

Madan Mohan Malaviya Engineering College
Gorakhpur



Memorandum of Understanding

Between

Superintending Engineer
Drainage Circle Ballia

And


Principal
Madan Mohan Malaviya Engineering College, Gorakhpur

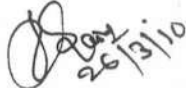
For

Performance Evaluation Studies

Of

Construction for Protection of Village group Nardara – Bhusaula and B. S. T.
Bund on the left bank of River Ganga in District Ballia, U.P


26/3/10
प्रधान, मदन मोहन मालवीय इंजीनियरिंग कालेज, गोरखपुर


26/3/10
(Prof. S. S. Saini)
M.M.M. Engineering College
Gorakhpur-221010 (India)

Memorandum of Understanding (MoU)

This Memorandum of Understanding (hereinafter MoU) is made on 26th day of March, 2010 at Gorakhpur between the Superintendent Engineer, Drainage Circle, Ballia U. P. Irrigation Department, Ballia on the one part (hereinafter called the Superintendent Engineer, Drainage Circle) and the Madan Mohan Malaviya Engineering College located at Gorakhpur represented by the Principal on the other part (hereinafter called the institute).

Whereas, the Irrigation Department, Government of U. P. has engaged the institute for carrying out the evaluation study of the following flood related schemes and assessing the outcome and impact of such schemes.

1. Construction for protection of village group Nardara – Bhusaula and B. S. T. Bund on the left bank of River Ganga in District Ballia, U.P.


The awarded work as mutually agreed and enunciated below for total consideration of an amount limited to Rs. 0.5% of cost of all works is to be taken up immediately excluding cost of land.

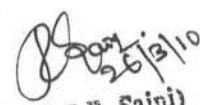
And whereas, the institute has agreed to carry out the awarded work under the terms and conditions specified in this MoU.

Now, therefore, it has been agreed by both the parties as follows;

1. OBJECTIVES;

- To evaluate the extent to which the objectives of the various flood control schemes named as above will be achieved.
- To identify the actual outcome and socio-economic impact of the concerned schemes.
- To assess the technology and cost effectiveness of the schemes.
- To diagnose the constraints and difficulties encountered by the implementing agencies and concerned stakeholders causing delays in project progress and sub optional achievements.
- To suggest recommendations in terms of modification of the scheme guidelines, and appropriate change in the operational structure for ensuring successful execution and effectiveness of the schemes under consideration.


26/3/10
सुपरिन्टेंडेंट इंजीनियर,
ड्रेनेज सर्किल, बल्लिया


26/3/10
(Prof. J.P. Saini)
Principal
M.M.M. Engineering College
Gorakhpur-273010 (India)

- To report on satisfactory completion through a regular quality control programme evaluating the quality and quantity of executed works.


2. Terms of Reference:

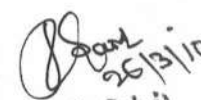
- (1) Madan Mohan Malaviya Engineering College will evaluate the effectiveness of schemes and will suggest if any improvement in schemes. Institution will also take cross-section of completed Bund at interval of 50 m with the assistance of U. P. Irrigation Department. In this regard, the measurement and preparation of such cross sections will be done by U. P. Irrigation Department, which will be reviewed by the institution team for any further suggestions or improvements.
- (2) Socio-economic impact of project on stake holders is to be assessed and actual outcome of project is to be shown in report.
- (3) The technology of schemes and its effectiveness on particular site and suggest improved technology if at all possible.
- (4) Actual constraints and difficulties faced by implementing agency and stake holders causing delay in project and suggesting remedial measures.
- (5) Projects have been generally made on guide-lines given by concerned I. S. Codes. If at all there are any suggestions regarding guidelines that has to be given in report.
- (6) Reporting of satisfactory completion through regular quality control programme evaluating the quality and quantity of executed works in interim reports and final report.

3. Submission of Reports:

Institute will give interim report of effectiveness after the receipt of first installment of advance payment. Interim reports will be given by institution every quarterly and the fourth report will be the final report. Interim reports will be put up before a committee constituted by Engineer-in-Chief (Head of Department). After approval, payment will be made as per the schedule given below -

Before submission of 1 st report (Interim report) -	20%
Before submission of 2 nd report	- 20%
After submission of 3 rd report	- 20%
After submission of 4 th and final report	- 40%


26/3/10
Principal
M.M.M. Engineering College
Gera, U.P. 2010 (India)


26/3/10
(Prof. I.P. Saini)
Principal
M.M.M. Engineering College
Gera, U.P. 2010 (India)

Institute will give a work detailed programme with details of technical manpower and equipments.

4. Institute will engage key persons. One team leader of the rank of Assistant Professor and experienced surveyor. Visit of technical persons / assistants will be taken up at site as per need and requirement, of the work, which will be shown in detailed work programme. Any change in team leader or staff has to be approved by committee constituted by Engineer-in-Chief.

(a) General Provisions:

- 1. Full cooperation, assistance and support will be given by U. P. Irrigation Department, to the institute / team during the 'performance evaluation studies'.
- 2. The logistic support and conveyance etc. will be provided by U. P. Irrigation Department, to the institute / team for site visit and 'performance evaluation studies'.
- 3. U. P. Irrigation Department, will provide all necessary inputs such as, data, drawings, reports, technical details and such other information as may be required by the institute team from time to time for successful completion of performance evaluation studies'.
- 4. Quality control and other testing charges required to be carried out during the execution of the project from time to time will be borne by U. P. Irrigation Department, separately. The fee of 0.5% of project cost of all the works for 'project evaluation studies' will not include any such charges.
- 5. The detailed programme and work schedule along with PERT Chart will be provided by U. P. Irrigation Department.


(b) Duration 1st March 09 to 31st March, 2011

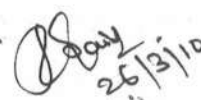
(c) Date of commencement: 1st March , 2009

(d) Date of completion: 31st March, 2011

(e) Modification / Alteration: Any modification / alteration in the project will be done by the client with the consent of institute / team only. The implementation of the suggestions / recommendations will be the responsibility of the client only.

(f) Default by the institute / client:


 26/3/10
 26/3/10


 26/3/10
 (Prof. J. P. Saini)
 M.M.M. Engineering College
 Gorakhpur-226010 (India)

* Any deviation from the Terms of Reference of the evaluation study as given in para - 2 barring force majeure will be considered as default by the institute.

* Any deviation from Terms of Reference of the evaluation study as given in para - 2 or General Provisions as given in para - 4(a) or payments as required in para - 3, barring force majeure, will be considered as default by the client.

(g) Force Majeure:

* An event beyond the control of the institute and not involving default or negligence and which is not foreseeable will be termed as force majeure. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotions, sabotage, fire, explosions, epidemics, quarantine, earthquakes, strikes etc.

- If the performances in whole or in part or any obligation under this MoU is prevented or delayed by any reason of force majeure for a period exceeding 90 days either party may at its option, terminate the MoU in a mutually agreed manner.

(h) Responsibilities / rights / duties of the institute: The institute will bear the responsibility of carrying out 'performance evaluation studies' with the assistance of U. P. Irrigation Department as per MoU. The institute reserves the right to spend and distribute the amount charged from U. P. Irrigation Department for 'performance evaluation studies' on its own discretion and change the budgetary estimates under various heads within the limit of 0.5% of cost of all works, which will be subject to cost revisions / escalations from time to time in future.


(i) Responsibilities / rights / duties of the Government: The government will bear the responsibility of successful completion of the projects and will ensure smooth conduct of affairs for the implementation of different components of the project.

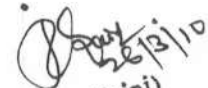
5. Remuneration of the Institute:

Payment:

(a) Cost Estimate: 0.5% of project cost of all the works including cost revisions / escalations in future. An estimate of tentative expenditure under various activities is enclosed as Annexure: 1.

(b) Stages of payment: Before starting the 'performance evaluation studies' of the project, 20% advance payment will be necessary to meet the initial expenses relating to the work. The second installment of payments of 20% will be necessary before the submission


 26/3/10
 2010


 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gorakhpur-273010 (India)

of second interim report. The payment of third installment of 20% and final installment of 40% will be done after the submission of third interim report and fourth and final report respectively.

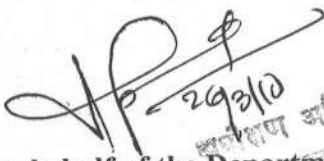
7. Penalty / copyrights:


- (a) All efforts will be made by the institute to complete the evaluation study within the stipulated duration and no request for extension will normally be entertained.
- (b) The penalty for delay in the completion of the evaluation study will be applicable in the case of default on the part of institute which will be deductible from the last installment. The rate of penalty will be 2% per month of the amount disbursed to the institute limited to a maximum of 20% of the total cost estimate.

8. Settlement of Disputes:

In case of any dispute or differences relating to the interpretation / application of the MoU the decision of the U. P. Government would be final.


Sworn and signed by both parties herein on this 26th day of March, 2010.


 (For and on behalf of the Department of
 U.P. Irrigation)


 (For and on behalf of the Institute)
 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gorakhpur-223010 (India)

In the presence of the following witness

Name:
 Address:
 Date:


 Name: R. K. Shukla
 Address: Asstt. Prof Cul Egg
 Date: 26-3-10.

Annexure: 1


Tentative Budget

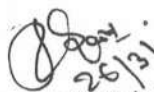
Sl. No.	Name of the item	Proposed Budget Estimates	Rs. in Lacs
1.	Socio Economic Impact Study	(i) Travelling expenses (ii) Lodging and boarding charges during Survey (iii) Video-audio recording (iv) Report preparation (v) Contingency	0.40
2.	Technology and cost effectiveness including soil investigation	(i) Geotechnical investigation and testing charges (ii) Design and stability analysis of embankments (iii) Estimation of quantity of materials for embankments and cost analysis	0.50
3.	Modification of the Scheme guidelines and approximate change in the operational structure	Different works: (i) Analysis of freeboard (ii) Analysis of seepage line (iii) Slope stability analysis for different flow conditions i.e. just after construction, study seepage and sudden drawdown (iv) Foundation shear stresses (v) Provision of slope protection of measures if any	0.40
4.	Survey and G.I.S. work	(i) Procurement of Satellite data at different resolution (From NRSA) and topographical maps from (SOI). (ii) Manpower / trained personnel in GIS and RS / M. Tech and Ph. D students	1.50

[Signature]
24/3/10
बि. वि. वि. वि.
इंजीनियरिंग विभाग, वाराणसी

[Signature]
26/3/10
(Prof. J.P. Saini)
Principal
M.M.M. Engineering College
Gorakhpur-273010 (India)

		for three months. (iii) Field data collection for RS works. (iv) GIS and Image processing software use . (v) Preparation for final report for GIS and RS work.	
5.	Hydrological and Hydraulic Investigations	(i) Visit for finalizing the appropriate sites (4 visit). (ii) Visit. for field test and data generation (4 to 5 persons, 6 to 8 visit). (iii) Equipment / consumable / additional data analysis and miscellaneous items.	0.30
6.	Over all integration	(i) Visit for field and other organization. (ii) Computer support work.	0.15
7.	Consultancy / evaluation charges		1.37
Total =			4.62


 26/3/10
 प्रमुख अभियंता
 जल संचयन, गोरखपुर


 26/3/10
 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gorakhpur-273010 (India)

**Madan Mohan Malaviya Engineering College
Gorakhpur**



Memorandum of Understanding

Between

**Superintending Engineer
Drainage Circle Ballia**

And


**Principal
Madan Mohan Malaviya Engineering College, Gorakhpur**


For

Performance Evaluation Studies

Of

**Construction of Anti Erosion Works at Turtipar, Srinager between Km 68.200
to 70.200 on right bank of river Ghaghra in District Ballia, U.P**


09.03.10
अधीक्षण अभियन्ता
ड्रेनेज मण्डल, बलिया


09/03/10
(Prof. J.R. Saini)
Principal
M.M.M. Engineering College
Gorakhpur-273010 (India)

Memorandum of Understanding (MoU)

This Memorandum of Understanding (hereinafter MoU) is made on 9th day of March, 2010 at Gorakhpur between the Superintendent Engineer, Drainage Circle, Ballia U. P. Irrigation Department, Ballia on the one part (hereinafter called the Superintendent Engineer, Drainage Circle) and the Madan Mohan Malaviya Engineering College located at Gorakhpur represented by the Principal on the other part (hereinafter called the institute).

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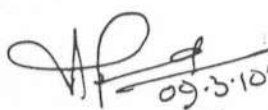
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 09.3.10
 अरीक्षण अभिसन्ता
 ड्रेनेज मण्डल, बलिया

1


 (Prof. J. P. Bainsi)
 Principal
 M. M. M. Engineering College
 Gorakhpur-273010 (India)

- To report on satisfactory completion through a regular quality control programme evaluating the quality and quantity of executed works.


2. Terms of Reference:


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Before submission of 2 nd report	- 20%
After submission of 3 rd report	- 20%
After submission of 4 th and final report	- 40%


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अधीक्षक अभियन्ता
इमेज मण्डल, वलिया


09/3/10
(Prof. J.P. Sahaj)
Principal College
M.M.M. Engineering College
Gorakhpur-273010 (India)

Institute will give a work detailed programme with details of technical manpower and equipments.

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5. The detailed programme and work schedule along with PERT Chart will be provided by U. P. Irrigation Department.


(b) Duration 1st March 09 to 31st March, 2011

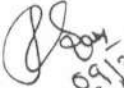
(c) Date of commencement: 1st March, 2009

(d) Date of completion: 31st March, 2011

(e) Modification / Alteration: Any modification / alteration in the project will be done by the client with the consent of institute / team only. The implementation of the suggestions / recommendations will be the responsibility of the client only.

(f) Default by the institute / client:


 अशोक अभियन्ता
 ड्रेनेज मण्डल, बलिया


 09/3/10
 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gorakhpur-273010 (India)

* Any deviation from the Terms of Reference of the evaluation study as given in para – 2 barring force majeure will be considered as default by the institute.

* Any deviation from Terms of Reference of the evaluation study as given in para – 2 or General Provisions as given in para - 4(a) or payments as required in para – 3, barring force majeure, will be considered as default by the client.

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- If the performances in whole or in part or any obligation under this MoU is prevented or delayed by any reason of force majeure for a period exceeding 90 days either party may at its option, terminate the MoU in a mutually agreed manner.

(h) Responsibilities / rights / duties of the institute: The institute will bear the responsibility of carrying out 'performance evaluation studies' with the assistance of U. P. Irrigation Department as per MoU. The institute reserves the right to spend and distribute the amount charged from U. P. Irrigation Department for 'performance evaluation studies' on its own discretion and change the budgetary estimates under various heads within the limit of 0.5% of cost of all works, which will be subject to cost revisions / escalations from time to time in future.


(i) Responsibilities / rights / duties of the Government: The government will bear the responsibility of successful completion of the projects and will ensure smooth conduct of affairs for the implementation of different components of the project.

5. Remuneration of the Institute:

Payments:

(a) Cost Estimate: 0.5% of project cost of all the works including cost revisions / escalations in future. An estimate of tentative expenditure under various activities is enclosed as Annexure: 1.

(b) Stages of payment: Before starting the 'performance evaluation studies' of the project, 20% advance payment will be necessary to meet the initial expenses relating to the work. The second installment of payments of 20% will be necessary before the submission


 09.3.10
 अधीक्षण अभियन्ता
 ड्रेनेज मण्डल, बलिया


 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gondaapur-273010 (Uttar Pradesh)

of second interim report. The payment of third installment of 20% and final installment of 40% will be done after the submission of third interim report and fourth and final report respectively.

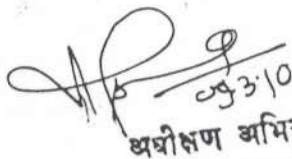
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- (b) The penalty for delay in the completion of the evaluation study will be applicable in the case of default on the part of institute which will be deductible from the last installment. The rate of penalty will be 2% per month of the amount disbursed to the institute limited to a maximum of 20% of the total cost estimate.

8. Settlement of Disputes:

In case of any dispute or differences relating to the interpretation / application of the MoU the decision of the U. P. Government would be final.

Sworn and signed by both parties herein on this 09th day of March, 2010.

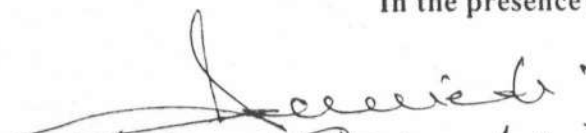

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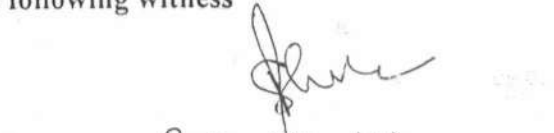
अधीक्षण अभियन्ता
जे.पी. मण्डल, ब.वि.दा
(For and on behalf of the Department of
U.P. Irrigation)


09/3/10

(For and on behalf of the Institute)
(Prof. J.P. Saini)
Principal
M.M.M. Engineering College
Gorakhpur-273010 (India)


In the presence of the following witness


Name: (S. N. Dwivedi)
Address: E.E., Flood Divn. B.L.A.
Date: 09/3/10


Name: R.K. Shukla
Address: Asst. Prof Civil Engg
Date: 9/3/10

Tentative Budget

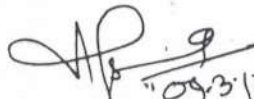
Sl. No.	Name of the item	Proposed Budget Estimates	Rs. in Lacs
1.	Socio Economic Impact Study	(i) Travelling expenses (ii) Lodging and boarding charges during Survey (iii) Video-audio recording (iv) Report preparation (v) Contingency	0.60
2.	Technology and cost effectiveness including soil investigation	(i) Geotechnical investigation and testing charges (ii) Design and stability analysis of embankments (iii) Estimation of quantity of materials for embankments and cost analysis	0.75
3.	Modification of the Scheme guidelines and approximate change in the operational structure	Different works: (i) Analysis of freeboard (ii) Analysis of seepage line (iii) Slope stability analysis for different flow conditions i.e. just after construction, study seepage and sudden drawdown (iv) Foundation shear stresses (v) Provision of slope protection of measures if any	0.60
4.	Survey and G.I.S. work	(i) Procurement of Satellite data at different resolution (From NRSA) and topographical maps from (SOI). (ii) Manpower / trained personnel in GIS and RS / M. Tech and Ph. D students	2.20



09.3.10
अधीक्षण अभियन्ता
इंजीनियरिंग मण्डल, बलिया

6


(Prof. R. K. Saini)
Principal
M.M.M. Engineering College
Gorekhpur-273010 (India)

		for three months. (iii) Field data collection for RS works. (iv) GIS and Image processing software use . (v) Preparation for final report for GIS and RS work.	
5.	Hydrological and Hydraulic Investigations	(i) Visit for finalizing the appropriate sites (4 visit). (ii) Visit for field test and data generation (4 to 5 persons, 6 to 8 visit). (iii) Equipment / consumable / additional data analysis and miscellaneous items.	0.35
6.	Over all integration	(i) Visit for field and other organization. (ii) Computer support work.	0.20
7.	Consultancy / evaluation charges		2.48
Total =			7.18


 05.3.10
 अरीक्षण अभियन्ता
 ड्रेमेज मण्डल, बलिया


 09/3/10
 (Prof. J.P. Saini)
 Principal
 M.M.M. Engineering College
 Gorakhpur-273010 (India)

MADAN MOHAN MALAVIYA ENGINEERING COLLEGE
GORAKHPUR (U.P.) - 273010



Memorandum of Understanding

Between

Chief Engineer (Gandak), U.P. Irrigation Department, Gorakhpur

and

Principal

Madan Mohan Malaviya Engineering College, Gorakhpur

for

Performance Evaluation Studies

of

1. Construction of Anti Erosion work at S.B. Ring Bund between Km. 13.600 to 15.000 on Left Bank of River Ghaghra/Saryu in District Gonda (U.P.)

[Handwritten signature]

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10/02/10

Principal

M.M.M. Engineering College
Gorakhpur-273010 (U.P.)

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10/2/10
EE

10/2
मुख्य अभियन्ता (वर्क),
बिचौड़ी विभाग, उ० प्र०
गोरखपुर

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Memorandum of Understanding (MoU)

This Memorandum of Understanding (hereinafter MoU) is made on 10th day of February, 2010 at Gorakhpur between the Chief Engineer (Gandak), U. P. Irrigation Department, Gorakhpur on the one part (hereinafter called the Chief Engineer, Gandak) and the Madan Mohan Malaviya Engineering College located at Gorakhpur represented by the Principal on the other part (hereinafter called the institute).

Whereas, the Irrigation Department, Government of U. P. has engaged the institute for carrying out the evaluation study of the following flood related schemes and assessing the outcome and impact of such schemes.

1. Construction of anti erosion work at S.B. Ring Bund between Km 13.600 to 15.00 on left bank of river Ghaghra/Saryu in District Gonda, U.P.

The awarded work as mutually agreed and enunciated below for total consideration of an amount limited to Rs. 0.5% of cost of all works is to be taken up immediately excluding cost of land.

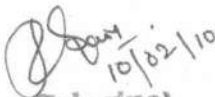
And whereas, the institute has agreed to carry out the awarded work under the terms and conditions specified in this MoU.


Now, therefore, it has been agreed by both the parties as follows;

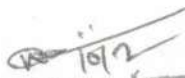
1. OBJECTIVES;

- To evaluate the extent to which the objectives of the various flood control schemes named as above will be achieved.
- To identify the actual outcome and socio-economic impact of the concerned schemes.
- To assess the technology and cost effectiveness of the schemes.
- To diagnose the constraints and difficulties encountered by the implementing agencies and concerned stakeholders causing delays in project progress and sub optimal achievements.
- To suggest recommendations in terms of modification of the scheme guidelines, and appropriate change in the operational structure for ensuring successful execution and effectiveness of the schemes under consideration.




Principal
M.M.M. Engineering College
Gorakhpur-273010 (U.P.)


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- To report on satisfactory completion through a regular quality control programme evaluating the quality and quantity of executed works.

2. Terms of Reference:

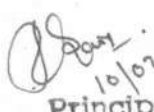
- (1) Madan Mohan Malaviya Engineering College will evaluate the effectiveness of schemes and will suggest if any improvement in schemes. Institution will also take cross-section of completed Bund at interval of 50 m with the assistance of U. P. Irrigation Department. In this regard, the measurement and preparation of such cross sections will be done by U. P. Irrigation Department, which will be reviewed by the institution team for any further suggestions or improvements.
- (2) Socio-economic impact of project on stake holders is to be assessed and actual outcome of project is to be shown in report.
- (3) The technology of schemes and its effectiveness on particular site and suggest improved technology if at all possible.
- (4) Actual constraints and difficulties faced by implementing agency and stake holders causing delay in project and suggesting remedial measures.
- (5) Projects have been generally made on guide-lines given by concerned I. S. Codes. If at all there are any suggestions regarding guidelines that has to be given in report.
- (6) Reporting of satisfactory completion through regular quality control programme evaluating the quality and quantity of executed works in interim reports and final report.


3. Submission of Reports:

Institute will give interim report of effectiveness after the receipt of first installment of advance payment. Interim reports will be given by institution every quarterly and the fourth report will be the final report. Interim reports will be put up before a committee constituted by Engineer-in-Chief (Head of Department). After approval, payment will be made as per the schedule given below -

Before submission of 1 st report (Interim report) -	20%
Before submission of 2 nd report -	20%
After submission of 3 rd report -	20%
After submission of 4 th and final report -	40%




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Institute will give a work detailed programme with details of technical manpower and equipments.

4. Institute will engage key persons. One team leader of the rank of Assistant Professor and experienced surveyor. Visit of technical persons / assistants will be taken up at site as per need and requirement of the work, which will be shown in detailed work programme. Any change in team leader or staff has to be approved by committee constituted by Engineer-in-Chief.

(a) General Provisions:

1. Full cooperation, assistance and support will be given by U. P. Irrigation Department, to the institute / team during the 'performance evaluation studies'.
2. The logistic support and conveyance etc. will be provided by U. P. Irrigation Department, to the institute / team for site visit and 'performance evaluation studies'.
3. U. P. Irrigation Department, will provide all necessary inputs such as, data, drawings, reports, technical details and such other information as may be required by the institute team from time to time for successful completion of performance evaluation studies'.
4. Quality control and other testing charges required to be carried out during the execution of the project from time to time will be borne by U. P. Irrigation Department, separately. The fee of 0.5% of project cost of all the works for 'project evaluation studies' will not include any such charges.
5. The detailed programme and work schedule along with PERT Chart will be provided by U. P. Irrigation Department.

(b) Duration 1st May 2008 to 31st March, 2010

(c) Date of commencement: 1st May, 2008

(d) Date of completion: 31st March, 2010


(e) Modification / Alteration: Any modification / alteration in the project will be done by the client with the consent of institute / team only. The implementation of the suggestions / recommendations will be the responsibility of the client only.

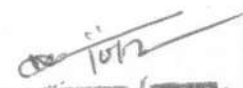
(f) Default by the institute / client:




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* Any deviation from the Terms of Reference of the evaluation study as given in para – 2 barring force majeure will be considered as default by the institute.

* Any deviation from Terms of Reference of the evaluation study as given in para – 2 or General Provisions as given in para - 4(a) or payments as required in para – 3, barring force majeure, will be considered as default by the client.

(g) Force Majeure:

* An event beyond the control of the institute and not involving default or negligence and which is not foreseeable will be termed as force majeure. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotions, sabotage, fire, explosions, epidemics, quarantine, earthquakes, strikes etc.

• If the performances in whole or in part or any obligation under this MoU is prevented or delayed by any reason of force majeure for a period exceeding 90 days either party may at its option, terminate the MoU in a mutually agreed manner.

(h) Responsibilities / rights / duties of the institute: The institute will bear the responsibility of carrying out 'performance evaluation studies' with the assistance of U. P. Irrigation Department as per MoU. The institute reserves the right to spend and distribute the amount charged from U. P. Irrigation Department for 'performance evaluation studies' on its own discretion and change the budgetary estimates under various heads within the limit of 0.5% of cost of all works, which will be subject to cost revisions / escalations from time to time in future.

(i) Responsibilities / rights / duties of the Government: The government will bear the responsibility of successful completion of the projects and will ensure smooth conduct of affairs for the implementation of different components of the project.

5. Remuneration of the Institute:

Payment:

(a) Cost Estimate: 0.5% of project cost of all the works including cost revisions / escalations in future. An estimate of tentative expenditure under various activities is enclosed as Annexure: 1.

(b) Stages of payment: Before starting the 'performance evaluation studies' of the project, 20% advance payment will be necessary to meet the initial expenses relating to the work. The second installment of payments of 20% will be necessary before the submission

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श्रीवाही विभाग, उ० प्र०
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of second interim report. The payment of third installment of 20% and final installment of 40% will be done after the submission of third interim report and fourth and final report respectively.

6- Penalty / copyrights:

- (a) All efforts will be made by the institute to complete the evaluation study within the stipulated duration and no request for extension will normally be entertained.
- (b) The penalty for delay in the completion of the evaluation study will be applicable in the case of default on the part of institute which will be deductible from the last installment. The rate of penalty will be 2% per month of the amount disbursed to the institute limited to a maximum of 20% of the total cost estimate.

7- Settlement of Disputes:

In case of any dispute or differences relating to the interpretation / application of the MoU the decision of the U. P. Government would be final.

Sworn and signed by both parties herein on this 10th day of February, 2010.

(For and on behalf of the Department of
U.P. Irrigation)

मुकुंद लाल शर्मा (सचिव)
विद्यार्थी विभाग, उ० प्र०
गोरखपुर

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(For and on behalf of the Institute)
Principal

M.M.M. Engineering College
Gorakhpur-273010 (U.P.)

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In the presence of the following witness

Name:

Address:

Date:

Name:

Address:

Date:

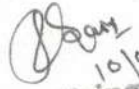
R.K. Shukla

Asstt. Prof Department of
MMM Engg Gorakhpur

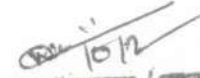
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Tentative Budget

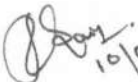
Sl. No.	Name of the item	Proposed Budget Estimates	Rs. in Lacs
1.	Socio Economic Impact Study	(i) Travelling expenses (ii) Lodging and boarding charges during Survey (iii) Video-audio recording (iv) Report preparation (v) Contingency	0.50
2.	Technology and cost effectiveness including soil investigation	(i) Geotechnical investigation and testing charges (ii) Design and stability analysis of embankments (iii) Estimation of quantity of materials for embankments and cost analysis	0.60
3.	Modification of the Scheme guidelines and approximate change in the operational structure	Different works: (i) Analysis of freeboard (ii) Analysis of seepage line (iii) Slope stability analysis for different flow conditions i.e. just after construction, study seepage and sudden drawdown (iv) Foundation shear stresses (v) Provision of slope protection of measures if any	0.50
4.	Survey and G.I.S. work	(i) Procurement of Satellite data at different resolution (From NRSA) and topographical maps from (SOI). (ii) Manpower / trained personnel in GIS and RS / M. Tech and Ph.D students	1.80



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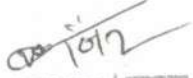

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		for three months. (iii) Field data collection for RS works. (iv) GIS and Image processing software use. (v) Preparation for final report for GIS and RS work.	
5.	Hydrological and Hydraulic Investigations	(i) Visit for finalizing the appropriate sites (4 visit). (ii) Visit for field test and data generation (4 to 5 persons, 6 to 8 visit). (iii) Equipment / consumable / additional data analysis and miscellaneous items.	0.30
6.	Over all integration	(i) Visit for field and other organization. (ii) Computer support work.	0.15
7.	Consultancy / evaluation charges		2.09
Total =			5.94


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