RAJKOT URBAN DEVELOPMENT AUTHORITY
e - Tender No.RUDA/ 213/2021-22

Bid Documents For

CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK)

ON AIIMS ROAD IN RUDA AREA

Last date for e-tendering is as under	
1. Downloading of e-Tender documents	11-11-21 to 03-12-21upto 15.00 hours
2. Pre bid	16-11-21 upto 11.00 hours
3. Last Date of online submission of e – Tender	03-12-21 upto 18.00 hours
4. Physical submission of EMD, Tender fee and other documents.	10-12-21 upto 18.00 hours
5. Verification of submitted documents (EMD, e - Tender fee, etc.)	13-12-21
6. Opening of online Technical Bid	15-12-21 at 11.00 Hours onwards
7. Opening of Price Bid (If possible)	to be intimated to Technically qualified Bidders
8. Bid Validity	180 Days

2020-21

Chief Executive Officer
RAJKOT URBAN DEVELOPMENT AUTHORITY
SHRI CHIMANBHAI PATEL VIKAS BHAVAN
JAMNAGAR ROAD,
RAJKOT - (GUJARAT)
E-mail : rajurabandev@yahoo.com
Phone No. : 0281-2476874, 2476799

Rajkot Urban Development Authority

e-TENDER FOR

CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK) AT JUNCTION ON AIIMS ROAD IN RUDA AREA

PART – I Terms & Conditions
PART – II Price Schedule – B (As per R&B-SOR)

Rajkot Urban Development Authority
PMU Branch

TERMS AND CONDITIONS OF TENDER

I/We agree to carry out the below work at _____% (In figures) _____ _____(In words) above/ below the estimated cost.

Name of work :- CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK) AT JUNCTION ON AIIMS ROAD IN RUDA AREA

Approved Estimated cost of Tender : - Rs.14,85,995.60/- (Fourteen Lacs Eighty Five Thousand Nine Hundred Nity five & Sixty paise Only) for Total work

Earnest Money	:-	Rs.14,860.00 /- (FDR Only)
Security Deposit	:-	2.5 % in form of FDR Only 2.5% from RA Bill @ of 5.0% from Each running bill
.		
Name of contractor	:-	_____
Address	:-	_____ _____ _____
Date:	:-	_____
Witness	:-	_____
Address	:-	_____ _____ _____
Occupation	:-	_____

Sign of Tenderer

Rates approved on behalf of Rajkot Urban Development Authority

Date: Sign of Sanctioning authority

Rajkot Urban Development Authority
:: *e*-Tender Notice ::

Rajkot Urban Development Authority, Jamnagar Road, Rajkot, invites tenders with two bid system by e-tendering from the contractors registered in State Government / Central Government in "E-1" Class (as per R & B rules) for the work ":- CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK) ON AIIMS ROAD IN RUDA AREA

Last date for e-tendering is as under	
1. Downloading of e-Tender documents	11-11-21 to 03-12-21upto 15.00 hours
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6. Opening of online Technical Bid	15-12-21 at 11.00 Hours onwards
7. Opening of Price Bid (If possible)	to be intimated to Technically qualified Bidders
8. Bid Validity	180 Days

1. All bidders must submit a bid security (earnest money) amounting to Rs.14,860/- (after providing the online details of the same), at the below mentioned address in form of FDR in favour of "Rajkot Urban Development Authority", Rajkot, from any Nationalised/Scheduled Bank in India.submission of physical documents will be accepted only by RPAD or speed post

Address:

Chief Executive officer
Rajkot Urban Development Authority
ShriChimanbhai Patel VikasBhavan
Jamnagar Road, Rajkot-424801
E-mail: rajurbandev@yahoo.com

2. The e-tender fee for work, amounting to Rs.1328/- will be accepted in form of Demand Draft only, in favor of "Rajkot Urban Development Authority" Rajkot, from any Nationalised/Scheduled Bank (except Co-operative Bank) in India and must be delivered to above address.Exemption Certificate in tender fee and EMD will not be excepted.
3. The time limit for the work is **3 MONTHS**.
4. **The prequalification requirement is as under**:

i) Financial Criteria:

1. An average annual turnover of last five years should not be less than 50% of the amount put to tender.
2. Working capital and Solvency should not be less than Rs.25% of cost put to tender.

ii) Experience Criteria:

The bidder should posses following minimum experience:

1. Bidder should have completed one work of similar nature(Civil Work & Electric Work) of 60% of tender amount or 2 work of 40% of tender amount or 3 work of 30% of tender amount of either government or Semi-government or Corporation/Municipality Company as a main contractor in period of last five years.
2. Bidder should have experience of development of minimum one circle /Eye land or this type butification work construction from Semi-government, Corporation/Municipality.

5. The tender of those bidders who do not submit the required documents physically within the stipulated date and time will be treated as non-responsive and their Price Bid will not be opened.
6. Chief Executive Officer, Rajkot Urban Development Authority, Rajkot, reserves the right to accept / reject any or all e-tender(s) without assigning any reasons thereof.
7. The bidder shall have to pay the Professional Tax for current financial year imposed by Government of Gujarat, and also the bidder shall have to produce Enrollment Certificate for the same.
8. G.S.T as per applicable by G.O.I will be born by Contractor. RUDA will not pay any Extra for Any Taxes.
9. The bidder shall have EPF registration & also to produce challan for last 12 months.

Chief Exicutive Officer
Rajkot Urban Development Authority
RAJKOT

રાજકોટશહેરી વિકાસ સત્તામંડળ

PART – I

Terms & Conditions

(૧) લેબર કાયદા અનુસાર, આવશ્યક જણાયે, કોન્ટ્રાકટરશ્રીએ સરકારશ્રીના લેબર એકટ મુજબ લેબર લાયસન્સ લેવાનું રહેશે, તથા ઈન્સ્યુરન્સ લેવાનો રહેશે.

(૨) લેબર કાયદા અનુસાર આવશ્યક જણાયે કોન્ટ્રાકટરશ્રીએ કર્મચારી પ્રોવિડન્ટ ફંડ ની રકમ કપાત કરવાની અને જમાં કરાવવાની રહેશે.

(૩) લેબર કાયદા અનુસાર આવશ્યક જણાયે કોન્ટ્રાકટરશ્રીએ લેબર લાઇસન્સ અને વિમો લેવાનો રહેશે.

(૪) કોન્ટ્રાકટરે પોતે રાખેલ કારીગરોને મીનીમમ વેજીસ એકટ પ્રમાણે દર આપવાનાં રહેશે.તેમજ સંબંધિત લેબર કાયદાઓનું પાલન કરવાનું રહેશે, તથા વખતોવખતના સરકારશ્રીનાઅન્ય કાયદાઓનું પાલન કરવાની જવાબદારી કામ રાખનાર એજન્સીની રહેશે. તથા જરૂરીયાત મુજબના લાયસન્સો લેવાની જવાબદારી જે તે એજન્સીની રહેશે.

(૫) કોન્ટ્રાકટરશ્રીએ ઉકત તમામ પ્રર્વતમાન કાયદાઓનું ચૂસ્તપણે પાલન કરવાનું રહેશે. આ અંગે સત્તામંડળની કોઇજવાબદારી રહેશે નહી. આવા નિયમ ભંગ અંગેની સંપૂણ''જવાબદારી કોન્ટ્રાકટરશ્રીની પોતાની જ રહેશે.

(૬) સત્તામંડળના સીવીલ તથા ઇલેક્ટ્રીક કામો માટે વાપરવામાં આવતા સઘળા કાચા માલની રોયલ્ટી જે તે ડીપાર્ટમેન્ટમાં ભરવાની જવાબદારી આ કામ રાખનાર કોન્ટ્રાકટરશ્રીની રહેશે. કોન્ટ્રાકટરશ્રીએ ભરેલ ભાવોમાં આ રોયલ્ટીનો સમાવેશ કરવાનો છે. અને આ અંગેની કાયદેસરની તમામ જવાબદારી કોન્ટ્રાકટરશ્રીની રહેશે. સત્તામંડળની આ માટે કોઈ પણ જવાબદારી રહેશે નહીં જેની સ્પષ્ટ સમજણ રાખી કામ રાખવાનું રહેશે. કામના ફાઈનલ બીલમાં રોયલ્ટીનું નોડયુ સર્ટીફીકેટજરૂર જણાય તોઆપવાનું રહેશે.

(૭) સઘળા માલની ફી, જી.એસ.ટી.તથા અન્ય તમામ પ્રકારના ટેકસ કે ફી જે તે ડીપાર્ટમેન્ટમાં ભરવાની જવાબદારી કોન્ટ્રાકટરશ્રીની કામ રાખનારનીએજન્સીની રહેશે. કોન્ટ્રાકટરશ્રીએ ભરેલ ભાવોમાં આ તમામ પ્રકારના ટેકસનો સમાવેશ કરવાનો છે. સત્તામંડળકોન્ટ્રાકટરશ્રીને આ માટે વધારાનું કોઈ ચુકવણું કરશે નહી કેસત્તામંડળની આ અંગે કોઈ જવાબદારી રહેશે નહી સરકારી નિયમ મુજબ ઈન્કમટેક્ષ કે અન્ય પ્રકારનાં ટેક્ષ સુચના મળ્યેથી કોન્ટ્રાકટરનાં બીલમાંથી કપાત કરવામાં આવશે.

(૮) કામ પુરા ખંત અને નિષ્ઠાથી કરવાનુ રહેશે અને કરેલું સઘળું કામ સુવ્યવસ્થિત (સ્કીલફુલ્લી) રીતે કરેલુ હોવું જોઈએ. કામ રાખનાર કોન્ટ્રાકટરશ્રી જે માલસામાન ઉપયોગમાં લે તે નિયત ધોરણ મુજબનો હોવો જોઈએ અને ડાયરેકટર (પ્રોજેકટસ)શ્રીએ એપ્રૂવ કરેલો હોવો જોઈએ. આ કામ કેટલી ત્વરાથી ચલાવવું તે બાબત તથા કામ અથવા તેમાં વપરાતા માલ–સામાન બાબતે તકરાર થયે એન્જીનીયર કે સક્ષમ અધિકારી જે હુકમ કરે તે આખરનો સમજવાનો રહેશે. માલસમાનની ગુણવતા અંગેના જરૂરી ટેસ્ટીંગ તમારા સ્વખર્ચે કરાવવાના રહેશે.

(૯) કોન્ટ્રાકટર તરફથી પ્રોગ્રેસ બીલ માટે માંગણી આવશે અને વ્યાજબી લાગશે, તો થયેલ કામનું માપ લઈ પ્રોગ્રેસ બીલ આપવામાં આવશે.

(૧૦) પોતાનાં કામદારને થયેલી ઈજા કે અન્ય કોઈ પ્રકારનાં નુકશાન માટે કોન્ટ્રાકટરશ્રી જવાબદાર રહેશે. કામદારોને થયેલ ઈજા માટે યોગ્ય બદલો આપવામાં જો કોન્ટ્રાકટર નિષ્ફળ નિવડે અને કામદારોને તે બદલો સત્તામંડળતરફથી આપવામાં આવશે, તો તેવી આપેલી રકમ કામો રાખનાર કોન્ટ્રાકટરશ્રીને આપવા જોગ થયેલ રકમમાંથી અથવા આપવાની થાય તે રકમમાંથી કપાત કરવાનો સત્તામંડળને અધિકાર રહેશે.

(૧૧) આમાં કબુલ કરેલી તેવી કામની જુદી–જુદી બાબતો માટેના દર જે તે બાબતો માટે મંજુર કરેલી સમજુતી અનુસાર પુરી કરવામાં આવી છે, એમ સ્વિકારવામાં આવે, તો જ કાયદેસર ગણાશે. જે પ્રસંગે કામની સદરહુ બાબતો એવી રીતે પુરી કરવાની છે એમ સ્વિકારવામાં નહી આવે તે પ્રસંગે ડેપ્યુટી એકઝી. એન્જીનીયરશ્રી છેવટના બીલો તૈયાર કરતી વ્યાજબી લાગે તેવા ઘટાડવાના દરથી બીલો તૈયાર કરવાને અધિકૃત રહેશે.

(૧૨) ૧. કોન્ટ્રાકટરે ૧૮ વર્ષ થી ઓછી ઉમરનાં કોઈ માણસોને કામે રાખવાના રહેશે નહી.
૨. લગતં ડેપ્યુટી એકઝી. એન્જીનીયરશ્રી દ્વારા–શારીરિક,માનસિક કે અન્ય અક્ષમતાના કારણોસર લગત માણસો કામ ઉપર રાખવાની મનાઈ કરવામાં આવે તેવા માણસોને કોન્ટ્રાકટરશ્રીએ કામે રાખવાના રહેશે નહી.
૩.કોન્ટ્રાકટરશ્રીએ,લગત સાઈટ ઉપર રાખવામાં આવનાર પોતાના અધિકૃત પ્રતિનિધિના નામ સાથેની માહિતી લેખીતમાં તથા તાજેતરનો પાસપોર્ટ સાઈઝનો ફોટોગ્રાફ તથા સંપર્ક માટે તેનો મોબાઈલ નંબર સત્તામંડળ કચેરીમાં અચુકપણે રજુ કરવાનો રહેશે.મોબાઈલ નંબર કોઈ પણ સંજોગોમાં બંધ રાખી શકાશે નહી.

(૧૩) કામ ચાલુ કરવા માટે આપવામાં આવતા વર્ક ઓર્ડરમાં સમય મર્યાદા જણાવવામાં આવશે, અને તે મુજબ કામ પુરૂં કરી આપવાનું રહેશે. મુદત દરમ્યાન કામ પુરૂં કરવામાં નહી આવે તો દરરોજના શરત નં ૨૮ મુજબ પેનલ્ટી વસુલવામાંઆવશે. વધુમાં વધુ પેનલ્ટી કામની રકમના ૧૦% મુજબની રહેશે.અથવા મુખ્ય કારોબારી અધિકારીશ્રી જે નકકી કરે તે માન્ય રહેશે.

(૧૪) કામ કરતા કોઈ માલ–સામાન નડતરરૂપ ન થાય તે રીતે કામ કરવુ, કોઈપણ પ્રકારનાં અકસ્માતથી થયેલ નુકશાન અંગેની જવાબદારી કોન્ટ્રાકટરની રહેશે.

(૧૫) "કોન્ટ્રાકટ" અંગેની પ્રાથમિક મંજુરી મળ્યાની તથા આનુષાંગિક કાર્યવાહી અંગે કોન્ટ્રકટરને લેખીત ખબર મળ્યાનાં દિવસ–૭ માં સીકયોરીટી ડીપોઝીટની રકમ ૧૨ માસની મુદત માટે સત્તામંડળની તરફેણની ફીકસ ડીપોઝીટની રસીદ (એફ.ડી.આર) ટેન્ડરમાં નક્કી થયા મુજબ ભરી આપવાની રહેશે.જો આમ કરવામાં કોન્ટ્રાકટ રાખનાર શખ્સ નિષ્ફળ જશે તો પણ તેણે ભરેલી અર્નેસ્ટમનીની રકમ જપ્ત કરવામાં આવશે, તથા આવા કોન્ટ્રાકટરશ્રીનેસત્તામંડળના તમામ કામો માટે ત્રણ વર્ષ માટે બ્લેક લીસ્ટ કરવામાં આવશે. અને આવા સંજોગોમાં ઝોનલ કામ અંગે વૈકલ્પિક વ્યવસ્થા અંગેનો નિર્ણય મુખ્ય કારોબારી અધિકારીશ્રી કરી શકશે.

(૧૬) જે કોન્ટ્રાકટરના ભાવ મંજુર થાય તેઓએ ધોરણસર સ્ટેમ્પ પેપર ઉપર દિન–૭(સાત)કરારનામું કરી આપવાનું રહેશે.

(૧૭) કામમાં સુધારો વધારો કરાવવા અથવા કામ ઓછુ વતું કરાવવું તે બાબતે ડાયરેકટર (પ્રોજેકટસ)શ્રીઅધિકૃત રહેશે.

(૧૮) આ કામ માટે રિફેકટ લાયબીલીટી ની મુદત ૧(એક) વર્ષ સુધીની રહેશે.

(૧૯) સીકયોરીટી ડીપોઝીટ તરીકે ભરેલી રકમ કામની મુદત પૂર્ણ થયાં પછી ૧ (એક)વર્ષ''બાદ એટલે કેરિફેકટ લાયબીલીટી ની મુદત પૂર્ણ થયા બાદ પરત આપવામાં આવશે. પરંતુ તે દરમ્યાન જો કોઈ કામ બરાબર ન થયેલ અથવા નુકશાન પામેલ માલુમ પડશે, તો તે કામ કોન્ટ્રાકટરે દુરસ્ત કરી આપવાનું રહેશે, અને જો તેમ કરવામાં તે નિષ્ફળ જશે તો સદરહુ દુરસ્તી તેના ખર્ચે અને જોખમેસત્તામંડળ તરફથી અન્ય કોન્ટ્રાકટરશ્રી મારફત કરાવી લેવામાં આવશે, અને તે પૈકી થયેલ ખર્ચ સીકયોરીટી ડીપોઝીટની રકમમાંથી અથવા કોન્ટ્રાકટરનાં લેણા નીકળતા બીલમાંથી કપાત કરવામાં આવશે. સદરહું બાબતે કોઈપણ વિવાદ ગ્રાહય રાખવામાં આવશે નહી.

(૨૦) કામ ઉપર કોન્ટ્રાકટરે પોતે અથવા તેમના અધિકૃત પ્રતિનિધિ ને કામ ઉપર તથા ઓફિસમાં હાજર રાખવાના રહેશે. પોતે જાતે હાજરરહી શકે તેમ ન હોય તોડાયરેક્ટર (પ્રોજેક્ટસ)શ્રી કે સમકક્ષના અધિકારીની પૂર્વ મંજુરી મેળવી, પ્રતિનિધિ નિયુકત કરી શકશે.
પૂર્વ મંજુરી વગરના એજન્સીના પ્રતિનિધિને માન્ય રાખવામાં આવશે નહી. અન્યથા કોન્ટ્રાકટ રદ કરવાની કાર્યવાહી કરવામાં આવશે.

(૨૧) કામ પુરૂં થયા બાદ સાઈટ વિસ્તાર યોગ્ય રીતે સાફ કરી આપવાનો રહેશે અને જો તેમ કરવામાં કોન્ટ્રાકટર નિષ્ફળ જશે તો કોન્ટ્રાકટરશ્રીના ખર્ચે અને જોખમ સત્તામંડળ તરફથી સાઈટ વિસ્તાર સાફ કરાવી લેવામાં આવશે.

(૨૨) રસ્તો બંધ કરવા માટે દિવસનાં ભાગમાં સૂચનાનું બોર્ડ, આડસ અથવા રાત્રિ બતીની વ્યવસ્થા કોન્ટ્રાકરે પોતાનાં ખર્ચે કરવાની રહેશે.તેને અભાવે થતી તમામ નુકશાનની જવાબદારી કોન્ટ્રાકટરની રહેશે. કોઈ પણ કામના ખોદાણ વખતે આડસની વ્યવસ્થાવ્યવસ્થિતરીતે કરવાની રહેશે. લોકોના જાન–માલને કાંઈ નુકશાની થશે તો તેની સંપૂર્ણ જવાબદારી જે તે કોન્ટ્રાકટરશ્રીની રહેશે. સત્તામંડળની આ અંગે કોઈ કાયદાકિય જવાબદારી રહેશે નહીં જેની સ્પષ્ટ નોંધ લેવાની રહેશે.

(૨૩) નામંજુર કરવામાં આવેલ માલ અથવા કામ ૨૪ કલાકમાં ખસેડી લેવાનું છે. અથવા કામ સુધારી (દુરસ્ત)આપવાનું છે. જો તેમ કરવામાં નહી આવે તો કોન્ટ્રાકટર પાસેથી તેની થતી રકમ બીલમાંથી કપાત કરવામાં આવશે.

(૨૪) માલ–સામાનથી ગટરો ભરાઈ ન જાય તેની પુરી તકેદારી કોન્ટ્રાકટરે રાખવાની છે.

(૨૫) દરેક કોન્ટ્રાકટરના રનીંગ બિલમાંથી ૫% રકમ સીક્યૂરીટી ડીપોઝીટ પેટે સત્તામંડળમાં જમા રાખવામાં આવશે જે ડીફેકટ લાયેબીલીટી સમય પૂર્ણ થયા બાદ કોન્ટ્રાકટરને ચૂકવવામાં આવશે

(૨૬) કોન્ટ્રાકટર પૈકી એક કરતા વધુ ભાગીદારો હોય તો જેતે વખતે ભાગીદારી ખતની નકલ રજુ કરવાની રહેશે અને આવી ભાગીદારી પઢીરજીસ્ટર ઓફ ફોર્મ્સમાં રજીસ્ટર થયેલી હોવી જોઈએ.

(૨૭) કોઈપણ કામમાં એકસ્ટ્રા આઈટમ થશે, તો તે આઈટમ પ્રવર્તમાનઆર.એમ.સીના શેડયુલ ઓફ રેઈટ મુજબ કરી આપવાની રહેશે, અને તેના ઉપર કામ રાખનાર કોન્ટ્રાકટરનાં મંજુર થયેલા ભાવ અનુસાર ટકાનો વધારો કે ઘટાડો કરવામાં આવશે. તે આઈટમનો ભાવ ચાલુ વર્ષનાં શેડયુલ ઓફ રેઈટસમાં નહી હોય તો યોગ્ય માર્કેટ રેઈટ આપવામાં આવશે. જે કોન્ટ્રાકટરને બંધનકર્તા રહેશે.

(૨૮) જે કિસ્સામાં કોન્ટ્રાકટર કામ કરવામાં સક્ષમ ન હોય તેવુ માલુમ પડે અથવા કોઈ કોન્ટ્રાકટર ઈરાદાપુર્વક આ કામ કરવાનું ટાળે છે, તેવુ ડાયરેક્ટર (પ્રોજેકટ્સ)શ્રી કે સક્ષમ અધિકારીશ્રીને માલૂમ પડે, તો અન્ય કોન્ટ્રાકટરશ્રી પાસે મંજુર થયેલ ભાવથી પેરેલલ કોન્ટ્રાકટરશ્રી તરીકે કામ આપવામાં આવશે. પેરેલલ કોન્ટ્રાકટરશ્રી તરીકે કામ આપવાની સત્તા ડાયરેક્ટર(પ્રોજેક્ટ્સ)શ્રી કે સક્ષમ અધિકારીશ્રીની રહેશે. તથા કોઈ નુકસાન થશે તે કોન્ટ્રાકટરની એસ.ડી.માંથી વસુલ કરવામાં આવશે.

(૨૯) કોઈપણ સંજોગોમાં કોન્ટ્રાકટરને મંજુર થયેલ કામ કરવાનુ સોંપવામાં આવે, તો તેઓનાં મંજુર થયેલ ભાવ પ્રમાણે કરી આપવા બંધાયેલ છે.

(૩૦) આવશ્યક સંજોગોમાં કોઈ અગત્યનું કામ કોન્ટ્રાકટરશ્રીને તાત્કાલિક કરી આપવાનું કહેવામાં આવે તો તે કામ લગત કોન્ટ્રાકટરશ્રીએ કરી આપવાનું રહેશે,અન્યથા સંબંધિત કોન્ટ્રાકટશ્રી સામે દંડનીય પગલા લેવા અંગેનો નિર્ણય સત્તામંડળકરી શકશે.

(૩૧) રસ્તાનાં કામોમાં બોલ્ડર, મેટલ, કે મોરમ ઉપરનું રોલીંગ, વોટરીંગ કામ વિ.માટે રોલરની વ્યવસ્થા કોન્ટ્રાકટરે કરવાની રહેશે. કોન્ટ્રાકટરશ્રી તેમની પાસે પોતાનો રોડ રોલર, ટ્રક, ટ્રેકટર વિગેરે સાધનો રાખવાનાં રહેશે.

(૩૨) આ કામે લગત ડે. એકઝી.એન્જીનીયર સ્થળ ઉપર નકકી કરે તે પ્રમાણે સેકશનમાં કરવામાં આવશે, તે માટે જરૂરી માલસામાનસ્થળ ઉપર કોન્ટ્રાકટરશ્રીએ હાજર કરવાનાં રહેશે, અને ત્યાર બાદ કામ શરૂ કરવામાં આવશે.

(૩૩) કામની સમય મર્યાદા વર્ક ઓરડરની તારીખથી ૩(ત્રણ) માસ ગણવામાં આવશે

(૩૪) દરેક કોન્ટ્રાકટરશ્રીએ પોતાએ રાખેલ કામોની સમજૂતી મેળવવા,ચાલુ કરવા અંગે તેમજ ચાલુ કામોની પ્રગતિ બાબતે કોન્ટ્રાકટરશ્રીએ અથવા કામના કોન્ટ્રાકટરશ્રીના પ્રતિનિધિએ, કચેરી કામકાજના દિવસો દરમ્યાન નિયમિતપણે, સાંજે ૫–૦૦ થી ૬–૦૦ દરમ્યાન રૂબરૂ આવવાનું રહેશે. કોન્ટ્રાકટરશ્રીએ પોતાનો મોબાઈલ નંબર અવશ્ય જણાવવાનો રહેશે.

(૩૫) કોન્ટ્રાકટશ્રીએ નિયુકત કરેલ જવાબદાર પ્રતિનિધિ અંગેની નિયુકિતનીવિગત કરારનામામાં સામેલ કરવાની રહેશે.

(૩૬) રવિવારે કામ બંધ રાખવાનુ છે. પરંતુ જો લગત ડેપ્યુટી એકઝીકયુટીવ એન્જીનીયરશ્રીદ્વારા કોઈ આવશ્યક સંજોગો કે જરૂરીયાત હોય ત્યારે સૂચના આપવામાં આવે તો તે કામ કરી આપવાનું રહેશે. કામદારોને અઠવાડીક ઓફ નિયમાનુસાર આપવાનો રહેશે.

(૩૭) રાત્રે કામ કરવાનું કહેવામાં આવે તો પણ કરી આપવાનું રહેશે, તેના માટે વધારાનો કોઈ ભાવ આપવામાં આવશે નહી.

૩૮) કોઈપણ કાયદાકીય વિવાદ અર્થે રાજકોટ શહેર કાર્યક્ષેત્ર રહેશે.

૩૯) અન્ય તમામ શરતો તથા સ્પેશીફીકેશન આઇ. એસ. કોડ તથા એમ. ઓ. આર.ટી.એચ.ના સ્પેશીફીકેશન તથા શરતો મુજબ સમજવાના રહેશે.

(૪૦) આ કામે રજુ થયેલ ભાવ રોયલ્ટી,જી.એસ.ટી. અને લેબરના પ્રવર્તમાન કાયદાની જરૂરી ફી વગેરે અન્ય જે કોઈ સરકારી કે અર્ધસરકારી ટેકસ લાગુ પડે તે તમામ સહીતના હોવાથી તે ભાવ ભરનાર કોન્ટ્રાકટરશ્રીને આપોઆપ લાગુ પડશે.

(૪૧) વાર્ષિક ટર્ન ઓવરમાં મોંઘવારી અન્વયે આપવાનો થતો વધારો ગણતરીમાં લેવામાં આવશે નહીં

(૪૨) દરેક ભાવો બધા કર સાથેના અને કોઈપણ પ્રકારના ભાવવધારા વગરના રહેશે.

(૪૩) કામની કિંમતના પ્રમાણમાં કામની સમયમર્યાદા નકકી કરવામાં આવશે. સત્તામંડળના કારણે કામમાં કોઈપણ પ્રકારનો વિલંબ થાય તો તે અન્વયે સમયમર્યાદા વધારવાની આખરી સત્તા માન.મુખ્ય કારોબારી અધિકારીશ્રીની રહેશે

(૪૪) જો કોન્ટ્રાકટર અને એન્જીનીયર ઈન્ચાર્જ વચ્ચે કોઈ પણ પ્રકારના તકરાર કે મતભેદ થાય તો તે બાબતે મુખ્ય કારોબારી અધિકારીશ્રી મધ્યસ્થી તરીકે આખરી નિર્ણય આપશે જે બંને પક્ષોને બાધ્ય રહેશે. જો તે નિર્ણય માન્ય ન જણાય તો તે પક્ષકાર ભારતીય ધારા- ૧૯૯૬ મુજબ ન્યાય અર્થે જઈ શકશે.

(૪૫) કોન્ટ્રાકટરના રનીંગ બિલમાંથી નીચે મુજબની રકમ કાપવામાં આવશે

(૧) ૫%સીકયોરીટી ડીપોઝીટ કપાત કરવામાં આવશે.

(૨) ૫% રીટેન્શન મની કામના વળતર પેટે કપાત કરવામાં આવશે.. –તે કામ પુર્ણ થયા બાદ ફાઇનલ બીલમા મજરે આપવામા આવશે.

(૩) ૧% લેબરસેસ કામના વળતર પેટે કપાત કરવામાં આવશે.

(૪) ઈન્કમટેક્ષ જાહેર ભાવો મુજબ કપાત કરવામાં આવશે

(૫)જી.એસ.ટી જાહેર ભાવો મુજબ કપાત કરવામાં આવશે

(૪૬) કોન્ટ્રાકટર ધરાવતી એજન્સીની કામ કરતી સમયે સ્થળ પર લાઇટ પાણી તથા અન્ય જરૂરી સમાનની વયવસ્થા સ્વખર્ચે કરવાની રહેશે

(૪૭) કામ માટે ના જરુરી માલ સામાનની ગુણવતા માટેનો ટેસ્ટીંગ ચાર્જ એજન્સીએ ચુકવવાનો રહેશે ઉકત શરતો તેમજ સમજુતી અમે વાંચી છે. અને આ અંગે અમોએ સમજી વિચારીને કામો કરવાબંધાઈ છીએ. આ કામની શરતો અને સમજુતી કરારનામાનો ભાગ ગણવાનો રહેશે. તે મુજબ અમે કામ કરવા સહમત છીએ.

(૪૭) એજન્સીએ ટેન્ડર સાથે સાથેપાન કાર્ડ, GST No.,EPF ,Registration ,Profesional tax Registration ની વિગતો, પેઢી હેઠળ કામ કરતા કર્મચારીઓના EPF, Profesional tax કપાતની વિગતો રજુ કરવાની રહેશે.

કોન્ટ્રાકટરની સહી

સ્થળ : રાજકોટ
તારીખ:

આસી. એન્જીનીયર	**ડે. એક્ઝી. એન્જીનીયર**	**ડાયરેક્ટર (પ્રોજેક્ટ્સ)**
રા. શ. વિ. સત્તામંડળ	**રા. શ. વિ. સત્તામંડળ**	**રા. શ. વિ. સત્તામંડળ**

STATEMENT – 1

INFORMATION REGARDING FINANCIAL CAPACITY OF THE CONTRACTORS.

Sr. No.	Details	**Amount (Rs. in lacs)**	**Remarks**
1	Solvency	25.0% of tender cost put to tender	A Banker's Certificate of current financial year to be attached
2	Annual Turnover for the last five years.	50.0% of tender cost put to tender	Certified C.A. copy to be attached
3	Price of biggest (CIVIL work) job carried out		Certified true copy to be attached

Seal and Signature of the Bidder

STATEMENT NO. – 2

BIDDER'S FINANCIAL CAPACITY

Sr No	**Financial Year**	**Annual Turnover in Engineering Project Rs.**	**Net worth Rs.**	**Net cash Rs.**	**Working Capital Rs.**
1	2020-21				
2	2019-20				
3	2018-19				
4	2017-18				
5	2016-17				

Note:-

1) Figures to be taken from audited balance sheets. Duly certified by CA attested true copy

2) Copies of the balance sheet to be attached.

3) The bidder shall have to provide that for a period of at least 4 months the bidder has Ability to sustain negative cash balance and how he proposes to meet with the same.

Seal and Signature of the Bidder

STATEMENT NO. – 3

LIST OF SINGLE CIVIL PROJECT WORK WHICH COMPLETED DURING THE LAST FIVE YEARS.

Sr No	***Year of Construc-tion Work***	**Name of project**	**Name of owner & contact person of the project, address, phone no. fax no.**	**Total cost of the work**	**Total value of work done Rs.**	**Date of starting work**	**Date of Actual completion of work**
1	2	3	4	5	6	7	8

***Note**: Certificate from the owners in support of above works must be enclosed with this statement.*

Seal and Signature of the Bidder

:: TECHNICAL SPECIFICATIONS ::

Rajkot Urban Development Authority
:: TECHNICAL SPECIFICATIONS ::

1.1 WATER

Water used for mixing and curing shall be clean and free from injurious amounts of oils, acids, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete or steel. Potable water is generally considered satisfactory for mixing concrete. Mixing and curing with sea water shall not be permitted. As a guide, the following concentrations represent the maximum permissible values:

a) To neutralise 200 ml sample of water, using phenolpthalein as an indicator, it should not require more than 2 ml of 0.1 normal NaOH.
b) To neutralise 200 ml sample of water, using methyl orange as an indicator, it should not require more than 10 ml of 0.1 normal HCl.
c) The permissible limits for solids shall be as follows when tested in accordance with IS : 3025:

	Permissible Limits (max)
Organic	200 mg/lit
Inorganic	**3000 mg/lit**
Sulphates (SO_4)	500 mg/lit
Chlorides (Cl)	500 mg/lit *
Suspended matter	2000 mg/lit

* In case of structures of lengths 30 m and below, the permissible limit of chlorides

may be increased upto 1000 mg/lit.

All samples of water (including potable water) shall be tested and suitable measures taken where necessary to ensure conformity of the water to the requirements stated herein.

d) The pH value shall not be less than 6

1014.1. General

All materials may be stored at proper places so as to prevent their deterioration or intrusion by foreign matter and to ensure their satisfactory quality and fitness for the work. The storage space must also permit easy inspection, removal and restorage of the materials. All such materials even though stored in approved godowns/places, must be subjected to acceptance test prior to their immediate use.

1.2. Brick

Bricks shall not be dumped at site. They shall be stacked in regular tiers as they are unloaded, to minimise breakage and defacement. The supply of bricks shall be available at site at any time. Bricks selected for use in different situations shall be stacked separately.

1.3. Aggregates

Aggregate stockpiles may be made on ground that is denuded of vegetation, is hard and well drained. If necessary, the ground shall be covered with 50 mm plank.

Coarse aggregates, unless otherwise agreed by the Engineer in writing, shall be delivered to the site in separate sizes (2 sizes when nominal size is 25 mm or less and 3 sizes when the nominal size is 32 mm or more). Aggregates placed directly on the ground shall not be removed from the stockpile within 30 cm of the ground until the final cleaning up of the work, and then only the clean aggregate will be permitted to be used

In the case of line aggregates, these shall be deposited at the mixing site not less than 8 hours before use and shall have been tested and approved by the Engineer.

1.4 Cement

Unless otherwise specified or called for by the Engineer, cement shall be Ordinary Portland Cement 53 Grade TATA/Ultra tech/Sidhee/SANGHEE OR Equivalent brand Conforming to IS specified above Where Portland pozzolana or slag cement are used, it shall be ensured that consistency of quality is maintained, there will be no adverse interactions between the materials and the finish specified is not marred.Only one type of cement shall be used in any one mix. The source of supply, type or brand of cement within the same structure or portion thereof shall not be changed without approval from Engineer. Cement which is not used within 90 days from its date of manufacture shall be tested at a laboratory approved by Engineer and until the results of such tests are found satisfactory, it shall not be used in any work.

Item No-1 :

Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(B) Dense or Hard soil

301.EXCAVATION FOR ROADWAY AND DRAINS

301.1. Scope

This work shall consist of excavation, removal and satisfactory disposal of all materials necessary for the construction of roadway, side drains and waterways in accordance with requirements of these Specifications and the lines, grades and cross-sections shown in the drawings or as indicated by the Engineer. It shall include the hauling and stacking of or hauling to sites of embankment and subgrade construction, suitable cut materials as required, as also the disposal of unsuitable cut materials in specified manner, trimming and finishing of the road to specified dimensions or as directed by the Engineer.

301.2 Classification of Excavated Material

301.2.1. Classification: All materials involved in excavation shall be classified by the Engineer in the following manner :

(a) Soil

This shall comprise topsoil, turf, sand, silt, loam, clay, mud, peat, black cotton soil, soft shale or loose moorum, a mixture of these and similar material which yields to the ordinary application of pick, spade and/or shovel, rake or other ordinary digging implement. Removal of

gravel or any other nodular material having dimension in any one direction not exceeding 75 mm occurring in such strata shall be deemed to be covered under this category.

(b) Ordinary Rock (not requiring blasting) This shall include:

(i) rock types such as laterites, shales and conglomerates, varieties of limestone and sandstone etc., which may be quarried or split with crow bars, also including any rock which in dry state may be hard, requiring blasting but which, when wet, becomes soft and manageable by means other than blasting;

macadam surface such as water bound and bitumen/tar bound; soling of roads, paths etc. and hard core; compact moorum or stabilised soil requiring grafting tool or pick or both and shovel, closely applied; gravel and cobble stone having maximum dimension in any one direction between 75 and 300 mm;

lime concrete, stone masonry in lime mortar and brick work in lime/cement mortar below ground level, reinforced cement concrete which may be broken up with crow bars or picks and stone masonry in cement mortar below ground level; and

bounders which do not require blasting having maximum dimension in
any direction of more than 300mm, found lying loose on the surface or embedded in river bed, soil, talus, slope wash and terrace material of dissimilar origin.

(c) Hard Rock (requiring blasting)

This shall comprise :

any rock or cement concrete for the excavation of which the use of mechanical plant and/or blasting is required ;

reinforced cement concrete (reinforcement cut through but not separated from the concrete) below ground level ; and

boulders requiring blasting.

(d) Hard Rock (blasting prohibited)

Hard rock requiring blasting as described under (c) but where blasting is prohibited for any reason and excavation has to be carried out by chiselling, wedging or any other agreed method.

(e) Marshy Soil

This shall include soils like soft clays and peats excavated below the original ground level of marshes and swamps and soils excavated from other areas requiring continuous pumping or bailing out of water.

301.2.2. Authority for classification: The classification of excavation shall be decided by the Engineer and his decision shall be final and binding on the Contractor. Merely the use of explosives in excavation will not be considered as a reason for higher classification unless blasting is clearly necessary in the opinion of the Engineer.

301.3. Construction Operations

301.3.1. Setting out : After the site has been cleared as per Clause 201, the limits of excavation shall be set out true to lines, curves, slopes, grades and sections as shown on the drawings or as directed by the Engineer. The Contractor shall provide all labour, survey instruments and materials such as strings, pegs, nails, bamboos, stones, lime, mortar, concrete, etc., required in connection with the setting out of works and the establishment of bench marks. The Contractor shall be responsible for the maintenance of bench marks and other marks and stakes as long as in the opinion of the Engineer, they are required for the work.

301.3.2. Stripping and storing topsoil: When so directed by the Engineer, the topsoil existing over the sites of excavation shall be stripped to specified depths constituting Horizon "A" and stockpiled at designated locations for re-use in covering embankment slopes, cut slopes, berms and other disturbed areas where re-vegetation is desired. Prior to stripping the topsoil, all trees, shrubs etc. shall be removed along with their roots, with approval of the Engineer.

301.3.3 Excavation - General: All excavations shall be carried out in conformity with the directions laid here-in-under and in a manner approved by the Engineer. The work shall be so done that the suitable materials available from excavation are satisfactorily utilized as decided upon beforehand.

While planning or executing excavations, the Contractor shall take all adequate precautions against soil erosion, water pollution etc. as per Clause 306, and take appropriate drainage measures to keep the site free of water in accordance with Clause 311.

The excavations shall conform to the lines, grades, side slopes and levels shown on the drawings or as directed by the Engineer. The Contractor shall not excavate outside the limits of excavation. Subject to the permitted tolerances, any excess depth/width excavated beyond the specified levels/dimensions on the drawings shall be made good at the cost of the Contractor with suitable material of characteristics similar to that removed and compacted to the requirements of Clause 305.

All debris and loose material on the slopes of cuttings shall be removed. No backfilling shall be allowed to obtain required slopes excepting that when boulders or soft materials are encountered in cut slopes, these shall be excavated to approved depth on instructions of the Engineer and the resulting cavities filled with suitable material and thoroughly compacted in an approved manner.

After excavation, the sides of excavated area shall be trimmed and the area contoured to minimise erosion and ponding, allowing for natural drainage to take place. If trees were removed, new trees shall be planted, as directed by the Engineer. The cost of planting new trees shall be deemed to be incidental to the work.

301.3.4. Methods, tools and equipment: Only such methods, tools and equipment as approved by the Engineer shall be adopted/used in the work. If so desired by the Engineer, the Contractor shall demonstrate the efficacy of the type of equipment to be used before the commencement of work.

301.3.5. Rock excavation: Rock, when encountered in road excavation, shall be removed upto the formation level or as otherwise indicated on the drawings. Where, however, unstable shales or other unsuitable materials are encountered at the formation level, these shall be excavated to the extent of 500 mm below the formation level or as otherwise specified. In all cases, the excavation operations shall be so carried out that at no point on cut

formation the rock protrudes above the specified levels. Rocks and large boulders which are likely to cause differential settlement and also local drainage problems should be removed to the extent of 500 mm below the formation level in full formation width including drains and cut through the side drains.

Where excavation is done to levels lower than those specified, the excess excavation shall be made good as per Clauses 301.3.3 and 301.6 to the satisfaction of the Engineer.

Slopes in rock cutting shall be finished to uniform lines corresponding to slope lines shown on the drawings or as directed by the Engineer. Notwithstanding the foregoing, all loose pieces of rock on excavated slope surface which move when pierced by a crowbar shall be removed.

Where blasting is to be resorted to, the same shall be carried out to Clause 302 and all precautions indicated therein observed.

Where presplitting is prescribed to be done for the establishment of a specified slope in rock excavation, the same shall be carried out to Clause 303.

301.3.6 Marsh excavation: The excavation of soils from marshes/swamps shall be carried out as per the programme approved by the Engineer.

Excavation of marshes shall begin at one end and proceed in one direction across the entire marsh immediately ahead of backfilling. The method and sequence of excavating and backfilling shall be such as to ensure, to the extent practicable, the complete removal or displacement of all muck from within the lateral limits called for on the drawings or as staked by the Engineer, and to the bottom of the marsh, firm support or levels indicated.

301.3.7. Excavation of road shoulders/verge/median for widening of pavement or providing treated shoulders: In works involving widening of existing pavements or providing treated shoulders, unless otherwise specified, the shoulder/verge/median shall be removed to their full width and to levels shown on drawings or as indicated by the Engineer. While doing so, care shall be taken to see that no portion of the existing pavement designated for retention is loosened or disturbed. If the existing pavement gets disturbed or loosened, it shall be dismantled and cut to a regular shape with sides vertical and the disturbed/loosened portion removed completely and relaid as directed by the Engineer, at the cost of the Contractor.

301.3.8. Excavation for surface/sub-surface drains: Where the Contract provides for construction of surface/sub-surface drains to Clause 309, excavation for these shall be carried out in proper sequence with other works as approved by the Engineer.

301.3.9 Slides: If slips, slides, over-breaks or subsidence occur in cuttings during the process of construction, they shall be removed at the cost of Contractor as ordered by the Engineer. Adequate precautions shall be taken to ensure that during construction, the slopes are not rendered unstable or give rise to recurrent slides after construction. If finished slopes slide into the roadway subsequently, such slides shall be removed and paid for at the Contract rate for the class of excavation involved, provided the slides are not due to any negligence on the part of the Contractor. The classification of the debris material from the slips, slides etc. shall conform to its condition at the time of removal and payment made accordingly regardless of its condition earlier.

301.3.10. Dewatering: If water is met with in the excavations due to springs, seepage, rain or other causes, it shall be removed by suitable diversions, pumping or bailing out and the excavation kept dry whenever so required or directed by the Engineer. Care shall be taken to discharge the drained water into suitable outlets as not to cause damage to the works, crops

or any other property. Due to any negligence on the part of the Contractor, if any such damage is caused, it shall be the sole responsibility of the Contractor to repair/restore to the original condition at his own cost or compensate for the damage.

301.3.11. Disposal of excavated materials: All the excavated materials shall be the property of the Employer. The material obtained from the excavation of roadway, shoulders, verges, drains, cross-drainage works etc., shall be used for filling up of (i) roadway embankment, (ii) the existing pits in the right-of way and (iii) for landscaping of the road as directed by the Engineer, including levelling and spreading with all lifts and lead upto 1000 m and no extra payment shall be made for the same.

All hard materials, such as hard moorum, rubble, etc., not intended for use as above shall be stacked neatly on specified land as directed by the Engineer with all lifts and lead upto 1000 m.

Unsuitable and surplus material not intended for use within the lead specified above shall also, if necessary, be transported with all lifts and lead beyond initial 1000 m, disposed of or used as directed by the Engineer.

301.3.12 Backfilling: Backfilling of masonry/concrete/hume pipe drain excavation shall be done with approved material after concrete/masonry/hume pipe is fully set and carried out in such a way as not to cause undue thrust on any part of the structure and /or not to cause differential settlement. All space between the drain walls and the side of the excavation shall be refilled to the original surface making due allowance for settlement, in layers generally not exceeding 150 mm compacted thickness to the required density, using suitable compaction equipment such as mechanical tamper, rammer or plate compactor as directed by the Engineer.

Plying of Construction Traffic

Construction traffic shall not use the cut formation and finished subgrade without the prior permission of the Engineer. Any damage arising out of such use shall be made good by the Contractor at his own expense.

301.5 Preservation of Property

The Contractor shall undertake all reasonable precautions for the protection and preservation of any or all existing roadside trees, drains, sewers or other sub-surface drains, pipes, conduits and any other structures under or above ground, which may be affected by construction operations and which, in the opinion of the Engineer, shall be continued in use without any change. Safety measures taken by the Contractor in this respect, shall be got approved from the Engineer. However, if any of these objects is damaged by reason of the Contractor=s negligence, it shall be replaced or restored to the original condition at his expense. If the Contractor fails to do so, within the required time as directed by the Engineer or if, in the opinion of the Engineer, the actions initiated by the Contractor to replace/restore the damaged objects are not satisfactory, the Engineer shall arrange the replacement/restoration directly through any other agency at the risk and cost of the Contractor after issuing a prior notice to the effect.

Item-2
Add extra for Disposing off the excavated stuff of above items for lead of (E) 400 to 500 m

1.0. Workmanship

1.1. The demolition shall consist of demolition of one or more parts of the building as specified or shown in the drawings. Demolition implies taking up or down or breaking up. This shall consist of demolishing whole or part of work including all relevant items as specified or shown in the drawings.

1.2. The demolition shall always be planned before hand shall be done in reverse order to the one in which the structure was constructed. This scheme shall be got approved form the Engineer-in-charge before starting the work. This however will not absolve the contractor from the responsibility of proper and safe demolition.

1.3. Necessary propping, shoring and under pinning shall be provided for the safety of the adjoining work or property, which is to be left intact, before dismantling and demolishing is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining property.

1.4. Wherever required, temporary enclosures or partitions shall also be provided. Necessary precautions shall be taken to keep the dust nuisance down as and where necessary.

1.5. Dismantling shall be commenced in a systematic manner. All materials which are likely to be damaged by dropping from a height or demolishing roof, masonry etc. shall be carefully dismantled first. The dismantled articles shall be properly stacked as directed.

1.6. All materials obtained from demolition shall be the property of Government unless otherwise specified and shall bee kept in safe custody until handed over to the Engineer-in-charge.

1.7. Any serviceable materials, obtained during dismantling or demolition shall be separated out and stacked properly as directed with all lead and lift. All unserviceable materials, rubbish etc., shall be stacked as directed' by the Engineer-m-charge.

1.8. On completion of work, the site shall be cleared of all debris rubbish and cleaned as directed.

2.0. Mode of measurements and payment

2.1. Measurements of all work except hidden work shall be taken before demolition or dismantling and no allowance for increase in bulk shall be allowed. The demolition of lime concrete shall be measured under this item. Specification for deduction for voids, openings etc. shall be on same basis as that employed for construction of work,

Item-3 Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete.

The earth to be used for filling shall be free from salts, organic or other foreign matter. All clods of earth shall be broken.

1.2. As soon as the work in foundation has been completed and measured the site of foundation shall be cleared of all debris, brick bats: mortar dropping etc., and filled with earth in layers not exceeding 20 cms. Each layer shall be adequately watered, rammed and consolidated before the succeeding layer is laid The earth shall be rammed with iron rammers where feasible and with the but ends of crow-bars, where rammer cannot be used.

1.3. The plinth shall be similarly filled with earth in layers not exceeding 20 cms. adequately watered and consolidated by ramming with iron or wooden rammers. When filling reaches finished level the surface shall be flooded with water for at least 24 hours and allowed to dry and then rammed and consolidated.

1.4. The finished level of filling shall be kept to shape intended to be given to floor.

1.5. In case off large heavy duty flooring like factory flooring, the consolidation may be done by power rollers, where so specified. The extent of consolidation required, shall also be as specified.

1.6. The excavated stuff of the selected type shall be allowed to be used in filling the trenches and plinth. Under no circumstances black cotton soil be used for filling the plinth.

2.0. Mode of Measurements & Payment

2.1. The payment shall be made for filling in plinth and trenches. No deduction shall be made for shrinkage or voids, if consolidated as instructed above.

2.2. The rate shall be for a unit of one cubic meter.

Item No-4 Providing and laying cement concrete 1:4:8 (1- Cement : 4- coarse sand : 8- hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth

1.0. Materials

1.1. Water shall conform to M-1. Cement shall conform to M-3. Sand shall conform to M-6 stone aggregate 40 mm. nominal size shall conform to M-12.

2.0. Workmanship

2.1. Relevant Specifications of item No. 5.3.2 shall be followed except that cement concrete shall be mixed in the preparation of 1:4:8 instead of 1:3.6 by volume.

3.0. Mode of measurement and payment

3.1. The concrete shall be measured for its length, breadth and depth, limiting dimensions to those specified on plans or as directed

3.2. The rate shall be for a unit of one cubic meter

Item -5,6,7&8 Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete.

Materials & Workmanship

1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-250 grades for the works as specified in the item.

2.0. Mode of measurements & payment

2.1. The relevant specifications of item No. 5.8.1. shall be followed.

2.2. The rate shall be for a unit of one cubic meter.

5.00.1. Providing and laying ordinary concrete 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregates 20 mm. nominal size) and finishing smooth with curing etc., complete including the cost of form work but excluding the cost of reinforcement for R.C.C. work in: (I) Slabs up to 8 cms. thickness (II) Slabs having more than 8 cms. and up to (III) Slabs having more than 10 cms. and up to 13 cms. thickness (IV) Slabs having more than 13 cms. and up to 15 cms. thickness.

1.0. Materials & Workmanship

1.1. The relevant specifications for item No. 5.4.1. shall be followed for concrete work and relevant specifications of item No. 9.1. shall be followed for form work and centering. The concrete surface shall be smooth finished with cement mortar 1:3 (1 cement: 3 fine sand) as per item No. 17.59 (I) The thickness shall be as specified in the item.

2.0. Mode of measurement & payment

2.1. The relevant specification for item No. 5.4.1 shall be followed except that item shall include the item providing from work and centering work as directed.

2.2. The rate shall be for a unit of one cubic meter.

5.00.2. Providing and laying controlled cement M-150 and finishing smooth with curing etc. complete including the cost of form work but excluding the cost of reinforcement for R.C.C. work in : (I) slabs up to 8 cms. thickness (II) Slabs more than 8 cms. 10 cms. (Ill) Slabs more the 10 cms. and up to 13 cms. (IV) Slabs more than 13 cms. and up to 15 cms.

1.0. Materials & Workmanship

1.1. The relevant specifications of item No. 5.8.1. shall be followed for concrete work and item No. 9.1. shall be followed for form work and centering. The concrete surface shall be smooth finished with cement mortar 1:3 (1 cement : 3 fine sand) as per No. 17.59 (I) The thickness shall be as specified in the item.

2.0. Mode of Measurement & Payment

2.1. The relevant of item No. 5.8.1. shall be followed except that the item shall include the cost and from work and centering.

2.2. The rate shall be for a unit of one cubic meter.

Item No-9 Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level(Over lap to be provided as per necessity . It will not be measured for payment)

1.5 Specification for TMT and MILD steel bars reinforcement

Scope of work

The scope of work consists of providing and laying mild steel reinforcement and TMT FE 500D reinforcement for RCC works of various components of the structure. . The steel to be used shall be procured from SAIL / VIZAG / TATA / JINDAL/ELECTRO THUMRM / IONAL/ASR/ESAAR/UTKARASH/GALLENT only for this project. This includes cuttings, bending, binding, placing, with all equipment and labour required for the work as directed by the Engineer-in-Charge and all operations covered within the intent and purpose of the specification. However for more details reference shall be taken from section no. 1000, 1600 and 1900 of MORTH specifications.

As per MoRT&H specification section -1700

Item No-10 Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (ii) Cement mortar 1:4

1 . For a surface which is to be subsequently plastered the joints shall be squarely racked out to a depth of 15 mm, while the mortar is still green. The racked joints shall be well brushed to remove dust and loose particles and the surface shall be thoroughly washed with water, cleaned and wetted.

Cement and sand shall be mixed in proportion as specified in the item, Cement and sand shall be proportioned by volume after making due allowance for bulking. The required quantity of water shall then be added and the mortar mixed to produce workable consistecy.

The mixing shall be done intimately by hand mixing. The operation shall be carried out on a clean watertight paltform, and cement and sand shall be first mixed dry in the required proportion to obtain a uniform colour and then the mortar shall be mixed thoroughly after addition of water. In case of cement mortar that has stiffened because of evaporation of water, the same shall be retempered by adding water as frequently as needed to restore the requisite consistent but this retampering shall be permitted only within thirty minutes from the time of addition of initial mixing.

Plastering shall be started from top & worked down All pitlog holes shall be properly filled in advance

of the plastering as the scaffolding is being taken down. Wooden screeds 75 mm wide and of the thickness ot the plaster shall be fixed vertically 2.5 metres to 4 meters apart to act as gauges and guides in applying the plaster. The mortar shall be laid on the wall between the screeds using the plaster float and pressing the mortar to the racked joints are properly filled.

The plaster shall then be finished off with a wooden straight edge reaching across the screeds. The straight edge shall be worked on the screeds with a small upward and side way motion 50 mm or 75 mm at a time. Finally, the surface shall be finished off with a plaster's wooden float. Metal floats shall not be used.

When recommenaing plastering beyond the work suspended earlier the edge of the old plaster shall be scrapped, cleaned and wetted before plaster is applied to the adjacent areas. No portion of the surface shall be left out initially or be patched by later on The plaster shall be finished to a true and plumb surface and to the proper degree of smoothness as required by the Engineer-in-charge. The average thickness of plaster shall not be less than the thickness specified in the item with a tolerance of 3 mm thickness which appear in the surface and all portions, which sound hollow when tapped, or are found to be otherwise defective, shall be cut out in rectangular shape and re-done as directed by the Engineer-in-charge.

Curing shall be started as soon as the mortar used for finished has hardened sufficiently not to be damaged when watered. It shall be kept wet for a period of atlest 7 days. During this period, it shall be suitably protected from all damages.

Stage scaffolding shall be provided for the work. This shall be independent of the structure.

The work of plastering shall be measured in sq. metre of the surface treated.

The rate of plastering shall include the cost of all labour, materials tools and plant scaffolding and all incidental expenses as described herein above.

ITEM NO. 11 Providing & applying of Natural Texture Coating System made from 100% natural grains and granules and premium acrylic resin, silicon and other additives to bind and protect to external walls, columns etc. of approved made, shade, design & pattern. Application: (i) 1st coat of primer based on acrylic resin which helps the texture material to bind properly with base coat. (ii) 2nd coat of texture material of

natural stone grains and granules which is based on premium acrylic resin, silicon, other additives and preservatives. (iii) 3rd coat is clear coat of acrylic and silicon which provide surface an extra strength and protect against water fall, provide UV resistency as suggested by Architect.

1.0. Base

The contractor shall have to provide natural grains and granules and premium acrylic resin, silicon and other additives to bind and protect to external walls, columns etc. of approved made, shade, design & pattern or as specifiedand as directed by Engineer-in-charge.

2.0.workmanship

A. 1st coat of primer based on acrylic resin which helps the texture material to bind properly with base coat

B. 2nd coat of texture material of natural stone grains and granules which is based on premium imported aceylicresin,silicon,other additives and preservatives.

C. 3rd coat of texture material of same as second coat to provide surface various patterns or actual shade.

D. 4th coat is clear coat of acrylic and silicon which provide surface an extra strength and protect against waterefall,provide UV resistency.

3.0. Measurement & Rates

The rate will be paid for a unit of one sqmt .

Item No.:- 12 P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismentaling of existing flooring and jointed with color cement slurry including finised with groove @3mm and it shall be fillwith epoxy powder of required shade pointing & cleaning the surface etc. complete for DARK shade

VITRIFIED TILE

The tiles shall be of approved make and shall generally conform to IS 15622. They shall be flat, and true to shape and free from blisters crazing, chips, welts, crawling or other imperfections detracting from their appearance. The tiles shall be tested as per IS 13630. Classification and Characteristics of VITRIFIED TILE shall be as per IS 13712.

The tiles shall be square or rectangular of nominal size. Table 1,3,5, and 7 of IS 15622 give the modular preferred sizes and table 2,4,6 and 8 give the most common non modular sizes. Thickness shall not be less than 8mm. It includes the profiles on the visible face and on the rear side.

Manufacturer/supplier and party shall choose the work size of tiles in order to allow a nominal joint width up to 2mm for unrectified floor tiles and up to 1mm for rectified floor tiles. The joint in case of spacer lug tile shall be as per spacer. The tiles shall conform to table10 of IS 15622with water absorption 3 to 6% (Group BII).

The top surface of the tiles shall be glazed. Glaze shall be either glossy or matt as directed by Executive Engineer. The underside of the tiles shall not have glaze on more than 5% of the area in order that the tile may adhere properly to the base. The edges of the tiles shall be preferably free from glaze.

However, any glaze if unavoidable, shall be permissible on only up to 50 per cent of the surface area of the edges.

Coloured Tiles

Only the glaze shall be coloured as specified. The sizes and specifications shall be the same as for the white glazed tiles.

Decorative Tiles

The type and size of the decorative tiles shall be as follows:

(i) Decorated white back ground tiles

The size of these tiles shall be as per IS 15622.

(ii) Decorated and having coloured back-ground

The sizes of the tiles shall be as per IS 15622.
Preparation of Surface and Laying
Base concrete or the RCC slab on which the tiles are to be laid shall be cleaned, wetted and mopped. The bedding for the tile shall be with cement mortar 1:6 (1 cement : 6 coarse sand) or as specified. The average thickness of the bedding shall be 20 mm or as specified while the thickness under any portion of the tiles shall not be less than 10 mm.
Mortar shall be spread, tamped and corrected to proper levels and allowed to harden sufficiently to offer a fairly rigid cushion for the tiles to be set and to enable the mason to placeooden plank across and squat on it.
Over this mortar bedding neat grey cement slurry of honey like consistency shall be spread at the rate of 3.3 kg of cement per square meter over an area up to one square metre. Tiles shall be soaked in water washed clean and shall be fixed in this grout one after another, each tile gently being tapped with a wooden mallet till it is properly bedded and in level with the adjoining tiles. The joints shall be kept as thin as possible and in straight lines or to suit the required pattern.
The surface of the flooring during laying shall be frequently checked with a straightedge about 2 m long, so as to obtain a true surface with the required slope. In bath, toilet W.C. kitchen and balcony/verandah flooring, suitable tile drop or as shown in drawing will be given in addition to required slope to avoid spread of water. Further tile drop will also be provided near floor trap.
Where full size tiles cannot be fixed these shall be cut (sawn) to the required size, and their edge rubbed smooth to ensure straight and true joints. Tiles which are fixed in the floor adjoining the wall shall enter not less than 10 mm under the plaster, skirting or dado.11.15.4.6
After tiles have been laid surplus cement slurry shall be cleaned off.

Pointing and Finishing
The joints shall be cleaned off the color cement grout with wire/coir brush or trowel to a depth of 2 mm to 3 mm and all dust and loose mortar removed. Joints shall then be flush pointed with colour cement added with pigment if required to match the colour of tiles. Where spacer lug tiles are provided, the half the depth of joint shall be filled with poly sulphide or as specified on top with under filling with cement grout without the lugs remaining exposed. The floor shall then be kept wet for 7 days. After curing, the surface shall be washed and finished clean. The finished floor shall not sound hollow when tapped with a wooden mallet.
Measurements
Length and breadth shall be measured correct to a cm before laying skirting, dado or wall plaster and the area calculated in square meter correct to two places of decimal. Where coves are used at the junctions, the length and breadth shall be measured between the lower edges of the coves. No deduction shall be made nor extra paid for voids not exceeding 0.20 square meter. Deductions for ends of dissimilar materials or other articles embedded shall not be made for areas not exceeding 0.10 square meter. Areas, where glazed tiles or different types of decorative tiles are used will be measured separately.
Rate
The rate for flooring shall include the cost of all materials and labour involved in all the operations described above, For tiles of sizes up to 0.16 sqm. unless otherwise specified in the description of the item. Nothing extra shall be paid for the use of cut (sawn) tiles in the work.

Item No.:- 13 Providing and laying 18mm thick Granite slab in flooring over 20 mm (Average) thick base of cement mortar 1:6 (1-Cement : 6-Coarse sand)and jointed with Epoxy powder of required shade the shade of slab including rubbing and polishing etc. complete as directed by Engineer-in-charge.(Telephone black only)

1.0. Materials
1.1. Water shall conform to M-1. Lime mortar shall conform to M-10. Cement mortar shall conform to M-11
Polished granite stone 18.0mm thickness shall conform to M-49,

2.0. Workmanship

2.1. Each slab shall be cut to the required size and shape and fine chisel dressed at all the edges. The sides trust dressed shall have a full contract if a straight edge is laid along. The sides shall be table rubbed with coarse sand before paving. All angles and edges of the slabs shall be true square and free from chippings and giving a plane surface. The thickness shall be 18 mm. (Average) as specified in the item but not less than 20 mm. at any place of the slab.

2.2. Bedding for the Kota stone slabs shall be of cement mortar 1:6 (1 cement : 6 coarse sand) or L.M. 1:1.5 of average thickness 20 mm given in the description of the item. Sub grade shall be cleaned, wetted and mopped Mortar of the specified mix and thickness shall then be spread on an area sufficient to receive one kota stone slab. The slab shall be washed clean before laying. It shall be laid on top, pressed, tapped gently to bring it in level with the other slabs. If shall then be lifted and laid aside. Top surface of the mortar shall then be corrected by adding fresh mortar at hollows or depressions. The mortar shall then be allowed to harden bit. Over this surface, cement slurry of honey-like consistency shall be applied. The slab shall then be gently placed in position and tapped with wooden mallet till it is properly padded in level with and close to the adjoining slab. The joint shall be as fine as possible. The slabs fixed in the floor adjoining, the walls shall enter not less than 10 mm. under the plaster, skirting or dedo. The junction between the wan and floor shall be finished neatly. The finished surface shall be true to levels and slopes as directed

2.3. The floor shall be kept wet for a minimum period of 7 days so that bedding and joints set properly

2.4. Polishing shall be normally commenced after 14 days of laying the stone slab. First polishing shah be done with carborundum stones of 120 grade grit fitted in the heavy machine and then second polishing shall be done with carborundum stone of 220 to 350 grade grit fitted in heavy machine. Water shall be properly used during polishing. The stone shall then be washed clean with water When directed by the Engineer-in-charge, wax polish of approved quality shall be applied on the surface with the help of soft cloth over a clean and dry surface. Then the polishing machine fitted with bobs shall be run over it.

2.5. The holes required for Nahni traps, pipes and any other fittings shall be made, without any extra cost.

3.0. Measurement & payment

3.1. The rate shall include the cost of all materials and labour involved in ail the operations described above. The kota stone flooring shall be measured in square meters correct to two places decimal, length and breadth shall be measured correct to a centimeter and between the finished face of skirting dedo plaster and no deduction shall be made nor extra paid for any opening in floor of areas up to 0 1 sq

3.2. The rate shall be for a unit of one sq. meter

Item No.:- 14 Providing and fixing pre-cast Rubber Dye inter locking concrete block 60mm thick with grade of concrete M250 pnumatic compressed by mechanically pressed and as per approved design including 75mm Sand layer for levelling and filling the joint with sand in proper line and level etc complete.

Material :

Water shall confirm to M-1, sand shall confirm to M-6, Cement shall confirm to M-3. 60mm thick
with grade of concrete M-250 and pneumatic compressed by mechanically pressed Rubber Dye paver block of approved colour & shape having abrasion value not more than 2mm and water absorption not more than 6%

Workmanship:

Sub grade shall be cleaned, leveled, wetted and rammed as directed. 75mm thick layer of dry sand
shall be spread over it. Paver block should be of approved colour, shape and size, and fixed as

instructed with concreting 1:2:4 the end blocks (without cement joints) in bedding of Bhogavo, shall be laid in different pattern/design as shown in the drawing or as directed by Consulting Architect/Engineer-in-charge as directed on top, pressed, tapped gently to bring it in line and level
and inter lock with others. The joint shall be as fine as possible. The finished surface shall be true to
levels and slopes as directed. Necessary testing of blocks is to be carried out.

Testing:
M-25 concrete blocks shall be tested in GERI and RUDA approved Laboratory at lot of every 20000 Nos block or part of there for each test. Lot will consider of 20000 Nos and manufacture test certifiably will be must attached.

Mode of Measurement and Payments :
The rate shall include the cost of all materials and labour involved in all the operations described
above. The Paver block flooring shall be measured in square meters correct to two places of decimal, length and breadth shall be measured correct to a centimeter
The rate shall be for a unit of one square meter

Item-16 Providing and fixing M.S. grills of required pattern to wooden frames of windows etc. with M.S. flats at required spacings and frame alround, square or round bars with round headed bolts and nuts or by screws (A) Plain Grill.

1.0. Materials
The structural steel shall conform to M-22
2.0. Workmanship
2.1. The M.S. Grill shall be prepared as per the drawing or as directed for fixing to wooden frames of windows etc.
2.2. The grill shall be fabricated to the designs and patterns shown in the drawings and the weight shall be as directed, and the joints shall be reverted or welded as shown in the plan or as directed. The grill so formed shall be fixed into the frames of the windows etc. before they are erected in position. The outside strip frame of the grill shall be housed to its full thickness into the recess cut into the frame of the windows etc. The grill shall be fixed to the frame with number of bolts and nuts or screws viz. bolt nut/screw per 30 cm. of the length of outer strip subject to minimum of 2 Nos. on each side of the frame or as indicated in the drawing or as directed.
2.3. The bolts and nuts or screws shall be counter sunk and shall be fixed with the top of their heads flush with the face of the frame strips.
3.0. Mode of measurements & payment
3.1. No payment shall be made for weight of screws, bolts nuts etc. only weight of grill shall be paid.
3.2. The rate shall be for a unit of one kg.

Item-17 Applying priming coat over new steel and other metel surface after and including preparing the surface by throughly cleaning, oil,grease, dirt and other foreign matter and scoured with brushes fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead.Painting two coats (excluding priming coat) on new steel and other metal surface with synthetic enamel paint, brushing to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.

1.0. Materials
The enamel pain shall conform to M-44 B.
2.0. Workmanship
2.1. General : The materials required for work of painting work shall be obtained directly from approved manufactures or approved dealer and brought to the site in maker's drums; kegs. etc. with seal unbroken.

2.1.2. All materials not in actual use shall be kept properly protected, lids of containers shall be kept closed and surface of paint in open or partially open containers covered with a thin layer of turpentine to prevent formation of skin. The materials which have become state or flat due to improper and long storage shall not be used. The paint shall be stirred thoroughly in its container before pouring into small containers. While applying also, the paint shall be continuously stirred in smaller container. No left over paint shall be put back into stock tins. When not in use the containers shall be kept properly closed.
2.1.3. If for any reasons, things is necessary, the brand of thinner recommended by the manufacturer shall be used.
2.1.4. The surface to be painted shall be thoroughly cleaned and dusted. All rust, dirt and grease shall be thoroughly removed before painting is started. No painting on exterior or other exposed part o the work shall be carried out in wet, damp or otherwise unfavorable weather and all the surfaces shall be thoroughly dry before painting work is started.
2.2. Application of paint:
2.2.1. Brushing operations are to be adjusted to the spreading capacity advised by the manufacture of particular paint. The paint shall be applied evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area over with paint, brushing the surface hard for the first time over and then brushing alternately in opposite directions two or three times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks shall be left after the -laying off is finished. The full process of crossing and laying off will constitute one coat.
2.2.2. Each coat shall be allowed to dry completely and lightly rubbed with very fine grade of sand-paper and loose particles brushed off before next coat is applied. Each coat shall vary slightly in shade and shall be got approved from Engineer-in-charge before next coat is started.
2.2.3. Each coat the last shall be lightly rubbed down with sand paper of fine pumice stone and cleaned of dust before the next coat is applied. No hair marks from the brush of clogging of paint puddles in the corners of panels, angles of moldings etc. shall be left on the work.
2.2.4. Special care shall be taken while painting over bolts, nuts, rivets, overlaps etc. Approved best quality brushes shall be used.
3.0. Mode of measurements and payment
3.1. The relevant specifications of item No. 19.12 shall be followed for mode of measurements and payment. The rate is excluding priming coat.
3.4. The rate shall be for a unit of One sq. meter.

1.0. Materials
1.1. The ready mixed primer, brushing red shall conform to I.S. 102-1962.
1.2. The thinner (linseed oil) shall conform to I.S. 75-1973. If for any reason, thinning is necessary *m* case of ready mix paint the brand of thinner recommended by manufacture shall be used.
2.0. Workmanship
2.1. Preparation of surfaces : The surfaces painting shall be cleaned of all rust, scale, dirt and other foreign matter sticking to it with wire brushes, steel wool, scrapers, sand paper etc. This surface shall then be wiped finally with mineral turpentine which shall also remove grease and perspiration of hand marks. The surface shall then be allowed to dry.

2.2. Application of primer :
2.2.1. After the preparation of the surface, the priming coat shall be applied immediately. The brushing operations are to be adjusted to the spreading capacity advised by the manufacturer of the particular primer. The paint shall be applied evenly and smoothly by means of crossing and laying off. The crossing and laying off consists of covering the area over with paint, brushing alternately in opposite directions, two or three times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks shall be left after the laying off is finished. The full process of crossing and laying off wall constitute one coat.
2.2.2. During painting, every time, after the priming coat has been worked out of the brush bristles or after the brush has been unloaded, the bristles of the brush shall be opened up by striking the brush against portion of the unpainted surface with the end of the bristles, held at right angles to the surface, so that bristles thereafter will collect the correct amount of paint when dipped again in to a paint container The prima/y coat shall be allowed to dry completely before painting is started.
2.2.3. No hair marks from the brush or clogging at pain puddles in the corner of panels angles of molding etc. shall be left on the work
2.2.4. Special care shall be taken while painting over bolts, nuts, rivets, overlaps etc.
2.2.5. The container when not in use shall be kept close and free from air so that paint does not thickness and also shall be kept guarded from dust.
3.0. Mode of measurements & payment

3.1. The new steel and other metal surface shall be measured under this item.
3.2. All the work shall be measured net in the decimal system, as executed subject to the following limits unless otherwise stated hereinafter.
(a) Dimensions shall be measured to the nearest 0.01 meter.
(b) Areas shall be worked out to the nearest 0.01 sq. meter.
3.3. No deductions shall be made for openings not exceeding 0.5 sq. mt. each and no addition shall be made for painting to beddings, moldings, edges, jambs, soffits, sills etc. of such opening.
3.4. In case of fabricated structural steel and iron work, priming coat of paint shall be included with frabation. In case of trusses if measured in sq. m. compound girders, stanchions, lattices, grader and similar work, actual area shall be measured in sq. m. and no extra shall be paid for painting on bolts heads, nuts, washers etc. No addition shall be made to 1 he weight calculated for the purpose of measurements of steel and iron works for paint applied on shop or at site.
3.5. The different surfaces shall be grouped into one general item, areas of uneven surfaces being converted into equivalent plain areas in accordance with the table given as per Annexure-ll for payment.
3.6. The rate shall be for a unit of One sq, meter.

Item-18 Steel work, riveted in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of read lead paint. (A) In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins conneted to common rafters and the like. (upto 10 ton)

1.0. Materials & Workmanship
The relevant specifications of item No. 11.2 (A) shall be followed except that the work shall be for trusses and trussed purlins up to 25 m. span and 1 5 m. overall height.
2.0. Mode of measurement & payment
2.1. The relevant specifications of item No. 11.2. (A) shall be followed.
2.2. The rate shall be for a unit of one quintal.

14.4.(A) Steel work welded, in built up sections frame work including, cutting, hoisting, fixing in position and applying a priming coat of red lead paint. In beams and joints, channels, angles tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins, connected to common falters and the like.

1.0 Materials & Workmanship
1.1. The relevant specification of item No. 11.2 (A) shall be followed except that the steel work shall be done by welding.
1.2. Welding shall generally be done by electric process. Gas welding shall be resorted to, using oxyacetylene flame with specific prior approval. Gas welding shall not be permitted for structural steel work.
1.3. The work shall be done as shown in the shop drawings which should clearly indicate various details of the joints to he welded, shop and site welded as well as type of electrodes to be used, symbol for welding on plansand shop drawings shall be according to I.S. 813-1961. As far as possible every effort shall be made tolimit the welding that must be done after improper welding that is likely to be done due to heights and difficult positions on scaffoldings etc. The welding work shall conform to I.S. 816-1969.
1.4. Preparation of surfaces : Surfaces which are to be welled together shall be free from loose mill scale, rust, paint, grease or other foreign matter. A coating of boiled linseed oil shall be permitted.
1.5. Assembly for welding : Before welding is commenced, the plates shall first be brought together and firmly clamped or spot welded at specified distance. This temporary connection has to be strong enough to hold the plates accurately in place without displacement.
1.6. Precautions : All operations connected with welding and cutting equipment shall conform to safety requirement given in I.S. 818-1968.
The following paints shall be borne in mind during the process of welding:
(b) Are length voltage and amperage shall be suited to the thickness of material type of groove and other circumstances of the work.
(c) The segments of welding shall be such that where possible the members which offer. the greatest resistance to compression are welded first.
1.7. The defective welds which shall be considered harmful to the structural strength shall cut out and rewarded.
1.8. Finished welds and adjacent parts shall be protected with clean boiled linseed oil and after all

stag has been removed. Welds and adjacent parts shall l*o painted after the same are approved.
1.9. All the members shall be thoroughly cleaned of rust-scales, dust etc. and given a priming coat of red lead paint before fixing them in position.
Testing of welding to be added in the specification I.N. 12.2.2.12-(i) to (viii)
2.0. Mode of measurements & payment
2.1. The relevant, specification of item No. 11.2 (I) shall be followed.
2.2. The rate shall be for unit of one quintal

Item-19 Providing and laying in trenches galvanised mild steel tubes (Midium grade) of the following nominal bore, and tube fitting (Earthwork in trenches to be measured and paid for separately)(H) 80mm (upto 10 ton)

1.0. Materials
1.1. Galvanised mild steel lube of specified dia. nominal bore and fittings shall conform to I.S. 1239-1968
2.0. Workmanship
2.1. The relevant specifications of Hem 23.2 (A) shall be followed for cutting laying an j jointing testing ofjoints except that the fixing of tube shall be done in trenches,
2.2. The width and depth of the trenches for different diameters of tht, tubes shall he is under, For 15 to 80 mm. dia tube width of trenches shall be 30 cms. and depth of trenches 60 cms,
2.3. All joints, the trench width, shall be widened where necessary. The work of excavation and refilling shall be done true to line, and gradient in accordance with general specifications of earth work in trenches
2.4. The pipes shall *be* painted with two coats of anti-corrosive bitumastic paint of approved quality. Thepipe shall be laid on a layer of 75 mm. sand filled upto 150 mm. above the pipe of so specified. The remaining portion of trench shall be then filled with excavated earth. The surplus shall be disposed off as directed.
2.5. When the excavation is done in rock the bottom shall be cut deep enough to permit the pipe to be laid and cushion of sand 75 mm. in case of bigger diameter of tube where the pressure is very high thrust block of cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 grade stone aggregates of 20 mm nominal size) shall be constructed on all bends to transmit the hydraulic thrust without impairing the ground and spreading it over a sufficient area if so specified.
3.0. Mode of measurement
3.1. The relevant specifications of item No. 23.2 (A) shall be followed. The authorised quantities shall be
3.2. For purpose of calculating cubic content cross section shall normally be taken at suitable intervals i.e. at manhole of wall chamber intervals except in abnormal cases like sudden change in strata or undulating ground etc., when they may be taken at closer intervals as approved by the Engineer-in charge whose decision shall be final, conclusive and binding

ITEM NO. 20 :-Providing laying and jointing in true line and level 50mm Ø. U.P.V.C. Pipe (SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.
General:
1.1 UNPLASTICIZED PVC PIPES
1.2. The pipe should be given adequate support at all times. Pipes should be stored on a reasonablyflat surface free from stones and sharp projections so that the pipe is supported throughout its length. Instorage, pipe racks should be avoided. Pipe should not be stacked in large piles, especially under warmtemperature conditions as the bottom pipes may distort, thus giving rise to difficulty in jointing. Socketand spigot pipes should be stacked in layers with sockets placed at alternate ends of the stacks to avoidlopsided stacks.
1.3. It is recommended not to store pipe inside another pipe.
1.4. On no account should pipes be stored in a stressed or bent condition or near the sources ofheat.

1.5. Pipes should not be stacked more than 1.5 m high. Pipes of different sizes and classes shouldbe stacked separately.
1.6.The ends of pipe should be protected from abrasion particularly those specially prepared forjointing either spigot or socket solvent welded joints or shouldered for use with couplings.
1.7. In tropical conditions, pipes should be stored in shade. In very cold weather, the impact strengthof PVC is reduced making it brittle and more care in handling shall be exercised in wintry condition.
1.8. If due to unsatisfactory storage of handling a pipe becomes kinked, the damaged portion shouldbe cut out completely. Kinking is likely to occur only on very thin walled pipes.
UNPLASTICISED POLYVINYL CHLORIDE PIPES AND FITTINGS:

1 UPVC Pipes

Pipes shall conform to Type A pipes of IS 13592 and of approved made. The internal and external surfaces of the pipesshallbe smooth and clean and free from grooving and other defects. The end shall be clearly cut andshall be square with the axis of the pipe. The end may be chamfered on the plain sides.Slightshallowlongitudinal grooves or irregularities in the wall thickness shall be permissible provided the wall thicknessremains within the permissible limit.

2 Colour of Pipe

Surface colour of the pipes shall be dark shade of grey or as specified.

3 Marking

Each pipe shall be clearly and indelibly marked with the following information at intervals not morethan 3 meter.
(a) Manufacturer's name or trade mark.
(b) Nominal outside dia. of pipe.
(c) Type 'A'
(d) Batch number.

4 Dimensions

4.1 Diameter and Wall Thickness: Mean outside diameter, outside diameter at any point andwall thickness for type –A manufactured plain or with socket shall be as given in Table- 1 of IS 13592.
UPVC rain water pipes shall be of the dia. specified in the description of the item and shall be innominal lengths of 2,3,4 or 6 metres either plain or with sliding/grooved socket unless shorter lengthsare required at junctions with fittings. Tolerances on specified length shall be + 10 mm and – 0 mm.

5 Fixing and Jointing

Pipes shall be either fixed on face of wall or embedded in masonry as required in the description ofthe item.
Plain pipes shall be secured to the walls at all joints with PVC Pipes clips by means of 50 x 50 x 50 mmhard wood plugs, screwed with M.S. screws of required length i/c cutting brick work and fixing in cementmortar 1:4 (1-cement:4-coarse sand). The clips shall be kept about 25 mm clear off finished face of wall,so as to facilitate cleaning of pipes. Pipes shall be fixed perfectly vertical or to the lines as directed. Thepipes shall be fitted to fittings with seal ring conforming to IS 5382 allowing 10 mm gap for thermalexpansion.

6 Installations in Wall/Concrete

The walls/concrete slots should allow for a stress free installation. Pipes and fittings to be insertedinto the slots without a cement base have to be applied first with a thin coat of PVC solvent cementfollowed by sprinkling of dry sand (medium size). Allow it to dry. The process gives a sound base forcement fixation. This process is repeated while joining PVC material to CI/AC materials.

7 Fittings

Fittings used shall be of the same make as that of the PVC pipes Injection moulded or fabricated bythe manufacturer and shall have a minimum wall thickness of 3.2 mm. The fittings shall be supplied withgroovedsocketted ends with square grooves and provided with Rubber Gasket conforming to IS 5382.The plain ends of the fittings should be chamfered. The fittings shall be joined with the help of Rubberlubricant. The details of fittings refer IS 13592.

8 Measurements
The pipes shall be measured net when fixed correct to acm. excluding all fittings along its length.
9 Rate
The rate shall include the cost of all materials and labour involved in all the operations describedabove including jointing and the supply and fixing of wall plugs and PVC clips.

ItemNo;21: Providing and fixing Gun metal check valve or non return full way wheel valve. a 50 mm dia
Scope :-This Item Covers supply, installation. Testing and commissioning of Gum metal wheel valve with necessary gaskets, hardware etc complete at site
Material : 50 mm Gum Metal wheel shall be as per I.S. Specification
Workmanship : Gum Metal wheel vlaveshall be fixing with necessary, gasket,, rubber&ring and hardware fitting
Mode of management : this rate shall for a unit of each/Nos Basis.
ItemNo:22: Providing, fixing, supplying and installation for any structure with 2 mm G.I. Suspension cable in position. Including for logo, statue or any other items. 2 mm G.I. Suspension cable installationwith J bolt, hooks, nuts, washer and welding complete. 2 mm G.I. Suspension cable anodizeor powder coating as per drawing or engineer in charge.
Material :(1) 2 mm G.I. Suspension cable as per I.S. Specification.
(2) 2 mm G.I. Suspension cable anodize or powder coating as per I.S. Specificationas per drawing or engineer in charge.
(3) J bolt, hooks, nuts, washer etc..are as per I.S. Specification
Workmanship :2 mm G.I. Suspension cable anodize or powder coating completed then cable install with necessary screw, bolt, nut, hooks and welding in proper position as per drawing or engineer in charge this installation including labour and necessary scaffolding completed. This installation for statue, logo, flower pallets or other structure.
Mode of management : This measurement shall be recorded in RMT including necessary scaffolding and welding.

ItemNo:23: Providing, Supplying, Fixing and erecring 6mm thick M.S Plate with CNC machine cut and curving in factory approvedby RUDA for flower palltes Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete.

Material : (1) 6 mm thick Mild steel plates as per I.S. Specification.
(2) 6 mm thickMild steel plates anodize or powder coating as per I.S. Specificationas per drawing or engineer in charge.
(3) J bolt, hooks, nuts, washer etc..are as per I.S. Specification
Workmanship :as per I.S. specification 6 mm thick Mild steel plates take and carving by CNC machine as per drawing or engineer in charge. After carving completed plate anodize or powder coating and transport at site. At site Flower pallets installation by 2 mm G.I. Suspension cable as per drawing.While installation fixing flower pallets with with J bolt, hooks, nuts, washer and welding complete.This installation including labour and necessary required scaffolding etc completed.
Mode of management : This measurement shall be recorded in Eachor Nosincluding necessary scaffolding and welding.

ItemNo;24: Providing, fixing, supplying and installation human Statueson sites carving by CNC Machine in 6 mm thick Mild steel plates and installation with J bolt, hooks, nuts, washer and welding complete. Human Statues are consisting of anodize or powder coating as per drawing or engineer in charge. Human Statues installing at site including required scaffolding and labour etccomplete as per drawing or engineer in charge.

Material : (1) 6 mm thick Mild steel plates as per I.S. Specification.
(2) 6 mm thick Mild steel plates anodize or powder coating as per I.S. Specificationas per drawing or engineer in charge.
(3) J bolt, hooks, nuts, washer etc..are as per I.S. Specification
Workmanship : As per I.S. specification 6 mm thick Mild steel plates take and carving human Statues by CNC machine as per drawing or engineer in charge. After carving completed plate anodize or powder coating transport at site. At site Mild steel plates installation as per drawing. While installation fixing flower pallets with with J bolt, hooks, nuts, washer and welding complete.This installation including labour and necessary required scaffolding etc completed.

Mode of management : This measurement shall be recorded in Each or Nos including necessary scaffolding and welding.

ItemNo;25: Providing, Supplying, Fixing and erecring 6mm thick M.S Plate for RUDA logo in carving or embos Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete with CNC machine cut as per drawing & Design provided by RUDA or its representative.

Material : (1) 6 mm thick Mild steel plates as per I.S. Specification.
(2) 6 mm thick Mild steel plates anodize or powder coating as per I.S. Specificationas per drawing or engineer in charge.
(3) J bolt, hooks, nuts, washer etc..are as per I.S. Specification
Workmanship : As per I.S. specification 6 mm thick Mild steel plates take and carving RUDA logo by CNC Machine or emboss as per drawing or engineer in charge. After carving completed plate anodize or powder coating and transport at site. At site Mild steel plates installation as per drawing. While installation fixing RUDA logo with with J bolt, hooks, nuts, washer and welding complete.This installation including labour and necessary required scaffolding etccompleted.
Mode of management : This measurement shall be recorded in Each or Nos including necessary scaffolding and welding.

ItemNo;26: Providing, Supplying, Fixing and erecring Aluminiam for RUDA logo in S.S - 304 Gr carving or embos Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instructionnecessarry Coating Complete.

Material : (1) Aluminiam sheet or Stailess Steel -304
(2) Aluminiam sheetanodize or powder coating as per I.S. Specificationas per drawing or engineer in charge.
(3) J bolt, hooks, nuts, washer etc..are as per I.S. Specification
Workmanship : As per Aluminiam sheet or Stailess Steel -304 take and carving RUDA logo by CNC Machine or emboss as per drawing or engineer in charge. After carving completed plate anodize or powder coating and transport at site. At site Aluminiam sheet or Stailess Steel -304 installation as per drawing. While installation fixing RUDA logo with with J bolt, hooks, nuts, washer and welding complete. This installation including labour and necessary required scaffolding etc completed.
Mode of management : This measurement shall be recorded in Each or Nos including necessary scaffolding and welding.

Technical Specification For Electric Work

PART- A

મીપ૦ .(૨).મી ડાયા સાઈઝ નો પોલીથીલીનનો ડબલ વોલ .કોરુગેટેડ (DWC) પાઈપ IS 14930 ॥ મુજબ સપ્લાય કામ.

.(૩)આર્મડકોપર ,XLPE, 1.1KV, ISI કેબલ :મેઇક) **ફક્ત સપ્લાય કામ** , (.લેપ/રાવીન /ઓલકેબ/.આઈ.ઈ.કે/કાબેલ.આર.આર/પોલીકેબ/ફિનોલેક્ષ/હેવલ્સ

.(૪)ફ્લેક્ષીબલ કોપર સી ઇન્સ્યુલેટેડ.વી.પી ,, 1.1 KV, ISI માર્ક કેબલ **ફક્ત ,સપ્લાય કામ** :મેઇક) (લેપ/રાવીન /ઓલકેબ/.આઈ.ઈ.કે/કાબેલ.આર.આર/પોલીકેબ/ફિનોલેક્ષ/હેવલ્સ

.(૯)કેબલ લગ્સફક્ત સપ્લાય કામ ,ગ્લાન્ડ/ .આઈ.એમ.એચ ,હેક્ષ ,ડોવેલ્સ -:મેઇક), પોલીકેબ , (વિબીઆઈ ,કોમેટ

.(૧૦)કન્ટ્રોલ પેટીમાં મેઈન સ્વીચ, કોન્ટેકટર, ટાઈમ સ્વીચ, એમવિ .બી.સી.ગેરે ફીટ કરી સંપુર્ણ વાયરીંગ કનેકશન કામ (પ્લાસ્ટીક ચેનલ પટ્ટી સાથે)

PART-B

ક્રમ	આઈટમ	કંપની
૧	**LED** ફિટીંગ કંપલીટ/ સ્પોટલાઈટ/લ્યુમીનર્સલગત / એસેસરીઝ વિગેરે	ક્રોમ્પ્ટન . એસએન્ડ .સી / હેવલ્સ / બજાજ //સુર્યાવીપ્રો/
૩	લેમ્પ	ફીલીપ્સ/ક્રોમ્પ્ટન એન્ડ .સી / હેવલ્સ / લાઈટીંગ .ઈ.જી/ બજાજ/ ઓસરામ/.એસ
૪	મીટર્સ, મેઝરીંગ ઈન્સ્ટ્રુમેન્ટ, કંટ્રોલર અને સ્વીચ ગીયર	મેકો / હેગર / . એસએન્ડ.સી /. ટીએન્ડ .એલ / કેપીટલ / જયપુર / મોટવા / થીબેન / .એલ.પી.એચને / હેવલ્સ / સીમેન્સ / ગેલ્કો / સ્નાઇડર રપસુ / નલીસ્ટે / .એસ.ડી.એમ / /સ્ટાન્ડર્ડ /.બી.બી.એ/એશીયનઈન્ડો/)જીનીયસ/જ્યોતી/.સી.આઈ.જીGENIUS)
૫	જં કશન બોક્ષ લોઝરએન્ક /	સીન્ટેક્ષ/હેન્સલ/એલાઇડ/ફાયબોકસ/સુમીપ
૬	PGVCL ફોર્માલીટી	રૂડા ના કોઇપણ નવા કનેકશન ની અરજીવર્ક કમ્પલીશન ,ટેસ્ટ રીપોર્ટ , કેપેસીટર ,રીપોર્ટ રીપોર્ટની કામગીરી .સંકલન વિ ,. PGVCL મા ભરવાની થતી નિયમાનુસરની ફી રૂડા દ્વારા ચુકવવામા આવશે

BILL OF QUANTITY (BOQ)

Name of Work
CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK) AT JUNCTION ON AIIMS ROAD IN RUDA AREA

RAJKOT URBAN DEVELOPMENT AUTHORITY					
Name of Work :- CONSTRUCTION OF CIRCLE (CIVIL & ELECTRIC WORK) AT JUNCTION OF AIIMS HOSPITAL CONNECTING 30.0M & 90.0M D.P. ROAD IN RUDA AREA					
Sr. No.	**Description of Item**	**Unit**	**Rate**	**Qty.**	**Amount**
	Civil Work				
1	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(B) Dense or Hard soil	CuM	86.86	120.00	10423.20
2	Add extra for Disposing off the excavated stuff of above items for lead of (E) 400 to 500 m	CuM	91.91	120.00	11029.20
3	Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete.	CuM	252.5	150.00	37875.00
4	Providing and laying cement concrete 1:4:8 (1-Cement : 4- coarse sand : 8- crush stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	CuM	1905.87	17.00	32399.79
5	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete.	CuM	4428.85	11.00	48717.35
6	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (B) Walls (Pardi)	CuM	5800	22.00	127600.00
7	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs	CuM	5389.36	13.00	70061.68
8	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Beams	CuM	5561.06	2.00	11122.12
9	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level(Over lap to be provided as per necessity . It will not be measured for payment)	Kg	45.45	5200.00	236340.00
10	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (ii) Cement mortar 1:4	Sqmt	97.47	143.00	13938.21

11	Providing & applying of Natura Texture Coating System made from 100% natural grains and granules and premium acrylic resin, silicon and other additives to bind and protect to external walls, columns etc. of approved made, shade, design & pattern (Groov Finish)Application: (i) 1st coat of primer based on acrylic resin which helps the texture material to bind properly with base coat. (ii) 2nd coat of texture material of natural stone grains and granules which is based on premium acrylic resin, silicon, other additives and preservatives. (iii) 3rd coat is clear coat of acrylic and silicon which provide surface an extra strength and protect against water fall, provide UV resistency as suggested by Architect. (M.R.)	Sqmt	700	143.00	100100.00
12	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismentaling of existing flooring and jointed with color cement slurry including finised with groove @3mm and it shall be fillwith epoxy powder of required shade pointing & cleaning the surface etc. complete for DARK shade	Sqmt	892.84	75.00	66963.00
13	Providing and laying 18mm thick Granite slab in flooring over 20 mm (Average) thick base of cement mortar 1:6 (1-Cement : 6-Coarse sand)and jointed with Epoxy powder of required shade the shade of slab including rubbing and polishing etc. complete as directed by Engineer-in-charge.(Telephone black only)	Sqmt	1982.63	11.00	21808.93
14	Providing and fixing pre-cast Rubber Dye inter locking concrete block 60mm thick with grade of concrete M250 pnumatic compressed by mechanically pressed and as per approved design including 75mm Sand layer for levelling and filling the joint with sand in proper line and level etc complete.	Sqmt	763.63	18.00	13745.00
15	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M250 grade concret as per approved design and including excavation for fixing in proper line and level,filling the joint with C:M 1:3 (1cement:3fine sand) etc complete.	Rmt.	240	4.00	960.00
16	Providing and fixing M.S. grills of required pattern on floor etc. with M.S. flats at required spacings and frame alround, square or round bars with round headed bolts and nuts or by screws (A) Plain Grill.	Kg.	66.05	250.00	16512.50

17	Applying priming coat over new steel and other metel surface after and including preparing the surface by throughly cleaning, oil,grease, dirt and other foreign matter and scoured with brushes fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead.Painting two coats (excluding priming coat) on new steel and other metal surface with synthetic enamel paint, brushing to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.	Sqmt	66.86	40.00	2674.40
18	Steel work, riveted in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of read lead paint with two coat of oilpaint(A) In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins conneted to common rafters and the like. (upto 10 ton)	Kg.	60.86	380.00	23126.80
19	Providing and laying in trenches galvanised mild steel tubes (Midium grade) of the following nominal bore, and tube fitting (Earthwork in trenches to be measured and paid for separately)(H) 80mm (upto 10 ton)	Rmt.	708.01	7.00	4956.07
20	Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	Rmt.	231.39	65.00	15040.35
21	Providing and fixing Gun metal check or non-return fullway wheel valve. 50mm	Each	600	2.00	1200.00
22	Providing, Supplying, Fixing and erecring 2mm diameter G.I Suspension cable with necessary fittings like J.Bolts, Screws, Nuts and washers & colour Etc. Complete. Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete.	Each	970	24.00	23280.00
23	Providing, Supplying, Fixing and erecring 6mm thick M.S Plate with CNC machine cut and curving in factory approvedby RUDA for flower palltes Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete.	Each	28070	8.00	224560.00

24	Providing, Supplying, Fixing and erecring 6mm thick M.S Plate with CNC machine cut and curved in factory approved by RUDA for human statue Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete with CNC machine cut as per drawing & Design provided by RUDA or its representative.	Each	13685	4.00	54740.00
25	Providing, Supplying, Fixing and erecring 6mm thick M.S Plate for RUDA logo in carving or embos Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instruction powder Coating or anodizied Complete with CNC machine cut as per drawing & Design provided by RUDA or its representative.	Each	10000	1.00	10000.00
26	Providing, Supplying, Fixing and erecring Aluminiam for RUDA logo in S.S -304 Gr carving or embos Fixing with necessary fittings like J. Bolt, Nuts, Washers and screws are fitted, Including as per drawing/Engineer incharge instructionnecessarry Coating Complete.	Each	2000	8.00	16000.00
	Electric Work				
	Part-A				
27	ક્યુબીક બોક્ષ CRC શીટ તથા પાવડર કોટીંગ સાથે	પ્રતિ કિગ્રા.	142	10	1420.00
28	DWC પાઈપ, 50 મીમી	પ્રતિ મીટર	110	80	8800.00
29	૦૪ કોર 4.0 સ્કે. મીમી કોપર આર્મડ કેબલ સપ્લાય કામ	પ્રતિ મીટર	304	95	28880.00
30	ફ્લેક્ષીબલ કોપર વાયર, ૩ કોર ૨.૫ સ્કે. મી.મી	પ્રતિ મીટર	44	15	660.00
31	કેબલ માટે ટ્રેન્ચ ખોદાણ ૦.૩ મીટર ઉંડાઇ(મોરમ)	પ્રતિ મીટર	49	80	3920.00
32	કેબલનું લેઇંગ કામ ટ્રેન્ચ/પાઈપમાં	પ્રતિ મીટર	11	95	1045.00
33	રનીંગ અર્થીંગ ગેલ્વે ૮ SWG વાયર થી	પ્રતિ મીટર	10	80	800.00
34	ફિક્ષ્ચર એસેમ્બલીંગ ફિકસિંગ તથા કનેક્શન કરવાનું કામ	પ્રતી નંગ	109	13	1417.00
35	કેબલ કનેક્શન ગ્લાન્ડ સાથે ફીટ કરી સંપૂર્ણ કામ	પ્રતી નંગ	55	16	880.00
36	કંટ્રોલ પેટીનું વાયરીંગ	પ્રતી નંગ	763	1	763.00
37	ફક્ત પાઈપ લેઇંગ કરવાનું કામ	પ્રતિ મીટર	22	80	1760.00
38	બોર ટાઈપ અર્થીંગ	પ્રતિ જોબ	9919	1	9919.00

39	હાઇલેમ શીટ ૧૨ મીમી	પ્રતિ કિગ્રા.	142	4	568.00
	Part-B				
40	15 વોટ(BAJAJ) sopt LED લાઇટ ફીટીંગ MRP-19220.00 - 2883.00 = 16,337.00 (LESS 15 %)	પ્રતી નંગ	16337	13	212381.00
41	ડબલ ચેનલ ટાઈમર L&T MRP-7185.00 - 718.00 = 6462.00 (LESS 10 %)	પ્રતી નંગ	6462	1	6462.00
42	MNX - ૬૦કોન્ટેક્ટર MRP-7360.00 - 736.00 = 6624.00 (LESS 10 %)	પ્રતી નંગ	6624	1	6624.00
43	૬-32 એમ્પી. FP MCB MRP-2180.00 - 218.00 = 1962.00 (LESS 10 %)	પ્રતી નંગ	1962	1	1962.00
44	૬-૩ ૨ amp SP MCB MRP-219.00 -21.00 = 197.00 (LESS 10 %)	પ્રતી નંગ	197	13	2561.00
			Total Amount Rs		1485995.60

I am / we are willing to carry out the above mentioned work at …… % (in figures)
…… (in words)
percentage below /above the rates mentioned in Schedule B as above

Seal & Signature of Contractor:

Dy.Ex.Engineer . Ex.Engineer Director(Projects)

RUDA RUDA RUDA