

**अधीक्षण अभियंता का कार्यालय,
ग्रामीण कार्य विभाग, कार्य अंचल, मधेपुरा।**

पत्रांक 623/2020

प्रेषक,

ई0 खलीकुज्जमा,
अधीक्षण अभियंता,

सेवा में,

नोडल पदाधिकारी,
F.D.R, कोषांग,
ग्रामीण कार्य विभाग,
बिहार, पटना।

मधेपुरा, दिनांक 21.05.22

विषय : ग्रामीण कार्य विभाग, कार्य प्रमंडल, मधेपुरा के अन्तर्गत शीर्ष **FDR** (वित्तीय वर्ष 2021-22) योजना का बाढ़ से क्षतिग्रस्त पथांशों का अस्थाई पुनर्स्थापन कार्य का प्राक्कलन के प्रशासनिक अनुमोदन प्रदान करने के संबंध में।

प्रसंग : कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, मधेपुरा का पत्रांक 172/.... अनु0, दिनांक 19.5.22 एवं अभियंता प्रमुख, ग्रामीण कार्य विभाग, बिहार, पटना का पत्रांक मु0अ0-4(मु0)विविध(कार्य)23-291/2019-4849 पटना, दिनांक 07.12.2021

महाशय,

उपर्युक्त विषयक प्रसांगिक पत्र द्वारा प्राप्त कार्य प्रमंडल, मधेपुरा अन्तर्गत शीर्ष **FDR** (वित्तीय वर्ष 2021-22) योजना का बाढ़ से क्षतिग्रस्त पथांशों का अस्थाई पुनर्स्थापन कार्य का डी0पी0आर0 एक-एक प्रति में तकनीकी स्वीकृति प्रदान कर प्रशासनिक अनुमोदन हेतु समर्पित की जाती है। जिसकी विवरणी निम्नवत है।

क्र0	प्रखंड	योजना का नाम	क्षतिग्रस्त भाग की लम्बाई (KM)	तकनीकी स्वीकृति की राशि (Lakh)
1.	Singheshwar	NH 106 Nariyal Vikash Board To Sukhasan	0.04	1.63597
2.	Singheshwar	Budhawe To Latrahi	0.269	7.93050
3.	Singheshwar	Singheshwar Biral Belari Road	1.662	34.42555
4.	Singheshwar	Barhari NH 106 Se Babhani Path Mahuli	0.858	15.23901
5.	Gamhariya	Jagir To Singhiyan	0.033	13.02978
6.	Kumarkhand	Kumarkhand To jaduapatti	0.258	9.27227
7.	Kumarkhand	Kumarkhand To Ramganj	0.354	23.03287
8.	Kumarkhand	Kumarkhand Rauta Tengraha	0.077	1.54242
9.	Kumarkhand	NH 106 To Rauta Bridge Via Berali Ranipatti	0.180	5.16275
10.	Kumarkhand	Tikuliya hat To Laxmipur Bhagwati Vishwa Bank Path	0.315	5.29505
11.	Kumarkhand	Kumarkhand Israinkala Jorawarganj	0.501	11.30913

P.T.O.

क्र०	प्रखंड	योजना का नाम	क्षतिग्रस्त भाग की लम्बाई (KM)	तकनीकी स्वीकृति की राशि (Lakh)
12.	Kumarkhand	Ratanpatti Sadak Korlahi To Kewatgama Chowk	0.231	3.00461
13.	Kumarkhand	Madhuban to Gopipur	0.173	2.08435
14.	Kumarkhand	PMGSY Sadak Kankar To Semarahi	0.421	6.75308
15.	Murliganj	Murliganj NH 107 To Pakilpar (Harpur)	1.016	23.65990
16.	Murliganj	Belo Chamgadth Se Chatra Kantahi	0.910	27.52292
17.	Shankarpur	Sonbarsa To Shankarpur	0.361	4.57169
18.	Kumarkhand	Baisarh To Bhairapur	0.057	0.23201
19.	Kumarkhand	Tikuliya Bhatani Bhokaraha Samarpan School Tengraha Mandir Via Basantpur Durga Mandir PMGSY Road	0.673	14.56602
20.	Murliganj	Middle School Rajani PWD Road To Pratap Nagar	0.030	0.80131

21. Murliganj Jorgama Banchayat me Surkila Devi
Ke Ghar se MMGSY Path Hanuman Mandir 0.022 1.92630
विश्वासभाजन,

अनु०:- प्राक्कलन एक-एक प्रति में।

21/05/22

अधीक्षण अभियंता,
ग्रामीण कार्य विभाग, कार्य अंचल,
मधेपुरा।



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Development Agency (BRRDA)

Head :- F.D.R.

YEAR (2021-22)

STATE
DISTRICT
BLOCK
DIVISION

BIHAR
Madhepura
Sigheshwar
Madhepura

**DETAILED ESTIMATE FOR TEMPORARY RESTORATION
OF ROAD FROM SINGHESHWAR BIRAILI BELARI ROAD
WITH 5 YEAR MAINTENANCE .**

Actual Length of Road	=	6.300 Km
Flood affected Length of Road	=	1.662 Km
TOTAL COST OF PAVEMENT	Rs	3,442,555.02
TOTAL PROJECT COST	Rs	3,442,555.02

Submitted By:
Executive Engineer
RWD (W) Division, Madhepura

Prepared By:
Executive Engineer
RWD (W) Division, Madhepura

Inspection Report for Flood Damage work

Date:-

- 1 Name of PIUS :- Madhepura.
2 Name of Block :- Singheshwar
3 Name of Road :- Temporary Restoration of Road from. Singheshwar Biraili
Belari Road with 5 year maintenance.

A. For Road

- 1 Damage Location/Chainage :- 0 to 1000, 1000 to 1200, 1200 to 1700, 2200 to 2600, 2600 to 3100, 3100 to 3900, 3900 to 4200, 4200 to 5600, 5600 to 6300
2 Damage Length :- 1.662 km.
3 Nature of damage :- heavy Rainfall!
4 Details of Restoration Works :-
i Material being used in Restoration works:- Brick Bats.
ii Equipments/Tools being used in Restoration works:- Grader, J.C.B.
iii Procedure taken up in Restoration works :-
iv Restored Length :- 1.662 km.

B. For Bridge

- 1 Damage Location/Chainage :-
2 Damage Length :-
3 Nature of damage :-
4 Details of Restoration Works :-
i Material being used in Restoration works:-
ii Equipments/Tools being used in Restoration works :-
iii Procedure taken up in Restoration works :-
iv Restored Length :-

Asst. JE
01/11/2024

Pr Singh
01/11/2024
AE

EE

13/11/24
Signature
(Name of inspector)

—:तकनीकी प्रतिवेदन:—

अंचल का नाम:— मधेपुरा

प्रमण्डल का नाम:— मधेपुरा।

योजना शीर्ष:—3054 एफ.डी.आर.

पथ का नाम:—**Singheshwar Biraili Belari Road with 5 year maintainance.**

पथ की लम्बाई:—6.30 कि.मी.

निर्मित/निर्माणाधीन पथ का शीर्ष:—WB(Koshi)

प्राक्कलित राशि:— रू0 34.42 लाख

प्रस्तुत प्राक्कलन वर्ष 2021 में आई अप्रत्याशित अतिवृष्टि एवं बाढ़ के कारण **Singheshwar Biraili Belari Road with 5 year maintainance.** पथ में हुए क्षति यथा कटाव/धसान/जलजमाव की आकस्मिक मरम्मति एवं यातायात पूनर्बहाल करने हेतु शीर्ष 3054 एफ.डी.आर. मद से सचिव, ग्रामीण कार्य विभाग/उच्चाधिकारियों के द्वारा दिये गये निर्देश के अनुपालन में तैयार किया गया है।

प्राक्कलन अन्तर्गत पथ में हुए क्षति की विस्तृत मापी दर्शायी गई है एवं प्राक्कलन वर्तमान अनुसूचित दर पर तैयार किया गया है।

Aswath
29/10/2021
कनीय अभियंता
ग्रामीण कार्य विभाग
कार्य प्रशाखा, सिंहेश्वर

Biraili
29/10/2021
सहायक अभियंता
ग्रामीण कार्य विभाग
कार्य अवर प्रमण्डल, सिंहेश्वर

29/10
कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमण्डल, मधेपुरा।

SUMMARY OF COST ESTIMATE FOR THE PROJECT

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM

NAME OF ROAD :-

SINGHESHWAR BIRAILI BELARI ROAD
WITH 5 YEAR MAINTENANCE .

DIVISION :- Madhepura

BLOCK :- Sigheshwar

Actual Length of Road :- 6.300 Km

Flood Affected Length of Road :- 1.662 Km

Sr. No.	Description	Amount (In Rs.)
1	Total Cost of Restoration=	2,908,374.53
2	Add:-Labour Cess @1% amt. =	29,083.75
3	Add:GST@12% on amt. =	349,004.94
4	Add:S.F.@ 10% on Material (Brick Bats) =	156,091.81
TOTAL RESTORATION COST OF THE PROJECT IN LACS		3,442,555.02

Say, 34,42,555/-

Amresh
29/10/2021

Junior Engineer
RWD (W) Division, Madhepura

Prish
29/10/2021

Assistant Engineer
RWD (W) Division, Madhepura

Prish
29/10/2021

Executive Engineer
RWD (W) Division, Madhepura

TS no - 20 dated 20/05/2022

पत्रांक - म. अ. - ५ (मृ.) विविध (कार्य) 23-291/2019. 4849

दि. - 07/12/2021

Technically sanctioned for ₹ 34,42,555.00/=.e Thirty four
Lacs fourty Two thousand five hundred fifty five only)

Wdhar
20/05/2022

Estimating Officer
Rural Work Department
Work Circle, Madhepura

11/12/2021

Superintending Engineer
Rural Works Department
Works Circle, Madhepura

Calculation of Seigniorage Fees

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM SINGHESHWAR BIRAILI
NAME OF ROAD :- BELARI ROAD WITH 5 YEAR MAINTENANCE .
BLOCK :- Sigheshwar

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
1/1	12.3	Construction of embankment with approved material obtained from borrow pits with lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5				
		E/W	0.00	Cum	34.81	0.00
2/2	A/R	Providing & laying Brick Bat....				
		Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.				
		Brick Bats	1512.52	Cum	1032.00	1560918.06
3/7	5.7.40.1	Labour filling empty cement bags with local sand, stitching the bags and placing including supply of sutli and EC bag etc. all complete as per approved desing, specification and direction of E/I				
		Sand	0.00	Cum	141.85	0.00
4/8	5.7.40.2	Providing, laying and filling Geo bags of size 1m X 0.7 m (Type A 300 GSM nonwoven) weight of bags 420g volume of filled bag 0.07m3. weight of filled Geo bags 126 Kg with local sand including stitching in four lines by approved nylon thread with stitching machine and generator stacking and placing after loading unloading and carriage with help of trolley within 150m lead all complete as per specifications and direction of E/I (including Carriage of Local sand lead 0.5 km)				
		Sand	0.00	Cum	141.85	0.00
5/9	401	Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.				
		For Grading I Material (with Coarse Sand Screening)				
		Unit = Cum				
		Taking output = 300 cum				
		Coarse graded granular sub-base material as per Table 400.2				
		53 mm to 9.5mm @ 50 percent	180.00	Cum	516.42	92955.60
		9.5 mm to 2.36 mm @ 20 percent	72.00	Cum	411.33	29615.76
		2.36 mm below @ 30 percent (coarse Sand Screening)	108.00	Cum	185.94	20081.52
						142652.88
		Cost for 300 cum = a		Cum		475.51
		Rate psr Cum = (a)/300	0.00	Cum	475.51	0.00
						0.00
		GSB Gr-I			TOTAL	1560918.06
					Say	156091.81
		Seigniorage Fees @10% of Basic Amount				

11092486
JE 29/10/2021

B. N. Singh
29/10/21
AE

EE 29/10/21

Bill of Quantity

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY
RESTORATION OF ROAD FROM SINGHESHWAR
BIRAILI BELARI ROAD WITH 5 YEAR MAINTENANCE .

BLOCK :- Singheshwar

DISTRICT :- Madhepura

S.No	SOR NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1/1	12.3	Construction of embankment with approved material obtained from borrow pits with lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	0.00	Cum	182.79	0.00
2/2	A/R	Providing & laying Brick Bat....				
		Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.	1512.52	Cum	1922.87	2908374.53
3/3	5.7.7	Labour for cutting 62mm to 75 mm dia bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E/I	0.00	m	45.86	0.00
4/4	5.7.8	Labour for fitting and fixing Split bamboo woven chachari in position with 20 swg G.I wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I	0.00	sqm	78.20	0.00
5/5	5.7.9	Labour for fitting and fixing 75 mm dia bamboo runners in position at every vertical pole with 150 mm long nails or 38 swg G.I. wire including cost of G.I wire or nails complete job as per specification and direction of E/I	0.00	m	5.31	0.00
6/6		Supply of Bamboo at site.	0.00	nos.	188.39	0.00
7/7	5.7.40.1	Labour filling empty cement bags with loocal sand, stitching the bags and placing including supply of sutli and EC bag etc. all complete as per approved desing, specification and direction of E/I	0.00	nos.	37.05	0.00
8/8	5.7.40.2	Providing,laying and filling Geo bags of size 1m X 0.7 m(Type A 300 GSM nonwoven) weight of bags 420g volume of filled bag 0.07m3. weight of filled Geo bags 126 Kg with local sand including stitching in four lines by approved nylon thread with stitching machine and generator stacking and placing after loading unloading and carriage with help of trolley within 150m lead all complete as per specifications and direction of E/I (including Carriage of Local sand lead 0.5 km)	0.00	Each	172.18	0.00
9/9	401	Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.	0.00	Cum	2091.76	0.00
10/10	9.3	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row.	0.00	m	4046.57	0.00
					Say	2908374.53
						156091.81
		Seigniorage Fees				349004.94
		Add @12% GST				29083.75
		Add @1% Lebour Cess				3442555.02
					Say	3442555.02

Alagash
29/10/2021
JE

Prish
29/10/2021
AE

EE

Schedule of Quantity

AD :- FROM SINGHESHWAR BIRAILI BELARI ROAD WITH 5 YEAR MAINTENANCE .

BLOCK :-

Singheshwar

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
1	301.5	Construction of embankment with approved material obtained from borrow pits with lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	0.00	Cum	182.79	0.00
2	A/R	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.	1512.52	Cum	1922.87	2908374.53
3	5.7.7	Labour for cutting 62mm to 75 mm dia bamboo piles to size and making shoes and driving etc. complete job as per specification and direction of E/I	0.00	m	45.86	0.00
4	5.7.8	Labour for fitting and fixing Split bamboo woven chachari in position with 20 swg G.I wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I	0.00	sqm	78.20	0.00
5	5.7.9	Labour for fitting and fixing 75 mm dia bamboo runners in position at every vertical pole with 150 mm long nails or 38 swg G.I. wire including cost of G.I wire or nails complete job as per specification and direction of E/I	0.00	m	5.31	0.00
6		Supply of Bamboo at site.	0.00	nos.	188.39	0.00
7	5.7.40.1	Labour filling empty cement bags with loocal sand, stitching the bags and placing including supply of sutli and EC bag etc. all complete as per approved desing, specification and direction of E/I	0.00	nos.	37.05	0.00
8		Providing, laying and filling Geo bags of size 1m X 0.7 m (Type A 300 GSM nonwoven) weight of bags 420g volume of filled bag 0.07m ³ . weight of filled Geo bags 126 Kg with local sand including stitching in four lines by approved nylon thread with stitching machine and generator stacking and placing after loading unloading and carriage with help of trolley within 150m lead all complete as per specifications and direction of E/I (including Carriage of Local sand lead 0.5 km)	0.00	Each	172.18	0.00
9	401	Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.	0.00	Cum	2091.76	0.00
10	9.3	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Roww(1000mm Dia).	0.00	m	4046.57	0.00
		Total			Rs.	2908374.53

Approved
JE 29/10/2021

B. Singh
29/10/2021
AE

29/10/2021
EE

Details of Measurement

कार्य का ब्यौरा Deatail of Workl		संख्या No.	पैमाईरा			मात्रा Quantity
			लम्बाई In m.	चौड़ाई In m.	In m.	
NAME OF ROAD :-		DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM SINGHESHWAR BIRAILI BELARI ROAD WITH 5 YEAR MAITENANCE .				
Item No. 1	Construction of embankment with approved material obtained from borrow pits with lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a <u>lead upto 1000 m</u> as per Technical Specification Clause 301.5					
		1	0	2.5	1.25	0.000
		Total (in Cum)				0.000
Item No. 2	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.					
CH:-0.00 to 1000		1	55.00	2.00	0.30	33.000
		1	15.00	2.00	0.35	10.500
		1	18.00	1.00	0.30	5.400
		1	5.00	3.00	0.30	4.500
		1	20.00	3.50	0.30	21.000
		1	30.00	2.00	0.32	19.200
		1	15.00	3.50	0.25	13.125
		1	35.00	3.00	0.30	31.500
		1	30.00	3.00	0.30	27.000
		1	25.00	3.50	0.35	30.625
		1	15.00	3.00	0.35	15.750
		1	20.00	3.00	0.25	15.000
		1	3.00	3.00	0.30	2.700
		1	40.00	3.00	0.30	36.000
		1	15.00	3.00	0.30	13.500
		2	35.00	2.00	0.35	49.000
		1	20.00	4.00	0.30	24.000
CH:-1000 to 1200		1	30.00	2.00	0.35	21.000

	2	30.00	2.00	0.25	30.000
	2	25.00	3.00	0.35	52.500
	1	3.00	3.00	0.35	3.150
	1	17.00	3.00	0.35	17.850
	1	20.00	2.00	0.35	14.000
CH:-1200 to 1700	1	3.00	2.00	0.30	1.800
	1	25.00	2.00	0.30	15.000
	1	2.00	2.00	0.30	1.200
	1	5.00	4.00	0.35	7.000
	1	20.00	2.00	0.30	12.000
	1	25.00	2.00	0.35	17.500
	1	55.00	2.00	0.35	38.500
	1	60.00	2.00	0.35	42.000
	1	70.00	2.00	0.25	35.000
	1	2.00	2.00	0.30	1.200
	1	20.00	3.50	0.35	24.500
	1	20.00	2.00	0.35	14.000
	1	5.00	2.00	0.35	3.500
	1	5.00	3.00	0.40	6.000
	1	20.00	3.00	0.30	18.000
	1	2.00	2.00	0.30	1.200
	1	15.00	2.00	0.30	9.000
	1	5.00	2.00	0.35	3.500
	1	15.00	2.00	0.35	10.500
	1	55.00	2.00	0.30	33.000
CH:-2200 to 2600	1	15.00	2.00	0.30	9.000
	2	3.00	3.00	0.30	5.400

	1	10.00	2.00	0.30	6.000
	1	2.00	2.00	0.30	1.200
	1	20.00	4.00	0.30	24.000
	1	3.00	3.00	0.30	2.700
	2	5.00	2.00	0.30	6.000
	1	2.00	2.00	0.30	1.200
	2	20.00	2.00	0.40	32.000
	1	10.00	2.00	0.29	5.800
	1	4.00	4.00	0.30	4.800
CH:-2600 to 3100	1	2.00	2.00	0.30	1.200
	2	20.00	1.50	0.30	18.000
	1	10.00	3.00	0.30	9.000
	1	10.00	3.00	0.30	9.000
	2	2.00	2.00	0.32	2.560
	2	3.00	3.00	0.30	5.400
	1	2.00	2.00	0.30	1.200
	1	5.00	2.00	0.30	3.000
	2	20.00	2.00	0.30	24.000
	1	10.00	3.00	0.30	9.000
CH:-3100 to 3900	1	2.00	2.00	0.35	1.400
	1	15.00	2.00	0.30	9.000
	1	15.00	2.00	0.20	6.000
	2	15.00	2.00	0.30	18.000
	1	20.00	3.00	0.40	24.000
	2	10.00	2.00	0.30	12.000
	1	15.00	3.00	0.29	13.050
	1	15.00	4.00	0.40	24.000

	2	25.00	2.50	0.30	37.500
	1	2.00	2.00	0.30	1.200
	1	20.00	4.00	0.35	28.000
	1	10.00	2.00	0.29	5.800
CH:-3900 to 4200	1	15.00	2.00	0.29	8.700
	1	30.00	2.00	0.30	18.000
	1	2.00	2.00	0.35	1.400
	1	10.00	4.00	0.30	12.000
	1	4.00	3.00	0.29	3.480
	1	2.00	2.00	0.35	1.400
	1	15.00	3.00	0.35	15.750
	1	5.00	2.00	0.30	3.000
	1	20.00	1.50	0.30	9.000
	1	5.00	3.00	0.30	4.500
	1	5.00	2.00	0.35	3.500
	1	20.00	2.00	0.35	14.000
	1	5.00	5.00	0.30	7.500
CH:-4200 to 5600	2	2.00	2.00	0.35	2.800
	2	4.00	4.00	0.40	12.800
	3	4.00	4.00	0.35	16.800
	1	4.00	4.00	0.29	4.640
	1	30.00	2.00	0.35	21.000
	1	10.00	3.00	0.30	9.000
	1	20.00	3.50	0.35	24.500
	1	15.00	3.25	0.40	19.500
	1	10.00	3.50	0.35	12.250

	1	4.00	3.75	0.35	5.250
	1	5.00	2.00	0.40	4.000
CH:-5600 to 6300	1	2.00	1.00	0.30	0.600
	1	4.00	3.00	0.40	4.800
	1	10.00	4.00	0.30	12.000
	1	55.00	3.75	0.35	72.188
	1	3.00	2.00	0.30	1.800
	1	15.00	3.00	0.30	13.500
	1	15.00	4.00	0.30	18.000
	1	15.00	2.00	0.25	7.500
	1	5.00	1.50	0.30	2.250
		1662			1512.5175
Less For Pipe	0	22/7x(0.6)2x2.5	(-)		0.000
		Total (in Cum)			1512.518

Ausar
 29/10/2021
 JE

Pringh
 AE 29/10/2021

E.E. 29/10/2021