

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	496	Press
B.P. No.		Mis.
Dated	20-2	C875-195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
20th February 1875.*

Read the following papers:—

No. 514.	From the District Engineer, Madura,	dated 8th July 1874,	No. 1,452.
No. 515.	From do.	do. 23rd "	" 1,688.
No. 516.	From do.	do. 11th Aug. "	" 2,053.
No. 517.	From do.	North Arcot, 21st Sept. "	" 1,762.
No. 518.	From do.	Madura, 13th Jan. 1875,	" 4,247.

No. 519. ORDER THEREON, 20th February 1875, No. 496.

CIVIL WORKS, No. 33.

AFTER very considerable delay the revised estimates for the Pereacolum Taluq Cutcherry are submitted to Government by the District Engineer, Madura. The estimate originally sanctioned in G. O., No. 121, of the 13th January 1873, amounted to Rupees 16,300, and the additional outlay now shown to be necessary to complete the building is Rupees 11,700. The revised estimate requiring sanction is therefore for a total of Rupees 28,000.

2. The greater portion of the excess is fairly accounted for. Additions to the buildings sanctioned by Government subsequently to the submission of the original estimate cause further expenditure of Rupees 4,730. Under estimation of the quantity of excavation necessary to prepare the site and place the foundations as well as of masonry in the foundations, and the omission of items, which were obviously required, are further causes of unforeseen outlay. The exercise by the Range Officer, Captain Pennycuik, of proper care in the preparation of the original estimate, would have resulted in far closer approximation to the real cost of the cutcherry in the first instance. The scrutiny of estimates is one of the most important duties of District Engineers, and His Excellency in Council must hold them strictly responsible for their reasonable accuracy.

3. The serious charges of persistent neglect of duty made by Colonel Fischer against Assistant Engineer Mr. Hawsworth in his letter accompanying the estimate under review will be dealt with in separate orders.

4. The revised estimate is now sanctioned, but no funds will be available till next year, in excess of those already placed at Colonel Fischer's disposal.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

To District Engineers. *Madura & Cutcherry*

To the Controller of Public Works Accounts.

Judicial Department.

Exd. A. Grubert.

Spare Copies

2nd or Dindigul RANGE. 3
DISTRICT. Madurai

Schedule of Rates for the half-year ending 31st March 1873.

Details.	Per	RATE.		Remarks.
		Estimated.	Actual.	
RATES OF LABOR.				
Skilled Workmen.				
Maistry ...	Month	20	20	
	Day	12	12	
Stone-cutters	"	10	10	
	"	12	12	
Bricklayers	"	10	10	
	"	12	12	
Carpenters	"	10	10	
	"	12	12	
Smiths	"	10	10	
	"	12	12	
Painters	"	10	10	
Laborers.				
Head cooly or gangman	Day	6	6	
Cooly-man	"	4	4	
Cooly-woman	"	1-8	1-8	
Cooly-boy	"	1-6	1-6	
Well sinker	"	8	8	
Picottaman	"	6	6	
Quarryman	"	8	8	
Carriage.				
Bullock cart to carry ... 120lbs.	Day	12	12	
Pack bullock to carry ... 100lbs.	"	8	8	
By road for 1st mile	Ton	4-6	4-6	for 2 casks
By do. for each succeeding mile	"	1-6	1-6	
By water per mile	"			
By Railway per mile for	"			
1st class goods	"			
2nd class goods	"			
Special class	"			
(The description of P. W. material coming under each class of goods to be obtained from the Railway Companies, and noted.				

(The description of P. W. material coming under each class of goods to be obtained from the Railway Companies, and noted.

Details.	Per	RATE.		Remarks.
		Estimated.	Actual.	
RATES OF MATERIALS.				
NOT INCLUDING CARRIAGE TO SITE.				
Bricks and Tiles.				
Stock bricks, table moulded ... 8 1/4" x 4 1/2" x 2 1/4"	1,000	1/2	1/2	} Not in use in this Ramp
Do. do. ... 9" x 4 1/2" x 2 1/4"	"	1/2	1/2	
Do. do. ... 6 x 3 x 1 1/2	"	1/2	1/2	
Stock bricks, ground moulded 9" x 4 1/2" x 2 1/4"	"	2-4	2-4	
Do. do. ... 9 x 4 1/2 x 3	"	4-8	4-8	
Do. do. ... 8 x 4 x 1 1/2	"	6	6	
Native bricks ... 6 x 4 x 1"	"	2-12	2-12	
Do. do. ... 7 x 4 x 1 1/2	"	1-12	1-12	
Do. do. ... x x	"	3	3	
Paving bricks... 12" x 12" x 1 1/4"	"	10	10	
Do. ... 8 1/2" x 8 1/2" x 2"	"	7	7	
Do. ... 7 1/2 x 7 1/2 x 2	"	6	6	
Penang paving tiles ... x x	"	1	1	
Pillar bricks quadrant shaped 2' diam. ...	"	9	9	
Do. do. 1 1/4' diam. ...	"	8	8	
Do. do. 1 1/2' diam. ...	"	7	7	
Terracing bricks ... 5" x 3" x 1"	"	1-14	1-14	
Do. do. ... 4 1/2 x 2 1/2 x 3/4	"	1-12	1-12	
Flat tiles for roofing ... 6" x 6" x 1/2"	"	1-12	1-12	
Do. do. ... 2 1/2 x 1 1/2 x 1/2	"	1-4	1-4	
Pantiles, large ...	"	3	3	
Do. common, 1st quality ...	"	2-8	2-8	
Do. do. 2nd do. ...	"	1-12	1-12	
Pot tiles, native ...	"	2	2	
Stone.				
Rough stone quarried and stacked ...	Cubic yard.	4-8	4-8	
Stone, hammer dressed (roughly squared) ...	100 C. feet.	35	35	
Stone, squared and dressed to size ...	"	2-2	2-2	
Laterite cut into blocks ...	"	1	1	
Flooring stones ... 12" x 12"	100 Stones.	1	1	} 8-8
Do. do. ... 9" x 9"	"	1	1	
Stone slabs, rough split ...	100 C. Ft.	1	1	

Details.	Per.	RATE.		Remarks.
		Estimated.	Actual.	
<i>Lime.</i>				
Lime stone, broken, small	Cubic yard.	4-6	4-6	
Lime, kunker, unburnt	"	1-12	1-12	
Lime, burnt and delivered	Barah	4-8	4-8	
Firewood, cut and stacked	"	2-8	2-8	
Sand, clean, sharp, on river bank	"	4-2-6	4-2-6	
<i>Timber and Roofing Material.</i>				
Teak-wood, best, sound, &c., in log	Cubic feet.	1-14	1-14	
Do. do. sawn into scantlings	"	2-8	2-8	
Do. do. wrought and fitted	"	4	4	See Data
Jungle-wood in the rough	"	1-8	1-8	
Palmyrah tree Ft. long	Each.	4	4	
Cocconut tree 40 Ft. long	"	2-12	2-12	
Palmyrah rafters, best hard block—				
1st class Ft. long	100			Not in use
2nd class Ft. long	"	7	7	in this Ramp
3rd class Ft. long	"			
Palmyrah reapers	100 R. Ft.			Market price
Bamboos, large, ... 1/2 Ft. long	Each.	4-8	4-8	@ 4-8
Bamboos-1st class 1/2 Ft. long	100	37-8	37-8	@ 4-6
2nd class 1/2 Ft. long	"	25	25	@ 4-4
3rd class 1/2 Ft. long	"	18-12	18-12	@ 3-3
Bundles of thatch 5' girth	Each.	4-2-6	4-2-6	
Palmyrah leaves	100			
Cocconut leaves	100	4-10	4-10	
<i>Iron.</i>				
Europe bar iron, wrought	lb.	4-3	4-3	
Native iron do.	lb.	1-6	1-6	
Corrugated iron sheets... ..	Each.			
Do. do.	"			
Continuous sheet iron	R. Ft.			
Europe steel bar for jumpers and chisels	lb.	4-6	4-6	
<i>Road Material.</i>				
Hard granite stone, broken, small	Cubic yard.	4-10	4-10	
Laterite gravel screened and stacked... ..	"	4-8	4-8	
Broken brick for under layer	"	4-12	4-12	

Details.	Per.	Rate.		Remarks.
		Estimated.	Actual.	
RATES OF WORK.				
Foundations.				
Excavating and filling in exclusive of baling, &c.,	100 C. Ft.	As per rates for earth-work.		
Concrete	"	9-6	9-6	
Sinking wells not less than 3 1/2 feet internal diam. up to 3 feet in depth	Foot of well.	4-4	4-4	Size and description of wells 8' thick
Do. from 3 to 6 feet in depth	"	4-6	4-6	
Do. from 6 to 9 do.	"	4-8	4-8	
Do. for 10th foot	"	4-12	4-12	
Do. for 11th foot	"	4-14	4-14	
Do. for 12th foot	"	1	1	
Masonry Work.				
Ashlar, plane (dressed stone) set in mortar	100 C. Ft.	25	25	
Do. Voussoirs for arches in do.	"	37-8	37-8	
Coursed rubble in do.	"	12	12	
Rubble in do.	"	10	10	
Rubble in clay	"	7-13	7-13	
Rubble, dry, in revetment, &c.	"	6-12	6-12	
Rough stone, large, packed in aprons of Irrigation works, bridges, &c.	"	11-2	11-2	See Data.
Brick Work.				
First class brickwork with table moulded bricks set in mortar	100 C. Ft.	25	25	
First class brickwork with common moulded bricks set in mortar with close fitting joints up to 20 feet high	"	16-8	16-8	
Do. do. above 20 feet high	"	18-8-4	18-8-4	
Do. do. in arches	"	18-8-4	18-8-4	
Do. do. in columns including bonding stones.	"	22	22	
Do. do. in cornices, mouldings and other ornamental work requiring much labor	"	30	30	
Do. do. in open parapets and balustrades	"	12	12	
Honey comb brickwork with best bricks plastered smooth.	"	8	8	
Do. do. with tiles whitewashed 12 x 10 x 5 sq feet	"	5	5	
Brickwork, burnt bricks in clay	"	11-9-2	11-9-2	
Mud walls	"	1	1	
Flooring.				
Flooring with granite paving stones laid on concrete and neatly pointed	100 Sq. Ft.	32	32	See Data
Do. with laterite do. do.	"			

Details.	Per	RATE.		Remarks.
		Estimated.	Actual.	
Flooring.-(Continued.)				
Flooring with paving bricks laid on concrete and neatly pointed	100 Sq. Ft.	10	10	
Do. with Penang tiles	"			
Do. with Brick on edge 6" thick	"	6-8	6-8	
Do. with concrete 4" thick	"	2-14	2-14	
Do. with asphalt 1/4 inches thick laid on 4 inches of concrete	"	34-15	34-15	
Do. do. 3/4 inch do. do.	"	26-5-3	26-5-3	
Do. do. 1/2 inch do. do.	"	16-11-7	16-11-7	
Plastering.				
Plastering with lime plaster 1 coat	100 Sq. Ft.	3-12	3-12	See Data
Do. do. 2 coats rubbed smooth	"	6-5-4	6-5-4	
Do. with best white shell lime 3 coats and polished	"	8-9-4	8-9-4	
Pointing with best cine mortar	"	2-4	2-4	
White and color washing	"	4-4-9	4-4-9	
Color	"	4-10	4-10	
Roofing.				
Best terraced roofing with brick on edge, three courses of flat tiles and three coats plaster exclusive of wood-work	100 Sq. Ft.	22-8	22-8	
Best sloping terrace with flat and pantile covered with mortar and plastered smooth including teak reepers.	"	16	16	
Do. with 3 courses flat tiles and three coats plaster including do.	"	22	22	
Best tiled roofing with flat and pantiles and chunam borders including teak reepers	"	16	16	
Do. do. including best palm-leaf couples and reepers (complete) well tarred	"	28	28	
Common tiled roofing with pantile laid on bamboo mats including wood-work complete	"	15	15	
Best thatch roofing 9 inches thick including do.	"	12	10	
Common thatch roofing with grass or leaves including do.	"	8	8	
Corrugated iron roofing complete	"	50	50	
Continuous sheet iron roofing complete	"	40	40	
Wood Work.				
Best teakwood wrought and placed in large beams	C. Ft.	3-8	3-8	
Do. do. in small beams and joists, etc.	"	3-12	3-12	
Do. Wrought and fitted in trusses, etc.	"	4	4	
Do. do. in barrack and office furniture	"	4	4	
Jungle-wood wrought and fitted	"	2-6	2-6	

