 4	-		
7	7 Tax		79	6 of item 4 + 5 + 6	-		
8	3 Total Unit Cost (4 + 5 + 6 +7)		Ph	D			cost per item
b.	Embankment from Structure Excavation	1.536	cu.m.				
1	1 material & description	qua	antity	unit	t cost	amount	
						T .	
	2 labor	no.	d	aily rate		amount	-
	Skilled laborer	1 2		/day		-	
	Unskilled laborer			/day		-	
	B equipment (rental based on ACEL rates)	unit	da	nily rental	no of days	amount	-
		output rate		,		days to complete	
	minor tools (10% of Labor Cost)	•				-	
	4 Total Direct Cost (1 + 2 + 3)				-		
	5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
	6 Contractor's Profit 7 Tax		70	of item 4	-		
	7 Tax 3 <b>Total Unit Cost</b> (4 + 5 + 6 +7)		Phi	6 of item 4 + 5 + 6	-		cost per item
III.	PLAIN AND REINFORCED CONCRETE WORKS						
a.	Structural Concrete (Class A 3000 psi at 28 days)	1 10	cu.m.				
	1 material & description		antity	unit	t cost	amount	_
	cement	10.00		um.	/bag	-	
	sand		cu.m.		/cu.m.	-	
	gravel		cu.m.		/cu.m.	-	
2	2 labor	no.	d	aily rate	no of days	amount	-
		production rate	)	cu.m./manhour	•	days to complete	
	Leadman	1		/day		-	
	Skilled laborer	1		/day		-	
	Unskilled laborer	1	de	/day	no of doug	- amount	
	B equipment (rental based on ACEL rates)	unit output rate	Ü6	nily rental	no of days	days to complete	-
	minor tools (10% of Labor Cost)	output rate				days to complete	
	4 Total Direct Cost (1 + 2 + 3)				-		
4	,			of item 4	-		
	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
<i>t</i>	6 Contractor's Profit						
6	6 Contractor's Profit 7 Tax			6 of item 4 + 5 + 6	-		
£ 6 7	6 Contractor's Profit 7 Tax 8 <b>Total Unit Cost</b> (4 + 5 + 6 +7)		Ph	6 of item 4 + 5 + 6	-		cost per item
6	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete	34.65	Phi kgs.	6 of item 4 + 5 + 6			cost per item
£ 6 7	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33)	5.20	kgs.	6 of item 4 + 5 + 6	- - /kg.		cost per item
£ 6 7	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33) 16mm diameter by 6000mm reinforcing steel bar (grade 40)	5.20 29.45	kgs. kgs. kgs.	6 of item 4 + 5 + 6	/kg.	:	cost per item
6 7 8 b.	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33) 16mm diameter by 6000mm reinforcing steel bar (grade 40) No. 16 G.I. Tire Wire	5.20 29.45 1.00	kgs. kgs. kgs. kgs.	6 of item 4 + 5 + 6 0	/kg. /kg.		cost per item
6 7 8 b.	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33) 16mm diameter by 6000mm reinforcing steel bar (grade 40) No. 16 G.I. Tire Wire	5.20 29.45 1.00 no.	kgs. kgs. kgs. kgs.	6 of item 4 + 5 + 6  D  aily rate	/kg.	amount	cost per item
8 7 8 b.	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33) 16mm diameter by 6000mm reinforcing steel bar (grade 40) No. 16 G.I. Tire Wire	5.20 29.45 1.00	kgs. kgs. kgs. kgs.	6 of item 4 + 5 + 6  D  Gaily rate  kg./manhour	/kg. /kg.	amount days to complete	cost per item
8 7 8 b.	6 Contractor's Profit 7 Tax 8 Total Unit Cost (4 + 5 + 6 +7) Reinforcing Steel of Reinforced Concrete 10mm diameter by 6000mm reinforcing steel bar (grade 33) 16mm diameter by 6000mm reinforcing steel bar (grade 40) No. 16 G.I. Tire Wire	5.20 29.45 1.00 no. production rate	kgs. kgs. kgs. kgs.	6 of item 4 + 5 + 6  D  aily rate	/kg. /kg.		cost per item



3 equipment (rental based on ACEL rates)	unit	dai	ily rental	no of days	amount	-
	output rate				days to complete	
minor tools (10% of Labor Cost)					-	
4 Total Direct Cost (1 + 2 + 3)				-		
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
6 Contractor's Profit			of item 4	-		
7 Tax		7%	of item 4 + 5 + 6	-		
8 <b>Total Unit Cost</b> (4 + 5 + 6 +7)		Php		-		cost per item
c. Formworks and Falseworks	2.57	sqm.				
1 material & description	qua	antity	unit	cost	amount	-
2"x 3" Good Lumber	6	bd.ft.		/bd.ft	-	
19mm x 1.2m x 2.4m Phenolic Board (3 uses)	1	pcs.		/pc.	-	
assorted CWN	1	kg.		/kg.	-	
2 labor	no.	da	aily rate	no of days	amount	-
	production rate	1	sq.m./manhour		days to complete	
Skilled laborer	2		/day		-	
Unskilled laborer	4		/day		-	
3 equipment (rental based on ACEL rates)	unit	dai	ily rental	no of days	amount	-
Area 142m²	output rate		m²/14days		days to complete	
H-Frame 1.7m x 1.2m, set	•	sets	•		0	
(2pcs. H-Frames, 4pcs diagonal cross braces, 4pcs horizontal braces & 8pcs joint pins)						
7 Shoring Jack, 3.8m full extension	62	pcs.			0	
Adjustable U-head Jack, 0.60m		pcs.			0	
Adjustable Base Jack, 0.60m		pcs.			0	
1-½" G.I. Pipe x 6.0m		pcs.			0	
1-½" G.I. Pipe x 4.0m		pcs.			0	
1-½" G.I. Pipe x 3.0m		pcs.			0	
1-½" G.I. Pipe x 1.0m		pcs.			0	
Tie Rod x 0.60m		pcs.			0	
		-			0	
Round Wing Nut	550	pcs.			U	
minor tools (10% of Labor Cost)  4 Total Direct Cost (1 + 2 + 3)				-		
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4			
6 Contractor's Profit			of item 4	-		
7 Tax		70/	of item 4 + 5 + 6	-		
8 <b>Total Unit Cost</b> (4 + 5 + 6 +7)		Php		-		cost per item
III. STEELWORKS		111,0				cost per tem
			1		ı	1
a. Steel Trusses and G.I Pipes	770.14	I.m.				
1 material & description	qua	antity	unit	cost	amount	
4" diameter G.I. Pipe schedule 40	4.00	pcs.		/pc.	-	
2" x 2 " x 1/4 " thick Angle Bar	15.00	nce				
		pcs.		/pc.	-	
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar	60.00	-		/pc.	-	_
		pcs.			- - -	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar	60.00	pcs.	_	/pc.	- - - -	_
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins	60.00 60.00 9.00	pcs. pcs.	_	/pc.		-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts	60.00 60.00 9.00 45.00	pcs. pcs. pcs. set		/pc. /pc. /pc. /set	- - - - - -	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod	60.00 60.00 9.00 45.00 21.00	pcs. pcs. pcs. set	-	/pc. /pc. /pc.		-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost)	60.00 60.00 9.00 45.00 21.00	pcs. pcs. pcs. set kg. lot	nily rate	/pc. /pc. /pc. /set /kg. //ot	-	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor	60.00 60.00 9.00 45.00 21.00 1	pcs. pcs. pcs. set kg. lot	nily rate	/pc. /pc. /pc. /set /kg.	- amount	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor	60.00 60.00 9.00 45.00 21.00	pcs. pcs. pcs. set kg. lot		/pc. /pc. /pc. /set /kg. //ot	-	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot	lm/manhour	/pc. /pc. /pc. /set /kg. //ot	- amount	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot	<i>lm/manhour</i> /day	/pc. /pc. /pc. /set /kg. //ot	- amount	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman Skilled laborer	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot	<i>lm/manhour</i> /day /day	/pc. /pc. /pc. /set /kg. //ot	- amount	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman Skilled laborer Unskilled laborer	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour /day /day /day	/pc. /pc. /pc. /pc. /set /kg. /lot no of days	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour /day /day /day /day iiy rental	/pc. /pc. /pc. /set /kg. //ot	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)  Welding Machine	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour /day /day /day	/pc. /pc. /pc. /pc. /set /kg. /lot no of days	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost) 2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)  Welding Machine minor tools (10% of Labor Cost)	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour /day /day /day /day iiy rental	/pc. /pc. /pc. /pc. /set /kg. /lot no of days	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost)  2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)  Welding Machine minor tools (10% of Labor Cost)  Total Direct Cost (1 + 2 + 3)	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour  /day /day /day ily rental /day	/pc. /pc. /pc. /pc. /set /kg. /lot no of days	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost)  2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)  Welding Machine minor tools (10% of Labor Cost)  Total Direct Cost (1 + 2 + 3)  5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour  /day /day /day ily rental /day  of item 4	/pc. /pc. /pc. /pc. /set /kg. /lot no of days  no of days	amount  days to complete	-
1 1/2" x 1 1/2 " x 1/4 " thick Angle Bar 1.2mm x 2" x 3" C-Purlins 150mm x 150mm x 6mm steel base plate anchor rods, nuts and bolts welding rod consumables (5% of Material Cost)  2 labor  Leadman Skilled laborer Unskilled laborer 3 equipment (rental based on ACEL rates)  Welding Machine minor tools (10% of Labor Cost)  Total Direct Cost (1 + 2 + 3)	60.00 60.00 9.00 45.00 21.00 1 no. production rate	pcs. pcs. pcs. set kg. lot da	Im/manhour  /day /day /day ily rental /day	/pc. /pc. /pc. /pc. /set /kg. /lot no of days	amount  days to complete	-



IV.	ROOFING WORKS						
	***roof area	217.06	sqm.				
a.	Roofing		•		_		
	1 material & description	qua	antity	unit	cost	amount	-
	.80mm x 2.66' x 8' (.81 m x 2.44 m) Rib-type Polycarbonate Roofing	130.00			/pc.	-	
	consumables (5% of Material Cost)		lot		/lot	-	
:	2 labor	no.		daily rate	no of days	amount	-
		production rate	)			days to complete	
	Leadman	1		/day		-	
	Skilled laborer	1		/day		-	
	Unskilled laborer	2		/day		-	
,	B equipment (rental based on ACEL rates)	unit		daily rental	no of days	amount	-
		output rate				days to complete	
	minor tools (10% of Labor Cost)					-	
	4 Total Direct Cost (1 + 2 + 3)				-		
	5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
	6 Contractor's Profit			of item 4	-		
	7 Tax 3 <b>Total Unit Cost</b> (4 + 5 + 6 +7)			7% of item 4 + 5 + 6	-		cost per item
				пр	-		cost per item
V.	PAINTING WORKS						
a.	Painting	63.68	sqm.				
	1 material & description		antity	unit		amount	-
	Red Oxide	15.92			/gal.	-	
	Semi-Gloss Latex (2 coats only)	15.92			/gal.	-	
	consumables (5% of Material Cost)		lot		/lot	-	
	2 labor	no.		daily rate	no of days	amount	-
		production rate	<u>-</u>	m²/manhour		_ days to complete	
	Loodoon	4		(dec.			
	Leadman	1		/day		-	
	Skilled laborer	1		/day		-	
	Unskilled laborer 3 equipment (rental based on ACEL rates)	1 unit		/day daily rental	no of days	amount	
	equipment (Tental based on ACEL rates)	output rate		m <sup>2</sup> /unithour	110 OI days	days to complete	_
	minor tools (10% of Labor Cost)	output rate		/day		uays to complete	
	4 Total Direct Cost (1 + 2 + 3)			, 444)	-		
	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
(	6 Contractor's Profit			of item 4	-		
	7 Tax			7% of item 4 + 5 + 6	-		
Ö	3 Total Unit Cost (4 + 5 + 6 +7)		F	Php	-		cost per item
VI.	CONCRETE PAVEMENT WORKS						
a.	Removal of Existing Driveway Pavement	90.68	sam.				
	1 material & description		antity	unit	cost	amount	-
		4					
	2 labor	no.		daily rate	no of days	amount	-
		production rate	)	m²/manhour	-1	days to complete	
			-				
	Leadman	1		/day		-	
	Skilled laborer	1		/day		-	
	Unskilled laborer	2		/day		-	
,	B equipment (rental based on ACEL rates)	unit		daily rental	no of days	amount	-
		output rate		m²/unithour		days to complete	
	minor tools (10% of Labor Cost)			/day		-	
	4 Total Direct Cost (1 + 2 + 3)				-		
	OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
	6 Contractor's Profit			of item 4	-		
	7 Tax 3 <b>Total Unit Cost</b> (4 + 5 + 6 +7)			7% of item 4 + 5 + 6	-		"
	י ו טומו טוווג טטטג (די טייטיו)		F	Php	-		cost per item



and driveway end ramp		sqm.				
1 material & description	qua	antity	unit (	cost	amount	
200mm x 100mm x 65mm thick brick red brick stone pavers (wave)		0 pcs.		/pc.	-	
cement		bags		/bag	-	
sand		cu.m.		/cu.m.	-	
gravel		cu.m.		/cu.m.	-	
consumables (5% of Material Cost)	1	lot		/lot	-	
2 labor	no.		ly rate	no of days	amount	
	production rate	ction rate m²/manhour			days to complete	
Leadman	1		/day		_	
Skilled laborer	1		/day		-	
Unskilled laborer	1		/day		-	
3 equipment (rental based on ACEL rates)	unit	daily	rental	no of days	amount	
	output rate		m²/unithour		days to complete	•
minor tools (10% of Labor Cost)			/day		-	
4 Total Direct Cost (1 + 2 + 3)				-		
5 OCM (OVERHEAD, CONTINGENCIES & MISCELLANEOUS EXPENSES)			of item 4	-		
6 Contractor's Profit			of item 4	-		
7 Tax		7%	of item 4 + 5 + 6	-		
8 Total Unit Cost (4 + 5 + 6 +7)		Php		•		cost per item
al Project Cost				Php		
nitted by:						

reference/s DPWH - BOC Cost Estimation for Low Rise Buildings issued/receipt September 27, 2019 DPWH Standard of Specifications, vol.ii & iii, 1995 edition DPWH - BOC Data on various building structure previously constructed Construction Manpower Development Foundation Construction Estimate Handbook by Velasco Construction Estimate Handbook by Max Fajardo