

The prescribed quin quennial
The San Pto. Act



enhancing considerably the expense
of postage, and any system under
which the measurement book itself
is sent to the divisional office
with necessity of returning it,
prevents the required information
being at all times available for the
Executive Engineer.

8. The question of the size
of (i.e. the number of sheets in)
the measurement book will be
separately considered.

R. 2311 C. a/17.87
" 4023 C. a/11.87
" 2041 C. a/17.87
" 2769 W. a/24.10.86.

P.W.C. No. 1

3148W

R. 24.2.88

No. 746W a/5th March/88

The Examiner P.W. Accounts will
submit a draft Standing
Order modifying para
1818 of the P.W. Code, so
as to make it clear that
measurement sheets should
be recorded in divisional
offices; - also that duplicate
measurement sheets are
unnecessary when mea-
surements are taken by
officers subordinate to
subdivisional officers.

W.C.
29.2.88

E. W. Aerts 29/2/88

Plu. 1. iii. 88

R. 3 iii 88

W.C. 7/3

C. 29.2.88
8/3 20/2/88

FROM

No. 264 G.
G. I. Walsh Esq.
THE SUPERINTENDING ENGINEER

FIRST CIRCLE.

TO

THE CHIEF ENGINEER

P.W.D.
FOR IRRIGATION.

DOWLAISHWARAM, 12th October 1887
Desp 26

SIR,

With reference to your Circular memorandum No. 23rd dated the 9th July 87, on the subject of recording measurement sheets, I have the honor to show below in a tabular form the purport of the reports received from the Divisional officers in this circle.

Divisions	Present practice as reported by Division officers.	Alterations proposed by Division officers	Supg. Engr's opinion
Ganjam.	The subordinate in charge of a work generally submits measurement sheets with bills in duplicate to the disbursing officer, who	No alteration	of the system.

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Divisions

Present practice as reported by Division officers

Alterations proposed by Division officers

Supg: Eng: opinion

Divisions

Present practice as reported by Division officers

Alterations proposed by Division officers

Supg: Eng: opinion

Ganjam (Contd)

is always a Sub Divisional officer, whom his turn forwards with his Cash extract the original bill and its measurement sheet to the Ex: Engineer and files in his office the duplicate bill with its measurement sheet. The bills thus received by the Ex: Engineer are submitted each month to the Examiner in support of the accounts and measurement sheets then of filed with work Abstracts in the office of the Executive Engineer.

Vizagapatnam

There are few or no Schedule Contracts (para 1818 P & Code) in force in the Vizagapatnam Division; and when they are the

Has a decided preference for the Government of India manner of dealing with Contract Certificates

Vizagapatnam (Contd)

measurement sheets are put away with the work abstract to which they belong.

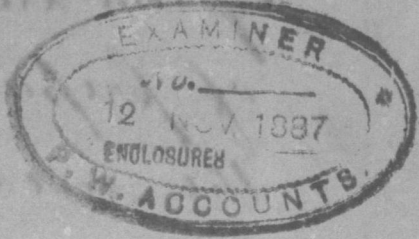
The Sub Divisional officer when he measures a work enters the measurements in his note book and they are abstracted into the form of a Contract Certificate or they may be copied and attached if he is ordered.

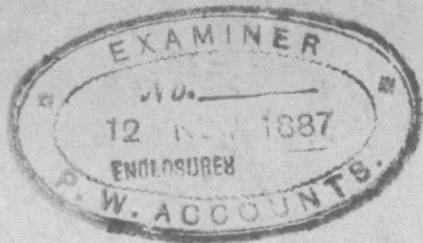
Godavari Eastern

Until lately the measurement sheets were a considerable amount of un- al office. of late necessary the Kapa hundry work & it also Sub Division and for necessitates the Ancient works, the careful examination Sub or officers have now of the measurement books direct from the mea- in the Sub or officer. measurement books after with this system check of the arithmetical each Subordinate work in those books. must necessarily

Division	Present practice as reported by Division officers	Alterations proposed by Division officers	Supg Engrs opinion
Godavari East (Contd)		keep two or more measurement books but to this there can be no objection. This system is applicable to all works in this Division except ^{the} to Quarry as it is found in practice absolutely necessary that the subordinate in charge of quarries should have with him all his measurement books for the greater part of the month. The only improvement necessary is that all the measurement books should be sent to the Sub ^d office for the last 3 days of the month where will be written across from the duplicate vouchers "Paid by Cheque" to	

Division	Present practice as reported by Division officers	Alterations proposed by Division officers	Supg Engrs opinion
Godavari Central Division	The practice in recording measurement sheets in this Division is that the duplicate of the measurement books themselves from the measurement book, accompany the bills into the measurement sheets the subordinate attached to the bill; the measurement sheets are filed in Division office books being in Sub ^d The measurement books officers hands; the are sent in at intervals book being returned who inspected; but hitherto there does not seem as soon as the call to have been any systematic comparison between them and the bills ^{as} paid. labor of copying out the whole detail measurements again and is a more satisfactory check than the comparison with the totals. Some time afterwards which is very likely to degenerate into a farce. It might be advisable to have	His own opinion is that the check is more complete. The duplicate of the measurement books themselves from the measurement book, accompany the bills into the measurement sheets the subordinate attached to the bill; the measurement sheets are filed in Division office books being in Sub ^d The measurement books officers hands; the are sent in at intervals book being returned who inspected; but hitherto there does not seem as soon as the call to have been any systematic comparison between them and the bills ^{as} paid. labor of copying out the whole detail measurements again and is a more satisfactory check than the comparison with the totals. Some time afterwards which is very likely to degenerate into a farce. It might be advisable to have	





FROM

THE SUPERINTENDING ENGINEER
FIRST CIRCLE.

TO

THE CHIEF ENGINEER

FOR IRRIGATION.

DATED

DESPATCHED

RECEIVED

12th } October 1887
26th }
2-11-87

No. 264 G.B.

ENCLOSURES. Nil

SUBJECT.

Measurement
Sheet

Show in a tabular
form the purport
of the reports received
from the S^d officers
on the subject of
recording —

No. 250 G.C.

Supy Engineer Office 2^d Circle
Camp Bank Canal
5th October 1887

From,

J. W. Russell Esquire
Supy Engineer
2^d Circle

To,

The Chief Engineer
Public Works Department
Madras.

Sir,

I have the honor, with
reference to your memo No 2311 C of the
9th July last, to report that the practice
in each Division of this Circle, as regards
the records of measurement sheets, is
as follows.

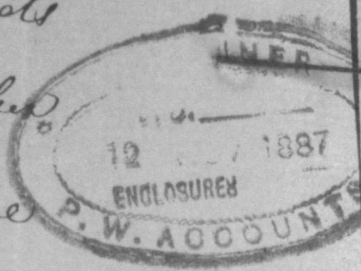
2. Western Eastern Division. Measurement
sheets are attached to the work
abstracts, except in the case of works
at Head quarters, where the original
Books are sent in with Bills, and are
returned to the Sub Division officer after
check of the Bills.

Respectfully

that the measurement books as supplied
are somewhat too large, not as regards
size of paper, but as regards the number
of pages they contain. I would issue
different sizes containing 32, 64, and
128 pages, and would endeavour to
have a book for each work or section
of a large work, to be sent to the
Division office for record with the final
measurements. At present, books contain
measurements relating to several works
and are kept back in the Sub Division
office, or Subordinate's office, because
perhaps one work of which some
measurements are entered happens to
be unfinished.

I have the honor to be
Sir
Yours most obd. Servant.
J. W. Randall
Suff Engineer
2d class

Compd



Σ.6
P.W.C. No. 8041 ✓
1823/88

From,
The Suptg. Engineer,
2nd Circle.

To,
The Chief Engineer,
P. W. D.

Dated 5th October 1887.

19.11.10.87

No. 250 G.L.

Measurement sheets.

Record of — in each
Division of the 2nd Circle.
Furnishing a report as
regards the practice of —

Complete
11.10.87
C. W. D.

Superintending Engineer's Office,

3RD CIRCLE

Bellary 6 October 1887.

No. 1314

FROM,

Col. A. Smalley R.E.
SUPERINTENDING ENGINEER,
IIIrd CIRCLE.

TO,

THE Chief Engineer
P. W. D.
Madras

SIR,

Enclosures.

With reference to your memo-
randum No. 2311 C dated 9th July/87
I have the honor to state that the
practice in the Divisions of this
Circle is to record the measurement
sheets with the duplicate copies of
bills, the original bills being sent
to the Examiner. The Executive
Engineers Bellary and Chudalaph
Divisions do not recommend any
modification of the present practice.
The Executive Engineer in charge
Kurnool Division is of opinion
that

that the submission of measurement
sheets may be dispensed with in the
case of payments made by Sub Di-
visional Officers themselves with a
view to afford relief to Sub Divisional
clerks. I do not agree with him in
this view. My own views have been
already stated as Executive Engineer
North West.

I have the honor to be
Sir,
Your most obed^t servant

H. Smalley Col. R. E.
Supdy. Engineer
3rd Mile



E.S.
PWC No 7941
1823
88

From,
The Superintending Engineer,
IIIrd Circle.

To,
The Chief Engineer
P.W.D.
Madras

Dated *6* } *October* 1887.
Received *8* }

Enclosures.

No. 1314

Measurement sheets of
Bills: —

Expressing opinion of
the Executive Engineers with
regard to the question of recording
the: —

Complete
As
9/10/87

Superintending Engineer's Office 4th Circle.

Pollachi - 17 August 1887.

No. *343*
E.W.

From,

COLONEL J. BEATTY R. E.,
SUPERINTENDING ENGINEER,
FOURTH CIRCLE.

To,

The Chief Engineer
P.W. Departt.

SIR,

With reference to your Circular
Memorandum No. 2311 C. of 9th ultimo,
I have the honor to report on the
present system of recording measure-
ment sheets in the Divisions of this
Circle.

2 In the Nilgiri Division
Measurement Books are kept by
the Sub divisional officers, from
which measurement sheets are pre-
pared and submitted to the Exe-
cutive Engineer with the contract
certificates (Form *M/14*) for payment.
The duplicate certificate and the

Measurement

measurement sheet are filed with the work abstract; Detailed measurements of the whole work executed are submitted with the final bill.

3. The Coimbatore and West Coast Divisions being very large, consisting of two whole Districts each, the Executive Engineer could not possibly pay contractors himself.

Subdivisional Officers are therefore allowed drawing accounts, and payments are made by them on Bills prepared in the Subdivisional Office.

To each Bill a measurement sheet is attached prepared from the measurement Book kept by the Subdivisional Officer. The Bill and measurement sheet, bearing the contractor's signature, are forwarded to the Executive Engineer's Office.

The measurement sheets and duplicates of Bills, after being checked, are filed in the Executive Engineer's office with the work abstracts.

4. The present system as regards measurement sheets and measurement

Books

Books is found to work well and ^{on} I do not consider that any modification of it is needed.

5. A separate measurement Book might be kept for each large work on the Nilgiris, and this book sent in to the Division office with the Bill, instead of sending a separate measurement sheet; thus saving a little clerical labor. This might answer at Cotacamund, where the Division and Subdivision offices are in the same place, but it could not be adopted in Coimbatore and the West Coast.

I have the honor to be
Sir

Your most obt. servt.

J. Beatty, Colonel R.E.
Suptg. Engineer, Vande

JB

PWC No. 503
1823/88

FROM

COLONEL J. BEATTY R. E.,
SUPERINTENDING ENGINEER,
FOURTH CIRCLE.

Dated. } 17th August 1887.
Recd: } 19.8.87

No. 343
SW

ENCL: 4

Measurement sheets
and Books.

Reporting on the
present practice of
recording—in Dn
offices and that no
modification of
the system is needed.

Complete
19.5.57
SW

Sup^d Engrs Office 5 Circle
No. 2253. Bangalore 29 August 1887.

From

Colonel. H. M. Vibart. R.E.
Sup^d Engineering Engineer 5 Circle
To The Chief Engineer
P.W. Department.

Sir,

With reference to your
Circular & Memorandum No.
2311 dated 9 July 1887, I
have the honor to report that
the general practice in the Divi-
sions in this Circle is to re-
cord measurement sheets
in the Executive Engineers
Office. I do not consider
it advisable to make any
alteration in this practice
for the measurement sheets
would be frequently useful
for reference in Executive
Engineers' Offices, in cases
of dispute or when in-
formation is required
about

about details of work.

I have the honor to be

Sir

Your Most Obedient Servant

Alfred W. Hart Coll. R.E.

Superintending Engineer
of Fire.

From

THE SUPERINTENDING ENGINEER,

V CIRCLE,

To

THE *Chief Engineer's*
P.W. Department.

Dated
Recd.

29 } *August* 188*7*.
31

ENCLOSURES.

No. 2253.

Measurement
Sheets.

*Remarks that the gen-
-ral practice in the Divi-
-sions in his file is to
- record — with the En-
-gineer's Office
- states that it is not
advisable to make any
alteration —*

Compile
W.S. 57
31.8.87

*As regards the Certificate
by Sub. Division Officer I would
point out that the measurements
are all taken by the Subordinates,
and part payments are made
on these measurements when
submitted. The Sub. Div. Officers
are not under the circumstances
prepared to certify the claim to be*

Contractor, who is advised of the dispatch of his bill.

The measurement book is necessarily kept by Upper Subordinate in Charge of works and checked measured by Sub-Divisional or Divisional Officer, the sole record of the work done of the Sub-Divisional Officer (if he is a disbursing Officer) is the Certified triplicate Copy of the Certificate (form M 14) or bill (form M 14 A) with detail list of measurement attached thereto. The original is being sent on to the Examiner of Public Works Accounts, the Certified duplicate Copy of the bill is retained with measurement lists in the office of the Executive Engineer, and these lists are checked with measurement books, which are called for from Subordinates whenever necessary. The eventual return of all books to the D. O. Office for record as required by Code para 1756 is insisted upon only when all works entered therein are completed; and the books are not required for further reference by the Officer in Charge of works."

correct until after inspection.

The order of Executive Engineer to pay has never been given separately for each payment. I would therefore recommend that the remarks of the Executive Engineer "Pay Rs" be removed.

The accompanying form is simple and may be adopted with advantage.

I think it is a question whether under any circumstances a duplicate measurement sheet need ever be prepared. In case the Sub. O. Officer pays he should forward the Copy of measurement sheet with the bill to Division office, which after check, should be returned to Sub. Division office for record until the accounts of the work are closed, when such Copies of measurements should be sent in to Division office with final bill for record."

Jaime

Negapatam-

"In this Division the Sub-Division Officers have their own drawing accounts and make payments to Contractors. They check measure works & initial the measurement books when so doing, but they cannot check measure every work for each payment. Duplicate detailed measurement sheets are made out by the Subordinate, who measures the work from his measurement book, and sent to the Sub-Division Officer.

The Sub-Division Officer pays the Contractor and records one of the detailed measurement sheets in his Office, and sends on the other together with the Contractor's receipt in duplicate in form N: M 14 (or M 14 A as the case may be) to the Executive Engineer. The Executive Engineer records the measurement sheet & duplicate receipt and sends on the original receipt to the Examiner P. & A. Accounts."

The alteration desirable in Code para 1818.

The para looks upon the Executive Engineer as the sole disbursing officer - where he is, the para would require no modification, as it is, however, the Sub-Division Officer disburse the payments for their Sub-Divisions. The measurement books are checked & initialled by Sub-Div. Officers when checking measuring works as stated above, but these measurement books cannot be the Sub-Div. Officers' sole record of all works scattered over his Sub-Division.

The measurement books must remain with the Subordinate, who actually measure up the works. The Sub-Division Officer's own measurement book being his sole record of work done, which he himself measures up.

For works measured up by his Subordinates measurement sheets

Negapatam-

Sheets are copied from the measurement book in duplicate and sent to the Sub-Division Officer. He retains one for record and sends on the other to the Division Office for record.

This entails much labour on subordinate clerks, and is a waste of time, and labour, and stationery. The copy sent on to the Division Office is not required. If necessity should arise the Sub-Division Office copy can always be obtained for scrutiny.

For works in the head quarters Sub-Division the measurement sheets must be recorded in the Division Office as the Executive Engineer is here himself the Sub-Division Officer.

The para 1818 modified to suit the practical requirements of this General District Division should run as follows-

'Whenever a payment is made to a Contractor the whole quantity of work done up to date must be recorded in duplicate Certificate in form R: M 14

Negapatam -

(or M.H. as the case may be) for each work separately. This certificate must be supported by a sheet of detailed measurements with an abstract of quantity & value of each sub. Head of Work done to be paid for. The measurement sheets will be recorded in the office of the disbursing officer, who will send on the duplicate Contractor's receipt to the Executive Engineer. The Sub. D. O. Officer's record of Work done, where such Sub. D. O. Officer does not happen to be also the Division officer, will be the measurement sheet so retained, & the original measurement book kept by his subordinate.

The use of the word Executive Engineer is undesirable under our present organization as many Executive Engineers are in charge of Sub. Divs. without being in charge of Divisions; and Sub. Division officers pay for work done in their Sub. Divisions."

Trichinopoly.

"This practice current in this Division is that measurement sheets are received along with the bills. The latter are submitted to the Engineer with the Monthly accounts, and the measurement sheets are retained in this Office, and attached to the work abstracts."

"In this Division measurements are, as a rule, made by Upper Subordinates, and payment for the most part by the Sub. Division Officer, only work done on regular contract being paid for by the Executive Engineer. Having only recently taken charge of the Division, I am not fully acquainted with the manner in which the work of preparing bills and copying measurements is distributed; but one Sub. Division Officer has recently very reasonably complained to me that he had to get made three copies of bills and three of measurements. Probably all the copies of measurements are made by the subordinate's clerks."

Madura.

17th

"I consider it quite sufficient if a single copy be made from the measurement Book and recorded in the Office, where the bill is paid."

Report showing the practice in each Division recording measurement sheets like to the Engineer's Office

from the Engineer's Office

The practice in each Division

Division

Trinivally.

"Measurement sheets accompany both the bills paid by the Sub-Divisional Officers as well as those submitted for payment by the Detached Officers and are recorded in the Divisional Office."

"As the measurement sheets that accompany the bills paid by the Sub-Divisional Officers are checked in the Sub-Divisional Office before the payment is made, these sheets may be recorded in the Sub-Divisional Office, the Sub-Divisional Officers being responsible for the correctness of the payments made by them."

Whenever required the original measurement book can be sent for by the Executive Engineer for the purpose of checking the measurements of any particular work."

"Copies of the measurement books are filed with the bills."

"I think smaller books one or more for each work, which could pass between the Division Office and

Revenue

Pamuel.

Superintg Eng'rs Office
Nodak Naval 19th August 1887

the Overseer, only the
abstract and with a note
of the situation of the pits,
would be sufficient, and
save much clerical labor
with the consequent chances
of mistakes."

John C. R. B.
Superintending Engineer
6th Circle.

Koda Naul 19th August 1887.

No. 961 J.J.

D/ 22nd

From

The Superintending Engineer,
6th Circle.

To

The Chief Engineer
Public Works Department
Madras.

Sir,

With reference to your No. 2311C of 9th July/87, I have the honor to enclose a statement showing the practice in the various Divisions of this Circle and the opinions of the officers in charge as to the changes required.

2. My own opinion is that no change is necessary in para 1818 except the omission of the words "to the Executive Engineer" in the 6th line, and the addition in the 9th line after "book" of the word "until the completion of the work when the book will be forwarded to the Divisional office for record."

I have the honor to be,

Sir,
Your Most Obedient Servant
J. B. J. Lintell
Superintending Engineer

E. 2

P/6627
1823/87

ENCLOSURE. 1

Statement showing
the practice in the
various Divisions

of the 6: Circle
and the opinions
of the officers in
charge as to the
changes required.

P. W. D. 6TH CIRCLE.

From

The Superintending Engineer,
6th Circle.

To

The Chief Engineer
P. W. D.

No. 961.T.J

Dated

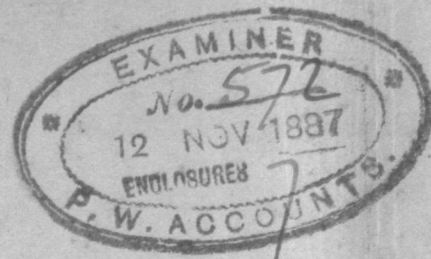
19th Aug. 1887

Received

Enclosure. /

Offers his opinion
with regard to the
question of record-
ing measurement
sheets in the offices
of the sub: engineers
in charge of divisions

Complete
W.M.
24.11.87



No. 4023 R.C

Government of Madras.

PUBLIC WORKS DEPARTMENT,

Chennai, 11th November 1887.

OFFICE NOTE.

From

W

To

C

Letter from S.S.I. No. 264 G.D. of 12.10.87
" " " II - 250 G.D. of 5.10.87
" " " III - 1314 of 6.10.87.
" " " IV - 3432 G.D. of 17.8.87.
" " " V - 2253 of 29.8.87.
" " " VI - 961 J.G. of 19.8.87.

For favour of any
further remarks you may
wish to offer, with reference
to your office note No.
277 of 30.6.87.

W.M.
10.11.87

J.M. 10/11/87

To W.

N^o 1104
23/2/88 Encl. 7

The present and the views as to future practice in respect of the recording of measurement sheets in the divisional office, as disclosed in the correspondence sent with your office note, may be thus briefly summarised.

2. Present practice. In all but the Godavari Eastern and Western Divisions, measurement sheets are apparently recorded in the divisional office. In the two divisions named the measurement books are sent to the paying office, sub-divisional or divisional as the case may be, but the change of procedure in the Godavari Eastern Division is said to be of recent introduction only. There is also an exception in the case of works at the head quarters of the Kistna Eastern Division, where the measurement books are sent instead of the measurement sheets. Duplicate measurement sheets are sent in the case of the following divisions:-

Ganjam
Tanjore
Negapatam
Madura.

and in one of the sub-divisions of the last named division measurement sheets are said to be prepared in triplicate.

3. There appears to be no case in which neither the measurement book nor the measurement sheet is sent to the divisional office.

4. Future practice. All the divisions in the 2nd., 3rd., 4th. and 5th. Circles advocate the continuance of the existing system of submitting measurement sheets to the divisional office, and Supg. Engineers do not consider any change necessary. In the 1st. Circle the Executive Engineer Ganjam Division now receives measurement sheets and desires no change but the Executive Engineer Vizagapatam Division prefers to have neither measurement book nor sheet sent up. In the 6th. Circle, the Executive Engineer Trichinopoly Division prefers to retain the present system of submitting measurement sheets to the divisional office.

he Executive Engineer Ramnad division proposes smaller measurement books than those now in use, to pass between the divisional office and overseer, while the other four divisions suggest the measurement sheets being recorded in the divisional or sub-divisional office, whichever makes the payment. The Supg. Engineer considers no change in existing rules necessary.

5. Practically it comes to this that almost every officer recommends the continuance of the practice at present in force in his division or circle, and the result is an overwhelming preponderance of opinion in favor of recording measurement sheets, i.e. extracts from measurement books, in divisional offices, and I would therefore suggest that the Code be so modified as to make this clearly the rule. It does not seem to be a matter as to which it can be necessary or desirable to admit diversity of practice; and as the practice proposed to be codified is actually in force in all except two divisions no great violence will be done.

6. The correspondence has also brought to light, the existing practice in a few divisions of obtaining measurement sheets in duplicate when the measurements are taken by officers subordinate to sub-divisional officers. Probably this practice is much more general than appears from the correspondence, but has remained unnoticed, not being a point on which report was required. It is a question whether duplicate sheets are required in such cases; if Government consider they are, then the concluding words of Code para 1818 would run "his measurement book or his file of measurement sheets of subordinates" or something to that effect. If on the other hand Government consider it distinctly undesirable that subordinates should be put to the trouble of preparing these extra copies, the practice might be prohibited.

7. Some officers have suggested separate measurement books for each work. This would involve risk of loss in transit, besides

enhancing considerably the expense of postage, and any system under which the measurement book itself is sent to the divisional office with necessity of returning it, prevents the required information being at all times available for the Executive Engineer.

8. The question of the size of (i.e. the number of sheets in) the measurement book will be separately considered.

No 1311 C d/9.7.87
" 4023 C d/11.11.87
" 2041 C d/17.6.87
" 2769 W d/24.10.86.

W. 1. III. 88

W. 7/3

PWC No 10

3148W

R 24.2.88

No 746 W d/5th March/88

The Examiner P.W. Accounts will submit a draft Standing Order modifying para 1818 of the P.W. Code, so as to make it clear that measurement sheets should be recorded in divisional offices; - also that duplicate measurement sheets are unnecessary when measurements are taken by officers subordinate to subdivisional officers.

W. 29.2.88

E. W. A. 29/2/88

PWC No 200