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Republic of the Philippines
Department of Public Works and Highways
OFFICE OF THE SECRETARY

097-13 DPWH
6-16-88

06 June 1988

DEPARTMENT ORDER

NO. 43)

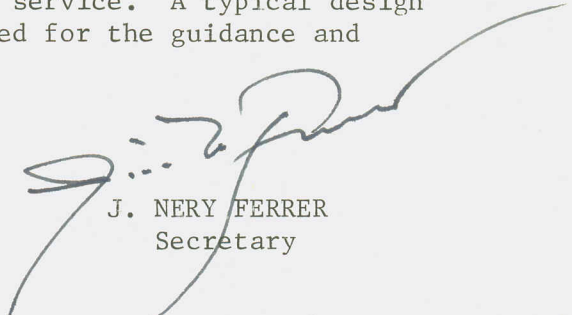
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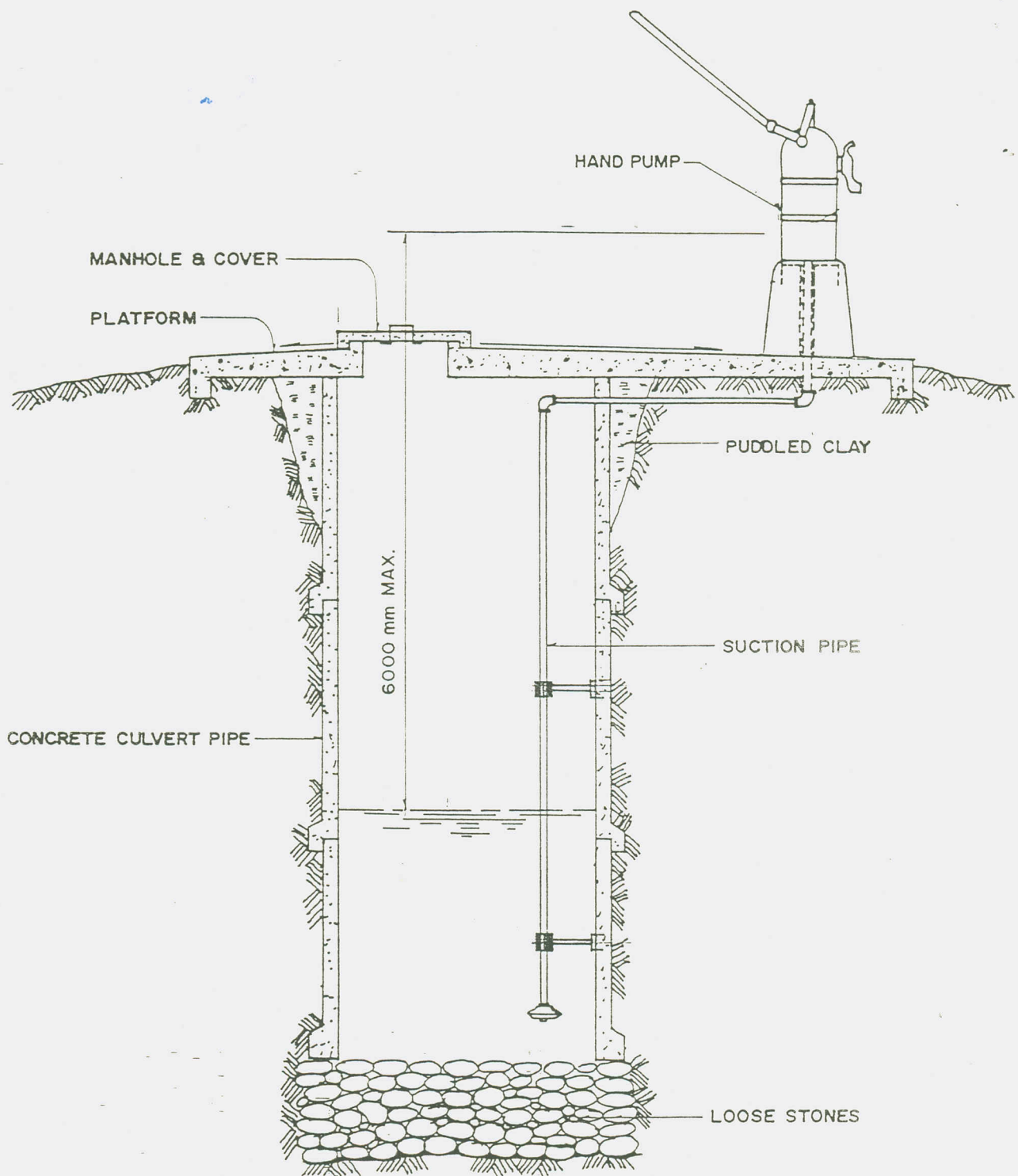
SUBJECT: Construction of Dug Wells under
DPWH Infrastructure Program for
Water Supply

For several years now, this Department has been undertaking on a pilot basis, the improvement of existing open dug wells. The development of these open dug wells involved the provision of concrete slab cover, and the installation of handpump and its accessories. With these additional amenities the well is protected, hence, sanitation and water quality can be assured.

With these experiences it becomes imperative that protected dug wells be considered as an additional category under Level I (point source) water service.

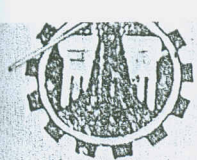
Henceforth, it is directed that protected dug wells will become a component of Level I water service. A typical design and project cost estimate are attached for the guidance and reference of all concerned.


J. NERY FERRER
Secretary



TYPICAL DUG WELL
WITH HAND PUMP

NOTE: WELL MAY BE IN ANY SHAPE - ROUND, RECTANGULAR,
SQUARE OR OVAL.



Republic of the Philippines
Department of Public Works and Highways
PROJECT MANAGEMENT OFFICE FOR RURAL WATER SUPPLY

(TYPICAL)
INDIVIDUAL PROJECT PROGRAM OF WORK

(1) Date _____
(2) Bureau/Corporation _____
(3) Region _____
(4) District/City _____

Name/Location of Project Plab Set No. _____	(7) Source of Fund PD# _____ or PB# _____ Sect.# _____ Item# _____	(8) Issued	(9) Released CDC
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Project Description: Construction of protected dug well	(11) Calendar Days to Complete <u>10 W.D.</u>
Technical Personnel Required: 1 - Senior Well Driller 2 - Laborer	1 - flatbed truck
(13) Implementation Procedure: By _____ Administrative _____	

Estimated Cost by Item of Work (MATERIALS AND LABOR ONLY)	% of TOTAL	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
Scope of Work to be Done ITEM					
I. Construction of protected dug well	100%		1	₱ 8,677	₱ 8,677

BILL OF MATERIALS

QUANTITY	UNIT	DESCRIPTION	UNIT COST (P)	ESTIMATE COST (P)
A. MATERIALS				
7	Pcs.	900mm.Ø x 1M Concrete Culvert Pipe (CCP)	550	₱ 3,850
7	Bags	Portland Cement	58	406
1	Cu.m.	Washed Sand	150	150
1	Cu.m.	Washed Gravel	190	190
1	Cu.m.	15mm.Ø Loose Stones	200	200
2	Pcs.	12mm.Ø x 6M. Reinforced Steel Bar	76	152
1	Pc.	1" x 3" x 8' Apitong	9	18
2	Pcs.	2" x 3" x 8' Apitong	9	72
1	Pc.	1/4" x 4' x 4' Plywood	80	80
1/2	Kl.	#16 Tie Wire	30	15
1/2	Kl.	Assorted Common Nail (#1 and #2)	18	9
1	Set	Jetmatic Handpump	700	700
2	Pcs.	38mm.Ø x 6M. G.I. Pipe	410	820
2	Pcs.	38mm.Ø Short Pipe	45	90
2	Pcs.	38mm.Ø x 45° Elbow	30	60
2	Pcs.	38mm.Ø Tee	20	40
1	Pc.	38mm.Ø Vertical Check Valve with Strainer	115	115
SUB-TOTAL - - - - -				₱ 6,967
B. LABOR				
Excavation, Concrete works, finishing, allowance, etc. at ₱57/person/day (3 persons, 10 days)			SUB-TOTAL - - - - -	₱ 1,710
			GRAND TOTAL - - -	₱ 8,677

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(15) Breakdown of Estimated Cost	% of Total	A m o u n t
15.1) I. ESTIMATED CONTRACT COST		
A. <u>Direct Cost</u>		
1. Mobilization/Demobilization	5.19	P 500
2. Materials	72.27	6,967
2.1 Supply/Delivery		
2.2 Testing of Materials		
3. Labor	17.74	1,710
3.1 Direct Labor		
3.2 Leaves		
3.3 SSS/GSIS		
3.4 Medicare		
3.5 State Insurance		
4. Equipment Expenses		
5. Supervision	0.89	86
6. Miscellaneous	0.26	25
B. <u>Indirect Cost</u>		
1. Profit (10% to 15% of A1 to A6)		
2. VAT (10% of labor cost)		
3. Withholding Tax (0.45% of A1 to B2)		
C. Contingencies (Up to 5% of A & B)		
	96.35	9,288
15.2) II ESTIMATED GOVERNMENT EXPENSES		
1. Preliminary and Detailed Engineering & RWSA Formation	2.60	250
2. Water Quality Analysis	1.05	100
3. Project Management (up to 5% of Estimated Contract Cost)		
4. Materials to be furnished by the Government		
SUB-TOTAL	3.65	350
15.3) III. PHYSICAL CONTINGENCIES (Up to 5% of the Estimated Cost)		
TOTAL ESTIMATED COST	100%	9,638

PREPARED BY:

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CONCURRED BY:

CHECKED BY:

FELICISIMO Y. DAMAYO

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APPROVED:

FLORENCIO F. PADERNAL

Project Manager V