

Environmental Monitoring Report

Project Number: 43253-027
Semestral Report (July-December 2020)
March 2021

INDIA: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)

Appendices (PART A)

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Annexure 1 - The SOP-H&S Plan for COVID safety

Final H&P Plan

2020

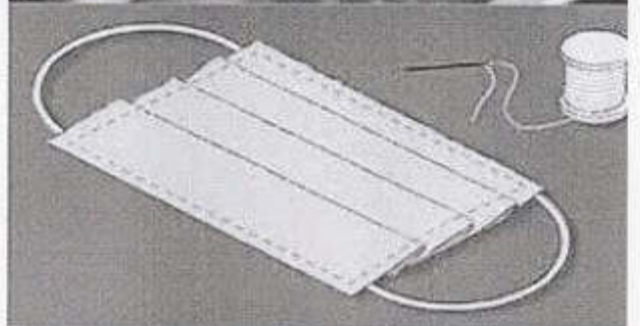
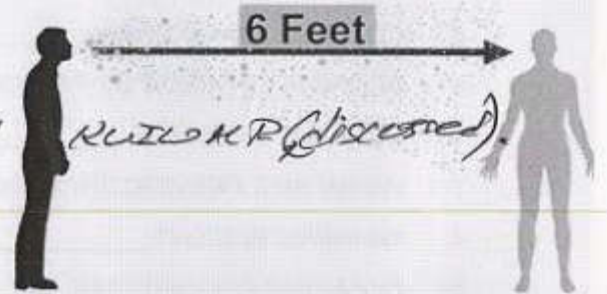
SOP-Health and Safety Plan

STOP the SPREAD of COVID-19

Comments of TM, KUDSHIP, TM
and GH Tech incorporated.

TM, KUDSHIP

[Signature]
7/5/2020



By KUIDFC
May 2020

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1 INTRODUCTION¹

- This document is intended to supplement formal H&S policies, procedures and plans that the contractor/agency has in place for its employees and staff working on KUIDFC projects. Hence, this document is not intended to replace any formalized procedures currently in place for the Contractor. Where this guideline does not meet or exceed the standards put forth by the Contractor, the Contractor shall abide by the most stringent procedure available.
- This approved project specific Health and Safety Plan (H&SP) shall be modified to require that the COVID-19 Officer² at the Contractor's worksite (appointed by Contractor and agreed by PIU) submit a written daily report to the Client's Representative (PIU Head). The COVID-19 Officer shall certify that the Contractor and all subcontractors are in full compliance with these guidelines.
- The COVID-19 officer should be present on site at all times, when the work is on at the premise.
- Any issue of non-compliance with these guidelines shall be a basis for the suspension of work. The Contractor will be required to submit a corrective action plan (on the next day or immediately as per the nature of issue) detailing each issue of non-conformance and a plan to rectify the issue(s). The Contractor will not be allowed to resume work until the plan is approved by the Client (PIU). Any (additional) issues of non-conformance may be subject to action against the Contractor's health & safety/safeguard clauses of the contract.
- Construction sites operating during the Covid-19 pandemic need to ensure that they are protecting their WORKFORCE and minimising the risk of spread of infection.
- This guidance is intended to introduce consistent measures on sites of all sizes in line with the Government's recommendations on social distancing.
- These are exceptional circumstances and the industry must remain abreast of and comply with the latest Government advice on COVID-19 at all times.
- The health and safety requirements of any construction activity must also not be compromised at this time. If an activity cannot be undertaken safely due to a lack of suitably qualified personnel being available or social distancing being implemented, it should not take place.
- It is to be noted that emergency services are also under great pressure and may not be in a position to respond as quickly as usual.
- Sites should remind the workforce at every opportunity of the Worksite Procedures which are aimed at protecting them, their colleagues, their families and the Karnataka population.

If a worksite is not consistently implementing the measures in this document, it may be required to shut down, till corrective measures are implemented and approved by employer.

¹ This document may be made available in the local language, and the salient features would be displayed through signages at the appropriate locations throughout work sites and stretches by the Contractor for wider dissemination and awareness.

² The existing safeguards officer OR health & safety officer OR supervisor of the contractor OR PMC-team member can be designated as COVID-19 officer by undergoing the training available at

(a) <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/training/online-training>

(b) <https://openwho.org/courses/eprotect-acute-respiratory-infections>

(c) <https://openwho.org/courses/COVID-19-IPC-EN>

2 PRINCIPLES OF WORKER PROTECTION

- Consistently practice social distancing
- Cover coughs and sneezes
- Maintain hand hygiene
- Clean surfaces frequently

3 MAXIMUM PRECAUTION FOR PERSONS/LABOURERS REPORTING TO WORK

- IF SICK, STAY HOME!
- IF SICK, GO HOME!
- IF SOMEONE SICK, SEND THEM HOME AND REPORT TO COVID OFFICER !

Contractor to provide face masks (of the type approved by Government for use to protect persons from COVID-19) to all persons working in or visiting the worksite. This along with procedures set out in this document is for maximum precaution to protect all persons/labourers at all times.

4 COVID-19 TYPICAL SYMPTOMS

- Fever
- Cough
- Shortness of Breath
- Sore Throat

All persons at the worksite should have their temperature screened by COVID-19 officer with Infrared Thermometer daily before start of work (handheld non-contact), twice a day (both morning and evening)

5 SELF-ATTESTATION BY PERSONS/LABOUR PRIOR TO WORK

Prior to starting a work (on daily basis), each labour /worker will self-attest to the supervisor:

- no signs of COVID-19 symptoms within the past 24 hours.
- No contact with an individual diagnosed with COVID-19. (contact means living with a positive person, being within 6 ft of positive person OR sharing things of positive person)
- Not undergone quarantine or isolation (in case of any labourer /worker who has been quarantined or isolated previously, the engagement shall be only after obtaining the requisite clearance)

The engagement of workers falling in the high-risk category such as workers over the age of 55 years, with underlying medical conditions or health issues, etc. should be done only after obtaining the requisite clearance from trained and registered medical practitioners.

The self-attestation would be verified in collaboration with trained and registered medical practitioners deployed at site through discussions with laborers /workers and/or preliminary checks such as temperature checks, etc. prior to their engagement at site.

In addition, the Contractor shall mandatorily follow all medical test requirements for the workers prior to their engagement and/or mobilization at site as per the guidelines issued by the Central and State government agencies and WHO from time to time.

Persons/Labourers showing COVID-19 symptoms or not providing self-attestation shall be directed to leave the work site and transported to/report to the fever clinic/quarantine centre immediately, at the cost of contractor. Labour not to return to the work site until cleared by fever clinic/quarantine centre.

6 GENERAL DIRECTION

- No handshake, Only Namaste
- Non-essential physical work that requires close contact between workers should not be carried out
- Work requiring physical contact should not be carried out. Scope for automation/mechanisation shall be explored in such cases
- Plan all other work to avoid contact between workers and/or ensure social distancing
- Wash hands often (every 1-2 hrs or as frequently as possible) with soap for at least 20 seconds
- Use hand sanitizer
- No person should enter the work site other than the authorized persons mentioned by supervisor during start of work
- Everyone at work site should practice social distancing by maintaining a minimum distance of 6-feet from others³ at all times to eliminate the potential of cross contamination.
- Avoid face to face meetings – critical situations requiring in-person discussion must follow social distancing i.e., 6 ft from others.
- Conduct all meetings via conference calls/video, if possible. Do not convene meetings of more than 10 people. Recommend use of cell phones, texting, web meeting sites and conference calls for project discussion
- All individual work group meetings/ talks should follow social distancing
- At each job briefing /toolbox talk, employees are to be asked if they are experiencing any symptoms, and are sent home if they reply in positive
- Each worksite should display laminated COVID-19 safety guidelines and handwashing instructions at suitable locations
- All restroom /toilet facilities should be cleaned (min twice a day), and handwashing facility must be provided with soap, hand sanitizer and paper towels
- All surfaces should be regularly cleaned, including mobiles, tabletops /surfaces, door handles, laptops, records, etc.
- All common areas and meeting areas are to be regularly cleaned (min twice a day) and disinfected at least twice a day
- All persons to maintain their own water bottle, and should not be shared.
- To avoid external contamination, it is recommended everyone bring food from home
- Please maintain Social Distancing separation during breaks and lunch.
- Cover coughing or sneezing with a tissue, then throw the tissue in the trash and wash hands, if no tissue is available then cough /sneeze into your upper sleeves or elbow. Do not cough or sneeze into your hands.
- Clean your hands after coughing or sneezing thoroughly by using soap and water (minimum for 20 seconds). If soap and water are not available, please use a hand sanitizer. The Contractor shall ensure adequate quantities of sanitizer and soap are

³ Social distancing may not be practical for undertaking certain specific activities within the workplace. It is therefore important to review the work method statements for these types of activities to assess impact and how to find safe ways of doing in line with best available guidance.

made available at all locations including site offices, meeting rooms, corridors, washrooms /toilets, etc. as appropriate.

- Avoid touching eyes, nose, and mouth with your hands
- To avoid sharing germs, please clean up after Yourself. DO NOT make others responsible for moving, unpacking and packing up your personal belongings
- If you or a family member is feeling ill, stay home!⁴
- Work schedules are adjusted to provide time for proper cleaning and disinfecting as required.
- Ensure separate disposal of used masks/used hand tissues, etc.

7 WORK-SITE PREVENTION PRACTICES

- At the start of each shift, confirm with all employees that they are healthy and inform all workers of reusable and disposable PPE.
- Outside person(s) should be strictly prohibited at worksite
- All construction workers will be required to wear cut-resistant gloves or the equivalent.
- Use of eye protection (reusable safety goggles/face shields) is recommended. The supply of eye protection equipment to the workers is considered as a standard part of PPE during construction works.
- In work conditions where required **social distancing is impossible** to achieve, such employees shall be supplied with standard face mask, gloves, and eye protection.
- All employees shall drive to work site in a single occupant vehicle. Staff shall not ride together in the same vehicle
- When entering a machine or vehicle which you are not sure whether you were the last person to enter, make sure that you wipe down the interior and door handles with disinfectant (with 1% sodium hypochlorite solution daily) prior to entry. Adequate quantity of the disinfectant shall be provided by the Contractor at all such site-specific locations.
- Workers should maintain separation of 6' from each other.
- Multi person activities will be limited where feasible (two persons lifting activities)
- Gathering places on the site such as sheds and/or break areas will be eliminated, and instead small break areas will be used with seating limited to ensure social distancing.
- Contact the cleaning person of the worksite and ensure proper COVID-19 sanitation processes. Increase cleaning/disinfection visits to at least 2 times a day. Cleaning person(s) to be provided with gloves, gown and face mask for each cycle of cleaning. The Contractor shall make available adequate supply of PPE and chemicals while the threat of COVID-19 continues.
- Clean all high contact surfaces a minimum of twice a day in order to minimize the spread of germs in areas that people touch frequently. This includes but is not limited to desks, laptops and vehicles
- All employees to maintain good health by getting adequate sleep; eating a balanced, healthy diet, avoid alcohol/tobacco; and consume plenty of fluids.
- Continuation of works in construction project with workers available on site and no workers to be brought in from outside, without prior approval of Deputy Commissioner of originating and destination locations.

⁴ The workers with no sick-leave would be supported with additional leave while affected by COVID-19 by the Contractor. The workers who have to stay home because of COVID19 affected family member(s), the Contractor shall pay for the days for staying away from the work.

- The site offices shall have adequate ventilation. The air conditioning or ventilation systems installed at the site offices would have high-efficiency air filters to reduce the risk of infection. The frequency of air changes may be increased for areas where close personal proximity cannot be fully prevented such as control rooms, elevators, waiting rooms, etc.
- The Contractor shall carry out contactless temperature checks for the workers prior to site entrance, during working hours and after site works to identify persons showing signs of being unwell with the COVID-19 symptoms

8 WASHING FACILITY

- All worksites should have access to toilet and hand washing facility.
- Providing hand cleaning facilities at entrances and exits. There should be soap and water wherever possible or hand sanitiser if water is not available
- Washing facility with hot water, and soap at fire hydrants or other water sources to be used for frequent handwashing for all onsite employees
- All onsite workers must help to maintain and keep stations clean
- If a worker notices soap or towels are running low or out, immediately notify supervisors. Proactively supervisor should make sure shortage situation never occurs.
- Garbage bins to be placed next to the hand wash facility for discarding of used tissues/towels with regular removal and disposal facility (end of each day)

9 CLEANING PROCEDURES

Increase cleaning/disinfection visits to at least 2 times a day. Cleaning person(s) to be provided with gloves, gown and face mask for each cycle of cleaning.

Each worksite should have enhanced cleaning and disinfection procedures that are posted and shared including sheds, gates, equipment, vehicles, etc. and shall be posted at all entry points to the sites, and throughout the project site. These include common areas and high touch points like

- Taps and washing facilities
- Toilet flush and seats
- Door handles and push plates
- Handrails on staircases and corridors
- Lift and hoist controls
- Machinery and equipment controls
- Food preparation and eating surfaces
- Telephone equipment / mobiles
- Keyboards, photocopiers and other office equipment

Re-usable PPE should be thoroughly cleaned after use and not shared between workers

10 LABOUR CAMP

Contractor shall follow a zero-tolerance policy on wearing of masks.

Masks (homemade⁵ can be thought of) to be provided to all the persons/labourers for use at the camp site as well as at the worksite. Increase cleaning/disinfection visits to at least 2 times

⁵ Advisory on use of Homemade Protective Cover for Face & Mouth by GOI

a day. Cleaning person(s) to be provided with disposable gloves, gown and face mask for each cycle of cleaning.

10.1 Toilet Facility

- Restrict the number of people using toilet facility at any one time e.g. appoint one welfare attendant among the labours.
- Wash hands before and after using the facilities
- Enhance the cleaning regimes for toilet facilities particularly door handles, locks and the toilet flush
- Portable toilets should be avoided wherever possible, but where in use these should be cleaned and emptied more frequently
- Provide suitable and sufficient rubbish bins for hand towels with regular removal and disposal.

10.2 Eating/snacks Arrangements

- With eateries having been closed (restricted) across Karnataka, providing permanent (till society is safe from COVID-19) on-camp/off-camp cook/helpers can be implemented. Make sure that the "Guidelines for food handling, preparation and distribution during COVID-19" and its regular updates are being followed.
- Whilst there is a requirement for construction camps to provide a means of heating food and making hot water, these are exceptional circumstances and where it is not possible to introduce a means of keeping equipment clean between use, etc. must be removed from use.
- Contractor to arrange all daily need items and grocery at site itself and no worker is allowed to go to shops for daily need items.
- Dedicated eating areas should be identified on camp to reduce food waste and contamination
- Break times should be staggered to reduce congestion and contact at all times
- Hand cleaning facilities or hand sanitiser should be available at the entrance of any room where people eat and should be used by workers when entering and leaving the area
- Workers should sit 2 metres apart from each other whilst eating and avoid all contact
- Where catering is provided on camp, it should provide pre-prepared and wrapped food only
 - Payments should be taken by contactless options wherever possible
 - Crockery, eating utensils, cups etc. should be avoided wherever possible
- Drinking water should be provided with enhanced cleaning measures of the tap mechanism introduced
- Tables should be cleaned between each use
- All rubbish should be put straight in the bin and not left for someone else to clear up; only covered pedal operated bins should be used and the bins should be cleared and cleaned regularly, with strict adherence to safety protocols for disposal and hygiene maintenance (including proper PPE's such as gloves, mask and apron worn by the waste handler/cleaner and disposal at a designated place);
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, etc.

10.3 Changing Facilities, Showers and Drying Areas

- Introduce staggered start and finish times to reduce congestion and contact at all times
- Introduce enhanced cleaning of all facilities throughout the day and at the end of each day

- Consider increasing the number or size of facilities available on camp if possible
- Based on the size of each facility, determine how many people can use it at any one time to maintain a distance of two metres
- Provide suitable and sufficient garbage bins in these areas with regular removal and disposal.
- Visitor log should be strictly maintained that the labour camp.

COVID-19 officer will ensure compliance with prevention issues at the labour camp(s).

11 UPDATES ON COVID-19

The Contractor shall be in touch with the Department of Health & Family Welfare and Labour Department to identify any potential worksite exposures relating to COVID-19, including:

- Strictly follow the guidelines issues by Ministry of health and OSHA
- Other workers, vendors, inspectors, or visitors to the worksite with close contact to the individual
- Labour Camps / Work areas such as designated workstations or rooms /sheds
- Work tools and equipment
- Common areas such as break rooms, tables and sanitary facilities
- Take up insitu health check up camps

Also refer the following websites from time to time for regular updates.

<https://www.mohfw.gov.in/>

<https://karunadu.karnataka.gov.in/hfw/Pages/home.aspx>

This document can be updated from time to time based on the advisories or directions of the Govt.

12 TRAINING

- RPMU/PIU to ensure all workers get training on above requirements before start of any construction activity
- During construction period frequent visual and verbal reminders to workers can improve compliance with hand hygiene practices and thus reduce rates of infection. Handwashing posters should also be displayed at work site and labour camps

13 EMERGENCY CONTACT

- Provide emergency contact number(s) at work site and labour camp for reporting COVID-19 symptoms

Ensure all staff and personal use enrol and use the Aarogya Setu app, recommended by GOI for tracking COVID-19 patients.


N. SRINIVAS
General Manager (Technical)
K.U.I.D.F.C Limited
Govt. of Karnataka Undertaking
Bangalore - 560 038.


Managing Director
K.U.I.D.F.C. Bangalore

**Annexure 2 - Mangalore UGD Statutory
permission from National Highways Authority for
road cutting**



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport & Highways)

परियोजना कार्यान्वयन इकाई-मंगलूर Project Implementation Unit - Mangalore.

डोर नं. 3-29, 'बेथेल', थारेथोटा, पंपवेल के पास (NH.66), मंगलूर - 575002.

Door No. 3-29, "Bethel", Tharethota, Near Pumpwell (NH.66). Mangalore - 575002.

टेलिफोन / Telephone : 91-824-4264499

टेलिफैक्स / Telefax : 91-824-4254499

ई-मेल / e-mail: man@nhai.org



BHARATMALA
ROAD TO PROSPERITY



भारतमाला
प्रगति के राह पर

No. 11013/2/2004/PIU(Mnglr) 750

17th March, 2020

To
The Commissioner,
Mangalore City Corporation,
Lalbagh,
Mangalore.



Sub: Proposal for laying sewer pumping main of 1100mm dia DI K9 class pipe at Kuntikana service road from Km.371.485 to Km.372.325 on LHS for a length of 480m with 1 no. of crossing on NH-66.

Ref: 1) NHAI R.O. B'lore letter no. NHAI/RO-BNG/15021/8/2020/4963 Dt.25.02.2020
2) Your letter no. MCC/MNG/KUIDFC/Pumping main/2017-18/632 Dt.05.01.2019
3) Your letter no. MCC/MNG/KUIDFC/Pumping main/2017-18/2008 Dt.16.03.2019

Sir,

With reference to the above, the Competent Authority of NHAI R.O. Bangalore has conveyed approval for laying sewer pumping main of 1100mm dia DI K9 class pipe at Kuntikana service road from Km.371.485 to Km.372.325 on LHS for a length of 480m with 1 no. of crossing on NH-66.

2. The above approval is subject to following conditions:

- NHAI has a right to terminate the permission as and when required by NHAI.
- In no case deviation from the approved plan of route of laying of pipeline cable shall be permitted.
- License shall obtain respective permissions from all other concerned Depts. like Fire, Explosives, Environmental / Pollution Control / Police etc., as applicable. State / Central & NHAI shall in no case be responsible for any of the accidents caused due to any of the direct, indirect or consequential reasons and the license shall indemnify damages caused due to such accidents by procuring proper insurance from the reputed insurance companies.

3. In view of the above, you are requested to complete the work within stipulated period adhering with the conditions laid down in the Agreement and to execute the work in the relevant chainages duly following MoRT&H/NHAI latest guidelines under intimation to this office. A copy Agreement is herewith enclosed for kind perusal.

Thanking you,

Yours faithfully,

(Shishu Mohan)

DGM(T)& Project Director

Encl: as above

EE
✓ 18/3

Letter sent to agency on 18/3/2020. Outward No. 1129.

**Annexure 3 - Labour license under The Contract
Labour (Regulation & Abolition) Act, 1970**



GOVERNMENT OF KARNATAKA
DEPARTMENT OF LABOUR

Licence No : ALC-MNG/CLA/C-100023295/2018-19

Registration No: RGN/CLA/MNG-202/2000-01

Assistant Labour
Commissioner, Mangalore
Division, Mangaluru
Prakruthi Commercial
Complex 2nd Floor, Opp.
Bharath Beedi Works Pvt
Ltd., Kadri road,
Mangalore-575003

Licence No: ALC-MNG/CLA/C-100023295/2018-19

Licence Date: Dec. 5 2018

FORM-VI

[See Rule25(1)]

1. Licence is hereby granted to DRS INFRATECH PVT LTD, I-N-6-454/5, DADDALKAD, NEAR INFOSYS, URWASTORE, ASHOKNAGAR, MANGALORE, 575006 Under Section 12 [1] of the Contract Labour [Regulation and Abolition] Act-1970, subject to the conditions specified in annexure.

2. This Licence is for doing the work UGD WORKS in the establishment of Commissioner, City Corporation Of Mangalore, Lalbagh, Mangalore

3. The Licence shall remain in force till : 06/06/2021

Renewal
[Rule 29]

Sl no.	Date of Licence	Renewal	Date of expiry	Fee paid for Licence Renewal	Next Date of expiry
1	06-08-2020		06-06-2020	LICENCE FEE:1500. PENALTY:375	06/06/2021

Please, verify authenticity of by visiting
www.labouronline.kar.nic.in & entering certificate Number

Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE
Assistant Labour Commissioner
Mangalore Division, Mangaluru

The license is subject to the following conditions:-

1. The license shall be non-transferable.
2. The number of workmen employed as contract labour in the establishment shall not, on any day, exceeds **30 workers**.
3. Expect as provided in the rules and fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable
4. The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed for the schedule of employment under the Minimum Wages Act, 1948, where applicable and where the rates have been fixed by agreement settlement or award, not less than the rates, fixed.
5. In cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the Principal Employer of the Establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of contractor shall be the same as applicable to the workmen directly employed by the Principal Employer of the Establishment on the same or similar kind of work; provided that in the case of disagreement with regards to the type of work the same shall be decided by the Commissioner of Labour whose decision shall be final.
6. In other cases the wage rates, holidays, hours of work and conditions of service of the workmen of the contractor shall be such as may be specified in this behalf by the Commissioner of Labour.
7. In every establishment where 20 or more women are ordinarily employed as contract labour shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One of such rooms would be used as play room for the children and the other as bed room for the children. For this purpose the contract shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the sleeping in this behalf by the Commissioner of Labour.
8. The licenses shall notify any change in the number of workmen or the conditions of work to the licensing officer.
9. A copy of license shall be displayed prominently at the premises where the contract work is being carried on.
10. The contract labourers shall be provided the lunch/dinner, coffee/tea and breakfast, snacks free of cost during the working hours, if such facilities are extended to regular workmen employed by the principal employer.
11. The contract labourers shall be paid the minimum wages fixed under the minimum wages act.
12. The contract labourers shall be paid with the same rate of Bonus and Ex-gratia payable to the regular workmen employed by the principal employer.
13. The contract labourers shall be provided with free uniforms and shoes, with such facilities are extended to the regular workmen employed by the principal employer.
14. Employment of Child Labour below 14 years is prohibited.

Assistant Labour Commissioner

MANGALORE DIVISION, MANGALORE

Assistant Labour Commissioner

MANGALORE DIVISION, MANGALORE

Annexure 4 - Mangalore UGD Labour compensation insurance



POLICY SCHEDULE FOR EMPLOYEES COMPENSATION INSURANCE

Insured's Name	: THE COMMISSIONER	Issuing Office Details	
Insured's Details		Office Code	: BEGUMPET DO (611900)
Customer ID	: PO57175862	Address	: #6-3-862/A/B, 2ND FLOOR, LAL BUNGLOW, GREENLANDS, AMEERPET, 500016
Address	: MANGALORE CITY CORPORATION, LALBAGH, MG ROAD, MANGALORE - 575003, 575003 MANGALORE, KARNATAKA, 575003	Phone No	: 04023413936 / 04066616201
Phone No	: 6302539118	E-mail/Fax	: nia.611900@newindia.co.in / 04023413935
E-mail/Fax	: drsinfratech@gmail.com, /	S.Tax Regn. No	: AAACN4165CST178
PAN No	: AACCD5271F	GSTIN	: 36AAACN4165C3ZQ
GSTIN/UID	: 29AACCD5271F1ZO / NA	SAC	: 997139 (Other non-life insurance services excl RI)

Policy Details			
Policy Number	: 61190036200100000096	Business Source Code	: DIRECT BUSINESS - (1D4023698)
Period of Insurance	: From: 20/02/2021 12:00:01 AM To: 19/08/2021 11:59:59 PM	Dev.Off level./Broker/Corp. Agent/Web Aggregator	: RAMESH VENKAT RAO K (NIA1D4021469) AGENT_SITE_50309 (1D4026447)
Date of Proposal	: 20-Feb-21	Phone No	: 8019506470 / NA
Prev. Policy no.	: 61190036190100000143	E-mail/Fax	: rameshkr Rao63@gmail.com, / /
Client Type	: Non-Corporate		

Premium(₹)	GST(₹)	Total (₹)	Total (₹ In words)	Receipt No. & Date
52684	9483	62167	RUPEES SIXTY-TWO THOUSAND ONE HUNDRED SIXTY-SEVEN ONLY	6119008120000000756 9 - 09/02/21

Details of Employees with monthly wages upto ₹ 15000:

Categories	Sub Categories	No of Employee	Cash Total Wages
Sewer and Road Contractors	40 Unskilled workers with wages @₹15000/- per month.	40	7200000

Details of Employees with monthly wages above ₹ 15000:

Categories	Sub Categories	No of Employee	Cash Total Wages
Sewer and Road Contractors	10 skilled workers with wages @₹25000 per month	10	3000000
Sewer and Road Contractors	10 semi skilled workers with wages @₹20000 per month	10	2400000
Trade Description	Particular of Works	Location Details	Included All Sub-Contractors

Validity unknown
Digitally signed by Srinivasan
Validated on 09/02/2021
17:31:48

Policy No. : 61190036200100000096 Document generated by 16176 at 09/02/2021 17:31:48 Hours.

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415.



रेवेन्यू स्टॉप ड्यूटी अदा की गई है।
CONSOLIDATED REVENUE
STAMP DUTY PAID
Procs. No.GSO5/2173/R/2019,
Dated 25-03-2019



Replacement of Old Sewerage pumping mains and rehabilitation of sewerage system for Mangalore city 02MNG02 including drilling and blasting.	Replacement of Old Sewerage pumping mains and rehabilitation of sewerage system for Mangalore city 02MNG02 including drilling and blasting.	Replacement of Old Sewerage pumping mains and rehabilitation of sewerage system for Mangalore city 02MNG02. Contractor: DRS INFRATECH PVT. LTD., DOOR No.: 1-N-6-454/5V, DADDAL KAD, NEAR INFOSYS, URWASTORE, PO ST ASHOKNAGAR, MANGALO RE-575006	No
---	---	---	----

Contractor/Sub-Contractor Details:

Contractor/Sub-Contractor Details:							
Serial No	Name of Contractor	Description	Categorie	No. of Workers			Amount Wages
				Skilled	Unskilled	Others	

Extensions under the Policy Cover

Name of the Extension	Sub Limit of the Extension	Deductibles of the Extension
Special Conditions	AS PER STANDARD WC ACT.	
	NA	
Special Exclusions	NA	
Special Excess/Deductible	NA	
The Policy shall be subject to EMPLOYEES COMPENSATION INSURANCE Policy clauses attached herewith.		
Clauses	Description	

Premium and GST Details

	Rate of Tax	Amount in INR
Premium		₹ 52684.00
SGST	0	0
CGST	0	0
IGST	18	9483

In witness whereof the undersigned being duly authorised by the Insurers and on behalf of the Insurers has (have) hereunder set his (their) hand(s) on this 09th day of February, 2021.

For and on behalf of

The New India Assurance Company Limited

Date of issue: 09/02/2021

Duly Constituted Attorney(s)

Stamp Duty under the Policy is ₹1

Mudrank _____ Dt. _____ consolidated Stamp Fees Paid by Pay Order Number _____ vide receipt number _____ dt. _____

Tax Invoice No : 61190020E0017648

IRDA Registration Number: 190



COLLECTION RECEIPT CUM ADJUSTMENT VOUCHER

Issuing Office : BEGUMPET DO (611900)
Address : #6-3-862/A/B, 2ND FLOOR, LAL BUNGLOW, GREENLANDS, AMEERPET
500016
Hyderabad
Phone : 04023413936
Email : nia.611900@newindia.co.in
Fax : 04023413935
Collection Number : 61190081200000007569
Collection Date : 09/02/2021
Business Source Code : 1D4023698
PAN No of Payer : AACCD5271F

Received with thanks from THE COMMISSIONER.

The amount received/Adjusted is towards -

Policy No.	A/C Description	Amount ₹	A/C Code	Sub A/C Code
61190036200100000096	Bank-611900	62166.00	9100.611900	BA00004716-611900-9100
61190036200100000096	Bank-611900	1.00	9100.611900	BA00004716-611900-9100

Total = ₹ 62167.00

Your Payment/Adjustment Details are as under -

Mode	Amount ₹	Cheque No.	Cheque Date	Drawee Bank	Drawee Branch	Reference No.	Scroll/BG/A PD Balance
Cheque	62166.00	259962	09-FEB-21	KARNATAKA BANK	HYDERABAD	6119002010030371	N.A.
Cash	1.00	N.A.	N.A.	N.A.	N.A.	6119002010030371	N.A.

Total = ₹ 62167.00

Utilization details of the Collected Amount :

Premium	GST	Stamp Duty	Excess Amount
52684.00	9483.00	0.00	0
Sl no.	Agency Code	Agency Name	Department Code
1	NIA1D4021469	RAMESH VENKAT RAO K	36

For The New India Assurance Company Limited

Revenue Stamp



Date of Issue: 09/02/2021

Cashier's Initial

Authorized Signatory

Note -

- Please note the Policy Number, Collection Number and date in all future correspondence. This Receipt is subject to Realisation of Cheque.
- NIA shall not be liable for any claim arising out of sales made during the period between the due date and date of payment of the installment if the premium paid has been exhausted by turnover declarations/If there is insufficient premium balance.

Tax Invoice No : 61190020E0017648

IRDA Registration Number: 190



Policy No. : 61190036200100000096 Document generated by 16176 at 09/02/2021 17:31:48 Hours.

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415.

Annexure 5 - Mangalore UGD Contractor All Risk Policy



CONTRACTOR'S ALL RISKS INSURANCE POLICY

Insured's Name	: THE COMMISSIONER		
Insured's Details		Issuing Office Details	
Customer ID	: PO57175862	Office Code	: HYDERABAD LCBO 960000 (960000)
Address	: MANGALORE CITY CORPORATION, LALBAGH, MG ROAD, MANGALORE - 575003. 575003 MANGALORE ,KARNATAKA, 575003	Address	: LARGE CORPORATE AND BROKERS OFFICE, 7C,7TH FLOOR, SURYA TOWERS, S.P.ROAD, SECUNDERABAD 500003
Phone No	: 6302539118	Phone No	: 4027810302
E-mail/Fax	: drsinfratech@gmail.com, /	E-mail/Fax	: nia.960000@newindia.co.in /
PAN No	: AACCD5271F	S.Tax Regn. No	: AAACN4165CST178
GSTIN/UID	: 29AACCD5271F1ZO / NA	GSTIN	: 36AAACN4165C3ZQ
		SAC	: 997139 (Other non-life insurance services excl RI)

Policy Details			
Policy Number	: 96000044200300000104	Business Source Code	
Period of Insurance	: From:05/02/2021 12:00:01 AM To: 04/08/2021 11:59:59 PM	Dev.Off. level/Broker/Corp. Agent	: SAFEWAY INS. BROKERS PVT. LTD. - (DM2099276) SAFEWAY INS. BROKERS PVT. LTD. (SI00018407) SAFEWAY INS. BROKERS PVT. LTD. (SI00018407) SAFEWAY INS. BROKERS PVT. LTD. (SI00018407)
Date of Proposal	: 05-Feb-21	Agent/Bancassurance/CPS C User	:
Prev. Policy no.	: 96000044170300000066	Phone No	: (011)35418585, / NA
Client Type	: Non-Corporate	E-mail/Fax	: ijsingh@safewayinsurance.co.in, safewayinsurance@hotmail.com / /

Premium	GST	Total	Receipt No. & Date:
295999	53280	349280	96000081200000005452 - 04/02/21

* Premium subject to adjustment on completion of the Project

Location of Contract site	Risk Address : 1 Replacement of Old Sewerage pumping mains and rehabilitation of, sewerage system for Mangalore city 02MNG02., MANGALORE, KARNATAKA, INDIA, 575003
---------------------------	---

Principal(s)/ Contractor/ sub-contractor Details		
Sl. No.	Name	Address
1	DRS INFRATECH PVT. LTD.	FLAT NO.: S1, PRIYA APARTMENTS, RAJBHAVAN ROAD, SOMAJIGUDA, HYDERABAD - 500082

Sl. No.	Description of Contract Works
1	1) Replacement of Old Sewerage pumping mains and rehabilitation of sewerage system for Mangalore city 02MNG02 including drilling and blasting.Contract:DRS INFRATECH PVT.LTD.,Flat No.:S1,Priya Apartments,RajBhavan Road,Somajiguda,Hyd- 500082. 2) Coverages:EQ,STFI,Escalation 10cr,Debris Removal 10cr,CLAIMS ARISING OUT OF INGRESS OF WATER AND SILT DUE TO INSURED PERIL IS COVERED UPTO 1% OF SUM INSURED,DEWATERING AND DESILTING DUE TO INSURED PERIL covered upto 1 CR. 3) TPL with Cross Liability 10cr(No limit on incidents),CPM 25Lakhs,Owners Surrounding property 10cr.NKORL will be paid from 08.01.2018 to 04.02.2018.

Sl. No.	Period of Insurance
1	Period of Insurance From : 05/02/2021 12:00:01 AM To : 04/08/2021 11:59:59 PM plus 0 months maintenance period

Section I - Material Damage :

1. 1. Contract works (Permanent and Temporary works including all materials to be incorporated therein)

Sl. No.	1.1) Contract price	1.2) Materials or items supplied by the Principal	2) Any other works and installations not included in 1.1 and 1.2 above (e.g. camp, colony, stores etc. as per list enclosed)	Total Project Sum Insured
---------	----------------------	---	--	---------------------------

Signature Not
Verified
Digitally signed
by Srinivasan
Valdeswaran
Date: 2021.02.04
18:25:59 +05'30'IST



Sl. No.	1.1) Contract price	1.2) Materials or items supplied by the Principal	2) Any other works and installations not included in 1.1 and 1.2 above (e.g. camp, colony, stores etc. as per list enclosed)	Total Project Sum Insured
1	₹1000000000	₹0	₹0	₹1000000000

3. Contractors Plant and Machinery (Memo 4) as per list enclosed

Item No.	Quantity	Description of Items (Type, Manufacture, Capacity)	Year of Manufacture	Sum Insured (In ₹)	Risk Code	Excess due to AOG Perils	Excess due to Other than AOG Perils	Excess for Boom Section
1	0	NA	1990	2500000	PROJECT-Project	0	0	20% of claim amount subject to minimum of ₹0/-

4. Add on Covers

1. Owners Surrounding Property

Sl. No.	Limit of Indemnity	Excess
1	100000000	Policy Excess

2. Additional Custom Duty

Sl.	No. Limit of Indemnity	Excess
1	₹ 0	5 % of Additional Duty

3. Removal of Debris per occurrence

Sl.	No. Limit of Indemnity	Excess
1	₹ 100000000	Policy Excess

4. Professional Fees

Sl.	No. Limit of Indemnity	Excess
1	₹ 0	Policy Excess

5. Expediting Cost including Air Freight & Express Freight

Sl.	No. Limit of Indemnity	Excess
1	₹	Policy Excess

6. Offsite Storage/ Fabrication

Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

7a. On Increased Replacement Value which may have to be paid on replacement of Item 1.1

Sl. No.	Limit of Indemnity	Excess
1	₹100000000	Policy Excess

7b. On Increased Replacement Value which may have to be paid on replacement of Item 1.2

Sl. No.	Limit of Indemnity	Excess
1	₹0	Policy Excess

7c. On Increased Replacement Value which may have to be paid on replacement of Item 1.3

Sl. No.	Limit of Indemnity	Excess
1	₹0	Policy Excess

8. Automatic Reinstatement clause

Sl. No.	Limit of Indemnity	Excess
1	0	Policy Excess

9. Loss minimisation expenses

Sl. No.	Limit of Indemnity	Excess
---------	--------------------	--------



Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

10. Cover for valuable documents

Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

11. Design Defect Cover

Sl. No.	Limit of Indemnity	Excess
1	₹DE-3 of Munich Re	5 times Policy Excess

Section II - Third Party Liability :

Sl. No.	Limit of indemnity in respect of any one accident or series of accidents arising out of one event	Total limit of Section II during policy period	Any One Person
---------	---	--	----------------

Excesses for Section I and II :

Sl. No.	1. For Storage & Construction claims	2. For Maintenance period claims	3. For Major peril claims as per Memo 8 of Section I	Terrorism Claims
1	5% of Claim Amount subject to Minimum of ₹ 15000 each claim	5% of Claim Amount subject to Minimum of ₹ 50000 each claim	5% of Claim Amount subject to Minimum of ₹ 50000 each claim	0.5 % of Total Sum Insured subject to minimum of ₹ 1,00,000/- for each and every claim

Excesses For Specific AddOn Covers :

Sl. No.	Description Of Cover	Excess
1	Third Party Liability with Cross Liability. No limit on incidents.	Normal 5% of claim amount subject to minimum of ₹50000/-. Testing period excess 5% of the claim amount subject to minimum of ₹250000/-

Terrorism Covered	Terrorism Premium
NO	0

Risk Serial No.	Earth Quake Cover
1	YES

Risk Serial No.	STFI Cover
1	YES

Installment Details

Installment Number	Installment Date on or before	Installment Amount (₹)	
		Premium	GST
1	05/02/2021	295999	53280

ENDORSEMENTS ATTACHED TO & FORMING PART OF THE POLICY

Sl. No.	Endorsement Number	Endorsement Title
	ENG 003	Exclusion of terrorism damage

Premium and GST Details

	Rate of Tax	Amount in INR
Premium		₹295999
SGST	0	0
CGST	0	0
IGST	18	53280

In witness whereof the undersigned being duly authorised by the Insurers and on behalf of the Insurers has (have) hereunder set his (their) hand(s) on this 04th day of February, 2021.

For and on behalf of
The New India Assurance Company Limited

Date of Issue: 04/02/2021



Duly Constituted Attorney(s)

Tax Invoice No : 96000020E0006684

IRDA Registration Number: 190

**Annexure 6 - Kundapura - Refund application for
Statutory permission from National Highways
Authority for road cutting**



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport & Highways)

परियोजना कार्यान्वयन इकाई-मंगलूर Project Implementation Unit - Mangalore.

डोर नं. 3-29, 'बेथेल', थारेथोटा, पंपवेल के पास (NH.66), मंगलूर - 575005.

Door No. 3-29, "Bethel", Tharethota, Near Pumpwell (NH.66), Mangalore - 575005.

टेलिफोन / Telephone : 91-824-4264499

टेलिफैक्स / Telefax : 91-824-4254499

ई-मेल / e-mail: man@nhai.org



No.11039/1/2009/PIU(Mnglr)/ 38

25th April, 2019

To,
The Chief Officer,
Town Municipal Council,
Kundapur
Udupi District



Sub: Request for granting of permission for laying Clear Water Pumping Main of 200mm dia DI K9 from existing DUCT at Km.284.000 across Highway near Shastri Circle, Kundapur Taluk along NH-66 - reg.

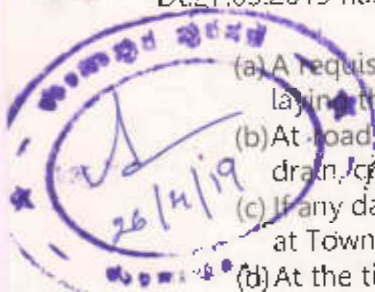
- Ref: 1) Your letter no.KIUWMIP/PIU/KDP/CR-18/2018-19 Dt.25.01.2019
2) Independent Engineer letter no.AA/KS/TL/NHAI/2019/4298 Dt.22.03.2019
3) Concessionaire letter no.NUTPL/1233/SKR/2801 Dt.27.03.2019

Sir,

This has reference to your letter 1st cited above, regarding request for granting permission for laying Clear Water Pumping Main of 200mm dia DI K9 from existing DUCT at Km.284.000 across Highway near Shastri Circle, Kundapur Taluk along NH-66. The Executive Engineer, KIUWMIP, Udupi has submitted necessary Performance Bank guarantee no. 180281IBGP00038 Dt.08.08.2018 of Rs.1,00,000/- & License Fee charges vide D.D.no. 550285 Dt.29.11.2018 of Rs.1,19,157/- respectively.

2. In this regard, our Independent Engineer M/s. Aarvee Associates vide in letter 2nd cited, has inspected the above said location and confirmed that, the proposal for laying of the clear water pumping main of 200mm DI-K9 for existing duct at Km.284.000 across Highway is in order.
3. Further, the Concessionaire M/s. Navayuga Udupi Tollway Pvt. Ltd., vide in letter no.2801 Dt.27.03.2019 has also submitted their consent with the following conditions:

- (a) A requisite permission for right of way from concerned Authority shall be obtained before laying the pipe line.
- (b) At road crossing found in the culvert portion should be lay without disturbing the RCC drain, culvert & main carriageway.
- (c) If any damages occur to the culvert or any other project property, it should be re-construct at Town Municipal Council, Kundapur own cost.
- (d) At the time of further road widening pipeline should be shift / relocate by Town Municipal Council, Kundapur own cost.
- (e) At the time of construction, if any of pipe damaged NUTPL is not responsible to repair the damaged section, it is under Authority own scope.
- (f) After laying the pipe line need to be earth fill & re-compact properly on the side of the drains.
- (g) While carrying out the works, all the safety precautions should be taken without affecting the live traffic, other existing utilities and construction works.
- (h) Laying of pipeline shall be carried out only on the presence of technical staff of Concessionaire.
- (i) Town Municipal Council, Kundapur shall inform NHAI / Concessionaire before starting of laying of water pipeline as well as at the time of completion of work of laying of water pipeline.



26/4/19

26/4/19

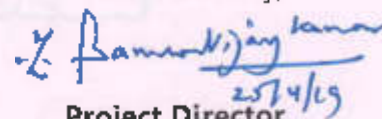
:: 2 ::

4. In view of the above, the permission is being accorded to Town Municipal Council, Kundapur for laying Clear Water Pumping Main of 200mm dia DI K9 from existing DUCT at Km.284.000 across Highway near Shastri Circle, Kundapur Taluk along NH-66 at their own cost duly maintaining the above mentioned conditions.

This is for your information and necessary action.

Thanking you,

Yours faithfully,


25/4/19
Project Director
PIU- Mangalore

Copy to: 1) The Team Leader, M/s. Aarvee Associates, Udupi
2) The Project Manager, M/s. Navayuga Udupi Tollway Pvt. Ltd., Padubidri



aarvee associates

architects engineers & consultants pvt. ltd.

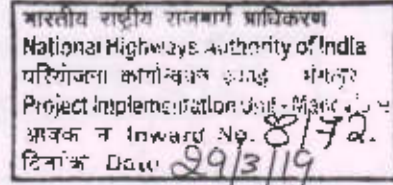
Independent Engineer for 4-Laning of Kundapur - Surathkal
and Mangalore - Kerala border sections of NH-17
under NHDP Phase - III on DBFOT (Toll) basis

yp(T)

Date: 22nd March 2019

Our Ref. AA/KS/TL/NHAI/2019/4298

**To,
The Project Director,
National Highways Authority of India
Project Implementation Unit - Mangalore
Door No. 3-29, Bethel, Tharethota,
Near Pumpwell (NH-66),
Mangalore - 575005**



C

Kind Attn: Mr. Z. Samson Vijay Kumar.

Design, Engineering, Finance, Procurement, Construction, Operation and Maintenance of
"Four Laning of Kundapur - Surathkal Section of NH - 17 from Km. 283+300 to Km.
358+080 (Section 1) and Mangalore - Kerala Border (Km. 375+300 to Km. 376+700 (i.e.
Nantoor Circle to Mahaveer Circle) and Km. 3+700 to Km. 17+200 (i.e. Mahaveer Circle to
Kerala Border) (Section 2) in the State of Karnataka" - (Package No. NHDP-
III/BOT/KNT/04).

**Sub: Request for granting permission for Laying Clear Water Pumping Main of
200mm dia DI K9 from existing DUCT at km. 284.000 across Highway near
Shastri Circle, Kundapur Taluk along NH-66- reg.**

Ref: Your letter no. 11045/6/2011/PIU(Mnglr)/1015, dated: 20.03.2019.

Dear Sir,

This refers to the drawing in respect of the laying of clear water pumping main of 200mm
dia DI K9 through existing duct at 2 km 284+000 across the Project Highway, forwarded
vide reference above.

We have Inspected the said location along with the representatives of concerned utility
provider and confirm that the proposal for laying of the clear water pumping main of
200mm DI - K9 for existing duct at km. 284+000 across Highway is in order.

Hence the necessary permission may be granted to the service provider.

Thanking you.

Yours faithfully,

For Aarvee Associates Architects Engineers & Consultants Pvt. Ltd.,

**M. Ramachandran
Resident Engineer &
Team Leader-In-Charge**

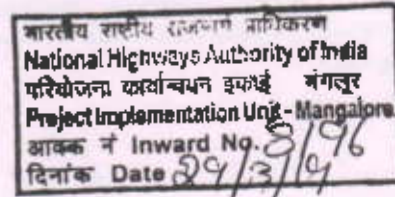
**Cc to: The Project Manager, Navayuga Tollway Private Limited - for information.
File.**

Navayuga Udupi Tollway Private Limited



Ref No: NUTPL/1233/SKR/2801
Date: 27/03/2019.

To,
The Project Director
National Highways Authority of India
Project Implementation Unit
Door No.3-29, Bethel, Tharethota,
Near Pumpwell (NH-66), Mangalore - 575005



YP(T)

Sub: Design, Engineering, Finance, Procurement, Construction, Operation, Maintenance Of "Four Laning Of Kundapur - Surathkal Section OF NH-17 From Km 283+300 To 358+080(Section 1) and Mangalore-Kerala Border From Km 375+300 To Km 376+700(i.e Nantur Circle To Mahaveer Circle) and Km 3+700 To 17+200 (Mahaveer Circle To Kerala Border) Package No.NDHP-III/BOT/KNT/04"- **Request for granting of permission for laying clear water Pumping Main of 200mm dia DI K9 at Km. 284.000 Across NH-66 near Shastri Circle, Kundapur Taluk - Reg.**

Ref: 1. NHAI Letter no. 11045/6/2011/PIU(Mnglr)/1015, Dated 20.03.2018

Dear Sir,

With reference to the above subject, we are herewith submitting our comments for the proposal given by Town Municipal Council, Kundapur towards the work of laying Clear Water Pumping Main of 200mm dia DI K9 at Km. 284.000 across NH-66 near Shastri Circle, Kundapur Taluk as follows with terms and conditions.

- A requisite permission for right of way from concerned authority shall be obtained before laying the pipe line.
- At road crossing found in the culvert portion should be lay without disturbing the RCC Drain, Culvert & Main carriageway.
- If any damages occur to the culver or any other project property, it should be re-construct at Town Municipal Council, Kundapur own cost.
- At the time of further road widening pipe line should be shift/relocate by Town Municipal Council, Kundapur own cost.
- At the time of construction, if any of pipe damaged NUTPL is not responsible to repair the damaged section, it is under your own scope.
- After laying the pipe line need to be earth fill & re-compact properly on the side of the drains.
- While carrying out the works, all the safety precautions should be taken without affecting the live traffic, other existing utilities and construction works.
- Laying of pipeline shall be carried out only in the presence of technical staff of concessionaire.
- Town Municipal Council, Kundapur shall inform NHAI/ CONCESSIONAIRE before starting of laying of water pipeline as well as at the time of completion of work of laying of water pipeline.

This is for your kind information and necessary action.

Thanking You,

Yours faithfully,

For **NAVAYUGA UDUPI TOLLWAY PRIVATE LTD.,**

CH. SANKARARAO

Chief Manager (Projects)

Copy to: Team Leader-In-Charger, Aarvee Associates, Udupi- for information



Karnataka Urban Infrastructure Development & Finance Corp. Ltd.,
Karnataka Integrated Urban Water Management and Investment Programme - "Jalasiri"-Tranche-2

No: KIUWMIP/PIU/KDP/CR.13/2019-20/055

Date: 13.12.2019

The Project Director,
National Highways Authority of India,
Mangaluru.

Dear Sir,

Sub:- "Construction of works and Services for Operation & Management of 24x7
Water Supply System for Kundapura Town in Karnataka Package No.
02KDP01" – **Withdrawal of NHAI crossing permission for 200dia DI pipe
through existing duct of Clear Water Transmission main – Reg**

- Ref: 1. 11039/1/2009/PIU(Mnglr)/38 Dated: 25.04.2019
2. KIUWMIP/PIU/KDP/CR-18/2018-19 Dated: 25.01.2019
3. KIUWMIP/PIU/KDP/CR-21(Vol-2)/2018-19/296 Dated: 20.08.2018
4. KIUWMIP/PIU/KDP/CR-18/2018-19/211 Dated: 25.01.2019

This is in reference to your letter cited in (1). Regarding the permission granted for crossing the 200dia DI K9 class pipe through existing duct. In this context, as per the received approval work is supposed to execute the laying of DI pipe is very problematic situation in site. Due to the duct is filled with mud & soil waste particles & space constraint it was not possible to remove manually as well as while O & M the pure water supply will get chances to sewerage effect in monsoon. So it is decided to tap the CWTM to MS line already crossed transmission main NH for Gandhi Park OHT. Hence there is a drinking water purity issue is arises for passing the pipe through existing duct we henceforth withdraw the approval as provided in ref.1. And also it is requested to return the BG No.1802811BGP00038 of amounting Rs.1,00,000/- submitted in ref.03 also the amount of Rs.1,19,157/- is paid through demand draft towards license fee in the favor of NH Project director.

Kindly return the said amount of Rs.1,19,157/- in the form of Demand Draft favor of Deputy Project Director, KUIDFC-KIUWMIP, mangaluru and original bank guarantee with submitted proposal.

Yours Faithfully,

Asst. Executive Engineer
Asst Executive Engineer,
KUIDFC- KIUWMIP Tr-2 PIU,
Kundapura



Copy to:

1. Chief officer, Town Municipal Council, Kundapur.
2. Deputy Project Director, KJWMP RPMU, Mangalore.



**Annexure 7 - Kundapura Labour license under
The Contract Labour (Regulation & Abolition)
Act, 1970. (Central Act w.e.f. 07-09-70)**



GOVERNMENT OF KARNATAKA

DEPARTMENT OF LABOUR

Licence No : ALC-MNG/CLA/C-100022157/2018-19

Registration No: ALC-MNG/CLA/P-1000015240/2018-19

Assistant Labour
Commissioner, Mangalore
Division, Mangaluru
Prakruthi Commercial
Complex 2nd Floor, Opp.
Bharath Beedl Works Pvt
Ltd., Kadri road,
Mangalore-575003

Licence Date: Sep 26 2018

FORM-VI

[See Rule 25(1)]

1. Licence is hereby granted to Laxmi Civil Engineering Services Pvt Ltd, 1148, E. Sykes Extension, Kothapur-41600, 1 Maharashtra, India Under Section 12(1) of the Contract Labour [Regulation and Abolition] Act-1970, subject to the conditions specified in annexure.

2. This Licence is for doing the work Water pipe line and civil construction in the establishment of Town Municipal Council Kundapura, With in municipal Area

3. The Licence shall remain in force till 19/12/2021

Renewal
[Rule 29]

Sl no.	Date of Licence Renewal	Date of expiry	Fee paid for Licence Renewal	Next Date of expiry
1	11-01-2021	19-12-2020	LICENCE FEE:1500, PENALTY:375	19/12/2021

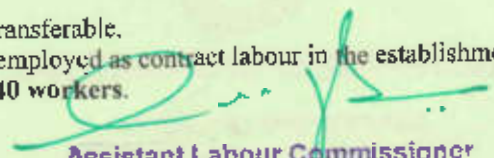
Please, verify authenticity of by visiting
www.labouronline.kar.nic.in & entering certificate Number


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALURU

ANNEXURE

The license is subject to the following conditions:-

1. The license shall be non-transferable.
2. The number of workmen employed as contract labour in the establishment shall not, on any day, exceeds 40 workers.


Assistant Labour Commissioner

MANGALORE DIVISION, MANGALORE

3. Expect as provided in the rules and fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable
4. The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed for the schedule of employment under the Minimum Wages Act, 1948, where applicable and where the rates have been fixed by agreement settlement or award, not less than the rates, fixed.
5. In cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the Principal Employer of the Establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of contractor shall be the same as applicable to the workmen directly employed by the Principal Employer of the Establishment on the same or similar kind of work; provided that in the case of disagreement with regards to the type of work the same shall be decided by the Commissioner of Labour whose decision shall be final.
6. In other cases the wage rates, holidays, hours of work and conditions of service of the workmen of the contractor shall be such as may be specified in this behalf by the Commissioner of Labour.
7. In every establishment where 20 or more women are ordinarily employed as contract labour shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One of such rooms would be used as play room for the children and the other as bed room for the children. For this purpose the contract shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the sleeping in this behalf by the Commissioner of Labour.
8. The licenses shall notify any change in the number of workmen or the conditions of work to the licensing officer.
9. A copy of license shall be displayed prominently at the premises where the contract work is being carried on.
10. The contract labourers shall be provided the lunch/dinner, coffee/tea and breakfast, snacks free of cost during the working hours, if such facilities are extended to regular workmen employed by the principal employer.
11. The contract labourers shall be paid the minimum wages fixed under the minimum wages act.
12. The contract labourers shall be paid with the same rate of Bonus and Ex-gratia payable to the regular workmen employed by the principal employer.
13. The contract labourers shall be provided with free uniforms and shoes, with such facilities are extended to the regular workmen employed by the principal employer.
14. Employment of Child Labour below 14 years is prohibited.


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

Annexure 8 - Kundapura Labour compensation insurance



CONTRACTOR'S ALL RISKS INSURANCE-POLICY

Insured's Name : LAXMI CIVIL ENGINEERING SERVICES P. LTD. & P.V.R.P.L. (JV)	
Insured's Details	
Customer ID	PO57280732
Address	32/1, FIRST TEMPLE ROAD, VASHISHTA PARADISE 10TH & 11TH CROSS, MALLESHWARAM BENGALURU (BANGLORE) URBAN, KARNATAKA BANGALORE, KARNATAKA, 560003
Phone No	9422051544
E-mail/Fax	tender@lcepl.com, /
PAN No	AABAL6485C
GSTIN/UIN	29AABAL6485C1ZH / NA
Issuing Office Details	
Office Code	NAGPUR DO II (160200)
Address	PLOT NO. 42, PRAGATI COLONY OPPOSITE SAI MANDIR WARDHA ROAD, NAGPUR, 440015
Phone No	07122252033 / 07122252555
E-mail/Fax	na.160200@newindia.co.in / 07122252444
S.Tax Regn. No	AAACN4185CST178
GSTIN	27AAACN4185C3ZP
SAC	997139 (Other non-life insurance services excl RI)

Policy Details	
Policy Number	16020044200300000010
Period of Insurance	From: 07/08/2020 12:00:01 AM To: 06/08/2021 11:59:59 PM
Date of Proposal	07-Aug-20
Prev. Policy no.	
Client Type	Non-Corporate
Business Source Code	
Dev. Off. level/Broker/Corp. Agent	DIRECT DEVELOPMENT OFFICER - (2D10752899)
Agent/Bancassurance	Mr. MILIND MANOHAR SAWARKAR (NIAAG00063948) M'LIND SAWARKAR (SI00109905)
Phone No	9822363953 / NA
E-mail/Fax	milind_s44002@yahoo.com, / /
Premium	100357
GST	19774
Total	129631
Receipt No. & Date:	16020081200000002556 - 31/07/20

* Premium subject to adjustment on completion of the Project

Location of Contract site : Risk Address : 1 KUNDAPURA TOWN DIST. UDPI (KARNATAKA), NA KUNDAPUR, KARNATAKA, INDIA, 576201

Principal(s)/ Contractor/ sub-contractor Details		
Sl. No.	Name	Address
1	LAXMI CIVIL ENGINEERING SERVICES PVT. LTD.	STERLING TOWER, GAWAT MANDAL, SAHUPURI, KOLHAPUR
2	THE CHIEF OFFICER, TOWN MUNICIPAL COUNCIL	KUNDAPURA, KARNATAKA

Financier(s) Details		
Sl. No.	Name of the Financiers	Address of the Financier's Branch
1	KARNATAKA BANK LTD	KOLHAPUR
2	AXIS BANK	PUNE
3	STATE BANK OF INDIA	PUNE
4	YES BANK LTD	KOLHAPUR
5	BANK OF BARODA	PUNE

Description of Contract Works	
Sl. No.	1) CONSTRUCTION OF WORKS AND SERVICES FOR OPERATION AND MANAGEMENT OF 24X7 WATER SUPPLY SYSTEM FOR KUNDAPURA TOWN DIST. UDPI 576201 (KARNATAKA) PACKAGE NO. 02KDP01 AS PER WORK ORDER NO TMC/WSS/CR NO. 01/2017-18 DTD 28.10.2017 2) DEBRIS REMOVAL (INTERNAL & EXTERNAL) 50 LAC. DEWATERING CHARGES 50 LAC, SURROUNDING PROPERTY 1 CR, TEMP. FACILITIES 50 LAC. 3) NA

Sl. No.	Period of Insurance
1	From: 07/08/2020 12:00:01 AM To: 06/08/2021 11:59:59 PM plus 3 months maintenance period

Section I - Material Damage :

Digitally signed by [Signature] Date: 2020.07.31 13:22:07 IST

Policy No. : 16020044200300000010. Document generated by 37552 at 31/07/2020 13:22:07 Hours

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 7415

Divisional Office - II (160200) : Plot No. 42, Pragati Colony, Opp. Sai Mandir, Wardha Road, (Nagpur)



1. Contract works (Permanent and Temporary works including all materials to be incorporated therein)				Total Project Sum Insured
Sl. No.	1.1) Contract price	1.2) Materials or items supplied by the Principal	2) Any other works and installations not included in 1.1 and 1.2 above (e.g. camp, colony, stores etc. as per list enclosed)	
1	₹231000000	₹0	₹0	₹231000000

3. Contractors Plant and Machinery (Memo 4) as per list enclosed									
Item No.	Quantity	Description of Items (Type, Manufacture, Capacity)	Year of Manufacture	Sum Insured (In ₹)	Risk Code	Excess due to AOG Perils	Excess due to Other than AOG Perils	Excess for Boom Section	

4. Add on Covers

1. Owners Surrounding Property

Sl. No.	Limit of Indemnity	Excess
1	20000000	Policy Excess

2. Additional Custom Duty

Sl.	No. Limit of Indemnity	Excess
1	₹ 0	5 % of Additional Duty

3. Removal of Debris per occurrence

Sl.	No. Limit of Indemnity	Excess
1	₹ 5000000	Policy Excess

4. Professional Fees

Sl.	No. Limit of Indemnity	Excess
1	₹ 0	Policy Excess

5. Expediting Cost including Air Freight & Express Freight

Sl.	No. Limit of Indemnity	Excess
1	₹	Policy Excess

6. Offsite Storage/ Fabrication

Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

7a. On Increased Replacement Value which may have to be paid on replacement of Item 1.1

Sl. No.	Limit of Indemnity	Excess
1	₹0	Policy Excess

7b. On Increased Replacement Value which may have to be paid on replacement of Item 1.2

Sl. No.	Limit of Indemnity	Excess
1	₹0	Policy Excess

7c. On Increased Replacement Value which may have to be paid on replacement of Item 1.3

Sl. No.	Limit of Indemnity	Excess
1	₹0	Policy Excess

8. Automatic Reinstatement clause

Sl. No.	Limit of Indemnity	Excess
1	0	Policy Excess

9. Loss minimisation expenses

Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

10. Cover for valuable documents

Sl. No.	Limit of Indemnity	Excess





Sl. No.	Limit of Indemnity	Excess
1	₹ 0	Policy Excess

11. Design Defect Cover		
Sl. No.	Limit of Indemnity	Excess
1	TNA	5 times Policy Excess

Section II - Third Party Liability :			
Sl. No.	Limit of indemnity in respect of any one accident or series of accidents arising out of one event	Total limit of Section II during policy period	Any One Person
1	₹5000000	₹5000000	₹1000000

Excesses for Section I and II :				
Sl. No.	1. For Storage & Construction claims	2. For Maintenance period claims	3. For Major peril claims as per Memo B of Section I	Terrorism Claims
1	5% of Claim Amount subject to Minimum of ₹ 15000 each claim	5% of Claim Amount subject to Minimum of ₹ 50000 each claim	5% of Claim Amount subject to Minimum of ₹ 50000 each claim	0.5 % of Total Sum Insured subject to minimum of ₹ 1,00,000/- for each and every claim

Excesses For Specific AddOn Covers :		
Sl. No.	Description Of Cover	Excess
	Terrorism Covered	Terrorism Premium
	NO	0
	Risk Serial No.	Earth Quake Cover
	1	YES
	Risk Serial No.	STFI Cover
	1	YES

Installment Details			
Installment Number	Installment Date on or before	Installment Amount (₹)	
		Premium	GST
1	07/08/2020	109857	₹ 19774

ENDORSEMENTS ATTACHED TO & FORMING PART OF THE POLICY		
Sl. No.	Endorsement Number	Endorsement Title
0	ABC	Agreed Bank Clause
	ENG 003	Exclusion of terrorism damage

Premium and GST Details

	Rate of Tax	Amount in INR
Premium		₹109857
SGST	0	0
CGST	0	0
IGST	18	19774

In witness whereof the undersigned being duly authorised by the insurers and on behalf of the insurers has (have) hereunder set his (their) hand(s) on this 31st day of July, 2020.

Date of Issue: 31/07/2020

For and on behalf of
The New India Assurance Company Limited

Duly Constituted Attorney(s)



Policy No. : 16020044200300000010. Document generated by 37552 at 31/07/2020 13:22:07 Hours

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415

Divisional Office - II (160200) Plot No. 42, Pragati Park, 3rd Floor, 1st Phase, Sector 10, Gurgaon - 122 002



COLLECTION RECEIPT CUM ADJUSTMENT VOUCHER

Issuing Office : NAGPUR DO II (160200)
Address : PLOT NO. 42, PRAGATI COLONY
OPPOSITE SAI MANDIR
WARDHA ROAD, NAGPUR, 440015
NAGPUR
Phone : 07122252393
Email : nia.160200@newindia.co.in
Fax : 07122252394
Collection Number : 16020020100018422
Collection Date : 31/07/2020
Business Source Code : 201072000
PAN No of Payor : AABX 6455C

Received with money from YES LAXMI CIVIL ENGINEERING SERVICES PVT.LTD

The amount received/Adjusted is towards -

Policy No.	A/C Description	Amount ₹	A/C Code	Sub A/C Code
16020044200300000010	Bank-160200	129631.00	9100.160200	BA00022736-160200-9100
Total = ₹ 159998.00				

Your Payment/Adjustment Details are asunder -

Mode	Amount ₹	Cheque No.	Cheque Date	Drawee Bank	Drawee Branch	Reference No.	Scroll/BG/A PD Balance
RTGS	129631.00	1689340	30-JUL-20	YES BANK	KOLHAPUR	1602002010018422	N.A.
Total = ₹ 159998.00							

Utilization details of the Collected Amount :

Premium	GST	Stamp Duty	Excess Amount
109857.00	19774.00	0.00	0
Sl no.	Agency Code	Agency Name	Department Code
1	NIAAG000067948	MLIND SAWARKAR	44

For The New India Assurance Company Limited
Revenue Stamp

Date of Issue: 31/07/2020

Cashier's Initial

Authorized Signatory

Note -

1. Please note the Policy Number, Collection Number and date in all future correspondence.
2. NIA shall not be liable for any claim arising out of sales made during the period between the due date and date of payment of the installment if the premium paid has been exhausted by turnover declarations if there is insufficient premium balance.

Tax Invoice No : 16020020P0008214

IRDA Registration Number: 190

Stamp as used

Digitally signed by
Nagpur DO II
Date: 2020.07.31
13:22:07 +05'30'

Policy No. : 16020044200300000010 Document generated by 37552 at 31/07/2020 13:22:07 Hours.

Regd & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1413

Divisional Office - II (160200) : Plot No. 42, Pragati Colony, Opp. Sai Mandir, Wardha Road, Nagpur - 440 015



POLICY SCHEDULE FOR EMPLOYEES COMPENSATION INSURANCE

Insured's Name : M/S LAXMI CIVIL ENGINEERING SERVICES PVT. LTD.		Issuing Office Details	
Insured's Details		Office Code : NAGPUR DO II (160200)	
Customer ID : PO66850545	Address : 51, TEACHER COLONY, VINAYAK NAGAR, HINDALGA ROAD, BELGAUM, KARNATAKA	Address : PLOT NO. 42, PRAGATI COLONY OPPOSITE SAI MANDIR WARDHA ROAD, NAGPUR, 440015	
Phone No : 9422051444	Phone No : 07122252333 / 07122252555		
E-mail/Fax : nagpuroffice@icepl.com, /	E-mail/Fax : nia.160200@newindia.co.in / 07122252444		
PAN No : 29AAACL5602N1ZA / NA	S.Tax Regn. No : AAACN4165CST178		
GSTIN/UIN : 29AAACL5602N1ZA / NA	GSTIN : 27AAACN4165C32P		
	SAC : 997139 (Other non-life insurance services excl RI)		
Policy Details			
Policy Number : 16020036200100000090	Business Source Code : DIRECT DEVELOPMENT OFFICER - (2D10752899)		
Period of Insurance : From: 07/08/2020 12:00:01 AM To: 06/08/2021 11:59:59 PM	Dev. Off level./Broker/Corp. Agent/Web Aggregator : Mr. MILIND MANOHAR SAWARKAR (NIAAG00063948) - MILIND SAWARKAR (SI00109865)		
Date of Proposal : 07-Aug-20	Agent/Bancassurance/Specified Person : 9822363953 / NA		
Prev. Policy no. : 160200361901000000258	Phone No : 9822363953 / NA		
Client Type : Non-Corporate	E-mail/Fax : milind_s44002@yahoo.com, / / /		
Premium(₹) : 25735	GST(₹) : 4632	Total (₹) : 30367	Total (₹ in words) : RUPEES THIRTY THOUSAND THREE HUNDRED SIXTY-SEVEN ONLY
			Receipt No. & Date : 1602008120000000255 6 - 31/07/20

Details of Employees with monthly wages upto ₹ 15000:

Categories	Sub Categories	No of Employee	Cash Total Wages
Engineers not otherwise classified	Incl. work away from shop or yard upto 9 mtrs height	15	1800000

Details of Employees with monthly wages above ₹ 15000:

Categories	Sub Categories	No of Employee	Cash Total Wages
Trade Description	Particular of Works	Location Details	Included All Sub-Contractors
ENGINEER AND CONTRACTOR	CONSTRUCTION OF 24X7 WATER SUPPLY SCHEME AT KUNDAPUR TOWN DIST.UDUPI (KARNATAKA) AS PER WORK ORDER NO.TMC/WSS/CR NO.01/2017-18 DTD 28/10/2017. ENGINEER,SUPERVISOR,SKILLED WORKER,UNSKILLED WORKER TOTAL WORKERS 10	AT.KUNDAPUR TOWN DIST.UDUPI	

Contractor/Sub-Contractor Details:				No. of Workers	Amount Wages
Serial No	Name of Contractor	Description	Category		

Digitally signed by
[Signature]
Date: 2020.07.31
13:21:58 IST

Policy No. : 16020036200100000090 Document generated by 37552 at 31/07/2020 13:21:58 Hours

Regd. & Head Office: New India Assurance Bldg., 87-M.C. Road, Fort, Mumbai - 400 061. TOLL FREE No. 1 800 209 1415
Divisional Office - II (160200) : Plot No. 42, Pragati Colony, Opp. SAI MANDIR, WARDHA ROAD, NAGPUR



Extensions under the Policy Cover			Skilled	Unskilled	Others
Name of the Extension	Sub Limit of the Extension	Deductibles of the Extension			
Medical Extension	₹200000	NA			
Special Conditions	NA				
Special Exclusions	NA				
Special Excess/Deductible	NA				
The Policy shall be subject to EMPLOYEES COMPENSATION INSURANCE Policy clauses attached herewith.					
_____ Clauses	Description				

Premium	Rate of Tax	Amount in INR
SGST		₹ 25735.00
CGST	0	0
IGST	0	0
	14	4632

In witness whereof the undersigned being duly authorised by the Insurers and on behalf of the Insurers has (have) hereunder set his (their) hand(s) on this 31st day of July, 2020.

Date of Issue: 31/07/2020

The New India Assurance Company Limited

Duly Constituted Attorney(s)

Stamp Duty under the Policy is ₹1

Mudrank _____ Dt. _____ consolidated Stamp Fees Paid by Pay Order Number _____ vide receipt number _____ dt. _____

Tax Invoice No : 16020020E0008213

IRDA Registration Number: 190





COLLECTION RECEIPT CUM ADJUSTMENT VOUCHER

Issuing Office : NAGPUR DO II (160200)
Address : PLOT NO. 42, PRAGATI COLONY
OPPOSITE SAI MANDIR
WARDHA ROAD, NAGPUR-440015
NAGPUR
Phone : 07122252153
Email : nia.160200@nia.co.in
Fax : 07122252153
Collection Number : 1602002120000009505
Collection Date : 31/07/2020
Business Source Code : 1010750989
PAN No of Payer :

Received with thanks from M/S LAXMI CIVIL ENGINEERING SERVICES PVT.LTD.

The amount received/Adjusted is towards -

Policy No.	A/C Description	Amount ₹	A/C Code	Sub A/C Code
16020036200100000090	Bank-160200	30367.00	9100.160200	BA00022736-160200-9100
Total = ₹ 159998.00				

Your Payment/Adjustment Details are as under -

Mode	Amount ₹	Cheque No.	Cheque Date	Drawee Bank	Drawee Branch	Reference No.	Scroll/BG/A PD Balance
RTGS	30367.00	16893407	30-JUL-20	YES BANK	KOLHAPUR	1602002010011859	N.A.
Total = ₹ 159998.00							

Utilization details of the Collected Amount

Premium	GST	Stamp Duty	Excess Amount
25235.00	4632.00	0.00	0
Sl no.	Agency Code	Agency Name	Department Code
1	NIAAG00063948	BLIND SAWARKAR	36

For The New India Assurance Company Limited
Revenue Stamp

Date of Issue: 31/07/2020

Cashier's Initial

Authorized Signatory

Note:

- Please note the Policy Number, Collection Number and date in all future correspondence.
- NIA shall not be liable for any claim arising out of sales made during the period between the due date and date of payment of the instalment if the premium paid has been exhausted by turnover declaration if there is insufficient premium balance.

Tax Invoice No : 16020020E0008213

IRDA Registration Number: 190



Signature valid

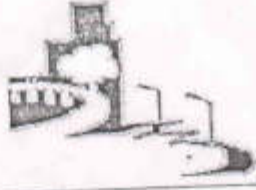
Digitally signed by
NIAAG00063948
Date: 2020.07.31
12:21:56 IST

Policy No. : 16020036200100000090 Document generated by 37552 at 31/07/2020 13:21:56 Hours.

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415.

Regional Office : 160200, Nagpur : Plot No. 42, Wardha Road

Annexure 9 - Kundapura - Tree felling Compensation/ permission



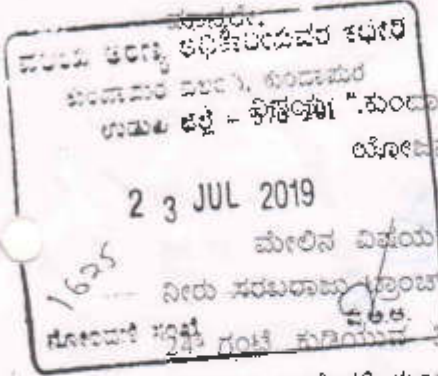
Karnataka Urban Infrastructure Development & Finance Corp.
Ltd.,
Karnataka Integrated Urban Water Management and Investment
Programme - "Jalasiri"-Tranche-2
Office of the Executive Engineer Programme Implementation Unit,
1st Floor, TMC Main Building, Kundapur
Email Id : jalasiritranche2ekdp@gmail.com

Date: 16-07-2019

No. KIUWMIP/PIU/KDP/CR- 05/2019-20/94

AE HARISH → 9030145862

ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿಗಳ
ಕುಂದಾಪುರ ವಲಯ
ಕುಂದಾಪುರ



ಕುಂದಾಪುರ ಯೋಜನಾ ನಿರ್ವಹಣಾ ಘಟಕದ 24x7 ಕುಡಿಯುವ ನೀರು ಸರಬರಾಜು ಯೋಜನೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ.- ತೆಂಗಿನ ಮರಗಳನ್ನು ಕಡಿಯಲು ಅನುಮತಿ ಕೋರಿ

ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕುಂದಾಪುರ ಯೋಜನಾ ನಿರ್ವಹಣಾ ಘಟಕದ 24x7 ಕುಡಿಯುವ ನೀರು ಸರಬರಾಜು ಯೋಜನೆ-2 ಅಡಿಯಲ್ಲಿ ಸ.ನಂ 292 ರಲ್ಲಿ 0.20 ಎಕ್ರೆ ಸರಕಾರಿ ಜಮೀನನ್ನು ಕುಂದಾಪುರ ಪಟ್ಟಣಕ್ಕೆ ಸೇರಿಸಿ ಕುಡಿಯುವ ನೀರು ಸರಬರಾಜು ಕಾಮಗಾರಿಯ ಮೇಲ್ವಿಚಾರಣೆ (OHT) ನಿರ್ಮಾಣ ಮಾಡುವ ಉದ್ದೇಶಕ್ಕೆ ಕುಂದಾಪುರ ಪುರಸಭೆಗೆ ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆಯ ಹೆಸರಿನಲ್ಲಿ ಕಾಯ್ದಿರಿಸಿದ್ದು, ಸದರಿ ಸ್ಥಳದಲ್ಲಿ ಇರುವ 21 ತೆಂಗಿನ ಮರಗಳನ್ನು ಕಡಿದು ತೆರವುಗೊಳಿಸಲು ತಮ್ಮ ಇಲಾಖೆಯಿಂದ ಅನುಮತಿ ನೀಡುವ ಬಗ್ಗೆ ಕೋರಲಾಗಿದೆ.

ಅಡಕ, 1. ಮೇಲಿನಂತೆ



ತಮ್ಮ ವಿಶ್ವಾಸಿ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
KUIDFC- KIUWMIP-PIU
Kundapura.

ಪ್ರತಿಯನ್ನು : 1. ಉಪ ಯೋಜನಾ ನಿರ್ದೇಶಕರು, KIUWMI-RPMU, ಕುಂದಾಪುರ.

ಸಂ: ವಲಯ/ಕುಂದಾಪುರ/2019-20/94-20

ದಿನಾಂಕ: 16-07-2019

ಮೊದಲ ಮರ ಕಡೆಯಲು ಯಾವುದೇ ಭೀಷಣತೆ ಇರುವುದಿಲ್ಲವೆಂದು
ಗೊತ್ತಾಗಿರುವುದರಿಂದ ಕುಂದಾಪುರ ಪುರಸಭೆ.

ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಕುಂದಾಪುರ ವಲಯ, ಕುಂದಾಪುರ

**Annexure 10 and 10 A - Puttur - Statutory
permission from National Highways Authority for
road cutting**



दक्षिणपश्चिमरेलवे

South Western Railway

Y/W.372/KM.140/400-140/500/WPL(2019-38)

Divisional office
Works Branch
Mysore
Date: 05.06.2020

To
The Municipal Commissioner,
City Municipal Council,
Court Road, Puttur,
Puttur Taluk & Dist
Dakshina Kannada -574201.

Dear Sir

Sub:- HAS – MAQ Section :- Permission for Proposed Water Supply Pipe Line Crossing Under the Railway Track at KM 140/400 – 140/500 between KABAKAPUTTUR – NERALAKATTE Railway Stations.

Please find herewith enclosed a copy of agreement with blue print/plan for the above work executed by you, with this administration in respect of Railway land permitted in your favour at the above Railway Km duly signed by the Divisional Railway manager/(Works)/South Western Railway / Mysore.

Hereby permission is accorded for the above said work under the Railway track at the above Km, as per approved plan subject to the following conditions.

The work within the Railway land would be carried out as per the approved plan at your cost but under Railway supervision.

The proposed C.I. encasing pipe/cable should be laid 1.00m minimum below the bottom level of sleeper (ground) level by pipe pushing (HDD) to be done by the party at their own cost under Railway supervision and Concrete pipes are not permitted and G.I./M.S. pipes only to be used.

The top surface of the land within Railway limit should be restored to the original condition after laying the pipe lines.

The annual way leave charges for the right of laying water pipe line crossing in the Railway land shall be paid as per rules in force.

Encl:-Agt. copy with plan.


Divisional Railway Manager (works)
South Western Railway/Mysore

C- Sr.DFM/MYS for information Encl: Agt. Copy in Original and Plan.

C/- ADEN/SKLR for information and necessary action please.

C/- SSE/PW/KBPR for information and necessary action please.



GOVERNMENT OF KARNATAKA
Public Works Department

Phone No: 08272-225858
Fax no:
Email: aeenhdsmdk@gmail.com

Office of the Assistant executive Engineer,
National Highway Sub Division
Madikeri - 571201

No: AEE/NHSD/MDK/NH-275/Water supply/Puttur/2020-21/165 Date: 5/02/21

To,

The Executive Engineer
National Highway Division
Mangalore

Sir,

Sub: Proposal for according permission for laying of water supply pipe line by the KUID&FCL Puttur from KM 9.962 to 17.80 in Puttur town limit of NH - 275, Bantwal-Bangalore section.
Ref: The EE KUID&FCL Division Puttur letter no:345 Dt:18.12.2020.

With reference to the above subject the Executive Engineer, KUID&FCL Division Puttur has submitted the proposal for according permission for laying of water supply pipe line from KM 9.962 to 17.80 in Puttur town limit of NH - 275, Bantwal-Bangalore section. And also submit the required drawings and documents for permission. After laying pipeline it is essential to keep the road in motor able condition.

As per proposal submitted by the above department an estimate for Restoration of Carriageway and Shoulder portion after laying of watersupply pipe line from KM 9.962 to 17.80 in Puttur town limit of NH - 275, Bantwal-Bangalore section in the state of Karnataka is prepared based on NHSR Bangalore Circle, for the year 2018-19 and continued to 2020-21 and the estimate is works out to **Rs.28.23 Lakhs**. Hence above proposal along with restoration estimate is submitted for early approval.

Encl: Program 2 Copies

Yours faithfully

Assistant Executive Engineer
National Highway Sub Division
Madikeri

✓ Copy submitted to the Executive Engineer, KUID&FCL Division Puttur for information and necessary action.

for Assistant Executive Engineer
National Highway Sub Division
Madikeri

ಕರ್ನಾಟಕ ನಗರ ಮೂಲ ಸೌಕರ್ಯ ಅಭಿವೃದ್ಧಿ ಮತ್ತು
ಹಣಕಾಸು ಸಂಸ್ಥೆ ನಿಯಮಿತ
ಕರ್ನಾಟಕ ಸಮಗ್ರ ನಗರ ನೀರು ನಿರ್ವಹಣೆ ಮತ್ತು ಬಂಡವಾಳ ಹೂಡಿಕೆ
ಕಾರ್ಯಕ್ರಮ
ಕೆ.ಯು.ಎ.ಡಿ.ಎಫ್. ೨-ಕೆ.ಎ.ಯು.ಡಬ್ಲ್ಯು.ಎಂ.ಎ.ಪಿ.(ಟ್ರಾಂಚ್-2)
ಪಿ.ಎ.ಯು.-ಕೋಡ, ನಗರ ಸಭೆ ವಾಣಿಜ್ಯ ಸಂಕೀರ್ಣ, ಮೊದಲನೇ
ಮಹಡಿ, ಗಾಂಧಿ ಕಟ್ಟೆ, ಪುತ್ತೂರು-574201

E-mail: jalasiritranche2eept@gmail.com

Karnataka Urban Infrastructure
Development & Finance Corp. Ltd.,
Karnataka Integrated Urban Water Management and
Investment Programme,
KUIDFC- KIUWMIP (Tranche-2) PIU-CELL,
City Municipal Commercial Complex, First Floor
Gandhi Kotte, Puttur-574201



No KIUWMIP/PIU-PTR/CR.16/2018-19/ 345

ದಿನಾಂಕ: 18.12.2020

ರಿಗೆ,

ಪುಟ್ಟಣ್ಣ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್
ರಾಷ್ಟ್ರೀಯ ಹೆದ್ದಾರಿ ಪ್ರಾಧಿಕಾರ
ಮಂಗಳೂರು ವಿಭಾಗ
ಮಂಗಳೂರು.



ಮಾನ್ಯರೇ,

ವಿಷಯ: ಪುತ್ತೂರು ನಗರಸಭೆ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಎಡಿಬಿ ನೆರವಿನ ಕೈಗೊಂಡಿರುವ 24/7 ಕುಡಿಯುವ ನೀರಿನ
ಸರಬರಾಜು ಕಾಮಗಾರಿಯಲ್ಲಿ ಪುತ್ತೂರು ನಗರದಲ್ಲಿ ಹಾದುಹೋಗುವ ರಾಷ್ಟ್ರೀಯ ಹೆದ್ದಾರಿ 275 ರ
ಜೈನೇಜ್ 9.962 ಯಿಂದ 17.80 ರವರೆಗೆ ಬೈಪಾಸ್ ರಸ್ತೆಯ ಎರಡು ಬದಿಯ ಶೋಲ್ಡರ್ ನಲ್ಲಿ
ನೀರಿನ ಶೋಷಣೆಯನ್ನು ಅಳವಡಿಸಲು ಅನುಮತಿ ನೀಡುವ ಬಗ್ಗೆ.

ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಪುತ್ತೂರು ನಗರಸಭೆ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಎಡಿಬಿ ನೆರವಿನಲ್ಲಿ ಪುತ್ತೂರು ನಗರಕ್ಕೆ
24/7 ಕುಡಿಯುವ ನೀರಿನ ಸರಬರಾಜು ಕಾಮಗಾರಿಯು ಕೆ.ಯು.ಎ.ಡಿ.ಎಫ್.ಸಿ ಹಾಗೂ ನಗರಸಭೆ ಪುತ್ತೂರು ವತಿಯಿಂದ ಜಲಸಿರಿ
ಯೋಜನೆಯಡಿ ಕೈಗೆತ್ತಿಕೊಳ್ಳಲಾಗಿದ್ದು ಅದರಲ್ಲಿ ಕೆಳಕಂಡಂತಿರುವ ಶೋಷಣೆಯನ್ನು ಪುತ್ತೂರು ನಗರದಲ್ಲಿ ಹಾದುಹೋಗುವ
ರಾಷ್ಟ್ರೀಯ ಹೆದ್ದಾರಿ 275 ಬೈಪಾಸ್ ರಸ್ತೆ ಎರಡು ಬದಿಯ ಶೋಲ್ಡರ್ ನಲ್ಲಿ ಅಂದಾಜು 7.838 ಕಿಮೀ ದೂರ (ಸಂಪ್ರದಿಂದ
ಮುರ ಶಾಂತಿನಗರದವರೆಗೆ) ಪೈಪ್ ಲೈನ್ ಅಳವಡಿಸಬೇಕಾಗಿರುವುದರಿಂದ, ಬೈಪಾಸ್ ರಸ್ತೆಯ ಬದಿಯಲ್ಲಿ ಶೋಷಣೆಯನ್ನು ಹಾಕಲು
ಅನುಮತಿ ನೀಡಲು ಹಾಗೂ ಕಾಮಗಾರಿ ಮಾಡುವಾಗ ರಸ್ತೆಯ ಯಾವುದೇ ಭಾಗವು ಹಾನಿಯಾದಲ್ಲಿ ನಮ್ಮ ಇಲಾಖೆಯಿಂದಲೇ
ತಮ್ಮ ಇಲಾಖೆಯ ಸಿಬ್ಬಂದಿಯ ಮೇಲುಸ್ತುವಾರಿಯಂತೆ ಮೊದಲಿನ ರೂಪಕ್ಕೆ ಮಾಡಿ ಕೊಡಲಾಗುವುದು ಹಾಗೂ ಡಾಂಬರ್ ರಸ್ತೆಗೆ
ಯಾವುದೇ ಹಾನಿಯನ್ನು ಮಾಡುವುದಿಲ್ಲ ಎಂದು ತಿಳಿಸುತ್ತಾ ಅನುಮತಿಯನ್ನು ನೀಡಲು ತಮ್ಮಲ್ಲಿ ಈ ಮೂಲಕ ಕೋರಲಾಗಿ ತಮ್ಮ
ಇಲಾಖೆಯ ಸಹಕಾರ ಅಗತ್ಯವಾಗಿದ್ದು ನಕ್ಷೆಯಲ್ಲಿ ತೋರಿಸಿದಂತೆ ಈ ಕೆಳಗಿನ ವಿವರವಿರುವ ಶೋಷಣೆಗಳನ್ನು ರಸ್ತೆ ಬದಿಯಲ್ಲಿ
ಹಾಕಲಾಗುವುದು.

SL No	Pipe Material	Dia (mm)
1	HDPE	75
2	HDPE	110
3	DI	150
4	HDPE	160
5	DI K9	200
6	DI K7	250

ತಮ್ಮ ವಿಶ್ವಾಸಿ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೆ.ಮಿ.ಪಿ-ಪಿ.ಎ.ಯು-ಪುತ್ತೂರು

**Annexure 11 - Puttur - Labour license under The
Contract Labour (Regulation & Abolition) Act,
1970**



GOVERNMENT OF KARNATAKA

DEPARTMENT OF LABOUR

Licence No : ALC-MNG/CLA/C-100034603/2019-20

Registration No: ALC-MNG/CLA/P-1000023667/2019-20

Assistant Labour
Commissioner ,Mangalore
Division, Mangaluru
Prakruthi Commercial
Complex 2nd Floor, Opp.
Bharath Beedi Works Pvt
Ltd., Kadri road,
Mangalore-575003

Licence Date: Nov 20 2019

FORM-VI

[See Rule25(1)]

1. Licence is here by granted to **SPPL SIPL DRS INFRATECH JV,Kausthuba Building, No.1/28/A, Padil, Bannur post, Puttur, Dakshina Kannada Dist.** Under Section 12[1] of the Contract Labour [Regulation and Abolition] Act-1970, subject to the conditions specified in annexure.

2. This Licence is for doing the work **Water supply** in the establishment of **CITY MUNICIPAL COUNCIL PUTTUR,PUTTUR**

3. The Licence shall remain in force till :**11/01/2022**

Renewal
[Rule 29]

Sl no.	Date of Licence Renewal	Date of expiry	Fee paid for Licence Renewal	Next Date of expiry
1	05-01-2021	11-01-2021	LICENCE FEE:2250, PENALTY:562	11/01/2022

Please, verify authenticity of by visiting
www.labouronline.kar.nic.in & entering certificate Number


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE
Mangalore Division, Mangaluru

The license is subject to the following conditions:-

1. The license shall be non-transferable.
2. The number of workmen employed as contract labour in the establishment shall not, on any day, exceeds **100 workers**.
3. Expect as provided in the rules and fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable
4. The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed for the schedule of employment under the Minimum Wages Act, 1948, where applicable and where the rates have been fixed by agreement settlement or award, not less than the rates, fixed.
5. In cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the Principal Employer of the Establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of contractor shall be the same as applicable to the workmen directly employed by the Principal Employer of the Establishment on the same or similar kind of work; provided that in the case of disagreement with regards to the type of work the same shall be decided by the Commissioner of Labour whose decision shall be final.
6. In other cases the wage rates, holidays, hours of work and conditions of service of the workmen of the contractor shall be such as may be specified in this behalf by the Commissioner of Labour.
7. In every establishment where 20 or more women are ordinarily employed as contract labour shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One of such rooms would be used as play room for the children and the other as bed room for the children. For this purpose the contract shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the sleeping in this behalf by the Commissioner of Labour.
8. The licenses shall notify any change in the number of workmen or the conditions of work to the licensing officer.
9. A copy of license shall be displayed prominently at the premises where the contract work is being carried on.
10. The contract labourers shall be provided the lunch/dinner, coffee/tea and breakfast, snacks free of cost during the working hours, if such facilities are extended to regular workmen employed by the principal employer.
11. The contract labourers shall be paid the minimum wages fixed under the minimum wages act.
12. The contract labourers shall be paid with the same rate of Bonus and Ex-gratia payable to the regular workmen employed by the principal employer.
13. The contract labourers shall be provided with free uniforms and shoes, with such facilities are extended to the regular workmen employed by the principal employer.
14. Employment of Child Labour below 14 years is prohibited.


 Assistant Labour Commissioner
 MANGALORE DIVISION, MANGALORE


 Assistant Labour Commissioner
 MANGALORE DIVISION, MANGALORE

Annexure 12 - Puttur - Labour compensation insurance



NIL ENDORSEMENT DOCUMENT
MARINE CUM ERECTION INSURANCE POLICY

Insured Name	: SUEZ PROJECTS PVT. LTD., SUEZ INDIA PVT. LTD.	Insurer Office Code	: Delhi LCO 930000 (930000)
Address	: DRS INFRATECH PVT. LTD. JV 1ST FLOOR, 18 CSI COMPOUND, 2ND CROSS, MISSION ROAD, BANGALURU, BENGALURU URBAN, KARNATAKA, BANGALORE, KARNATAKA, 560027	Address	: 301, R.G. CITY CENTER LSC, BLOCK B, LAWRENCE ROAD NEW DELHI, 110035
Telephone	: //9871459093	Telephone	: 27196509 / 27196510
Fax	:	Fax	: 27196515
Email	:	Email	: nia.930000@newindia.co.in
GSTIN	: 29ABBAS5237L1Z1	GSTIN	: 07AAACN4165C1ZT
UIN	: NA	SAC	: 997139 (Other non-life insurance services excl RI)

Endorsement attached to forming part of Policy Number				: 93000044190800000022
Department	: Engineering	Cover	: NA	
Period of Insurance	: From 05/07/2019 12:00:01 AM To 02/11/2023 11:59:59 PM	Endorsement No	: 93000044200882000043	
		Effective Date	: 20 November 2020	
Date Signed	: 04/12/2020	Sum Insured₹	: 736,000,000.00	
Additional Premium ₹	: N/A	Additional GST ₹	: N/A	
Refund Premium ₹	: N/A	Refund ST/GST. ₹	: N/A	
Parent Policy Number	: 93000044190800000022			

Change in Policy Attributes

Parameter Name	Changed Value	Old Value
----------------	---------------	-----------

It is hereby understood and agreed that the endorsement on policy 93000044190800000022 will be in effect from 20 November 2020.

Reason	Notwithstanding anything herein contained to the contrary it is hereby agreed and declared that the said policy is issued only for the work contract amount (excluding GST). The GST amount is non-claimable under the All Risk Insurance Policy. Hence the said Insurance Policy which has been issued on the Works Contracts does not cover GST amount. Details as under: Work Contract Value including GST : ₹ 71,46,12,089/- GST Amount : ₹ 7,65,65,581/- Works contract excluding GST Value : 63,80,46,508/- Insured's Works Contract Value : ₹ 64,00,00,000/- 15% Sum Insured Enhancement : ₹ 9,60,00,000/- All other Terms and conditions remain unchanged.
--------	--

Premium and GST Details

	Rate of Tax	Amount
Premium		0
SGST	0	0
CGST	0	0
IGST	0	0

Signature valid
Digitally signed by
V. A. Chinnaiyan
Date: 2020.12.12 14:26:21 IST

Policy No. : 93000044190800000022 Document generated by 33309 at 04/12/2020 14:26:21 Hours.

Regd. & Head Office: New India Assurance Bldg., 87 M.G. Road, Fort, Mumbai - 400 001. TOLL FREE No. 1 800 209 1415.

**Annexure 13 - Udupi - Labour license under The
Contract Labour (Regulation & Abolition) Act,
1970**

LD0121023015205266



- Renewal Certificate

GOVERNMENT OF KARNATAKA

DEPARTMENT OF LABOUR

Licence No : ALC-MNG/CLAC-100027485/2019-20

Registration No: ALCM/RGN/CLA/UDP-29/2008

Assistant Labour
Commissioner, Mangalore
Division, Mangaluru
Prakruthi Commercial
Complex 2nd Floor, Opp.
Bharath Beedi Works Pvt
Ltd., Kadri road,
Mangalore-575003

Licence Date: Jun 21 2019

FORM-VI

[See Rule 25(1)]

1. Licence is here by granted to SPPL SIPL- DRS INFRA- JV.#1-44, Animitha House, Padubettu, Adi-Udupi Under Section 12(1) of the Contract Labour [Regulation and Abolition] Act-1970, subject to the conditions specified in annexure.

2. This Licence is for doing the work Water supply in the establishment of City Municipal Commissioner, Udupi

3. The Licence shall remain in force till : 11/01/2022

Renewal
[Rule 29]

Sl no.	Date of Licence Renewal	Date of expiry	Fee paid for Licence Renewal	Next Date of expiry
1	05-01-2021	11-01-2021	LICENCE FEE:2250, PENALTY:562	11/01/2022

Please, verify authenticity of by visiting
www.labouronline.kar.nic.in & entering certificate Number


Assistant Labour Commissioner
Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

ANNEXURE

The license is subject to the following conditions:-

1. The license shall be non-transferable.
2. The number of workmen employed as contract labour in the establishment shall not, on any day, exceeds 100 workers.
3. Expect as provided in the rules and fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable
4. The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed for the schedule of employment under the Minimum Wages Act, 1948, where applicable and where the rates have been fixed by agreement settlement or award, not less than the rates, fixed.
5. In cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the Principal Employer of the Establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of contractor shall be the same as applicable to the workmen directly employed by the Principal Employer of the Establishment on the same or similar kind of work; provided that in the case of disagreement with regards to the type of work the same shall be decided by the Commissioner of Labour whose decision shall be final.
6. In other cases the wage rates, holidays, hours of work and conditions of service of the workmen of the contractor shall be such as may be specified in this behalf by the Commissioner of Labour.
7. In every establishment where 20 or more women are ordinarily employed as contract labour shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One of such rooms would be used as play room for the children and the other as bed room for the children. For this purpose the contract shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the sleeping in this behalf by the Commissioner of Labour.
8. The licenses shall notify any change in the number of workmen or the conditions of work to the licensing officer.
9. A copy of license shall be displayed prominently at the premises where the contract work is being carried on.
10. The contract labourers shall be provided the lunch/dinner, coffee/tea and breakfast, snacks free of cost during the working hours, if such facilities are extended to regular workmen employed by the principal employer.
11. The contract labourers shall be paid the minimum wages fixed under the minimum wages act.
12. The contract labourers shall be paid with the same rate of Bonus and Ex-gratia payable to the regular workmen employed by the principal employer.
13. The contract labourers shall be provided with free uniforms and shoes, with such facilities are extended to the regular workmen employed by the principal employer.
14. Employment of Child Labour below 14 years is prohibited.

Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

Annexure 14- Udupi - Labour compensation insurance

RELIANCE**GENERAL
INSURANCE**

A RELIANCE CAPITAL COMPANY

reliancegeneral.co.in

(Toll Free) 1800 3009

(022) 4890 3009

(Registered Office: Reliance General Insurance Co Ltd, H Block, 1st Floor, Dhirubhai Ambani Knowledge City, Maharashtra)

Navi Mumbai-400710.

GROUP MEDICLAIM INSURANCE SCHEDULE

Corporate Office/Policy Issuing Office: Reliance General Insurance Co. Ltd. Reliance Centre, 4th Floor, South Wing, Off. Western Express Highway, Santacruz (East), Mumbai - 400 055, India	Policy Servicing Branch: C-1, 3rd Floor, New Krishna Park, Adjacent to Janakpuri Metro Station West DELHI
Agent/Broker Code:13A07225	Policy Branch Office Code: 1315
Policy No: 131532028430000117	
Date of proposal: 30/07/2020 Proposal No: P072820104480	Details of previous policy (in case of renewal) Previous policy No: Date of expiry:
Tax Invoice No & Date : P072820104480 & 7/30/2020 8:18:00 PM	
INSURED NAME : M/S SUEZ PROJECTS PRIVATE LIMITED	
GSTIN /UIN of the insured	29AABCD3102N1Z8
Policy Holder Address / Place Of Supply : 18, C.S.I COMPOUND, MISSION ROAD, BANGALORE, BENGALURU (BANGALORE) URBAN, KARNATAKA BANGALORE 560027	
Period of Insurance: From 27/07/2020 to mid night on 26/07/2021	
Total No of Employees Covered	164
Total No of Lives Covered	164
Basis of Sum Insured	Individual
Total Sum Insured(Rs)	16400000.00
Coverage Details and List of members covered as per Schedule attached:	
Premium (Rs)	303400.00
IGST (@18.00%)	54612.00
TOTAL PREMIUM PAYABLE(Rs)	358012.00
Branch GSTIN: 27AABCD3102N1Z8 Code: 9971, Description Of Services: Financial and related services;	
Consolidated Stamp duty Paid vide Letter of Authorisation No. CSD/GT/2019/6344 dated 27 Dec 2019 at General Stamp Office, Mumbai.	
** Not Applicable for the State of Jammu & Kashmir	
This document shall be treated as a Tax Invoice as per Rule 12(1) of the Goods and Services Tax Invoice Rules.	

Reliance General Insurance Company Limited, IRDAI Registration No. 103

Certified for Excellence - ISO 9001:2015

Registered Office: Reliance Centre, South Wing, 4th Floor, Off. Western Express Highway, Santacruz (East), Mumbai - 400 055.

Corporate Office: Reliance Centre, South Wing, 4th Floor, Off. Western Express Highway, Santacruz (East), Mumbai - 400 055.

REGD/INDIA/2014/ISSUER

01/310118 Corporate Identity Number: U66603MH0000103E000 HEALTH GROUP MEDICLAIM - MASTER - EMPLOYER/EMPLOYEE RELATIONSHIP/URN

RELIGP0001V010102

Trade Logo displayed above belongs to And Dhirubhai Ambani Ventures Private Limited and used by Reliance General Insurance Company Limited under License.



**GENERAL
INSURANCE**
A RELIANCE CAPITAL COMPANY

reliancegeneral.co.in
(Toll Free) **1800 3009**
(022) **4890 3009**

Notice of communication to be given in respect of claim to :	
Name:	Reliance HCMT
Address:	Reliance General Insurance Company Ltd. HCMT HUB 1-89/3B/40 to 42/KS/301 3rd floor, Krishi block, Krishi Sapphire Madhapur, Hyderabad Pincode: 500081
City:	Hyderabad
Website Address:	
Customer care No	1800-3009
Email id:	rcarehealth@rcap.co.in
In the event of dishonor of Cheque, this policy automatically stands cancelled from inception irrespective of whether a separate communication is sent or not.	
The policy wording with detailed terms, conditions and exclusions are available on our website www.reliancegeneral.co.in	
Policy wordings link : https://www.reliancegeneral.co.in/Insurance/About-Us/Downloads.aspx	
In witness whereof this policy has been signed at Mumbai on 30/07/2020	
In case of a renewal, the benefits provided under the policy and/or terms and conditions of the policy including premium rate may be subject to change.	
Grievance Clause: For resolution of any query or grievance, Insured may contact the respective branch office of the Company or may call at 1800 3009 or may write an email at rgci.services@relianceada.com . In case the insured is not satisfied with the response of the office, insured may contact the Nodal Grievance Officer of the Company at rgci.grievances@relianceada.com . In the event of unsatisfactory response from the Nodal Grievance Officer, insured may email to Head Grievance Officer at rgci.headgrievances@relianceada.com . In the event of unsatisfactory response from the Head Grievance Officer, he/she may, subject to vested jurisdiction, approach the Insurance Ombudsman for the redressal of grievance. Details of the offices of the Insurance Ombudsman are available at IRDAI website www.irda.gov.in or on company website www.reliancegeneral.co.in or on www.gbci.co.in . The insured may also contact the following office of the Insurance Ombudsman within whose territorial jurisdiction the branch or office of the Company is located. Smt. Sandhya Baliga Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 002. Tel.: 011 - 23239633 / 23237532 Fax: 011 - 23230858 Email: bimalokpal.deli@gbci.co.in	
For and on behalf of	
Reliance General Insurance Company Limited	
Agent Codes	13A07225
Agent Contact No	
User ID: 70273497	Policy Generation Date : 30/07/2020

Reliance General Insurance Company Limited. IRDAI Registration No. 103
Registered Office : Reliance Centre, South Wing, 4th Floor, Off Western Express Highway, Santacruz (East), Mumbai - 400 056
Corporate Office : Reliance Centre, South Wing, 4th Floor, Off Western Express Highway, Santacruz (East), Mumbai - 400 056
IRDAI (LIC) 2643 (PSEVER) 01/310118 Corporate Identity Number: U66603MH0000PLC128000 HEALTH GROUP MEDICLAIM - MASTER - EMPLOYER EMPLOYEE RELATIONSHIP/IR :
RELHOP03001V010102
*Trade Logo Displayed above belongs to Anil Dharubhai Antani Ventures Private Limited and used by Reliance General Insurance Company Limited under License.

**Annexure 14A - Mangalore WS - Labour license
under The Contract Labour (Regulation &
Abolition) Act, 1970**

SPPL/KUIDFC/MCC/0181/2020-21**Date: 19.11.2020**

✓ To
The Executive Engineer
KUIDFC-KIUWMIP, Jalasiri Tranche-2
PIU – Mangaluru



Sub: Implementing 24x7 Water Supply System (Strengthening Distribution System) including 8 years O&M to Mangalore city – **Submission of Renewed Labour License.**

Ref: 1. LOA Letter No: MCC/MNG/ADB/KUIDFC/02MNG01/2017-18/561 dated 19.10.2019
2. Contract Package No.02MNG01, Contract Agreement, date: 21.11.2019
3. KIUWMIP/PIU-MNG/02MNG01/CR-03/2017-18/586 date: 10.11.2020

19/11/20
Dear Sir,

With reference to above subject & reference, we would like to inform you that we are submitting herewith copy of Renewed Labour license. Renewed Labour license no. is **ALC-MNG/CLA/C-100040137/2020-21** date:10.11.2020.

Thanking you and assuring you our best services at all times.

Yours faithfully,



Authorized Signatory
Suez Projects Pvt. Ltd (SPPL)

Encl: Labour License copy – 1 No.

Cc: 1. The Deputy Project Director, KUIDFC Mangaluru, Letter for kind information.
2. The Commissioner, Mangaluru City Corporation, Mangaluru, Letter for kind information.
3. Team Leader, EGIS Consulting Engineers, Mangaluru, Letter for kind information.

LD1120023015203289



- Renewal Certificate

GOVERNMENT OF KARNATAKA

DEPARTMENT OF LABOUR

Licence No : ALC-MNG/CLA/C-100040137/2020-21

Registration No: RGN/CLA/MNG-202/2000-01

Assistant Labour
Commissioner ,Mangalore
Division, Mangaluru
Prakruthi Commercial
Complex 2nd Floor, Opp.
Bharath Beedi Works Pvt
Ltd., Kadri road,
Mangalore-575003

Licence Date: Sep 7 2020

FORM-VI

[See Rule 25(1)]

1. Licence is hereby granted to SPPL SIPL DRS INFRATECH JV, No.4/152, Laxman Building, Kottara Chowki, Mangalore - 575006, Under Section 12[1] of the Contract Labour [Regulation and Abolition] Act-1970, subject to the conditions specified in annexure.

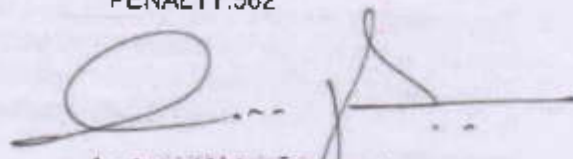
2. This Licence is for doing the work Water supply in the establishment of Commissioner, City Corporation Of Mangalore, Lalbagh, Mangalore

3. The Licence shall remain in force till 21/11/2021

Renewal
[Rule 29]

Sl no.	Date of Licence Renewal	Date of expiry	Fee paid for Licence Renewal	Next Date of expiry
1	10-11-2020	21-11-2020	LICENCE FEE:2250, PENALTY:562	21/11/2021

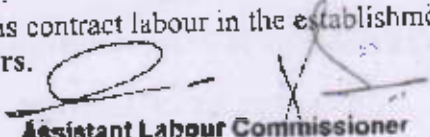
Please, verify authenticity of by visiting
www.labouronline.kar.nic.in & entering certificate Number


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE
Mangalore Division, Mangaluru


ANNEXURE

The license is subject to the following conditions:-

1. The license shall be non-transferable.
2. The number of workmen employed as contract labour in the establishment shall not, on any day, exceeds 100 workers.


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

3. Except as provided in the rules and fees paid for the grant or as the case may be, for renewal of the license shall be non-refundable
4. The rates of wages payable to the workmen by the contractor shall not be less than the rates prescribed for the schedule of employment under the Minimum Wages Act, 1948, where applicable and where the rates have been fixed by agreement settlement or award, not less than the rates, fixed.
5. In cases where the workmen employed by the contractor perform the same or similar kind of work as the workmen directly employed by the Principal Employer of the Establishment, the wage rates, holidays, hours of work and other conditions of service of the workmen of contractor shall be the same as applicable to the workmen directly employed by the Principal Employer of the Establishment on the same or similar kind of work; provided that in the case of disagreement with regards to the type of work the same shall be decided by the Commissioner of Labour whose decision shall be final.
6. In other cases the wage rates, holidays, hours of work and conditions of service of the workmen of the contractor shall be such as may be specified in this behalf by the Commissioner of Labour.
7. In every establishment where 20 or more women are ordinarily employed as contract labour shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One of such rooms would be used as play room for the children and the other as bed room for the children. For this purpose the contract shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the sleeping in this behalf by the Commissioner of Labour.
8. The licensee shall notify any change in the number of workmen or the conditions of work to the licensing officer.
9. A copy of license shall be displayed prominently at the premises where the contract work is being carried on.
10. The contract labourers shall be provided the lunch/dinner, coffee/tea and breakfast, snacks free of cost during the working hours, if such facilities are extended to regular workmen employed by the principal employer.
11. The contract labourers shall be paid the minimum wages fixed under the minimum wages act.
12. The contract labourers shall be paid with the same rate of Bonus and Ex-gratia payable to the regular workmen employed by the principal employer.
13. The contract labourers shall be provided with free uniforms and shoes, with such facilities are extended to the regular workmen employed by the principal employer.
14. Employment of Child Labour below 14 years is prohibited.


Assistant Labour Commissioner
MANGALORE DIVISION, MANGALORE

**Annexure 14B - Mangalore WS - Labour
compensation insurance**

August 07, 2020

SUEZ PROJECTS PRIVATE LIMITED

UNITECH BUSINESS PARK,
TOWER A, 2ND FLOOR SOUTH CITY 1, GURGAON,
GURGAON,
HARYANA, 122001.



Dear Customer,

Sub: Employees Compensation Insurance Policy No: 3114203483962500000

We thank you for having preferred us for your *Insurance* requirements. We at HDFC ERGO General Insurance believe "*Insurance*" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker.

Name of the Intermediary : Not Applicable

Intermediary Code : Not Applicable

Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website www.hdfcergo.com. To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,



Authorised Signatory



3114203483962500000

Page 1 of 12

HDFC ERGO General Insurance Company Limited

Certificate of Insurance cum Policy Schedule



Take it easy!

Policy No. 3114203483962500000

Employees Compensation Insurance



Insured Name	SUEZ PROJECTS PRIVATE LIMITED (PAN Number:AABCD3192N)	Business	OTHERS
Correspondence Address	UNITECH BUSINESS PARK,TOWER A,2ND FLOOR SOUTH CITY 1,GURGAON,GURGAON,HARYANA,122001.		
Mobile	Phone	E Mail	Policy Issuance Date
			07/08/2020
Period of Insurance	From Date & Time	01/08/2020 00:01 AM	To Date & Time
			31/07/2021 Midnight

LAW

The Policy covers Liability of the Insured under the following Law(s) shown as covered, subject to claim being otherwise admissible as per terms, conditions and exclusions of the Policy and subject to Limit of Indemnity as stipulated against each Law:

Sr. No.	Law	Limit of Indemnity
a.	Employee's Compensation Act, 1923 and subsequent amendments thereof prior to the date of issue of this Policy	Subject otherwise, to the terms, conditions & Exclusions of the Policy, the amount of liability incurred by the Insured
b.	Common Law	Subject otherwise, to the terms, conditions & Exclusions of the Policy, the amount of liability incurred by the Insured, but not exceeding:- a) Limit Per Employee for any number of accidents during Period of Insurance ₹. is as per actuals b) Limit Per Accident for any number of Employees ₹. is as per actuals c) Aggregate Limit for all accidents and claims arising there from during the Period of Insurance ₹. is as per actuals

EC-13-0005

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
UB5033MH2037P1 0177177
Registration & Corporate Office
1st Floor, HDFC House, 150 - 156 Backbay Reclamation

Customer Service Address:
2-301, 3rd Floor, Eastern Business District (Magnet Mall),

UIN: IRDAM125F0017V92201112 | IRDAI Reg No: 146 - CIN:

Toll Free Number: 1800 2700 730
Telephone: 191 22 9838 3900 Fax: 91 22 9839 3869



Details of Employees Covered

Description of work done by Employees	Declared Number of Employees	Declared Wages during the Period of Insurance	Place/Places of Employment
ERECTION OF WASTE WATER TREATMENT PLANT	118	15794064.00	ANYWHERE IN INDIA, ANYWHERE IN INDIA, ANYWHERE IN INDIA
ERECTION OF WASTE WATER TREATMENT PLANT	320	41832960.00	ANYWHERE IN INDIA, ANYWHERE IN INDIA, ANYWHERE IN INDIA
ERECTION OF WASTE WATER TREATMENT PLANT	79	10573992.00	ANYWHERE IN INDIA, ANYWHERE IN INDIA, ANYWHERE IN INDIA

Premium Details (₹)

Basic Premium	246752.00
Integrated Tax 18%	44415.00
Total Premium	291167.00

GST Registration No: 06AABCL5045N1ZC. The contract will be cancelled ab initio in case; the consideration under the policy is not realized.

List of Endorsements

Endt No	Description	Effective Date
EC_12_0001	Medical Expenses	01 August 2020
EC-13-0006	Insurance Contract	01 August 2020
EC-13-0005	Policy Schedule	01 August 2020
01	Arbitration Clause	01 August 2020
02	Jurisdiction Clause	01 August 2020
03	Insured's liability to employees of contractors to the insured	01 August 2020
04	All employees of the Insured to be included without selection.	01 August 2020
05	Any liability of the insured which attaches by virtue of an agreement	01 August 2020
06	but which would not have attached in the absence of such agreement.	01 August 2020
07	Policy to cover the contracted and sub contracted employee for ALL OVER INDIA Location.	01 August 2020
01	Communicable Disease Exclusion - 1. Notwithstanding any provision, clause or term of this Insurance Contract to the contrary, this Insurance Contract excludes any loss, cost, damage, liability, claim, fines, penalty or expense or any other amount of whatsoever nature, whether directly or	01 August 2020

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	indirectly and/or in whole or in part, related to, caused by, contributed to by, resulting from, as a result of, as a consequence of, attributable to, arising out of, arising under, in connection with, or in any way involving (this includes all other terms commonly used and/or understood to reflect or describe nexus and/or connection from one thing to another whether direct or indirect):	
02	1.1 a Communicable Disease and/or the fear or threat (whether actual or perceived) of a Communicable Disease and/or the actual or alleged transmission of a Communicable Disease regardless of any other cause or event contributing and/ or occurring concurrently or in any sequence thereto, and	01 August 2020
03	1.2 a pandemic or epidemic, as declared by the World Health Organisation or any governmental authority.	01 August 2020
04	2.As used herein, Communicable Disease means: any infectious, contagious or communicable substance or agent and/or any infectious, contagious or communicable disease which can be caused and/or transmitted by means of substance or agent where:	01 August 2020
05	2.1 the disease includes, but is not limited an illness, sickness, condition or an interruption or disorder of body functions, systems or organs, and	01 August 2020
06	2.2 the substance or agent includes, but is not limited to, a virus, bacterium, parasite, other organism or other micro-organism (whether asymptomatic or not); including any variation or mutation thereof, whether deemed living or not, and	01 August 2020
07	2.3 the method of transmission, whether direct or indirect, includes but not limited to, airborne transmission, bodily fluid transmission, transmission through contact with human fluids, waste or the like, transmission from or to any surface or object, solid, liquid or gas or between organisms including between humans, animals, or from any animal to any human or from any human to any animal, and	01 August 2020
08	2.4 the disease, substance or agent is such:	01 August 2020
09	2.4.1 that causes or threatens damage or can cause or threaten damage to human health or human welfare, or	01 August 2020
10	2.4.2 that causes or threatens damage to or can cause or threaten damage to, deterioration to, contamination of, loss of value of, loss of marketability of or loss of use or usefulness of, tangible or intangible property.	01 August 2020
11	For avoidance of doubt, Communicable Disease includes but is not limited to Coronavirus Disease 2019 (Covid -19) and any variation or mutation thereof.	01 August 2020



Subject to terms and Conditions of Employees Compensation Insurance Policy attached herewith.

Mentioned are four special conditions for EC policy with context to the policy wordings.

1. Subrogation condition no. 14 does not apply to this policy.
2. Average condition no. 9 does not apply to this policy. However, this is subject to adjustment of premium on the basis of actual number of employees and their wages at the time of claims.
3. This policy is issued to cover employer's legal liability for accidents to employees under - The Fatal Accidents Act, 1855.
4. The Wages declared is estimated wages for the Coming Year. Any Increase or Decrease in wages will be declared at the End of Policy & Subject to that Premium will be charged or refunded

Note: The stamp duty of Rs. 123.38 (Rupees One Hundred Twenty-Three And Thirty-Eight Paise Only) is paid by Demand Draft as consolidated stamp duty, vide Receipt/Challan no CSD/293/2020/385/2020 dated 24/01/2020 as prescribed in Government Notification Revenue and Forest Department No Mudrank 2004/4125/CR 690/M-1, dated 31/12/2004

Invoice No	203483962500000	GSTN No	29AABCD3192N1Z8
Place of Supply	KARNATAKA	HSN Code	997139
Policy Issuance Date	07-08-2020	Branch	FARIDABAD - OM SHUBHAM TOWER

For HDFC ERGO General Insurance Company Ltd



Duly Constituted Attorney

EC-13-0005



EMPLOYEES COMPENSATION INSURANCE

POLICY WORDINGS

WHEREAS the **Insured** by a Proposal which shall be the basis of this Contract and deemed to be incorporated herein, has applied to HDFC ERGO General Insurance Company Limited (hereinafter called "the Company") for the insurance hereinafter contained for the **Business** described in the **Schedule** and has paid or agreed to pay the premium stated in the **Schedule** as consideration for such insurance,

NOW THIS **POLICY** WITNESSETH, subject to the terms exceptions and conditions contained herein or endorsed hereon, that if at any time during the **Period of Insurance** any **Employee or Employees** of the **Insured** shall sustain **Injury** by accident arising out of and in the course of his employment in the **Business**, for which the **Insured** is liable to pay compensation under any Law(s) specified in the **Schedule**, then the Company shall indemnify the **Insured** up to the **Limit of Indemnity** against all sums for which the **Insured** shall be so liable, including costs and expenses for defending any such claim incurred with the Company's consent.

PROVIDED ALWAYS that in the event of any change in the Law(s) or the substitution of other legislation therefore, this **Policy** shall remain in force but the liability of the Company shall be limited to such sum as the Company would have been liable to pay if the Law(s) had remained unaltered.

DEFINITIONS

This Policy, the **Schedule** and any Clauses thereon shall be considered one document and any word or expression to which a specific meaning has been attached in Definitions bears that specific meaning wherever it appears in this Policy in bold typeface.

Business means the Business of the **Insured** as specified in the **Schedule** in respect of which this Policy is issued.

Injury means physical bodily injury including death resulting from such injury arising out of an accident but does not include any mental sickness, disease, **Occupational Disease**, unless caused by such physical bodily injury.

Insured means the person or organization specified in the Policy **Schedule** but does not include their Contractors or Sub Contractors.

Occupational Disease means any occupational disease or illness including but not limited to the diseases listed under Schedule III of the Employees' Compensation Act, 1923 contracted by an **Employee** due to employment in the **Business**.

Wages means the remuneration payable to an **Employee** by the **Insured** for the employment in the **Business** and includes any privilege or benefit which is capable of being estimated in money other than a travelling allowance or the value of any travelling concession or a contribution paid by the employer of an employee towards any pension or provident fund or a sum paid to an employee to cover any special expenses entailed on him by the nature of his employment;

Employee or Employees means such person or persons in direct employment under the **Insured** in the **Business**, but shall not include any person employed under a Contractor or Sub-Contractor of the **Insured** unless specifically shown as covered in the **Schedule** and by an endorsement.

Schedule means the Schedule attached to and forming part of this Policy.

Period of Insurance means the period for which this insurance is availed by the **Insured** as specified in the **Schedule**, unless cancelled earlier.

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Limit of Indemnity means the maximum amount of indemnity as specified in the **Schedule** that will be provided under this Policy by the Company in respect of

- a) any particular claim by an **Employee** and
- b) all claims arising out of all accidents for any number of **Employees** during the **Period of Insurance**.

EXCLUSIONS

This Policy shall not cover liability of the **Insured**:

- (a) For **Injury** caused to **Employee** by accident directly or indirectly caused by or arising from or in consequence of or attributable to war, invasion, act of foreign enemy, hostilities (whether war be declared or not) civil war, mutiny, insurrection, rebellion, revolution or military or usurped power, nuclear weapons material, ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel.
- (b) Accident occurring at any other place than the Place or Places of Employment specified in the **Schedule**, unless the **Employee** was at such other place whilst on duty for the purpose of the **Business** and on the directions of the **Insured** or any of its official authorized to exercise control and supervision over the **Employee**.
- (c) For **Occupational Diseases** contracted by an **Employee**.
- (d) For interest and/or penalty imposed on the **Insured** under any law or otherwise.
- (e) Under any Law for medical expenses in connection with treatment of any **Injury** sustained by an **Employee**
- (f) For persons employed in the **Business** under a Contractor or Sub-Contractor of the **Insured** unless specifically covered in the **Schedule**
- (g) For **Injury** sustained by person whilst in the employ of the **Insured** otherwise than in the **Business** and/or who has is not declared for insurance under this Policy.
- (h) Assumed by agreement which would not have attached in the absence of such agreement.
- (i) For any sum which the **Insured** would have been entitled to recover from any party but for an agreement between the **Insured** and such party.
- (j) For any accident occurring whilst the **Employee** is under the influence of intoxicating liquor or drugs.
- (k) For any incapacity or death of an **Employee** resulting from his/her deliberate self-injury or the deliberate aggravation of an accidental **Injury**.

CONDITIONS

1. **The Contract:** This Policy and the **Schedule** shall be read together as one contract and any word defined herein and shown in bold shall bear such specific meaning wherever it may appear in the **Policy** or the **Schedule**.
2. **Due Observance:** The due observance and fulfilment of the terms, conditions and endorsements of this **Policy** so far as they relate to anything to be done or not to be done by the **Insured** shall be condition precedent to any liability of the Company to make any payment under this **Policy**.
3. **Misrepresentation/Non-Disclosure:** This Policy shall be void in the event of any mis-representation or non-disclosure in the **Proposal** and the **Insured** is deemed to warrant the truth and accuracy of the statements and answers in the **Proposal** which form the basis of this Policy.
4. **Written Communication:** Every notice or communication to be given or made under this Policy shall be delivered in writing to the Company.
5. **Safeguards:** The **Insured** shall take reasonable precautions to prevent accidents and disease and shall comply with all statutory obligations, manufacturer's recommendations and other safety regulations in conduct of the **Business**.

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6. **Claim Intimation:** In the event of any occurrence which may give rise to a claim under this Policy the Insured shall as soon as possible, and in any case within a period of thirty days of such occurrence, give notice thereof to the Company in writing with full particulars. Every letter claim with summons and process shall be notified to the Company immediately on receipt. Notice shall also be given to the Company immediately the Insured shall have knowledge of any impending prosecution inquest or fatal enquiry in connection with any such occurrence as aforesaid.
7. **Company's Rights After Loss:** No admission offer promise or payment shall be made by or on behalf of the Insured without the consent of the Company which shall be entitled, without being obliged to do so, if it so desires to take over and conduct in his name the defence or settlement of any claim or to prosecute in his name for its own benefit any claim for indemnity or damages or otherwise and shall have full discretion in the conduct of any proceedings and in the settlement of any claim and the Insured shall give all such information and assistance as the Company may require.
8. **Declaration of Employees and Wages:** It is clearly agreed and Understood that the Insured shall be bound at all times to declare all Employees and Wages payable in respect of such Employees on the basis of which the Premium for this Policy is calculated.

In case of increase in Employees or Wages subsequent to insurance, Insured shall keep the Company intimated and obtain Endorsement by payment of necessary additional premium.

The Insured shall as and when require by the Company permit inspection of its records to verify the Wages and Employees and shall also provide duly authenticated copies thereof if so required the Company.

9. **Average:** Notwithstanding anything contained hereinabove,
- (i) a) If the number of Employees (whether on duty or otherwise) employed by the Insured on the date of accident is higher than the number covered under this Policy, the Company shall indemnify Insured's liability arising out of such accident, only in such proportion that the number of Employees covered bears to the Employees found employed on the date of accident.
- b) If the amount of Wages declared for this insurance for all Employees is less than the actual Wages paid until date of accident, the Company shall be liable to indemnify on any claim only in proportion that the Wages declared bears to the Wages paid. For the purpose of this clause, the Wages declared shall be calculated proportionately for the period from commencement of Policy until date of accident for comparison with the actual wages paid during such period to determine applicability of this clause.
- c) If the liability of the Insured for any claim by an Employee is determined on the basis of Wages higher than covered under this Policy, the Company shall be liable to indemnify only in proportion that the Wages covered under the Policy for the Employees/Employee bears to the Wages on the basis of which Insured is held liable. For the purpose of this clause, the Wages covered in respect of any Employee shall be deemed to be the average wage per Employee in the category under which the Employee falls as specified in the Schedule, unless actual Wages paid at the time of accident is substantiated by submission of documentary evidence to the Company.
- (ii) If more than one of the above clauses is found applicable in respect of a claim, only such clause under which the liability of the Company is least shall be applied.
10. **Maintenance of record of Employees/Wages:** The Insured undertakes to maintain an accurate record of the Employees and Wages in respect of the Business throughout the Period of Insurance, in compliance with all statutory requirements or otherwise, and allow the Company to inspect such records during or upon expiry of this Policy.

EC-13-0004

3114203483962500000

HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
LOGGERS-H2C07/PLC 177/17

Registered & Corporate Office:

1st Floor HD-C House, 103-106 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:

D-301, 3rd Floor, Eastern Business District (Magnez Mall),
UBR Marg, Bandra (West), Mumbai - 400 078

JIN IRDAN125P3C17V022E1112 IRDAI Reg No. 149 | CIN

Toll Free Number: 1800 2700 100

Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699

Email : cor@22hdfcergo.com

11. **Contribution:** If at the time of the happening of an accident covered by this Policy there shall be any other insurance covering the same risk in respect of the **Employee** whether or not effected by the **Insured**, then the Company shall not be liable to contribute more than its rateable proportion of the amount that would otherwise be payable under this Policy.

12. **Cancellation:** The **Insured** may cancel this Policy by sending at least 15 days written notice to the Company and in such event the premium shall be adjusted in accordance with Condition 8 above.

Company also reserves the right to cancel this Policy immediately upon becoming aware of any misrepresentation, fraud, non-disclosure of material facts or non-cooperation by or on behalf of the **Insured**; the Company is not obliged to refund the premium already paid under the Policy.

Notice of cancellation will be mailed to the **Insured** last known address. If notice of cancellation is mailed, proof of mailing will be sufficient proof of notice.

Company shall have no obligation to give notice that the Policy is due for renewal or renew this Policy upon expiration or cancellation.

13. **Forfeiture:** If the **Insured** shall make any claim or connive in the making of any claim, knowing the claim to be false or fraudulent, the Policy shall become void and all claims will stand forfeited.

14. **Subrogation:** In the event of any payment under this Policy, the Company shall be subrogated to the extent of such payment to all the **insured's** rights of recovery and the **insured** shall execute all papers required and shall do everything necessary to secure and preserve such rights, including the execution of such documents necessary to enable the Company effectively to bring suit in the name of each **Insured**.

15. **Alteration and Assignment:** No change in, modification of, or assignment of interest under this Policy shall be effective except when made by a written endorsement to this Policy which is signed by an authorised employee of the Company.

16. **Premium Payment:** It is hereby agreed that, as a condition precedent to any liability under this Policy, any premium due must be paid and actually received by the Company in full. However, where the remittance made by the **Insured** is not realised by the Company the Policy shall be treated as void-ab-initio

17. Arbitration:

a) If any dispute or difference shall arise as to the quantum to be paid under this Policy (liability being otherwise admitted) in respect of any claim, such difference shall independently of all other question be referred to the decision of a sole arbitrator to be appointed in writing by the parties to or if they cannot agree upon a single arbitrator to a panel of three arbitrators to be appointed in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The arbitration shall be governed by Indian law. The venue of arbitration shall be within India.

b) It is clearly agreed and understood that no reference to arbitration can be made if the Company has either not admitted or has disputed liability in respect of any claim under or in respect of this Policy.

c) In the event that these arbitration provisions shall be held to be invalid then all such disputes or differences shall be referred to the exclusive jurisdiction of the Indian Courts.

d) It is further expressly agreed and declared that if the Company shall disclaim liability in respect of any claim and is not within 12 calendar months from the date of such disclaimer be made the subject matter of a suit or proceeding before a Court of law or any other forum, it shall for all purposes be deemed to have been abandoned and shall not thereafter be recoverable hereunder.

18. **Law and Jurisdiction:** It is hereby declared and agreed that this contract of insurance and all claims there under shall be governed by Indian Law and any legal proceeding in respect thereof shall be raised a competent court of India. All claims shall be paid in Indian Rupees only.

EC-13-0004

3114203483862500000

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)

US6030MH2007PLC177117

Registered & Corporate Office:

1st Floor, HDFC House, 155 - 156 Sakinaka, Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:

D-201, 3rd Floor, Eastern Business District (Mumbai),
LBS Marg, Bandrup (West), Mumbai - 400 050

UIN: ARDA125P0017V02201112 | IRDAI Reg No. 148 | CIN

Toll Free Number: 1800 2750 731

Telephone: 41 22 0828 3600 Fax: 51 22 5038 3559

Email: care@hdfcergo.com



Coverage for Medical Expenses

Policy Period	Effective Date From 00:01 hours August 01, 2020
	Expiry Date To (Midnight) July 31, 2021
Effective Date	August 01, 2020
Policy Number	3114203483962500000
Insured	SUEZ PROJECTS PRIVATE LIMITED
Name of Company	HDFC ERGO General Insurance Company Limited
Date Issued	August 07, 2020

In consideration of the payment of an additional premium it is hereby understood and agreed that this Policy is extended to cover Insured's liability towards medical expenses for treatment of Injury arising out of accident in respect of which indemnity granted under this Policy otherwise applies.

Provided always that the liability of the Company under this endorsement shall be limited to Rs. 30000. in respect of each Employee per accident and the aggregate liability of the Company for all accidents during the Period of Insurance to Rs. Nil (Not Applicable)

For the purpose of this endorsement only, Definitions is modified and amended to add the following:

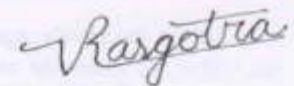
Medical expenses mean reasonable expenses for necessary:

- first aid administered at the time of an accident;
- medical, surgical, x-ray and dental services, including prosthetic devices; and
- ambulance, hospital, professional nursing and funeral services.

Subject to otherwise to the terms, provisions and conditions of the within Policy.

*If the Underwriter wants to give complete coverage for actual incurred the last paragraph of the endorsement can be deleted

For Name of the Company



Authorised Signatory

Date: August 07, 2020



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GRIEVANCE REDRESSAL PROCEDURE

If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:

- Call Center (Toll free helpline)
1800 2 700 700 (accessible from any Mobile and Landline within India)
1800 226 226 (accessible from any MTNL and BSNL Lines)
- Emails - grievance@hdfcergo.com
- Designated Grievance Officer in each branch.
- Company Website - www.hdfcergo.com
- Fax : 022 - 66383699
- Courier : Any of our Branch office or corporate office

You may also approach the Complaint & Grievance (C&G) Cell at any of our branches with the details of your grievance during our working hours from Monday to Friday.

If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at

**The Complaint & Grievance Cell,
HDFC ERGO General Insurance Company Limited
D-301,3rd Floor, Eastern Business District (Magnet Mall),LBS Marg,
Bhandup (West), Mumbai - 400078,
e-mail: grievance@hdfcergo.com**

In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Principal Grievance Officer of the Company at the following address

**The Chief Grievance Officer
HDFC ERGO General Insurance Company Limited
D-301,3rd Floor, Eastern Business District (Magnet Mall),LBS Marg,
Bhandup (West), Mumbai - 400078 ,
e-mail: cgo@hdfcergo.com**

You may also approach the nearest Insurance Ombudsman for resolution of your grievance. The contact details of Ombudsman offices are mentioned below if your grievance pertains to:

- Insurance claim that has been rejected or dispute of a claim on legal construction of the policy
- Delay in settlement of claim
- Dispute with regard to premium
- Non-receipt of your insurance document

You may also refer our website <https://www.hdfcergo.com/customer-care/grievances.html> for detailed grievance redressed procedure.



Ombudsman Offices	
Jurisdiction	Office Details
Gujarat Dadra & Nagar Haveli, Daman and Diu	AHMEDABAD Office of the Insurance Ombudsman, 2nd floor, Ambika House, Near C.U. Shah College, 5, Navyug Colony, Ashram Road, Ahmedabad - 380 014. Tel: 079 - 27546100 / 27546139 Fax: 079 - 27546142 Email: bimalokpal.ahmedabad@gbic.co.in
Missa	BHUBANESHWAR - Shri. B. N. Mishra Office of the Insurance Ombudsman, #2, Forest park, Bhubaneswar - 751 009. Tel: 0674 - 2596467 / 2596465 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@gbic.co.in
Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry)	CHENNAI - Shri. Virander Kumar Office of the Insurance Ombudsman, Helma Akter Court, 4th Floor, 453, Anna Salai, Teymarpet, CHENNAI - 600 018. Tel: 044 - 24333668 / 24333264 Fax: 044 - 24333664 Email: bimalokpal.chennai@gbic.co.in
Assam Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura	GUWAHATI Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati - 781001 (ASSAM). Tel: 0361 - 2132204 / 2132205 Fax: 0361 - 2132207 Email: bimalokpal.guwahati@gbic.co.in
Madhya Pradesh Chattisgarh	BHOPAL - Shri. R. K. Srivastava Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 2 Malviya Nagar, Opp. Ariel Office Near New Market, Bhopal - 462 003. Tel: 0755 - 2769201 / 2769202 Fax: 0755 - 2769209 Email: bimalokpal.bhopal@gbic.co.in
Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh	CHANDIGARH - Shri. Manik B. Sonawane Office of the Insurance Ombudsman S.C.O. No. 101, 102 & 103, 2nd Floor, Balra Building, Sector 17 - D, Chandigarh - 150 017. Tel: 0172 - 2705186 / 2706468 Fax: 0172 - 2706274 Email: bimalokpal.chandigarh@gbic.co.in
Delhi	DELHI - Smt. Sandhya Baliga Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 002. Tel: 011 - 23239833 / 23237539 Fax: 011 - 23230858 Email: bimalokpal.delhi@gbic.co.in
Andhra Pradesh, Telangana, Yarra and part of Territory of Pondicherry	HYDERABAD - Shri. G. Rajeswara Rao Office of the Insurance Ombudsman, 6/248, 1st floor, 'Main Court', Lane Opp. Saleem Function Palace A. C. Guards, Iqbal-Ka-Pool, Hyderabad - 500 004. Tel: 040 - 85504123 / 23312122 Fax: 040 - 23316589 Email: bimalokpal.hyderabad@gbic.co.in
Kerala, Lakshadweep, Mahara part of Pondicherry	ERNAKULAM - Shri. P. K. Vijaya Kumar Office of the Insurance Ombudsman, 2nd Floor, Pulina BMG, Opp. Cochin Shipyard, M. G. Road, Ernakulam - 682 015. Tel: 0484 - 2366759 / 2369338 Fax: 0484 - 2369335 Email: bimalokpal.ernakulam@gbic.co.in
Rajasthan	JAIPUR - Shri. Ashok K. Jain Office of the Insurance Ombudsman, Jeevan Nidhi - II Bldg., 3rd Floor, Bhawan, Singh Marg, Jaipur - 302 005. Tel: 0141 - 2740363 Email: bimalokpal.jaipur@gbic.co.in
Districts of Uttar Pradesh - Faizpur, Jhansi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhadra, Fatehpur, Pratapgarh, Jaunpur, Varanasi, Gaziipur, Jalaun, Kanpur, Lucknow, Unnao, Sitapur, Luckhimpur, Bahraich, Barabanki, Raebareilly, Sravasti, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Mahara, Banka, Kanpur, Azamgarh, Kushinagar, Gorakhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Siddharthnagar	LUCKNOW - Shri. N. P. Bhagat Office of the Insurance Ombudsman, 6th Floor, Jeevan Bhawan, Phase-II, Nawal Kishore Road, Hazratganj, Lucknow - 226 001. Tel: 0522 - 2231030 / 2231031 Fax: 0522 - 2231030 Email: bimalokpal.lucknow@gbic.co.in
Karnataka	BENGALURU - Shri. M. Parshad Office of the Insurance Ombudsman, Jeevan Soudha Building, P.O. No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, 1st Phase, Bengaluru - 560 078. Tel: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@gbic.co.in
West Bengal, Bihar, Sikkim, Jharkhand, Andaman & Nicobar Islands	KOLKATA - Shri. K. B. Sana Office of the Insurance Ombudsman, Hindustan Bldg. Annex 4th Floor, 4, C.R. Avenue, KOLKATA - 700 072. Tel: 033 - 22124339 / 22124340 Fax: 033 - 22124341 Email: bimalokpal.kolkata@gbic.co.in
Coa. Mumbai Metropolitan Region excluding Navi Mumbai & Thane	MUMBAI - Shri. A. K. Dasgupta Office of the Insurance Ombudsman, 3rd Floor, Jeevan Seva Annex, S. V. Road, Santacruz (W), Mumbai - 400 054. Tel: 022 - 26105552 / 26105960 Fax: 022 - 26105052 Email: bimalokpal.mumbai@gbic.co.in
Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region	PUNE - Shri. A. K. Sahas Office of the Insurance Ombudsman, Jeevan Darshan Bldg., 2nd Floor, C.T.S. Naka, 195 in 198, N.C. Kolkar Road, Narayan Peth, Pune - 411 030. Tel: 020 - 22341320 Email: bimalokpal.pune@gbic.co.in
State of Uttaranchal and the following Districts of Uttar Pradesh: Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budhha, Bulandshahr, Etah, Kanooj, Mainpuri, Mathura, Meerut, Moradabad, Muzaffarnagar, Oraiyya, Pilibhit, Etawah, Farukhabad, Firozbad, Gaurambodhanagar, Ghazlebad, Haridol, Shahjahanpur, Hapur, Shamli, Rampur, Kasrganj, Sankhral, Amroha, Hathras, Kunshirambagar, Saharanpur.	NOIDA Office of the Insurance Ombudsman, Email: bimalokpal.noida@gbic.co.in

STATUTORY NOTICE: "INSURANCE IS THE SUBJECT MATTER OF SOLICITATION"

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)

UIN: 13DAN125P001V02201112 | IRDAI Reg No. 148 / 04

JR6030MF-2037PLC177117

Registration & Corporate Office

1st Floor, HDFC House, 155 - 16A Backbay Reclamation,
4th, Parkin Marg, Churchgate, Mumbai - 400 020

Customer Service Address

3-301, 3rd Floor, Eastern Business District, (Wagle's Mall)
, 85 Muz, Bhandup (West), Mumbai - 400 070

Toll Free Number: 1800 2700 703

Telephone: +91 22 5638 3600 Fax: 01 22 5638 3550
Email: care@hdfcergo.com

Annexure 14C - All risk insurance

HDFC ERGO General Insurance Company Limited

Policy Schedule

Policy No. : 2220 2034 8458 6200 000

Erection All Risk Insurance



222020348458620000

SUEZ PROJECTS PRIVATE LIMITED
UNITECH BUSINESS PARK, TOWER A, 2ND
FLOOR, SOUTH CITY 1, CURUGRAM,
GURGAON HARYANA-122001
Contact No.:

Dear Customer,

Sub: Erection All Risk Insurance Policy No. 2220203484586200000

We thank you for having preferred us for your *Insurance* requirements. We at HDFC ERGO General Insurance believe "*Insurance*" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker. Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website www.hdfcergo.com. To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,

Authorised Signatory



HDFC ERGO General Insurance Company Limited**Policy Schedule****Policy No. : 2220 2034 8458 6200 000****Erection All Risk Insurance**

ZC: 201115420000

SUEZ PROJECTS PRIVATE LIMITED
UNITECH BUSINESS PARK, TOWER A, 2ND
FLOOR SOUTH CITY 1, GURUGRAM,
GURGAON HARYANA-122001
Contact No..

Insured Name : SUEZ PROJECTS PRIVATE LIMITED
Policy Number : 2220 2034 8458 6200 000
Policy Period Insurance : From 01/08/2020 00:00 hrs To 23/12/2022 Midnight
Place Of Supply : Kamafaka
Policy Issuance Date : 07/08/2020
Customer Id 101866465602
GSTIN : 29AABCD3182N1Z8
Customer PAN : AABCD3182N
Email : COMMISSIONER.MCC@GMAIL.COM

RM Code	N117227	Loan Account No		Client ID	1538743300
Co-insurance Details	Outgoing	HDFC ERGO GENERAL INSURANCE CO LTD - 40%	MAGMA HDI GENERAL INSURANCE CO LTD - 40%	BHARTI AXA GENERAL INSURANCE COMPANY LIMITED - 20%	

Project Details

Name of the Principal	Mangaluru City Corporation				
Address of the principal	Post Box No: 756, Lalbagh, Mangaluru-575003, Karnataka				
Name of the Contractor	Suez Projects Private Limited				
Address of the Contractor	Unitech Business Park, Tower A, 2nd Floor, South City 1, Gurgaon 122001, Haryana				
Location of Contract Site	575003, ENTIRE, MANGALORE CITY, DAKSHINA KANNADA, MANGALORE, KARNATAKA, PIN - 5/5003				
Description of Project Work	Implementing 24x7 water Supply System Strengthening (Distribution system) in Mangaluru City Package No. 02MNG01.				
Risk Description	Laying of Water Pipelines		Risk Code	110603	
Project Period	From Date	24/12/2019	To Date	23/12/2022	
Maintenance Period	Extended Maintenance Period 12 Months to be reckoned from date of completion or handing over provided the policy period has been extended till completion or handing over.				
Special conditions concerning fire fighting facilities –Equivalent Value of Rs. Per Storage Unit	No of Months For Continuity of Cover	0	Maximum length of open trench (Km)		% of Loss amount for Cover of Extra Charges for Overtime
Total Testing Period (in Months)	1		Additional Testing Period (in Months)	0	

Coverage Details, Sum Insured & Premium

Perils Covered	Sum Insured (₹)	Premium (₹)
Premium excl. Terrorism	5,250,000,000.00	6,300,001.00
Terrorism Damage Cover	0.00	0.00
Net Policy Premium		6,300,001.00
Integrated Tax * 8%		1,134,000.00
Total Premium		7,434,001.00

Installment Details

Installment No	Due Date For Payment	Premium Payable			
		Net Premium (₹)	Terrorism Premium (₹)	* Taxes (₹)	Total Payable (₹)
1	01/08/2020	1,947,273.00	0.00	350509.14	2297782.14
2	23/09/2020	544,091.00	0.00	97936.38	642027.38
3	23/12/2020	544,091.00	0.00	97936.38	642027.38
4	23/03/2021	544,091.00	0.00	97936.38	642027.38
5	23/06/2021	544,091.00	0.00	97936.38	642027.38
6	23/09/2021	544,091.00	0.00	97936.38	642027.38
7	23/12/2021	544,091.00	0.00	97936.38	642027.38
8	23/03/2022	544,091.00	0.00	97936.38	642027.38
9	23/06/2022	544,091.00	0.00	97936.38	642027.38

* Tax amount is subject to change.

Details of Sum Insured

Insured Items	Sum Insured (₹)	
Section I - Material Damage		
Description	Occurrence Limit/ Percentage	Aggregate Limit/Sum Insured
Project Sum Insured	5,250,000,000.00	5,250,000,000.00
Section II - Third Party Liability		
1 Third Party Liability Cover	Occurrence Limit	Aggregate Limit/Sum Insured
	0.00	250,000,000.00

Details of Add On Cover

Description	Occurrence Limit/Percentage (₹)	Aggregate Limit/Sum Insured (₹)	Excess/ Deductible applicable if any
Professional Fees	0.00	50,000,000.00	

HDFC ERGO General Insurance Company Limited

Policy Schedule

Policy No. : 2220 2034 8458 6200 000

Erection All Risk Insurance

Details of Add On Cover			
Description	Occurrence Limit/Percentage (%)	Aggregate Limit/Sum Insured (₹)	Excess/ Deductible applicable if any
Extended Maintenance Cover	0.00	₹ 250,000,000.00	Testing Period excess
CONSTRUCTION MACHINERY PLANTS AND EQUIPMENTS	0.00	2,500,000,000	As mentioned in Excess/Deductibles Tab
Third Party Liability Cover	0.00	250,000,000.00	
Additional Custom Duty	0.00	525,000,000.00	5 % of the Additional Custom Duty incurred in addition to the excess amount applicable for the affected item under the policy.
72 Hours Clause	0.00	0	
Escalation	0.00	525,000,000.00	
Design Defect Cover - DD	0.00	5,250,000,000.00	5 times AOG excess
Earthquake Cover	0.00	5,250,000,000.00	
Removal of Debris	0.00	10,000,000.00	
Insured Own Surrounding property	0.00	525,000,000.00	
Valuable Documents Cover	0.00	5,000,000.00	
Loss Minimization Expenses	0.00	50,000,000.00	
50-50 Clause	0.00	0	
Waiver of Contribution Clause	0.00	0	
Cover for Offsite Storage Fabrication	0.00	50,000,000.00	Rs. 1500 for each and every claim

Excess/ Deductibles

For Normal Claims	5% of Claim amount subject to minimum of Rs. 75000
For Fire/Explosion Excess	10% of Claim amount subject to minimum of Rs. 1000000
For Acts of GOD Claims/Major Perils/Collapse	10% of Claim amount subject to minimum of Rs. 1000000
Testing Period excess	5% of Claim amount subject to minimum of Rs. 1000000

EXCESS/ DEDUCTIBLES APPLICABLE FOR CONSTRUCTION MACHINERY PLANT & EQUIPMENT

Value of equipments	For claims arising out of AOG perils	For claims arising out of perils other than AOG
Individual value upto Rs.1 lakh.	10 % of S.I. Subject to a minimum of Rs. 5,000/-	2 % of S.I. subject to minimum of Rs. 1,500/-
Individual value over Rs. 1 lakh and upto Rs. 5 lakh	5 % of S.I. Subject to a minimum of Rs. 10,000/-	1.5 % of S.I. subject to minimum of Rs. 2,000/-
Individual value over Rs. 5 lakh and upto Rs. 10 lakhs.	3 % of S.I. subject to a minimum of Rs. 25,000/-	1.25 % of S.I. subject to minimum of Rs. 7,500/-
Individual value over Rs. 10 lakhs upto Rs. 25 lakhs	2 % of S.I. subject to a minimum of Rs. 30,000/-	1.00 % of S.I. subject to minimum of Rs. 12,500/-

Clauses & Extensions

1) Endorsement Regarding Safety Measures	14) THIRD PARTY LIABILITY INCLUDING CROSS LIABILITY COVERAGE FOR Rs. 250000000
2) AUTOMATIC REINSTATEMENT COVER, COVERAGE FOR Rs. 525000000/-	15) COVER FOR OFFSITE STORAGE/ FABRICATION, COVERAGE FOR Rs. 50000000
3) Endorsement Regarding Damage to Crops, Forests etc	16) CONSTRUCTION MACHINERY EQUIPMENT, COVERAGE FOR Rs. 2500000
4) ENDORSEMENT REGARDING ADDITIONAL CUSTOMS DUTY - 105 COVERAGE FOR RS. 525000000	17) ENDORSEMENT REGARDING MAINTENANCE VISITS AND EXTENDED MAINTENANCE COVER - 113 EXTENDED MAINTENANCE FOR 12 Months Rs.525000000/-
5) COVER OF EXTRA CHARGES FOR OVERTIME, NIGHT WORK, WORK ON PUBLIC HOLIDAYS, EXPRESS FREIGHT INCLUDING AIR FREIGHT - 105 COVERAGE UPTO 30% OF CLAIM AMOUNT	18) 72 -Hours Clause
6) "Sanction and Embargo Clause No (re)insurer shall be deemed to provide cover and no (re)insurer shall be liable to pay any claim or provide any benefit hereunder to the extent that the provision of such cover payment of such claim or provision of such benefit would expose that (re)insurer to any sanction, prohibition or restriction under United Nations resolutions or the trade or economic sanctions, laws or regulations of the European Union, United Kingdom or United States of America	19) Endorsement Concerning Storage
7) 50-50 CLAUSE	20) ESCALATION @ 10% COVERAGE FOR RS. 525000000
8) Warranty concerning underground cables and pipes	21) PROFESSIONAL FEES CLAUSE FOR A VALUE OF Rs.50000000/-
9) INSURED'S OWN SURROUNDING PROPERTY AND INCLUDING FLEXA COVER COVERAGE FOR Rs.525000000	22) REMOVAL OF DEBRIS in aggregate Up to Rs. 10000000
10) STFI COVER FOR 52500000000/-	23) COVER OF MANUFACTURER'S RISK DESIGN DEFECT COVER DE - 4 COVERAGE FOR RS.525000000
11) LOSS MINIMISATION EXPENSES FOR A VALUE OF Rs.50000000	24) VALUABLE DOCUMENTS COVER, COVERAGE FOR Rs. 50000000/-
12) Waiver of contribution clause	25) COVER OF EXTRA CHARGES FOR OVERTIME, NIGHT WORK, WORK ON PUBLIC HOLIDAYS, EXPRESS FREIGHT INCLUDING AIR FREIGHT - 105.



13) Waiver of Subrogation clause	COVERAGE UPTO 30% OF CLAIM AMT 26) On account payment clause
Special Conditions, Warranties & Exclusions	
<p>Sanction and Embargo Clause No (re)insurer shall be deemed to provide cover and no (re)insurer shall be liable to pay any claim or provide any benefit hereunder to the extent that the provision of such cover, payment of such claim or provision of such benefit would expose that (re)insurer to any sanction, prohibition or restriction under United Nations resolutions or the trade or economic sanctions laws or regulations of the European Union, United Kingdom or United States of America.</p> <p>NMA 2915 End B 1. Electronic Data Exclusion - Notwithstanding any provision to the contrary within the Policy or any endorsement thereto, it is understood and agreed as follows - a) This Policy does not insure, loss, damage, destruction, distortion, erasure, corruption or alteration of ELECTRONIC DATA from any cause whatsoever (including but not limited to COMPUTER VIRUS) or loss of use, reduction in functionality, cost, expense of whatsoever nature resulting therefrom, regardless of any other cause or event contributing concurrently or in any other sequence to the loss. ELECTRONIC DATA means facts, concepts and information converted to a form useable for communications, interpretation or processing by electronic and electro-mechanical data processing or electronically controlled equipment and includes programmes, software, and other coded instructions for the processing and manipulation of data or the direction and manipulation of such equipment. COMPUTER VIRUS means a set of corrupting, harmful or otherwise unauthorised instructions or code including a set of maliciously introduced unauthorised instructions or code, programmatic or otherwise that propagate themselves through a computer system or network of whatsoever nature. COMPUTER VIRUS includes but is not limited to Trojan Horses, worms and time or logic bombs. b) However, in the event that a peril listed below results from any of the matters described in paragraph a) above, this Policy, subject to all its terms, conditions and exclusions will cover physical damage occurring during the Policy period to property insured by this Policy directly caused by such listed peril.</p> <p>Listed Perils - Fire, Explosion</p> <p>2. Electronic Data Processing Media Valuation - Notwithstanding any provision to the contrary within the Policy or any endorsement thereto, it is understood and agreed as follows:- Should electronic data processing media insured by this Policy suffer physical loss or damage insured by this Policy, then the basis of valuation shall be the cost of the blank media plus the costs of copying the ELECTRONIC DATA from back-up or from originals of a previous generation. These costs will not include research and engineering nor any costs of recreating, gathering or assembling such ELECTRONIC DATA. If the media is not repaired, replaced or restored the basis of valuation shall be the cost of the blank media. However this Policy does not insure any amount pertaining to the value of such ELECTRONIC DATA to the Assured or any other party even if such ELECTRONIC DATA cannot be recreated, gathered or assembled.</p> <p>2. WARRANTED ALL STORAGES OF CRITICAL & VULNERABLE MATERIALS UNDER COVERED PREMISES ONLY 3. WARRANTED PROPER SECURITY FOR MATERIALS AT THE SITE AND AT STORAGE LOCATIONS 4. Warranted that storage methodology should be in compliance with the OEM's instructions and recommendations. Further it is warranted that electronic and electrical items designed for indoor use should be stored within covered premises. 5. Warranted that no wet risk exposure and no work in hot area. 6. Warranted that any loss/damage occurred or exaggerated in the structure erected prior to the policy inception with us is not covered under the policy. 7. Warranted that there have been no losses from project inception till date. NKORL confirmation to be provided at the time of placement of risk. 8. Demolition/ Dismantling of existing structures stand excluded from the scope of policy coverages 9. Terrorism Damage Exclusion Clause 10. If the Insurer alleges that by reason of this clause, any amount is not covered by this policy, the burden of proving the contrary shall rest in the Insured. 11. SPECIAL CONDITIONS FOR OPEN TRENCHES DURING LAYING OF PIPELINES DUCTS AND CABLES - 115 Special conditions for open trenches during laying of pipelines, ducts & cables : It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the policy or endorsed thereon, the insurers will indemnify the insured for any loss or damage due to storm, rain, flood, inundation such as sanding, silting up, mudding up, erosion, collapse and floating up of pipes, ducts or cables, sustained by completely or partly excavated open trenches and/or items laid therein upto a maximum length of 1 km open trench any one loss event. The insured shall make sure that plugging facilities are available near the pipe ends for emergency purposes and pipe ends exposed to flooding are plugged before any interruption during idle periods such as nights and holidays. 12. Tunneling works and Underground assets Risk other than pipeline stands excluded from scope of policy coverages 13. Supplementary Cover-Loss Payee Clause - Subject to name should be provided at the time of binding the risk 14. Nominate Loss adjuster - 1 - Proclaim Insurance Surveyors & Loss Assessors India Pvt Ltd, 2- Puri Crawford Insurance Surveyors & Loss Assessors India Pvt Ltd, 3 - Protocol Surveyors, 4- Bhatawadekar Insurance Surveyors, 5- Mehta & Padamsay, 6- Any other surveyors as mutually agreed 15. Property in care custody and control/Leased equipment excluding CPM equipments are covered if their Sum insured is included in total project sum insured 16. Fire fighting expenses, INR 50 lacs any one occurrence and INR 1 Cr. In aggregate 17. relating to means: relating to; in connection with; arising under arising out of; as a result of; as a consequence of; attributable to; contributed to by; and any other term commonly used and/or understood to reflect or describe a nexus and/or connection from one thing to another whether direct or indirect. For avoidance of doubt: (1) no other prior concurrent or subsequent provision, clause, term or exception of this policy (including (but not limited to) any prior concurrent or subsequent endorsement and/or any provision, clause, term or exception that operates, or is intended to operate, to extend the coverage of, or protections provided by this policy; (2) any change in the law clause or similar provision; (3) any follow the fortunes clause or similar provision; and/or, (4) no change in the law or any regulation (to the extent permitted by applicable law), shall operate to provide any insurance, coverage or protection under this policy that would otherwise be excluded through the exclusion set forth in this clause. 18. Communicable Disease means any: infectious disease; contagious disease; communicable disease; and/or, any infectious, contagious or communicable substance (including (but not limited to) a virus, bacterium, parasite or organism or any mutation of any such things, whether living or not), regardless of the method of transmission (including (but not limited to) whether direct or indirect airborne transmission, bodily fluid transmission, transmission from or to any surface or object, solid, liquid or gas) that causes, can cause or threatens: damage to human health; damage to human welfare and/or, damage, deterioration, loss of value, marketability or loss of use to tangible or intangible property. For the avoidance of doubt Communicable Disease includes (but is not limited to) corona virus disease 2019 (COVID-19) and any mutation or variation thereof. 19. COMMUNICABLE DISEASE EXCLUSION CLAUSE-Notwithstanding any other provision, clause or term of this policy to the contrary, this policy does not cover any claim, loss, liability, damage, cost or expense of any kind relating to, whether directly or indirectly and/or in whole or in part, a Communicable Disease and/or any fear or threat thereof (whether actual or perceived) As used in this clause, 20. Exclusion of Horizontal Directional Drilling 21. COMPULSORY EXCESS:- NORMA PERILS -5 % of claim amount subject to minimum of Rs. 75,000/- AOG/ MAJOR PERILS -10% of Claim amount subject to minimum of the Testing Period Excess-1,000,000/- TESTING PERIOD EXCESS:5 % of claim amount subject to minimum of Rs. 1,000,000/- FIRE/ EXPLOSION:-10% of Claim amount subject to minimum of the Testing Period Excess-1,000,000/-</p>	
COVERAGES	EXCESS
Off site storage / Fabrication	5% of Claim Amount subject to Minimum of Rs. 25000 per Claim for Storage Claim
AIR FREIGHT	5 % of the Air Freight incurred per Claim, in Addition to Policy Excess
Additional Custom Duty	5 % of the Additional Custom Duty incurred, in addition to the Excess Amount applicable for the affected item under the Policy
CONSTRUCTION MACHINERY EQUIPMENT	2 % of CPM Sum Insured subject to minimum of Rs 50000/-



HDFC ERGO General Insurance Company Limited

Policy Schedule

Policy No. : 2220 2034 8458 6200 000

Erection All Risk Insurance

Special Conditions, Warranties & Exclusions

DESIGN DEFECT COVER : 5 times AOG Excess

EXTENDED MAINTENANCE FOR 12 Months Testing Period Excess

22 Warranted that this policy does not cover old, second hand and prototype equipments.

For Queries / Claim Services	Toll-Free	1800 2 700 700	E-mail	care@hdfcergo.com	Invoice No.:	0080700759411	HSN Code	997139
Address	6th Floor, Leela Business Park, Anandhi-Kurba Road, Andheri(E), Mumbai 400 059							

GST Registration No. 06AABCL5045N1ZC

The contract will be cancelled ab initio in case, the consideration under the policy is not realized.

"The stamp duty of ₹ 0.50 paid by Demand Draft, vide Receipt/Challan no. CSD/203/2020/395/2020 dated 24/01/2020 as prescribed by Government of Maharashtra Order No. Mudrank-2017/C.R.97/M-1, dated the 09th January 2018". GST for this invoice is not payable under reverse charge basis.

Note: Where the proposal form is not received, information obtained from insured, whether orally or otherwise, is captured in the policy document. Discrepancies, if any, in the information contained in the policy document may be pointed out by an insured within 15 days from the policy issue date after which information contained in the policy document shall be deemed to have been accepted as correct. The company may cancel the policy by sending 15 days notice in case of any fraud, misrepresentation, non disclosure of material fact or non cooperation of the insured as per Regulation 11(1) (xiii) of IRDA (Protection of Policy Holders interests) Regulations, 2017.

The Company shall be under no obligation to renew the policy on expiry of the period for which premium has been paid. The Company reserves the right to offer revised rates, terms and conditions at renewal based on claim experience and a fresh assessment of the risk. This policy may be renewed only by mutual consent and subject to payment in advance of the total premium at the rate in force at the time of renewal. The Company, however, shall not be bound to give notice that the policy is due for renewal or to accept any renewal premium. Unless renewed as herein provided, this policy shall automatically terminate at the expiry of the period for which premium has already been paid.

Branch : gmd 'Ir, shop no- 35 & 36 ,gm, shubram tower neelam bata chowk, nit, landabadi

For HDFC ERGO General Insurance Company Ltd.


Duly Constituted Attorney

The Policy wording attached herewith includes all the standard coverage offered by the Company to its customers. Your entitlement for coverage/benefits shall be restricted to the coverage/benefits as mentioned in this policy schedule.



HDFC ERGO General Insurance Company Limited

Policy Schedule

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Erection All Risk Insurance

WHEREAS the insured named in the Schedule hereto had made to HDFC ERGO General Insurance Company Ltd., a written proposal by completing a Proposal Form which together with any other statements made in writing by the insured for the purpose of this Policy is deemed to be incorporated herein.

NOW THIS POLICY OF INSURANCE WITNESSETH

that subject to and in consideration of the Insured having paid to the Company, the premium mentioned in the said Schedule and subject to the terms, exclusions, provisions and conditions contained herein or endorsed hereon the company will indemnify the Insured against sudden and unforeseen physical loss of or damage to the property insured in the manner and to the extent hereinafter provided.

GENERAL EXCLUSIONS -

The Company will not indemnify the Insured in respect of loss, damage or liability directly or indirectly caused by or arising out of or aggravated by

- War, invasion, act of foreign enemy, hostilities or war like operations (whether war be declared or not), civil war, rebellion, revolution, insurrection, mutiny, civil commotion, military or usurped power, martial law, conspiracy, confiscation, commandeering a group of malicious persons or persons acting on behalf of or in connection with any political organisation, requisition or destruction or damage by order of any government de jure or de facto or by any public, municipal or local authority.
- Nuclear reaction, nuclear radiation or radioactive contamination.
- Wilful act or wilful negligence of the Insured or of his responsible representative
- Cessation of work whether total or partial.
- Terrorism Damage Exclusion Warranty:

This Policy excludes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any act of terrorism regardless of any other cause or event contributing concurrently or in any other sequence to the loss.

For the purpose of this exclusion, an act of terrorism means an act or series of acts, including but not limited to the use of force or violence and/or the threat thereof, of any person or group(s) of persons, whether acting alone or on behalf of or in connection with any organisation(s) or government(s), or unlawful associations, recognized under Unlawful Activities (Prevention) Amendment Act, 2008 or any other related and applicable national or state legislation formulated to combat unlawful and terrorist activities in the nation for the time being in force, committed for political, religious, ideological or similar purposes including the intention to influence any government and/or to out the public or any section of the public in fear for such purposes.

This exclusion also includes loss, damage, cost or expense of whatsoever nature directly or indirectly caused by, resulting from or in connection with any action taken in controlling, preventing, suppressing or in any way relating to the above.

In any action, suit or other proceedings where the company allege that by reason of the provisions of Exclusion (a) above any loss, destruction, damage or liability is not covered by this insurance, the burden of proving that such loss, destruction, damage or liability is covered shall be upon the Insured.

PERIOD OF COVER -

The liability of the Company shall commence, (notwithstanding any date to the contrary specified in the Schedule) only from the time after the unloading of the property specified in the Schedule from any conveyance at the site specified in the schedule and shall continue until immediately after the first test operation or test loading is concluded (whichever is earlier) but in no case beyond four weeks from the day on which after completion of erection a trial running is made and/or readiness for work is declared by the erectors/contractors, whichever is earlier. If however, a part of a plant or one or several machine/s is/are tested and put into operation the cover and consequently the liability of the Company for that particular part of the plant or machine ceases whereas it continues for the remaining parts which are not yet ready.

In case after the expiry of four weeks of trial running, approval of the plant or any part thereof is not given by the concerned Authorities the cover for the extended period of further trial running can be covered at extra premium to be arranged before hand.

If the actual erection period is shorter than the period indicated in the Schedule, no refund of premium shall be allowed, unless specifically allowed by Insurers.

In the case of second-hand/used property, the insurance hereunder shall however, cease immediately on the commencement of the testing.

At the latest, the insurance shall expire on the date specified in the Schedule but if the work of erection and test operations included in the insurance is not completed within the time specified hereunder, the company may extend the period of Insurance but the Insured shall pay to the Company additional premium at agreed rates.

GENERAL CONDITIONS -

- The due observance and fulfillment of the terms of this Policy in so far as they relate to anything to be done or complied with by the Insured and the truth of the statements and answers in the questionnaire and proposal made by the Insured shall be a condition precedent to any liability of the company



2. The Schedule and the Section(s) shall be deemed to be incorporated in and form part of this policy and the expression 'this Policy' wherever used in this contract shall be read as including the Schedule and the Section(s). Any word or expression to which a specific meaning has been attached in any part of this Policy or of the Schedule or of the Section(s) shall bear such meaning wherever it may appear.
3. The Insured shall at his own expense take all reasonable precautions and comply with all reasonable recommendations of the Company to prevent loss damage or liability and comply with statutory requirements and manufacturers' recommendations.
4. a) Representatives of the Company shall at any reasonable time have the right to inspect and examine the risk and the Insured shall provide the representatives of the company with all details and information necessary for the assessment of the risk.
- b) The Insured shall immediately notify the Company by telegram and in writing of any material change in the risk and cause at his own expense such additional precautions to be taken as circumstances may require and the scope of cover and/or premium shall, if necessary be adjusted accordingly.

No material alteration shall be made or admitted by the Insured whereby the risk is increased unless the continuance of the Insurance be confirmed in writing by the Company.

5. In the event of any occurrence, which might give rise to a claim under this Policy, the Insured shall -
- a) immediately notify the Company by telephone or telegram as well as in writing giving an indication as to the nature and extent of loss or damage.
 - b) take all steps within his power to minimize the extent of the loss or damage.
 - c) preserve the parts affected and make them available for inspection by a representative of the company or surveyor deputed by the Company.
 - d) furnish all such information and documentary evidence as the company may require.
 - e) inform the police authorities in case of loss or damage due to theft or burglary.

The Company shall not in any case be liable for loss damage or liability of which no notice has been received by the company within 14 days of its detection.

Upon notification being given to the Company under this condition, the Insured may carry out the repair or replacement of any minor damage not exceeding Rs. 7,500/-. In all other cases a representative of the company shall have the opportunity of inspecting the loss or damage before any repairs or alterations are effected. If a representative of the company does not carry out the inspection within a period of time which could be considered as adequate under the circumstances the Insured is entitled to proceed with the repairs or replacement.

The liability of the Company under this Policy in respect of any item sustaining damage shall cease if said item is not repaired properly without delay.

6. The Insured shall at the expense of the Company do and concur in doing and permit to be done all such acts and things as may be necessary or required by the Company in the interest of any rights or remedies or of obtaining relief or indemnity from parties (other than those insured under this Policy) to which the company shall be or would become entitled or subrogated upon their paying for or making good any loss or damage under this Policy, whether such acts and things shall be or become necessary or required before or after the Insured's indemnification by the company.
7. If any dispute or difference shall arise as to the quantum to be paid under this Policy (liability being otherwise admitted) such difference shall independently of all other questions be referred to the decision of a sole arbitrator, to be appointed in writing by the parties to or, if they cannot agree upon a single arbitrator within 30 days of any party invoking Arbitration, the same shall be referred to a panel of three Arbitrators comprising of two Arbitrators - one to be appointed by each of the parties to the dispute/difference, and the third Arbitrator to be appointed by such two Arbitrators and arbitration shall be conducted under and in accordance with the provisions of the Arbitration and Conciliation Act 1996.

It is clearly agreed and understood that no difference or dispute shall be referable to arbitration as hereinbefore provided, if the Company has disputed or not accepted liability under or in respect of this Policy.

It is hereby expressly stipulated and declared that it shall be a condition precedent to any right of action or suit upon this Policy that the award by such Arbitrator/Arbitrators of the amount of the loss or damage shall be first obtained.

8. If a claim is in any respect fraudulent, or if any false declaration is made or used in support thereof, or if any fraudulent means or devices are used by the Insured or anyone acting on his behalf to obtain any benefit under this Policy, or if a claim is made and rejected and no action or suit is commenced within three months after such rejection or, in case of arbitration taking place as provided therein, within three months after the Arbitrator or Arbitrators or Umpire have made their award, all benefit under this Policy shall be forfeited.
9. If at the time any claim arises under this Policy there be any other insurance covering the same loss, damage or liability the company shall not be liable to pay or contribute more than their rateable proportion of any claim for such loss, damage or liability.
10. This insurance may be terminated at the request of the Insured at any time in which case the Insurers will refund appropriate premium amount subject to the following conditions.

- i) Claims experience under the policy as on date of cancellation should be less than 60 % of reworked premium.



- ii) The unexpired period is not less than 3 months or 25% of the policy period, whichever is less
- iii) Testing period should not have commenced.

This insurance may also at any time be terminated at the option of the Insurer by 15 days notice to that effect being given to the Insured in which case the Insurers shall be liable to repay on demand a rateable proportion of the premium for the unexpired term from the date of cancellation.

SECTION I - MATERIAL DAMAGE

The Company hereby agrees with the Insured (subject to the exclusions and conditions contained herein or endorsed hereon) that if, at any time during the period of insurance stated in the said Schedule or during any further period of extension thereof the property (except packing materials of any kind) or any part thereof described in the said Schedule be lost, damaged or destroyed by any cause, other than those specifically excluded hereunder, in a manner necessitating replacement or repair the Company will pay or make good all such loss or damage up to an amount not exceeding in respect of each of the items specified in the Schedule the sum set opposite thereto and not exceeding in the whole the total sum insured hereby -

The Company will also reimburse the Insured for the cost of clearance and removal of debris following upon any event giving rise to an admissible claim under this policy but not exceeding in all the sum (if any) set opposite thereto in the Schedule.

EXCLUSION TO SECTION I -

The Company, shall not, however, be liable for -

- a) the first amount of the loss arising out of each and every occurrence shown as Excess in the Schedule;
- b) loss discovered only at the time of taking an inventory;
- c) normal wear and tear, gradual deterioration due to atmospheric conditions or otherwise, rust, scratching of painted or polished surfaces or breakage of glass;
- d) loss or damage due to faulty design, defective material or casting, bad workmanship other than faults in erection.

Note - This exclusion shall be limited to the items immediately affected and shall not be deemed to exclude loss or damage to other insured items resulting from such excluded perils:

- e) the cost necessary for rectification or correction of any error during erection unless resulting in physical loss or damage
- f) loss of or damage to files, drawings, accounts, bills, currency, stamps, deeds, evidence of debt, notes, securities cheques, packing materials such as cases, boxes, crates.
- g) any damage or penalties on account of the Insured's non-fulfilment of the terms of delivery or completion under his Contract of Erection or of any obligations assumed thereunder including consequential loss of any kind or description or for any aesthetic defects or operational deficiencies

PROVISIONS APPLYING TO SECTION I

Memo 1. SUM INSURED

It is a requirement of this insurance that the Sum of Insurance stated in the Schedule shall not be less than the completely erected value of the property inclusive of freights, customs duty, erection cost and the Insured undertakes to increase or decrease the amount of insurance in the event of any material fluctuation in the level of wages or prices. Provided always that such increase or decrease shall take effect only after the same has been recorded on the Policy by the Company.

If, in the event of the occurrence of a loss, or damage it is found that the Sum Insured representing the completely erected value of the property and/or of particular items involved is less than the amount required to be insured the amount recoverable by the Insured under the Policy shall be reduced in such proportion as the Sum Insured bears to the amount required to be insured.

Memo 2. PREMIUM ADJUSTMENT

The sum insured under the Policy representing the completely erected value of the plant machinery/project shall be adjustable at completion of erection on the basis of the actual values to be declared by the insured in respect of freight and handling charges, customs dues and costs of erection and the difference in premium shall be met with by payment, at the rate agreed to or by the insured as the case may be. Any increase or decrease in prime cost of Plant and Equipment shall not be the subject matter of premium adjustment.

Memo 3. BASIS OF LOSS SETTLEMENT

In the event of any loss or damage the basis of any settlement under this Policy shall be -

- a) in the case of damage which can be repaired, the cost of repairs necessary to restore the items to their condition immediately before the occurrence of the damage less salvage,



HDFC ERGO General Insurance Company Limited

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Erection All Risk Insurance

OR

b) in the case of a total loss the actual value of the items immediately before the occurrence of the loss less salvage;

However, only to the extent the costs claimed has to be borne by the Insured and to the extent they are included in the Sum Insured and provided always that the provisions and conditions have been complied with.

All damages which can be repaired shall be repaired, but if the cost of repairing any damage equals or exceeds the value of the items immediately before the occurrence of the damage the settlement shall be made on the basis provided for in (b) above.

The cost of any provisional repairs will be borne by the Company if such repairs constitute part of the final repairs and do not increase the total repair expenses.

The cost of any alterations, additions and/or improvements shall not be recoverable under this Policy.

Extension of Cover Any extra charges incurred for overtime, work on holidays, express freight (including air freight), are not covered by this insurance unless agreed upon at an additional premium.

In the event of loss or damage the insurance shall notwithstanding be maintained in force during the period of insurance for the sum insured, the insured undertaking to pay a pro-rata additional premium of the full amount of each claim for the loss or damage from the date of such loss to the expiry of the period of insurance.

Memo 4. CONSTRUCTION PLANT AND MACHINERY

Loss of or damage to Construction Plant and Machinery excludes loss or damage directly caused by its own explosion or its own mechanical or electrical breakdown or derangement.

Memo 5 - SURROUNDING PROPERTY

Loss or damage to property located on or adjacent to the site and belonging to or held in care, custody or control of the Principal(s) or the Contractor (s) shall only be covered if occurring directly due to the erection, construction or testing of the items insured under Section I and happening during the period of cover, and provided that a separate Sum therefore has been entered in the Schedule under Section I, Item 5 for Principal's specified surrounding property. This cover does not apply to construction/erection machinery, plants and equipment.

Memo 6 MAJOR PERILS/ACTS OF GOD CLAIMS

The Major Perils/Acts of God Claims shall mean the claims arising out of -

- a) Earthquake - Fire & Shock
- b) Landslide/Rockslide/Subsidence,
- c) Flood/Inundation,
- d) Storm/Tempest/Hurricane/Typhoon/Cyclone/lightning or other atmospheric disturbances.

SECTION II - THIRD PARTY LIABILITY

The Company will indemnify the Insured against -

- a) Legal liability for accidental loss or damage caused to property of other persons including property held in trust by or under custody of the Insured for which he is responsible excluding any such property used in connection with erection thereon;
- b) Legal liability (liability under contract excepted) for fatal or non-fatal injury to any person other than the Insured's own employees or workman or employees of the owner of the works or premises or other firms connected with any other erection work thereon, or members of the Insured's family or of any of the aforesaid; directly consequent upon or solely due to the erection of any property described in the Schedule.

Provided that the total liability of the Company during the period of insurance under this clause shall not exceed the limits of Indemnity set opposite thereto in the Schedule.

In respect of a claim for compensation to which the indemnity provided herein applies, the Company will, in addition, indemnify the Insured against -

- a) all cost and expenses of litigation recovered by any claimant from the Insured and
- b) all costs and expenses incurred with the written consent of the Company.

The exclusion contained in paragraphs (d), (f) & (g) in Section I of this Policy shall apply to this Section also.

EXCLUSIONS TO SECTION II -

The Company will not indemnify the Insured in respect of -



HDFC ERGO General Insurance Company Limited

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1. The Excess stated in the Schedule to be borne by the Insured in any one occurrence related to property damage
2. Expenditure incurred in doing or redoing or making good or repairing or replacing anything covered or coverable under Section I of this Policy
3. Liability consequent upon -
 - a) bodily injury to or illness of employees or workmen of the Contractor(s) or the Principal(s) or any other firm connected with the project which or part of which is insured under Section I, or members of their families;
 - b) loss of or damage to property belonging to or held in care, custody or control of the Contractor(s), the Principal(s) or any other firm connected with the project which or part of which is insured under Section I, or an employee or workman of one of the aforesaid;
 - c) any accident caused by vehicles licensed for general road use or by waterborne vessels or aircraft;
 - d) any agreement by the Insured to pay any sum by way of indemnity or otherwise unless such liability would have attached also in the absence of such agreement.

CONDITIONS APPLYING TO SECTION II

1. No admission, offer, promise, payment or indemnity shall be made or given by or on behalf of the Insured without the written consent of the Company who shall be entitled if they so desire, to take over and conduct in the name of the Insured the defence or settlement of any claim or to prosecute for their own benefit in the name of the Insured any claim for indemnity or damage or otherwise and shall have full discretion in the conduct of any proceedings or in the settlement of any claim and the Insured shall give all such information and assistance as the Company may require.
2. The Company may, so far as any accident is concerned, pay to the Insured the limit of indemnity for any one accident, any one period, but deducting therefrom in such case any sums already paid as compensation in respect thereof or any lesser sum for which the claim or claims arising from such accident can be settled and the company shall thereafter be under no further liability in respect of such accident under this section.



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Erection All Risk Insurance

Grievance Redressal Procedure

If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through

- Call Centre : 022-62346234/ 0120-62346234
- Emails - grievance@hdfcergo.com
- Designated Grievance Officer in each branch
- Company Website - www.hdfcergo.com
- Courier : Any of our Branch office or corporate office

You may also approach the Complaint & Grievance (C&G) Cell at any of our branches with the details of your grievance during our working hours from Monday to Friday.

If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at

The Complaint & Grievance Cell,
HDFC ERGO General Insurance Company Ltd,
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Bhandup (West), MUMBAI - 400078
State : Maharashtra, City : Mumbai
Pincode : 400078

In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Chief Grievance Officer of the Company at the following address

To the Chief Grievance Officer:
HDFC ERGO General Insurance Company Limited
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Bhandup (West), MUMBAI - 400078
State : Maharashtra, City : Mumbai
Pincode : 400078
E-mail: l.cgo@hdfcergo.com

You may also approach the nearest Insurance Ombudsman for resolution of your grievance. The contact details of Ombudsman offices are mentioned below if your grievance pertains to

- Insurance claim that has been rejected or dispute of a claim on legal construction of the policy
- Delay in settlement of claim
- Dispute with regard to premium
- Non-receipt of your Insurance document



Ombudsman Offices	
Jurisdiction	Office Address
Gujarat, Dadra & Nagar Haveli, Daman and Diu	AHMEDABAD: Office of the Insurance Ombudsman, 2nd floor, Ambika House, Near C.U. Shah College, S. Navyug Colony, Ashram Road, Ahmedabad - 380 014 Tel.: 079 - 27545150 / 27546139 Fax: 079 - 27546142 Email: bimalokpal.ahmedabad@gbic.co.in
Karnataka	BENGALURU - Shri. M. Parshad, Office of the Insurance Ombudsman, Jeevan Soudha Building, PID No. 57-27-N-19, Ground Floor, 19/19, 24th Main Road, JP Nagar, 1st Phase, Bengaluru - 560 078 Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@gbic.co.in
Madhya Pradesh, Chattisgarh	BHOPAL - Shri. R. K. Swastava, Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 8, Malviya Nagar, Opp. Airtel Office, Near New Market, Bhopal - 462 003 Tel.: 0755 - 2769201 / 2769202 Fax: 0755 - 2769203 Email: bimalokpal.bhopal@gbic.co.in
Orissa	BHUBANESHWAR - Shri. B. N. Mishra, Office of the Insurance Ombudsman, 62, Forest park, Bhubneshwar - 751 009 Tel.: 0674 - 259646 / 2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@gbic.co.in
Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh	CHANDIGARH - Office of the Insurance Ombudsman, S.C.O. No. 101, 102 & 103, 2nd Floor, Batra Building, Sector 17 - D, Chandigarh - 160 017 Tel.: 0172 - 2706198 / 2706488 Fax: 0172 - 2708274 Email: bimalokpal.chandigarh@gbic.co.in
Tamil Nadu - Pondicherry Town and Karaikal (which are part of Pondicherry)	CHENNAI - Shri Virander Kumar, Office of the Insurance Ombudsman, Fatima Akhtar Court, 4th Floor, 453, Anna Salai, Teynampet, CHENNAI - 600 018 Tel.: 044 - 24333668 / 24336284 Fax: 044 - 24333664 Email: bimalokpal.chennai@gbic.co.in
Delhi	DELHI - Smt. Sandhya Baliga, Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 007 Tel.: 011 - 23239833 / 23237632 Fax: 011 - 23230658 Email: bimalokpal.delhi@gbic.co.in
Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura	GUWAHATI - Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor Nr. Panbazar over bridge S.S. Road, Guwahati - 781001 (ASSAM) Tel.: 0361 - 2132204 / 2132205 Fax: 0361 - 2732937 Email: bimalokpal.guwahati@gbic.co.in
Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry	HYDERABAD - Shri. C. Rajeswara Rao, Office of the Insurance Ombudsman, 6-2-46 1st floor, "Main Court", Lane Opp. Saleem Function Palace, A. C. Guards, Lakdi-Ka-Pool, Hyderabad - 500 004 Tel.: 040 - 65504123 / 23312122 Fax: 040 - 23376589 Email: bimalokpal.hyderabad@gbic.co.in
Rajasthan	JAIPUR - Shri. Ashok K. Jain, Office of the Insurance Ombudsman, Jeevan Nidhi - II Bldg., Gr. Floor, Bhawani Singh Marg, Jaipur - 302 005 Tel.: 0141 - 2740363 Email: bimalokpal.jaipur@gbic.co.in
Kerala, Lakshadweep, Mahe's part of Pondicherry	ERNAKULAM - Shri. P. K. Vijayakumar, Office of the Insurance Ombudsman, 2nd Floor, Pulicat Bldg., Opp. Cochin Shipyard, M. G. Road, Ernakulam - 682 015 Tel.: 0484 - 2358759 / 2359338 Fax: 0484 - 2359336 Email: bimalokpal.ernakulam@gbic.co.in
West Bengal, Sikkim, Andaman & Nicobar Islands	KOLKATA - Shri. K. B. Saha, Office of the Insurance Ombudsman, Hindustan Bldg. Annex, 4th Floor, 4, C.R. Avenue, KOLKATA - 700 072 Tel.: 033 - 22124339 / 22124340 Fax: 033 - 22124341 Email: bimalokpal.kolkata@gbic.co.in
Districts of Uttar Pradesh: Laitpur, Jhansi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhadra, Fatehpur, Pratapgarh, Jaunpur, Varanasi, Gaziipur, Jalaun, Kanpur, Lucknow, Unnao, Srampur, Lakimpur, Bahraich, Barabanki, Raebareilly, Sravasti, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Maharajgarh, Santkabirnagar, Azamgarh, Kushinagar, Gorkhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Sidharthnagar	LUCKNOW - Shri. N. P. Bhagat, Office of the Insurance Ombudsman, 6th Floor, Jeevan Bhawan, Phase-II, Nawab Kishore Road, Hazratganj, Lucknow - 226 001 Tel.: 0522 - 2231330 / 2231331 Fax: 0522 - 2231310 Email: bimalokpal.lucknow@gbic.co.in
Goa, Mumbai Metropolitan Region excluding Navi Mumbai & Thane	MUMBAI - Shri. A. K. Dasgupta, Office of the Insurance Ombudsman, 3rd Floor, Jeevan Seva Annexe, S. V. Road, Santacruz (W), Mumbai - 400 054 Tel.: 022 - 26106552 / 26106960 Fax: 022 - 26106052 Email: bimalokpal.mumbai@gbic.co.in
State of Uttaranchal and the following Districts of Uttar Pradesh: Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budaun, Bulandshahar, Etah, Kanooj, Mainpuri, Mathura, Meerut, Moradabad, Muzaffarnagar, Oraiyya, Pilibhit, Etawah, Farrukhabad, Firozbad, Gautambodhanagar, Ghazabad, Hardoi, Shahjahanpur, Ilauri, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanshirarnagar, Saharanpur	NOIDA - Shri. Ajesh Kumar, Office of the Insurance Ombudsman, Bhagwan Saha Palace 4th Floor, Main Road, Naya Bans, Sector 15, Dist. Gautam Buddha Nagar, U.P-201301 Tel.: 0120-2514250 / 2514251 / 2514253 Email: bimalokpal.noida@gbic.co.in
Bihar, Jharkhand	PATNA - Shri. Sadasiv Mishra, Office of the Insurance Ombudsman, 1st Floor, Kalpana Arcade Building, Bazar Samiti Road, Bahadurpur, Patna 800 008 Tel.: 0612-2580952 Email: bimalokpal.patna@gbic.co.in
Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region	PUNE - Shri. A. K. Sahoo, Office of the Insurance Ombudsman, Jeevan Darshan Bldg., 3rd Floor, C.T.S. No.s. 195 to 198, N.C. Kalkar Road, Narayan-Peth, Pune - 411 030 Tel.: 020 - 37341320 Email: bimalokpal.pune@gbic.co.in

STATUTORY NOTICE: "INSURANCE IS THE SUBJECT MATTER OF THE SOLICITATION"


1. 50: 50 CLAUSE

In respect of the subject matter insured hereunder consigned from out of India:

The Insured hereby undertakes to inspect each item of the subject matter insured upon arrival at the contract site for possible damage sustained during transit.

In the case of packed items which are to be left in their packaging until a later date the packaging is to be visually inspected for signs of possible damage and where such damage is visible the items are to be unpacked and inspected and any damage discovered reported to the marine insurers.

Where the packaging of an item shows no visible signs of damage to such item having been sustained during transit any subsequent damage discovered upon unpacking will be dealt with by the Marine Insurers or the EAR Insurers according to whether it can be clearly established that such damage was caused before or after arrival at the contract site.

Where it is not possible to clearly establish whether the damage to an item was caused before or after arrival at the contract site it is hereby agreed that the cost of such damage shall be shared equally between the Marine Insurers and the EAR Insurers, provided such a clause is included in the Marine Policy also.

2. 72 HOURS CLAUSE

It is agreed that any loss or damage to the Insured Property arising during any one period of seventy two (72) consecutive hours, caused by storm, tempest, flood or earthquake shall be deemed as a single event and therefore shall constitute one occurrence with regard to the Excesses provided for herein. For the purpose of the foregoing the commencement of any such seventy two (72) hours period shall be decided at the discretion of the Insured it being understood and agreed, however, that there shall be no overlapping in any two or more such seventy two (72) hours periods in the event of damage occurring over a more extended period of time.

3. WAIVER OF CONTRIBUTION CLAUSE

It is hereby agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon, the Insurers hereby waive contribution clause operating among one or more policies taken by the Principal and/or contractors and/or subcontractors having an association or affiliation at the time of loss with the assured through ownership or management subject to having been insured under this Policy. However, this clause does not apply to contribution which would apply to insurance effected between Principal and other parties not forming part of the project.

4. WAIVER OF SUBROGATION CLAUSE

It is hereby agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the Policy or endorsed thereon, the Insurers shall waive all their rights of subrogation or action which they may have or acquire against the assured and any person, firm or corporation having an association or affiliation at the time of loss with the assured through ownership or management subject to having been insured under this Policy.

5. WARRANTY CONCERNING UNDERGROUND CABLES AND PIPES

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the policy or endorsed thereon, the Insurers shall only indemnify the Insured in respect of loss of or damage to existing underground cables and/or pipes or other underground facilities if, prior to the commencement of works, the Insured has enquired with the relevant authorities about the exact position of such cables, pipes or other underground facilities.

The indemnity shall in any case be restricted to the repair costs of such cables, pipes or other underground facilities, any consequential damage being excluded from the cover.

6. ENDORSEMENT CONCERNING STORAGE

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the policy or endorsed thereon, the Insurers shall only indemnify the Insured for loss of or damage to the Insured items during storage up to a value per storage unit not exceeding the limit specified in the schedule.

The individual storage units shall be either at least 50 m apart or separated by fireproof walls.

7. ENDORSEMENT REGARDING SAFETY MEASURES



It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the policy or endorsed thereon, the Insurers shall only indemnify the Insured for loss, damage or liability directly or indirectly caused by flood and inundation if adequate safety measures have been taken during planning and execution of the project.

Adequate safety measures in this context shall mean that the average monthly rainfall, flood and inundation hazard as known from statistics of the competent meteorological offices for the respective month and location has been taken into account.

8. ENDORSEMENT REGARDING DAMAGE TO CROPS, FORESTS ETC.

It is agreed and understood that otherwise subject to the terms, exclusions, provisions and conditions contained in the policy or endorsed thereon, the Insurers shall not indemnify the Insured for loss, damage or liability directly or indirectly caused to crops, forests and/or any cultures during the execution of the contract works.



TAX INVOICE

Details of Insured				Details of Insurer			
Insured Name	SUEZ PROJECTS PRIVATE LIMITED			Insurer Name	HDFC ERGO General Insurance Company Limited		
Correspondance Address	UNITECH BUSINESS PARK, TOWER A, 2ND FLOOR, SOUTH CITY 1, GURGAON, HARYANA - 122001			Branch Address	GRND FLR, SHOP NO- 35 & 36, OM SHUBHAM TOWER, NEELAM BATA CHOWK, NIT, FARIDABAD, 121001		
Billing Address	UNITECH BUSINESS PARK, TOWER A, 2ND FLOOR, SOUTH CITY 1, GURGAON, HARYANA, Pin - 122001			GSTIN	06AABCL5045N1ZC		
Place of Supply	Karnataka			Policy No.	2220203484586200		
State Code	29			Certificate No.	222020348458620000		
PAN	AABCD3192N			Invoice No.	J080700/59011		
GSTIN	20AABCD3192N1Z8			Policy issue date / Invoice date	07/08/2020		

Premium Details (₹)											
S.No.	Description of Services	HSN Code	Premium Amount	CGST		SGST		IGST		Total Tax	Premium Value with Tax
				Tax %	Amount	Tax %	Amount	Tax %	Amount		
1	Erection All Risk Insurance	997139	1947273	9%	175254.5	9%	175254.5	18%	0	350509	2297782
Total Invoice Value										2297782	
Total Invoice Value (In Words)		RUPEES TWENTY-TWO LAKHS NINETY-SEVEN THOUSAND SEVEN HUNDRED EIGHTY-TWO AND ZERO PAISE ONLY									

Whether Tax is payable on Reverse charge basis : No

For HDFC ERGO General Insurance Company Ltd

Vargotra
Authorised



Annexure 15- Budgetary provisions have been included in EMP of Tranche 2 subprojects

Annexure 15**Monitoring Budget**

Sr. no.	Package	Tentative Monitoring budget (in Rs.)
1	Replacement of pumping mains Mangalore, Package No 02MNG02	₹12,15,000
2	Construction of 24X7 & Distribution Network - Operator assisted in Kundapura, Package No 02KDP01	₹11,75,000
3	Construction of 24X7 & Distribution Network - Operator assisted in Puttur, Package No 02PTR01	₹13,25,600
4	Construction of Distribution Network -Operator assisted in Udupi. Package No 02UDP01	₹13,70,000.
5	Construction of Distribution Network -Operator assisted in Mangalore. Package No 02MNG01	₹28,50,000.

Annexure 16 – Site Photographs

KUNDAPUR



Distribution network zone-2 HDPE 90mm pipe laying under progress at Barekatt road and vadarhobli



Existing OHT halekote inlet pipe valve chamber raft reinforcement binding work in progress



Road Restoration Works



New house connection work in progress at zone 3 Halekote



Earthwork excavation for @90mm pipelaying work under progress at zone 4 kodi

PUTTUR



Karmala OHT Concreting Work in Progress



Seetigudda GLSR Excavation Work in Progress



Sludge Collection Tank Concreting Work



Hydrotest Work in progress at Zone 4A and Zone 6A



Sieve Analysis of Materials



A View of Karmala OHT



A View of Public Consultation in Ward No 22

UDUPI



Anantha Nagara OHT Concreting works



Indralli OHT Works.



Santhekatte OHT Shuttering Work



Manchi OHT Works



Manipal Anganavadi OHT Concerting Work



Compound wall at HUDCO colony



CWTM Pipe line laying work



HDPE Pipe line laying work

MANGALORE



Kodipady OHT Works Under Progress



Excavation Work under Progress



Pipe Laying Work in Progress

UPUDI PHOTOS





CONDUCTED HIV AIDS TRAINING PUTTUR



AIR, NOISE, WATER TESTING AT PUTTUR



COVID-19 PRECAUTIONS AT PUTTUR



- Conducting Covid 19 Training Regularly / Daily to Workers
- Sanitizing a Work Place and Workers camp Daily
- Workers are aware to use MASK and SANITIZING
- And Posted a Signage at site of COVID-19 Precautions.

Annexure 17 - The accident register

Consolidated

Package No.	Date Y-M-D	Time	Name of Person	Gender	Designation	Contractor	Project site	Location	Magnitude of acc	Nature of injury	Cause	Action taken
02MNG02	2020-07-04	11.15 AM	Kamalaksha	Male	Network engineer	Suez	Panambur	Customer Survey	Minor	Cut injury on left	During consultation a stray dog attacked and bited him.	Training program aranged regarding working in public
02MNG01						M/s. Suez India Pvt. Ltd & Suez Project Pvt Ltd JV with M/s DRS Infratech Pvt Ltd			No potential injuries reported			
02KDP01						M/s. Laxmi Civil Engineering Services Pvt. Ltd.			No potential injuries reported			
02PTR01						M/s. Suez India Pvt. Ltd & Suez Project Pvt Ltd JV with M/s DRS Infratech Pvt Ltd			No potential injuries reported			
02UDP01	2020-10-30	10:30 AM	Somshekar	Male	Skilled labour		Laxminagara ,Ma	Site	Minor//First aid	Cut injury on right	Handglove not wearining	TBT given to workers
	2020-11-17	11:30 AM	Devaraj	Male	Unskilled labour	M/s. Suez India Pvt.	Moodubettu	Site	Minor//First aid	Cut injury on right	Lack of working skill	TBT given to workers
	2020-12-07	4:45 PM	Mr M Khan	Male	Engineer	Ltd & Suez Project	Snthekatte	Store-3	Minor//First aid	Cut injury on left	Handglove not wearining	TBT given to workers
	2020-12-14	9:50 AM	Sidappa	Male	Unskilled labour	Pvt Ltd JV with M/s	Vasuki Nagara ,	Site	Minor//First aid	Cut injury on left	Lack of working superviosn	TBT given to workers
	2020-12-29	6:45 PM	Mr Azarath Ali	Male	skilled labour	DRS Infratech Pvt Ltd	Doddangudde	Site	Minor//First aid	Cut injury on left	Lack of working superviosn	TBT given to workers

Package_ No_02MNG02

	Date Y-M-D	Time	Name of Person	Gender	Designation	Contractor	Project site	Location	Magnitude of accident	Nature of injury	Cause	Action taken
1	2020-07-04	11.15 AM	Kamalaksha	Male	Network engineer	Suez	Panambur	Customer Survey	Minor	Cut injury on left leg	During consultation a stray dog attacked and bited him.	Training program aranged regarding working in public area.

Package No 02MNG01

[illegible]

Package No 02KDP01

[illegible]

Package No 02PTR01

ACCIDENT HISTORY JULY 2020 - DEC 2020

[illegible]

Package No 02UDP01

ACCIDENT HISTORY JULY 2020 - DEC 2020

[illegible]

Annexure 18 - Grievances register

Site: Kundapura 24*7WSS Project.**Grievances of August 2020.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	28/08/2020	Prameela Vittal	Shri Varasiddhi Nilaya, Vittalvadi, Behid Prasanna ganapathi Temple, Kundapura	9916549266	Vittalwadi	Meter box not fixed.	Fixed meter box.	Resolved	30/08/2020	Closed
2	29/08/2020	Raju Devadiga	Bhagath singh Road, Kundapura	8762123850	Bhagath singh Road.	Installed meter in reverse.	Rectified by proper installation of meter.	Resolved	30/08/2020	Closed

Site: Kundapura 24*7WSS Project.**Grievances of December 2020.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	08/12/2020	Shekar Poojary	Basrur Moor Kai	9964279138	BC Raod Kundapur	Backfilled area got damaged in in excavated area due to rain.	Again backfilled.	Resolved	10/2/2020	Closed
2	08/12/2020	Sadhu Basava	TT Road	8310060897	Near OHT	Need new connection.	Provided new connection	Resolved	13/12/2020	Closed
3	16/12/2020	Seetha Mogerthi	BC Raod	9617963641	Near VKR School	HSC Leakage.	Rectified leakage problem.	Resolved	21/12/2020	Closed
4	28/12/2020	Shobha	KSRTC Rod Kundapura.	8861976238	Near to KSRTC depot	HSC Leakage.	Rectified leakage problem.	Resolved	30/12/2020	Closed

Site: Kundapura 24*7WSS Project.**Grievances of July 2021.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	01/07/2020	Bhavya	Ram Mandir Road.	9036825499	Post office Road, Kundapura	Required new HSC connection.	Provided new connection.	Resolved	04/07/2020	Closed
2	06/07/2020	Sundar Kharvi	Badushah Road.	9481750545	Badushah Road.	Leakage problem	Rectified leakage problem.	Resolved	26/06/2020	Closed
3	08/07/2020	Shakunthala Hegde	Near kalyana mantapa, LIC Road.	9481360970	LIC Road, Kundapura	Required new HSC connection.	Provided new connection.	Resolved	18/07/2020	Closed
4	09/07/2020	Nagaraj Acharya	Near BB Hegde College, Chickensal Road.	9481851687	Chickensal Road Kundapura	Required new HSC connection.	Provided new connection.	Resolved	18/07/2020	Closed
5	13/07/2020	Shridhar K	Gowri Nilaya 155/5	9844237537	Church Road	Replace meter with new one.	Replaced meter with new one.	Resolved	19/07/2020	Closed

					Kundapur a					
6	13/07/2020	Sundar Kharvi	Badushah Road.	9481750545	Badushah Road, Kundapur a	HSC pipe not alligned properly.	Pipe aligned properly to HSC connection.	Resolved	19/07/2020	Closed
7	20/07/2020	Venkatarama na	TT Road Kundapura. Meter no8168	9611046426	TT Road, Kundapur a	Meter box not fixed.	Fixed meter box.	Resolved	24/07/2020	Closed
8	20/07/2020	Ranjith Prabhu	MeterNo 1072 Prabhakar Tiles.	9342777834	Ferry Road, Kundapur a	Meter box not fixed.	Fixed meter box.	Resolved	24/07/2020	Closed
9	31/07/2020	Sathish	Huncharab ettu, Opp to Bobbarya Temple.	8277066325	Hunchara bettu Road, Kundapur a	Need Connection	Provided HSC Connection	Resolved	03/08/2020	Closed

Site: Kundapura 24*7WSS Project.**Grievances of November 2020.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	13/11/2020	Smt. Bebi	Badushah road, Kundapura	9342478483	Kundapur	excess bill	There is a water leakage in pipe, rectified leakage problem.	Resolved	14/11/2020	Closed
2	17/11/2020	Jyothi k	Church Road	8310144949	Near church	Need new connection.	Provided new connection	Resolved	20/11/2020	Closed
3	21/11/2020	Nagesh Acharya	48/9, Hanglur, Kundapura.	9731434538	Near Durgamba Depot.	Need new connection.	Provided new connection	Resolved	23/11/2020	Closed

Site: Kundapura 24*7WSS Project.**Grievances of October 2020.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	06/10/2020	Krishna	Anand house, near Uday Jewellery, Kundapura.	9663234550	Near Parijatha circle.	Need HSC Connection.	Provided new HSC Connection	Resolved	08/10/2020	Closed
2	07/10/2020	Ashwath B Bangera	H.No 523-A2, Ganesha Nilaya.	9611787476	Chickenst all Road, Kundapur	Pipe leakage near meter.	Rectified leakage problem.	Resolved	10/10/2020	Closed
3	07/10/2020	Sushila	Mahabala Nilaya, Vaderhobli.	9448548751	BHM Road.	Need HSC Connection.	Provided new HSC Connection	Resolved	11/10/2020	Closed
4	19/10/2020	Pandu Kharvi	Hoskeri, Near River.	8073512848	Muddugu dde	New meter to be replaced.	Replaced meter with new one.	Resolved	23/10/2020	Closed
5	27/10/2020	Shobha	Near school, Huncharbet tu.	9964279138	BC Road	Need HSC Connection.	Provided new HSC Connection	Resolved	31/10/2020	Closed

Site: Kundapura 24*7WSS Project.**Grievances of September 2020.**

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	07/09/2020	GMS Sathar	TT Road	9590941111	Near OHT	Damage of drainage of while laying HDPE pipe	The damage of pipe which was done by us was rectified.	Resolved	10/09/2020	
2	09/09/2020	Vishwanath	TT Road	9611046426	Near temple	Leakage near meter	Leakage problem rectified	Resolved	13/09/2020	
3	19/09/2020	Oswald Dsouza	Barekattu Behind Road	9448574022	Kundeshwara Temple Backside	Required new HSC	Provided new HSC	Resolved	22/09/2020	

Remarks;**No Grievances were registered in the month of May 2021.**

Date of damage	Type of Excavation	Particulars of Damage	Name of site / Area	Date of Rectified	Sign Name / Plu Roman NO
12/03/20	manual	1/2 Inch water pipe PVC Damaged	Bannur	13/03/20	1 Jayantha Rectified Jayanm 7899584804
13/03/20	manual	1/2 Pipe PVC Damaged (house connection)	Bannur	13/03/20	2 Jayantha Rectified 7899584804 Jayanm.
07/09/20	manual	1/2 Pipe Inch PVC pipe damage	Padnour	08/09/20	mohideen Rectified
07/09/20	manual	1/2 inch PVC pipe damaged	Padnour	08/09/20	Mohideen Rectified
16/09/20	manual	1/2" PVC pipe damage	Bannur	16/09/20	9663192340
17/09/20	manual	3/4" PVC pipe damage	Bannur	17/09/20	Krishnapa Rectified
18/09/20	manual	1/2" PVC pipe damage	Bannur	18/09/20	Gangsha Rectified
19/09/20	Manual	1/2" PVC pipe damage	Bannur	19/09/20	Rectified
21/09/20	Manual	1/2" & 2" PVC pipe damage	Bannur (v.c.)	21/09/20	Manga 9944244337
		1/2" PVC pipe damage	Bannur School	21/09/20	
22/09/20	Manual	2" PVC pipe damage	Bannur School	21/09/20	Rectified
25/09/20	Manual	1/2" PVC pipe damage	v.c college	25/09/20	Rectified

Date of Damage	Type of Excavation	Particulars of damage	Name of the site	Date of Rectified	Sign/Name/ mobile Number	Remarks
03/10/20	manual	1/2 Inch House connection pipe damaged	Rotary Pura gidegal	03/10/20	Meeraj 8880888576	Rectified
08/10/20	manual	1/2 Inch PVC waste pipe damaged	Rotary Pura gidegal	09/10/20	Joseph Putino 9482034852	Rectified
17/10/20	manual	1/2 Inch PVC (HSC) connection pipe damaged	Mottetadua	18/10/20	Anusha 8880888576	Rectified
17/10/20	manual	1/2 Inch PVC House connection pipe damaged	Mottetadua	18/10/20	Nagaveni 8880888576	Rectified
17/10/20	manual	1/2 Inch House connection pipe damaged	Masil - Rotary Pura	17/10/20	Karthik 9902150762	Rectified
17/10/20	manual	1/2 Inch House PVC pipe damaged	Masil	18/10/20	Prasad 9148724188	Rectified
18/10/20	manual	1 Inch House connection PVC pipe damaged	Masil	18/10/20	Prasad 9148724188	Rectified

DATE OF Damage	Type of Excavation	Particulars of damages	Name of site	Date of Rectification	Signature Name/M.BNO	Remarks
05/11/20	manual	1/2 Inch water pipe damaged	Motte tadka	05/11/20	Dikshith PS Dikshith 874782140	Rectified
05/11/20	manual	1 Inch water pipe damaged	Motte tadka	05/11/20	Shajin 8453300866	Rectified
05/11/20	manual	1/2 Inch water pipe PVC damaged	Motte tadka	05/11/20	2 Shajin Sahajin 8453300866	Rectified
05/11/20	manual	1/2 Inch PVC House connection pipe damaged	Motte tadka	05/11/20	Sectha 8453300866	Rectified
05/11/20	manual	1 Inch PVC pipe damaged	Motte tadka	06/11/20	Jes malathi 8971205881	Rectified
06/11/20	manual	1/2 Inch PVC pipe damaged	Motte tadka	06/11/20	Malmun CB 9900166119	Rectified
27/11/20	manual				Sectha 964451309	

Date	Page					
29/11/20	manual	1/2 Inch water (PVC) Pipe damaged -geel	Machimale (Bollanay)	29/11/20	Shanarad 99022051030	
4/12/20	manual	1/2 Inch water	Balnad Hei Pad	09/11/20	Sheshagiri 9481032715	
5/12/20	manual	1/2 Inch PVC Pipe damaged	Mullerem Padi	05/12/20	Shanarad MO Shanarad 9164585161	
06/12/20	manual	1/2 Inch PVC HSC Pipe damaged	Mukram Padi (Anand Ashrama)	07/12/20	Savitri Savitri 9481979418 9481979418	
08/12/20	manual	1/2 Inch HSC PVC Pipe damaged	Mukram Padi (Anand Ashrama)	08/12/20	Parthvi Vishalakshi 9448780400	
09/12/20	manual	Trench damaged	Sampyay	09/12/20	Sashikala 8971205880	
12/12/20	manual	1/2 Inch Pipe damaged	Koornadka	12/12/20	Naveen Kumar Shetty 9740048471	

SL No.	Complacent Date	Complainer Name	Contact No.	Address	Complacent
1	28-08-2020	Tripulgram phat	9418096216	Near Inball temple	Pipeline damage

[illegible]

Site: 24x7 Water Supply Project Udupi. The Works commenced from 7th November 2019 only.

December -2020

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	2	3	4	5	6	7	8	9	10	11

NIL

[illegible]

Site: 24x7 Water Supply Project Udupi. The Works commenced from 7th November 2019 only.

October -2020

Site: 24x7 Water Supply Project Udupi. The Works commenced from 7th November 2019 only.

October -2020

Sl. No	Date	Name	Address	Phone Number	Location	Complaint Details	Action Taken	Status of grievance	Resolved Date	Remarks
1	2	3	4	5	6	7	8	9	10	11

[illegible]

* **Vivid Colours:** Richer, brighter images & graphics.

— **customer connectivity in an digital copiers & printers**

100

NIL

[illegible]

Annexure 19 - Monthly EMP Implementation report

Monthly Environmental Monitoring Report

Project Number: 43253-027
July 2020

IND: Karnataka Integrated Urban Water Management Investment Program (Tranche2) – Improvements for 24 x 7 Water Supply System for Town Municipal Council in Kundapura

Package No. 02KDP01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur, and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) project management capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an assessment sewerage projects within the project area, i.e., Mangalore.

2. Existing Water Supply System in Kundapura

Kundapura is located in Udupi District in Karnataka and is the headquarters of the Kundapura Taluk placed 92 km from Mangalore and 416 km from Bangalore (Figure 1). Geographically, Kundapura Town is located at a latitude of 13°08'N and longitude of 74°07'E at an average altitude of 80 m above the mean sea level (msl). The municipality spreads in an area of 14 square kilometer (km²) and consists of Kundapura Kasaba and Vaderahobli villages, with 23 municipal wards. Population of Kundapura is 30,450 (2011 Census). Kundapura is well connected to other parts of the state and country by highways and railways. National highway (NH-66) passes through the town. Nearest airport is Mangalore International Airport, 87 km from Kundapura. Kundapura is also connected to the Konkan Railway, which runs from Mumbai to Mangalore. Nearest railway station is at about 4 km from the town.

Kundapuram Town Municipal Council (TMC) provides urban services to the people efficiently and is well recognized by the state and central governments. Kundapura TMC has been awarded following certificates of appreciation by the Government of Karnataka:

- (i) Best Urban Local Body in the year of 1996-1997;
- (ii) Best Urban Local Body Award in the 2009-2010;
- (iii) Second Best Practices Award in the year 2010 for Reduction of Nonrevenue Water Supply;
- (iv) Third Best Practices Award-2010 for Solid Waste Management (SWM) for providing excellent Municipal Services, maintaining Healthy Environment;
- (v) The best Utilization of reserved Fund for the social Service Activities; and
- (vi) Town Municipal Council also grabbed Green Leaf Award-2009, Nation Urban Water Awards-2009, and ICONSMW Award-2011 in National level.

3. Need for Infrastructure Improvement in Kundapura

River Varahi is the main surface source of water supply to Kundapura. The intake works, located in Jambu beside Jambukeshwara Temple, about 11 km from Kundapura, pump raw water to the WTP constructed on a hillock in Japhthi village at a distance of about 2.5 km from the intake works by 400 mm diameter mild steel (MS) rising main. Treated water from WTP is pumped through a 400mm diameter MS rising main to the 500

clear water transmission main passes through Kundapura-Shimoga Road and pass through four-enroute villages viz., Japhthi, Balkur, Basrur and Koni. A Schematic diagram of the existing water supply system is shown in the Figure 1.

Figure 1: Existing Water Supply System in Kundapura

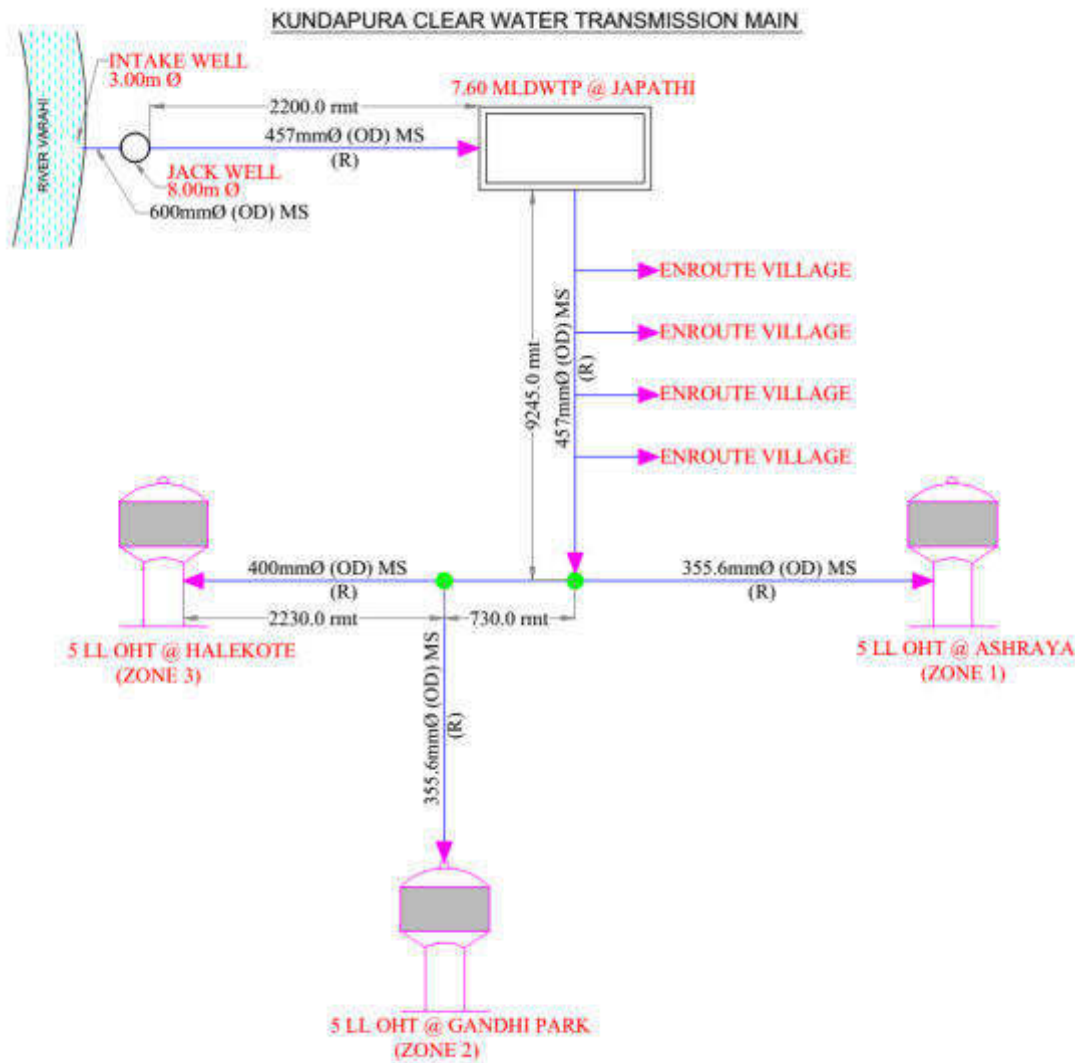


Table 1: Component of Existing Water Supply System in Kundapura

WTP Location	Capacity (MLD)	Treatment Process	Preliminary Design Stage? (Y/N)	Distance of WTP to nearest receptors in meters	Receiving Water of WTP Backwash /Wastewater Discharge	Uses of the receiving water (swimming, boating, fishing, irrigation, others [please specify])
Japthi, Kundapura	7.6	Inlet chamber ,Parshall flume,Flash Mixer , ClrifloculatorFilterhouse, Chlorination,	Existing WTP Rehabilitation	79	Discharged to drain	Irrigation

4. The proposed subproject:

The subproject formulated under this Investment Program to address gaps in current water supply system. Detailed design of all the subproject components is completed prior to the bidding, and as per the detailed design the subproject includes the following components:

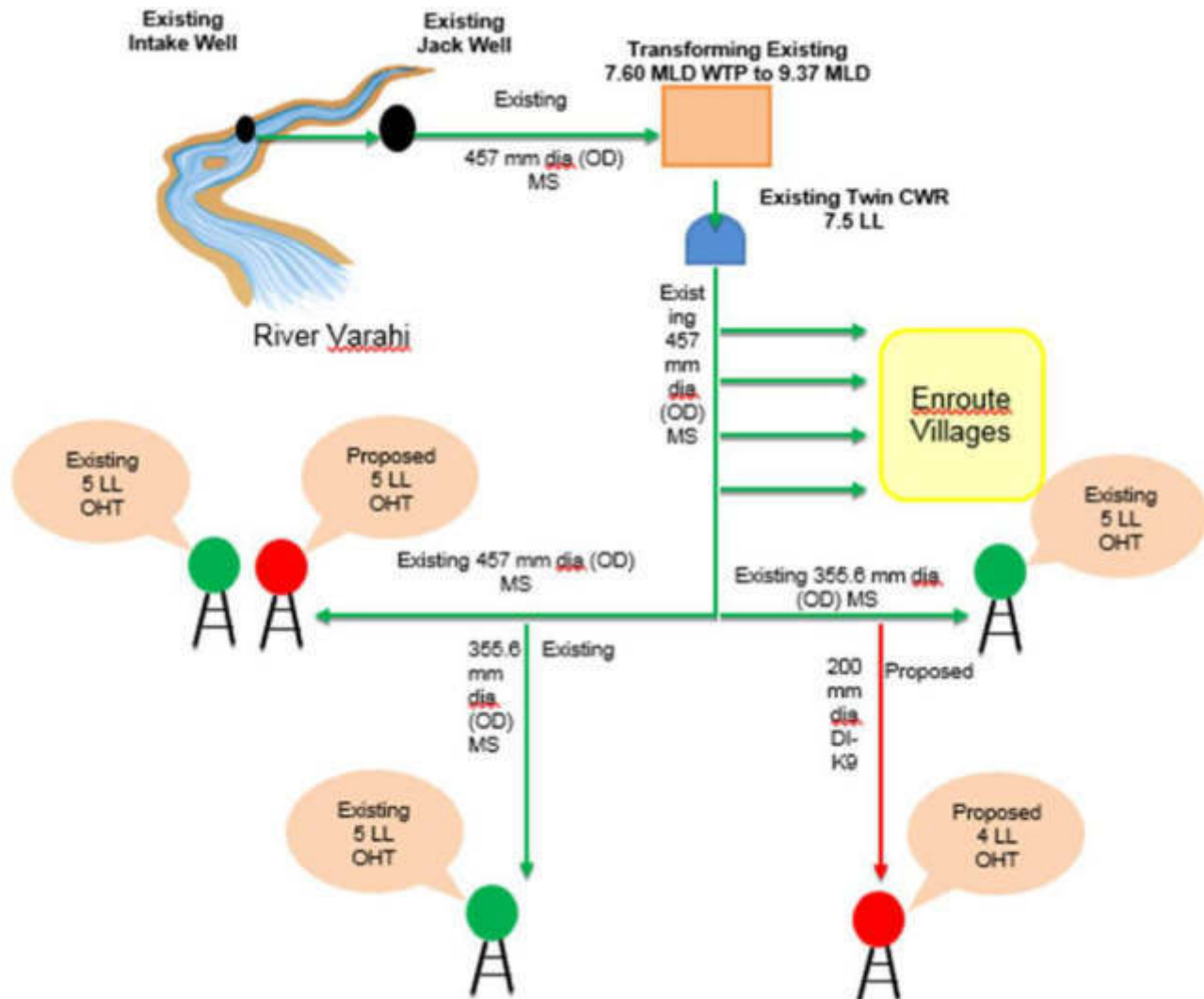
- (i) rehabilitation works and replacement of electromechanical equipment in Jack well at Jambu (Japthi village) to sufficiently supply 9.37 million liters per day (MLD) of raw water to the water treatment plant (WTP), and provision of a new diesel generator set for the un-interrupted power supply;
- (ii) rehabilitation of the existing 7.60 MLD WTP in Japthi village including provision of backwash water recirculation and sludge management system;
- (iii) laying of 4.8 kilometer (km) feeder main tapping from existing clear water main with 200 millimeter (mm) diameter pipe to feed to the proposed overhead tank (OHT) located in Kodi for the newly added zone 4;
- (iv) construction of 2 OHTs with a total capacity of 0.9 million liter;
- (v) extension of 31.64 km distribution network of diameter of 75 mm to 250 mm; and
- (vi) replacement of 4,200 existing meters and providing new metered house service connection (HSC) of 2,250 for uncovered households.

Following Table 2 provides details of the KIUWMIP Tranche 2 subproject components in Kundapura based on the detailed engineering design of the subproject. Schematic diagram of water supply system in Kundapura is shown in Figure 2. Locations of proposed components in Kundapura are shown. The position of the pipe alignment shown on road section is not exact due to mapping scale and underground utilities, and it will be fixed exactly during the pipeline laying work on site. All pipelines will be laid in the road shoulder, wherever it is available, or into the edge of road carriage way.

Table 2: Proposed Components for 24x7 Water Supply Systems

Infrastructure	Function	Description	Location
Jack well and Pump House	Pumping raw water to water treatment plant (WTP)	Rehabilitation works in Jack well by replacing mechanical equipment inside the pump house (pressure gauges, dewatering pumps, and electrical improvements) Provision of diesel generator set of 200 kilovolt ampere (kVA) for the un-interrupted power supply to the Jack well.	Works will be conducted within the existing Jack well near Jambukeshwara Temple in Jambu village
WTP	Treats raw water	Rehabilitation works in WTP by replacement equipment (flow meters, valves, pressure gauges, flash mixer, clari-floculator, alum and lime mixer, chlorinator, lab equipment etc.), Provision of diesel generator set (160 kVA) at WTP. Provision of backwash water recirculation and sludge management system to cater to total capacity of WTP (7.6 MLD); clarified water will be re-circulated to WTP inlet and accumulated sludge will be disposed in sanitary landfill	Works will be conducted within the existing WTP at Japthi village Sufficient land available within the WTP campus to develop backwash and sludge management facilities (see Figure 7)
Clear Water Transmission Main	Conveys clear water to service reservoirs	4.8 kilometer (km) length 200 millimeter (mm) diameter ductile iron pipe	Pipeline will be laid from the existing clear water main on NH-66 near Vinayaka theater to proposed new overhead tank (OHT) Kodi. Alignment is all along Kodi Road Alignment and profile drawings are shown in Figures 9 to 16.
Water service reservoirs	Water storage for supply	2 no.OHTs (of reinforced cement concrete, RCC) including compound walls at the sites: 500kiloliter (kl) capacity for Zone-3 at Halekote 400klcapacity for Zone-4 at Kodi	Site is vacant and owned by TMC Site is vacant and owned by Government of Karnataka Layout plans and elevations of OHTs are shown in Figures 17 to 20.
Distribution system Pipelines	Distributes clear water to the houses for the entire Town	31.64 km length diameter 75 - 250 mm high density poly ethylene (HDPE)pipes 75 mm dia-12.01km 90 mm dia- 5.89 km 110 mm dia- 7.08 km 160 mm dia- 2.27 km 200 mm dia- 2.33 km 250 mm dia- 2.06 km	Distribution pipes will be laid along the roads, within the road right of way, in 4 zones in KundapuraTown Municipal Council (TMC) area. Distribution zones with existing and proposed pipelines are shown Zone wise in Figures 21 to 24.
House Service Connections (HSC)	Individual houses get water after HSC.	HSC with Class B Multijet water meters 2,250 new 4,200 replacement	All households in four zones

Figure 2: Proposed 24/7 Water Supply System for Kundapura



CWR = clear water reservoir, dia = diameter, LL = lakh liter, mm = millimeter, MLD = million liters per day, MS = mild steel, OHT = overhead tank, WTP = water treatment plant.

5. Environmental Management Plan

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with.

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for Town Municipal Council in Kundapura	Name of the Contractor: Laxmi Civil Engineering Services Pvt,Ltd
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Kundapura	Name of SE/EE/AE of concerned division PIU :- Mr.HarishWalmiki, AEE
Date of monthly monitoring: 21/07/2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr. Vijay

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction–Kundapura

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of implementation
Environmental Management Plan (EMP) Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<ol style="list-style-type: none"> 1) Project manager and all key workers will be required to undergo EMP implementation including spoils management, standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.; and 2) Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work. 	Construction Contractor/ project implementation unit (PIU)/ Project Management Design and Construction Supervision Consultant (PMDSC)	<ol style="list-style-type: none"> a) Certificate of Completion (Safeguards Compliance Orientation) b) Posting of Certification of Completion at worksites c) Posting of EMP at worksites. 	Cost of EMP Implementation Orientation Training to contractor is responsibility of Program Management Unit (PMU). Other costs responsibility of contractor.	<ol style="list-style-type: none"> 1) Contractor has to update SOPs. OHS plan and Activities are going on as per company EHS Policies. 2) Complied Environmental, Health and Safety (EHS) Engineer appointed by contractor.

Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<ol style="list-style-type: none"> 1) Consult with PMU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; 2) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; 3) Use tarpaulins to cover sand and other loose material when transported by trucks; and 4) Stockpile sand and other loose material only in barricaded area and protect/cover by tarpaulins to avoid dust generation 5) Clean wheels and undercarriage of vehicles prior to leaving construction site; and 6) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly. 	Construction Contractor	<ol style="list-style-type: none"> a) Location of stockpiles; b) Complaints from sensitive receptors; c) Heavy equipment and machinery with air pollution control devices; d) Certification that vehicles are compliant with Air Act 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Instructed to contracting agency to Spray water on exposed soil and stock piled mainly in commercial and residential area 3) Complied 4) Partially Complied. 5) Complied 6) Complied
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<ol style="list-style-type: none"> 1) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 2) Laying of pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping; 3) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, 	Construction Contractor	<ol style="list-style-type: none"> a) Areas for stockpiles, storage of fuels and lubricants and waste materials; b) Number of silt traps installed along trenches leading to water bodies; c) Records of surface water quality inspection; d) Effectiveness of water 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Stockpiling of earth fill not found during the site visit 2) Work was not in progress due to Rain but Instructed to contracting agency to close all opened trenches Before rainy season 3) Partially Complied - Spoil Management plan prepared by Contractor Annexure attached

		<p>dispose in municipal landfill (Sample Spoils Management Plan in Appendix 10);</p> <p>4) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>5) Provide temporary bunds for stockpiles and materials;</p> <p>6) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 100% capacity bund; and</p> <p>7) Dispose any wastes generated by construction activities in landfill or reuse in beneficial purposes</p>		<p>management measures;</p> <p>e) No visible degradation to nearby drainages, nallahs or water bodies due to civil works</p>		<p>in Feb 2019 report and recommended to update according to the suggestions given and submit Spoil Management Plan.</p> <p>updated /Corrected Spoil Management plan yet to be submitted by Contractor</p> <p>4) Surface Water bodies not found along the Project site.</p> <p>5) Partially Complied</p> <p>6) Fuels and lubricants in bulk are not stored by contractor at site.</p> <p>7) Debris generated by construction is disposed in the ULB designated areas. Waste is used to fill the low line area</p>
	Contamination of coastal water due to works in coastal zone	<p>In addition to the above measures following measures given below for piling works:</p> <p>8) Piling activities for OHT foundation work at Kodi shall be conducted carefully; there shall no spillage of bentonite on the ground; bentonite slurry shall be properly collected in leak proof containers and re-circulated in the piling activity; excess</p>			Cost for implementation of mitigation measures responsibility of contractor.	<p>8) Piling activities for OHT foundation work at Kodi beach has been done and OHT Construction work in progress and excess earth is disposed in landfill</p>

		bentonite slurry shall be dried properly in containers, and disposed in landfill safely				
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<ol style="list-style-type: none"> 1) Plan activities in consultation with PMU/PMDCSC so that activities with the greatest potential to generate noise (road cutting and piling activity) are conducted during periods of the day which will result in least disturbance; 2) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach; 3) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and 4) Maintain maximum sound levels not exceeding 80 decibels (dB) when measured at a distance of 10 m or more from the vehicle/s. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Use of silencers in noise-producing equipment and sound barriers; and c) Equivalent day and night time noise levels (Appendix 3) 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied
Landscape and aesthetics	Impacts due to excess excavated earth, excess construction and demolition materials and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants,	<ol style="list-style-type: none"> 1) Manage surplus soil, debris and solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; 2) Coordinate with PIU / Kundapura TMC for beneficial uses of road debris and surplus soils in on-going construction works or for temporary 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Worksite clear of hazardous wastes such as oil/fuel; and c) Worksite clear of any excess excavated earth, excess construction materials, and 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied. No excess excavated earth at work site. 2) Complied - Contractor Coordinated with PIU / Kundapura TMC and surplus soils Disposed in Authorized landfill.

	and other similar items.	<p>storage for future use or disposal in landfill</p> <p>3) In unavoidable case of disposal, debris shall be disposed at landfill site or site approved by PIU / Kundapura; waste shall not be disposed in the forest areas and in or near water bodies/ rivers / coast</p> <p>4) Prepare and implement spoils management plan;</p> <p>5) Surplus soil and debris from work site shall be removed / cleared at the end of each day of work; there shall be no stock piling of debris / surplus soil at the site</p> <p>6) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>7) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>8) Request PIU/PMDSC to report in writing that the necessary environmental restoration works have been adequately performed before acceptance of work.</p>		<p>solid waste such as removed concrete, wood, packaging materials, empty containers</p>		<p>3) Complied</p> <p>4) Partially Complied spoil management plan Prepared and Implementation is going on accordingly (SPM attached as Annexure in Feb 2019 Monthly report. Recommended the Contractor for update as per suggestions given and to submit SM Plan. Updated /Corrected Spoil Management plan not submitted by Contractor</p> <p>5) Complied</p> <p>6) Used oil and lubricants not generated on site</p> <p>7) Complied</p> <p>8) Work was not in progress due to Rain</p>
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Utilities - existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<ol style="list-style-type: none"> 1) At least two-weeks prior to start of work at any section, Identify utilities that will be required to be temporarily disturbed / shifted for the construction work; 2) Liaise with the respective utility department, provide prior information to the affected public and restore the utilities as soon as the work is complete 3) Provide contingency services where required (temporary diversion of drains, provision of water supply by tankers, etc.,) 4) Coordinate with the respective department and ensure that electricity and telephone services are restored quickly 5) Reconstruct the damaged footpath and drains immediately after the completion of pipeline work in that particular section 	Construction Contractor and PIU	<ol style="list-style-type: none"> a) Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken b) Record to confirm that contingency services are provided and all damaged utilities are restored after the work 	Part of project cost	<ol style="list-style-type: none"> 1) Complied 2) Complied contingency services are provided and restoration is going on after the work. 3) Complied 4) Complied 5) Complied
Ecological Resources – Terrestrial	Loss of vegetation and tree cover	<ol style="list-style-type: none"> 1) Except four (4) coconut trees at Kodi OHT site, and pruning of large tree to the minimum required extent at Halekoti OHT site, no trees shall be removed for the subproject. 2) Trees in the pipeline alignments shall be avoided during construction by locally 	Construction Contractor	<ol style="list-style-type: none"> a) PMU/PMDSC to report in writing the number of trees cut and planted. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied. 6 trees got felled and Compensations were paid to the owners. Attached as Annexures 10 in the May 2019 report. And also ADB Social safeguard team visited on 23/9/2019 to particular affected persons to provide further training for them.

		3) altering the alignment. Obtain tree cutting and pruning permission from Tree Officer; plant and maintain 10 trees for each tree that is removed				2) Complied 3) Compensation paid to the owner of the tree.
Accessibility	Traffic problems and conflicts near project locations and haul road	<p>1) Plan pipeline work in consultation with the traffic police; prepare a Traffic Management Plan – a template is provided for reference at Appendix 11.</p> <p>2) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>3) Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>4) Schedule transport and hauling activities during non-peak hours;</p> <p>5) No road shall be completely closed for traffic; in unavoidable circumstances of road closure (eg, NH service road closure at Shastri Circle for trenchless work), provide alternative route, and ensure that public is informed about such traffic</p>	Construction Contractor	<p>a) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (Appendix 11);</p> <p>b) Complaints from sensitive receptors; and</p> <p>c) Number of signages placed at project location.</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Traffic Management Plan prepared by contractor and followed accordingly. Traffic Management Plan attached as Annexure– 9 in the May 2019 report. It was advised to contractor to update Traffic Management Plan.</p> <p>Traffic management plan yet to be updated</p> <p>2) Complied</p> <p>3) Complied</p> <p>4) Complied</p> <p>5) Contractor has to provide traffic management plan for their all working areas to minimize the traffic in busy and small</p>

		<p>diversions;</p> <p>6) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>7) Maintain safe pedestrian access at all times to the houses along the work site;</p> <p>8) Hard barricades should be mandatorily provided for work sites in residential and commercial areas, along with caution board.</p> <p>9) At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints;</p> <p>10) Keep the site free from all unnecessary obstructions;</p> <p>11) Drive vehicles in a considerate manner</p> <p>In narrow roads listed above, Inform the affected local population on week in advance, and again a day before the work</p>				<p>congested areas</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Work was not in progress due to Rain but Instructed to contracting agency to close all opened trenches Before rainy season</p> <p>MS tubular barricades are provided by Contractor at HaleKote OHT and Kodi OHT Site.</p> <p>9) The public information/caution boards at work sites not provided with details mentioned in Mitigation Measures except at Kodi Beach which is also in Kannada.</p>
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						10) Complied 11) Partially Complied
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	<ol style="list-style-type: none"> 1) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time; 2) Leave spaces for access between mounds of soil; 3) Provide walkways and metal sheets where required for people; 4) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 5) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and 6) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Spoils management plan; and c) Number of walkways, signs, and metal sheets placed at project location. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied 5) Complied 6) Not Complied. Work was not in progress due to Rain but instructed contracting agency to provide Project information board was at all working areas.

Socio cultural resources	Disturbance to socio cultural resources (religious, educational, health care etc.), access disruptions etc.,	<ol style="list-style-type: none"> 1) No material should be stocked close to these areas; material shall be brought to the site as and when required; 2) Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles; 3) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time; 4) No work should be conducted near the religious places during religious congregations; 5) Material transport to the site should be arranged considering school timings; material should be in place before school starts; 6) Notify concerned schools, hospitals etc., 2 weeks prior to the work; conduct a 30-minute awareness program on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts; and 7) Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites. 	Construction Contractor	<ol style="list-style-type: none"> a) Visual site observations b) Public complaints 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Contractor conducting work manually for all possible works to minimize the use of equipment. 3) Complied 4) Complied 5) Complied 6) Work was not in progress due to Rain but Recommended contacting agency when work starts to provide information about project work and Proper record has to be maintained 7) Improvement is required in Implementation.
Socio-Economic - Employment	Generation of contractual	<ol style="list-style-type: none"> 1) Employ local labor force to the maximum extent, if 	Construction Contractor	<ol style="list-style-type: none"> a) Employment records; 	Cost for implementation	<ol style="list-style-type: none"> 1) Register maintained by

	employment and increase in local revenue	manpower is available; and 2) Comply with labor laws		b) Records of sources of materials; and c) Compliance to core labor laws (See Appendix 2 of this IEE)	n of mitigation measures responsibility of contractor.	contractor attached as Annexure – 7 in May 2019 report. 2) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled). Attached as Annexure 11 and 12 in May 2019 report.
Occupational Health and Safety	Occupational hazards which can arise during work	1) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE); 2) Develop and implement site-specific health and safety (H&S) plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H&S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;	Construction Contractor	a) Site-specific OHS Plan; b) Equipped first-aid stations; c) Medical insurance coverage for workers; d) Number of accidents; e) Supplies of potable drinking water; f) Clean eating areas where workers are not exposed to hazardous or noxious substances; g) record of H&S orientation trainings h) personal protective equipment; i) % of moving	Cost for implementation of mitigation measures responsibility of contractor.	1) Contractor following Company EHS Policy Site-specific OHS Plan Not prepared by Contractor and is yet to be submitted 2) Contractor following Company EHS Policy-PPE'S provided by Contractor. Proper Documentation has to be maintained by Contractor

		<p>3) All trenches in sandy and mixed sandy soils irrespective of depth shall be protected with safety shoring / strutting to avoid safety risks to workers, public and nearby buildings/structures</p> <p>4) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>5) Provide medical insurance coverage for workers;</p> <p>6) Secure all installations from unauthorized intrusion and accident risks;</p> <p>7) Provide supplies of potable drinking water;</p> <p>8) Provide clean eating areas where workers are not exposed to hazardous or noxious substances</p> <p>9) Provide H&S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p>		<p>equipment outfitted with audible back-up alarms;</p> <p>j) permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>k) Compliance to core labor laws (Appendix 2)</p>		<p>3) Recommended contractor to implement the mitigation measure when such deep trenches are to be executed.</p> <p>4) First aid box is available but not adequate as per standards. The equipped first-aid station not provided.</p> <p>5) Employees Compensation Insurances for Workers (Skilled and unskilled).</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Separate clean eating areas not provided by contractor.</p> <p>9) H&S orientation training for workers not found during the work and proper documentation required need to be done</p> <p>10) Not Complied</p>
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		<p>10) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>11) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>12) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>13) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>14) Disallow worker exposure to noise level greater than 85 dB for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively; and</p>				<p>11) Complied</p> <p>12) Complied</p> <p>13) Not Complied</p> <p>14) Not Complied Recommend the Contractor to use hearing protection measures and not allow worker to work more than 8 hours per day during the work.</p>
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		15) Overall, the contractor should comply with International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety. (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2Boccupational%2Bhealth%2Band%2Bsafety.pdf?MOD=AJPERES)				15) Not complied
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<ol style="list-style-type: none"> 1) Provide protective shorting / strutting hard barricading for all deep excavations in sandy and mixed sandy that may require especially for pipe lines soils (>1m); 2) One week prior to start of work at any section, a joint inspection shall be conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and take necessary precautions for safe conduct of work. 3) identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work; 	Construction Contractor	<ol style="list-style-type: none"> a) Traffic Management Plan; and b) Complaints from sensitive receptors 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Recommended contractor to implement the mitigation measure when such deep trench were executed. 2) Complied 3) Joint inspection conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and should take necessary precautions for safe conduct of work, No such record found at time of inspection 4) Complied 5) Complied

		<p>4) Plan material and waste routes to avoid times of peak-pedestrian activities;</p> <p>5) Liaise with Kundapura TMC in identifying risk areas on route cards/maps;</p> <p>6) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>7) Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads; and</p> <p>8) Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/dd673400488559ae83c4d36a6515bb18/3%2Bcommunity%2Bhealth%2Band%2Bsafety.pdf?MOD=AJPERES).</p>				<p>6) Not complied- Register of Equipment and Vehicles maintenance certificates not found at site during the site visit.</p> <p>7) Work in progress at Halekote OHT and sign boards provided at work site but no pipe execution work was in progress during inspection. Instructed contracting agency to keep necessary sign boards when pipe execution work starts.</p> <p>8) Not Complied.</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation, water pollution from storage and use	1) Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located within reasonable distance of work site;	Construction Contractor	<p>a) Complaints from sensitive receptors;</p> <p>b) Drinking water and sanitation facilities for employees</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Complied. Instructed contracting agency to provide H&S safety measures about COVID-19 to all worker and employees</p>

	<p>of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>2) Minimize removal of vegetation and disallow cutting of trees;</p> <p>3) Labor camps shall include accommodation for workers/laborers along with other basic amenities such as kitchen, potable water supply, sanitation (toilets, bathrooms, washing areas and water supply for such needs), first aid room as well as garbage collection and disposal facility.</p> <p>4) The roof height of the worker's and labor camp shall not be less than 3 m from floor level to the lowest part of the roof.</p> <p>5) The camps shall be floored with concrete, shall be kept clean, and with proper cross ventilation, and the space provided shall be on the basis of one sq.mt per head or as per the relevant regulation, whichever is higher.</p> <p>6) Fire and electrical safety precautions shall be adhered to.</p> <p>7) Cooking, sanitation and washing areas shall be provided separately.</p> <p>8) The Contractor shall maintain necessary living accommodation and ancillary facilities (including provision of clean fuel to prevent damage to forests and to prevent fuel wood cutting and burning by labor) in functional and hygienic manner.</p> <p>9) The site must be graded and rendered free from depressions such that water does not get stagnant anywhere.</p> <p>10) The entire boundary of the site should be fenced all around with</p>				<p>2) Removal of vegetation minimized by selecting best alignment.</p> <p>3) Labor camp facilities provided by the Contractor needed to be improved.</p> <p>4) Not Complied</p> <p>5) Not Complied</p> <p>6) Fire Extinguisher not provided and electrical cable connections are not safely maintained.</p> <p>7) Separate Cooking areas has not been provided</p> <p>8) Gas Cylinder has been Provided by Contractor</p> <p>9) Complied</p>
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		<p>barbed wire so as to prevent the trespassing of humans and animals.</p> <p>11) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 lpcd); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>12) Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>13) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>14) Recover used oil and lubricants and reuse or remove from the site;</p> <p>15) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>16) Remove all wreckage, rubbish, or temporary structures which are no longer required;</p> <p>17) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>10) Not complied</p> <p>11) Complied</p> <p>12) Not Complied. The toilets are in unhygienic conditions.</p> <p>13) Not Complied</p> <p>14) Complied - reused.</p> <p>15) Complied</p> <p>16) Complied</p> <p>17) Still Construction Phase is in progress.</p>
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Social and Cultural Resources	Risk of archaeological chance finds	<p>18) Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>19) Stop work immediately if any finds are suspected to allow further investigation;</p> <p>20) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in site; and</p> <p>21) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility of contractor.	<p>18) Complied</p> <p>19) Till now no such suspected items found nor recorded</p> <p>20) Till now no such archaeological items recorded</p> <p>21) Till now no such change found nor recorded</p>
Submission of EMP implementation report	Unsatisfactory compliance to EMP	22) Timely submission of monitoring reports including pictures.	Construction contractor	a) Availability and competency of appointed supervisor Monthly report	Cost for implementation of mitigation measures responsibility of contractor.	23) Monthly report submitted by Contractor.
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	<p>24) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p> <p>25) All excavated roads shall be reinstated to original condition.</p> <p>26) All disrupted utilities restored.</p> <p>27) All affected structures rehabilitated/compensated.</p> <p>28) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these</p>	Construction Contractor	a) PMU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to pre-project conditions; (iii) all construction related structures not relevant to operation and maintenance (O&M) are removed; and (iv) Worksite clean-up is satisfactory.	Cost for implementation of mitigation measures responsibility of contractor.	<p>24) Complied</p> <p>25) Complied</p> <p>26) Complied</p> <p>27) Till now no structures affected</p> <p>28) Complied</p>

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Conclusion:-

Overall The Contractor's compliance with the Environment and Health and safety requirements of the Project is not satisfactory. Contractor is maintaining copy of IEE. **HIV AIDS Awareness Training programme** have to be conducted by the Contractor. Proper Safety precautions at site and **Safety against COVID-19** should be improved by the Contractor. **January, February, March, April, May, June and July 2020 site specific EMP Monthly report** with PIU letter has to be submitted from the contracting agency.

Recommendation:-

Key Issues: Following are the key issues which required immediate necessary action / further improvement.

S.No	Monitoring of Mitigation /Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Certificate of Completion (Safeguards Compliance Orientation)	<ul style="list-style-type: none"> Register of Clearances required /status 	1) CRZ Clearance attached as Annexures 2,3 & 4 in June 2019 report 2) Tree cutting permission from tree officer not provided yet.
2.	Posting of Certification of Completion at worksites	<ul style="list-style-type: none"> If any Respective Project Site work completed - Certification of Completion will be provided at worksites on Information board. 	Within 3 day of work Completion
3.	Posting of EMP at worksites.	<ul style="list-style-type: none"> Project Information board should also be in Kannada Language along with contact numbers for grievance Redressal 	Comply with in 15 days
4.	Location of stockpiles;	<ul style="list-style-type: none"> To prepare the Google map of the Locations of identified stockpiles 	Comply with in 5 days
5.	Complaints from sensitive receptors;	<ul style="list-style-type: none"> Complaints/Grievance Redressal Registers should be maintained at each work site. 	Compiled and maintaining grievance registers at site
6.	Heavy equipment and machinery with air pollution control devices;	<ul style="list-style-type: none"> PUC certification for all vehicles/equipment used for/during construction and certification of users at site. 	Comply with in 7 days
7.	Certification that vehicles are compliant with Air Act	<ul style="list-style-type: none"> Register of Equipment and Vehicles maintenance certificates at site 	Comply with in 5 days
8.	Areas for stockpiles, storage of fuels and lubricants and waste materials;	<ul style="list-style-type: none"> Storage of materials like fuel, chemicals, and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water. 	Comply with in 7 days
9.	Number of silt traps installed along trenches leading to water bodies;	<ul style="list-style-type: none"> Prepare list of silt traps installed along trenches 	If applicable in 8 days
10	Records of surface water quality inspection;	<ul style="list-style-type: none"> If any surface water body is Present nearby project area during the construction phase, the contractor will carry out environmental monitoring and testing for Surface water engaging NABL approved laboratory. 	For every 3 months, Complied (Jan to March Monitoring).Annexure 2 in May 2019 report. The Water quality

			monitoring is done in January 2020 and attached as Annexure-5c in Jan 2020 report
11	Use of silencers in noise-producing equipment and sound barriers; and	<ul style="list-style-type: none"> • Only acoustic enclosures fitted DG set will be allowed at the construction site and camp sites. • Maintenance of equipment and machinery (including proper lubrication, tuning and checks for muffler effectiveness) shall be regular and up to the satisfaction of the Engineer to keep noise level under control. • Barricading- Hard Barricade should be provided to protect from unauthorized access of common people 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work.</p>
12	Equivalent day and night time noise levels (Appendix 3)	<ul style="list-style-type: none"> • During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure 2 in May 2019 report. And informed contractors to conduct the noise test every 3 months. The Noise level monitoring is done in January 2020 and attached as Annexure-5b in Jan 2020 report</p>
13	Records of Air quality inspection	<ul style="list-style-type: none"> • If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure-2 during the work. Informed the contractors to conduct the air quality test every 3 months. The Air quality monitoring is done in January 2020 and attached as Annexure-5a in Jan 2020 report</p>
14	Worksite clear of hazardous wastes such as oil/fuel;	<ul style="list-style-type: none"> • Used oil generated from vehicles/DG set at plant/camp site will be collected in closed containers and sold to MoEF&CC/SPCB approved used oil recyclers. • No solid or hazardous wastes (such as oil contaminated waste) will be dumped in drains or in open areas 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work</p>
15	Solid waste such as removed concrete, wood, packaging materials, empty containers	<ul style="list-style-type: none"> • Burning of wastes will not be allowed. • The contractor will provide garbage bins in the camp and construction site and it will be ensured that these are regularly emptied and waste is disposed off in a hygienic manner as per 	<p>Daily monitoring required at site during the work</p> <p>Comply all the issues during the work</p>

		<ul style="list-style-type: none"> the Solid Waste (Handling and Management) Rules, 2016. Solid waste generated at the construction site, plant/camp site, will be collected in covered wasted bins and segregated as biodegradable (food waste, paper, etc) and non-biodegradable (plastic, polyethylene bag etc.). Polyethylene/plastic wastes will be stored in empty cement bags and should be sent for recycling. Biodegradable (food waste, paper etc.) solid waste will be disposed in a compost pit. 	
16	Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken	<ul style="list-style-type: none"> Maintain copy of Section-wise list of utilities to be shifted / disturbed. 	Partially Complied. Communication letter maintained by PIU attached as Annexures 3&4 in the May 2019 report. Contactor should also have copy with him Section-wise list of utilities to be shifted comply within 7 days.
17	Record to confirm that contingency services are provided and all damaged utilities are restored after the work	<ul style="list-style-type: none"> Register of damaged infrastructure Register of reinstated infrastructure 	Comply with in 3 days
18	PMU/PMDCSC to report in writing the number of trees cut and planted.	<ul style="list-style-type: none"> Maintain separate file with all relevant documents of tree cutting, felling permission and Compensation. 	Complied attached as Annexures 10 in the May 2019 report
19	Number of signage's placed at project location.	<ul style="list-style-type: none"> Maintain the signages placed at project location 	Comply with in 5 days
20	Visual site observations	<ul style="list-style-type: none"> Register of official visiting the site and directions given if any at each site. 	Comply with in 3 days
21	Employment records;	<ul style="list-style-type: none"> Attendance registers of labour at each site. 	Complied and attached as Annexure 7 in the May 2019 report and maintaining the attendance register.
22	Records of sources of materials; and	<ul style="list-style-type: none"> Maintain separate record of quantity of materials used and with all authorized certificates of suppliers 	Comply with in 5 days
23	Compliance to core labor laws (See Appendix 2 of this IEE)	<ul style="list-style-type: none"> Register of payment to the workers 	Comply Immediately
24	Site-specific OHS Plan;	<ul style="list-style-type: none"> Site-specific Occupational Health and Safety Plan 	Comply with in 4 days
25	Equipped first-aid stations;	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. 	Comply with in 7 days

		<ul style="list-style-type: none"> • Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. • The contractor shall identify nearby hospital, which could be used in case of emergency. • First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account. 	
26	Medical insurance coverage for workers;	<ul style="list-style-type: none"> • File of insurance as per 13.1 PCC with contents showing the validity. • Health Camps and Check -up should be conducted for the workers • Necessary HIV/AIDS prevention measures and awareness programme conducted by Contractor. 	Comply with in 12 days
27	Number of accidents;	<ul style="list-style-type: none"> • Accident and Incident register will be maintained by Contractor at each work site. 	Complied. Attached in Annexure 1 in Aug 2019
28	Supplies of potable drinking water;	<ul style="list-style-type: none"> • Potable water supply: Sufficient (minimum 20 liters at any given point of time) and clean (potable) water for drinking shall be placed in the mess/labour camp and at the construction site. 	Complied
29	Clean eating areas where workers are not exposed to hazardous or noxious substances;	<ul style="list-style-type: none"> • Since a common mess is not provided/operated, separate space for cooking and eating shall be provided. 	Comply with in 4 days
30	Record of H&S orientation trainings personal protective equipment;	<ul style="list-style-type: none"> • Weekly and monthly monitoring and safety training programs have to be documented properly including mock drill register • The list of PPEs to be provided. 	Comply with in 7 days
31	Personal protective equipment;	<p>The Contractor shall provide and ensure enforcement with zero tolerance the following:</p> <ul style="list-style-type: none"> • Safety vests will be used by workers whenever on the construction site. • Hard hat or helmets to all workers, supervising staff and inspecting official entering work site, plant area, and engaged in loading/ unloading operations • Protective footwear, protective goggles and nose masks (as required) will be provided to the workers employed. These shall be provided to all workers employed for handling of cement, mortar, concrete and similar dust generating operations shall be provided. • During reinforcement/fabrication operation, safety appliances like: helmets, protective eye wear, gum boots and hand gloves shall be provided to labour/workers at the construction site. • Welder's protective eye-shields will be provided to workers 	Comply with in 5 days

		<ul style="list-style-type: none"> who are engaged in welding works. • Nettings below and on the sides of overhead construction to prevent mishaps due to accidental fall of a workman, tool and/or debris shall be provided. • Proper moving guards will be provided at all moving machines, like motors and pulleys. • All workforces on the construction site shall be provided with identity cards. • High risk areas are to be provided with warning signage. 	
32	Permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.	<ul style="list-style-type: none"> • The contractor should comply with International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety. Guidelines. 	Comply with in 10 days
33	Records of chance finds	<ul style="list-style-type: none"> • Concerned records should be maintained if any chance find transpires. 	Comply immediately as soon as chance find occurs.
34	Availability and competency of appointed supervisor	<ul style="list-style-type: none"> • Certified and Experienced supervisor will be appointed by Contractor 	Contractor must appoint certified and Experienced supervisor.
35	Monthly report	<ul style="list-style-type: none"> • Contractor submitted Monthly report to PIU & PMU 	January, February, March, April, May, June and July 2020 Monthly report has to be submitted by contractor
36	Camp has been vacated and restored to pre-project conditions	<ul style="list-style-type: none"> • All construction related structures not relevant to operation and maintenance (O&M) are removed; and • Worksite clean-up must be satisfactory. 	Will be Compiled Within 2 days of Work Completion
37	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> • Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	Partially complied. Implementation of H & S at work site is done. Attached as Annexure 4. H & S plan is to be prepared by contractors Comply with in 10 days



MAHMAD RAPHIYODDIN SHAPHIYODDIN MALIK
Environmental Specialist, EGIS,
Mangalore, KIUWMIP – Tranche 2.

ANNEXURE -1

STATUS OF SITE OBSERVATIONS VISITED ON FEB 27th 2020

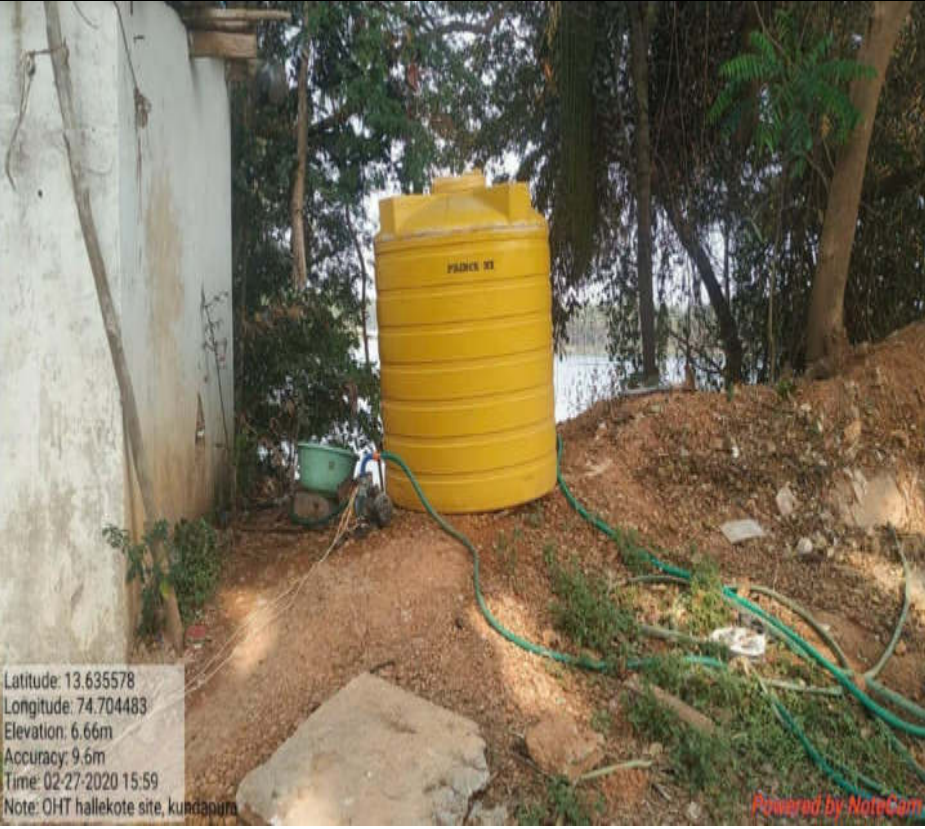
S.No	Observation		Recommendation	Status
a	Material storage at kodi OHT, Kundapura	 <p>Latitude: 13.630724 Longitude: 74.669453 Elevation: 2.59m Accuracy: 3.2m Time: 02-27-2020 15:27 Note: OHT Kodi site, kundapura</p>	<p>Material at kodi OHT site were properly stored and banded</p> <p>Instructed contractor agency to dispose all loose earth stored to dumping yard</p>	Partially complied

b	First Aid Box at Kodi OHT Site , Kundapura		To have proper first hand treatment at site if any injury occurs to any personnel, First Aid Box as per standards is to be provided at site immediately.	Partially complied
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C	Housekeeping at Kodi OHT Site , Kundapura		Instructed contractor agency to remove all material covers, cardboard boxes stored at Kodi OHT Store yard and also steel rods to keep in proper places and to maintain proper housekeeping near store and site	Partially complied
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d	<p>One side of the Clariflocculator Ja pti WTP Site, Kundapurais open and it may endanger the life or may cause injuries to any person, animal by risking to fall inside Clariflocculator.</p>	 <p>Latitude: 13.61083 Longitude: 74.759057 Elevation: 142.73m Accuracy: 2.2m Time: 17-12-2019 14:51 Note: Japoti WTP</p> <p>Powered by NoteCam</p>	<p>One side Opening is required with proper channel/Gate/tubular rods.</p>	<p>Partially complied</p>
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e	Electrical Switch Board Panel is without proper Enclosure at WTP Jabti, Kundapura		Electrical Switch Board Panel should be covered with proper box cover which prevents rain water from entering inside the panel box.	Not complied
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f	Barricading is not done at valley side and proper platform/place has not been provided for washing or bathing at OHT Site,Halekote	 <p>Latitude: 13.635578 Longitude: 74.704483 Elevation: 6.66m Accuracy: 9.6m Time: 02-27-2020 15:59 Note: OHT halekote site, kundapur</p> <p>Powered by NoteCam</p>	Hard Barricading is to be done at river side near Water Tank in order to prevent fall of any person. Proper bathroom and washing platform need to be provided.	Not complied
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g	OHT Halkote work site		Hard barricading by sheetmust be provided so that residential staying nearby and animals should not enter into the OHT site during work	Not complied
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h	Toilet is not properly maintained at OHT Halekote, Kundapura		Toilet facilities at works camp at Halekote must be maintained properly	Not complied
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ANNEXURE-2

SITE VISIT OBSERVATIONS VISITED ON 25rd May 2020

S.No	Observation		Recommendation	Status
1	Sign Boards at Kodi Beach OHT are not proper		<p>Work in progress Board is to be placed at site, which should be legible</p> <p>Project Information Board also to be in English along with necessary contact numbers for Grievance Redressal.</p>	Complied


2	Barricading, PPEs and water facility to workers at pipe laying work site		<p>Instructed contractors to provide soft barricading at side of the excavation</p> <p>PPEs should be provided at all work site</p> <p>Drinking water facility should be provided at site for worker</p>	Not complied
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3	Registers maintained at site		Contracting Agency has been recommended to maintain all necessary registers asked by time to time.	Complied
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4	Steel bars/iron rods openly laying on roads without any hard barricading or caution sign, which can cause harm		<p>Immediately shift the steel bars from the present location and keep near the Store Room, where space is available. Put proper caution signboards near the storage area.</p> <p>Steel Reinforcement Work should be carried out in safe working location</p>	Partially complied
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5	Housekeeping near store room not maintained		The housekeeping near store room should be done properly	Partially complied
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7	<p>Proper Barricading is not done at valley side and proper platform/place has not been provided for washing or bathing at OHT Site Hallekote</p>		<p>Proper Hard Barricading is to be done completely along with sign boards from behind the labour room to washing area up to last point of working area at backside in order to prevent fall of any of the persons. Proper bathrooms and washing platform need to be provided.</p>	<p>Not complied</p>
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8	Toilet is not properly maintained at OHT Halekote, Kundapura		Toilet facilities at works camp at Halekote must be maintained properly along with provision of Water and electricity connection. The cleanliness should be maintained.	Not complied
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9	Found damaged cable cover used for the trial run checking of rotating mechanism of Clariflocculator.		It should be replaced with another cable of required specifications and with no damage	Not complied
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ANNEXURE-3

STATUS OF SITE OBSERVATIONS VISITED ON 23rd June 2020

S.No	Observation		Recommendation	Status
1	Sign Boards at Kodi Beach OHT are not proper	 <p>Latitude: 13.630562 Longitude: 74.669485 Elevation: 10.89m Accuracy: 4.3m Time: 06-23-2020 13:59 Note: At Kodi beach kundapur...</p>	Project Information Board provided in English and Kannada. And instructed to contracting agency to put same in Halekote OHT site.	Partially complied

2	Material Store room at Kodi OHT site	 <p>Latitude: 13.630666 Longitude: 74.669713 Elevation: 5.89m Accuracy: 3.2m Time: 06-23-2020 14:02 Note: At Kodi beach kundapur OHT site</p>	Instructed contractors to provide proper sheet door for store room to avoid injury to workers during opening the door	Not complied
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3	DI materials stored at kodi OHT site	 <p>Latitude: 13.630553 Longitude: 74.670016 Elevation: 5.27m Accuracy: 3.2m Time: 06-23-2020 14:03 Note: At Kodi beach kundapuram, Nellore</p> <p>Powered by NoteCam</p>	Instructed contracting agency to place material on wooden platform and to cover the material with tarpaulin to avoid the rusting	Not complied
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4	HDPE materials stored at kodi OHT site		Instructed contracting agency to place properly HDPE role one on one, to provide sign board and to soft barricade the hdpe surrounding area	Not complied
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5	Housekeeping near store room not maintained		The housekeeping near store room should be done properly	Not complied
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6	<p>Proper Barricading is not done at valley side and proper platform/place has not been provided for washing or bathing at OHT Site Hallekote</p>		<p>Proper Hard Barricading is to be done completely along with sign boards from behind the labour room to washing area up to last point of working area at backside in order to prevent fall of any of the persons. Proper bathrooms and washing platform need to be provided.</p>	<p>Not complied</p>
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7	Toilet is not properly maintained at OHT Halekote, Kundapura	 <p>Latitude: 13.638331 Longitude: 74.703162 Accuracy: 2100.0m Time: 06-23-2020 14:22 Note: At halekote kundapura OHT site</p> <p>Powered by NoteCam</p>	Toilet facilities at works camp at Halekote must be maintained properly along with provision of Water and electricity connection. The cleanliness should be maintained.	Not complied
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8	Scrape materials stored at Halekote area.	 <p>Latitude: 13.635577 Longitude: 74.704435 Elevation: 10.4m Accuracy: 3.2m Time: 06-23-2020 14:23 Note: At halekote kundapura OHT site</p> <p>Latitude: 13.6354 Longitude: 74.704139 Elevation: 17.33m Accuracy: 3.2m Time: 06-23-2020 14:27 Note: At halekote kundapura OHT site</p>	Instructed contracting agency to remove all scrape materials and sand, aggregates from OHT site.	Not complied
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Monthly Environmental Monitoring Report

Project Number: 43253-027
July 2020

IND: Karnataka Integrated Urban Water
Management Investment Program (Tranche 2) –
Replacement of Old Sewerage Pumping Mains for
Mangalore City

Package No. 02MNG02

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur, and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) project management capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an assessment sewerage projects within the project area, i.e., Mangalore.

2. Existing Sewerage System in Mangalore

The first sewerage system in Mangalore was built in 1961 and was designed for an ultimate flow of 27.04 million liters per day (MLD) estimated for a design population of 200,000 of the year 1991. This scheme was implemented by Public Health Department. The total area covered by the sewerage network is about 25 km² with two sewerage districts and seven zones. Total length of sewerage network constructed was about 250 km with pipe diameter varying from 150mm to 600mm with 7,000 manholes

and eight wet wells-cum-pump houses. In 1974, Karnataka Urban Water Supply and Sewerage Board (KUWSDB) extended the sewerage networks within the existing 25 km² area by another 245 km with 8,000 units of manholes.

The second scheme was established in 2003 under the ADB funded Karnataka Urban Development and Coastal Environmental Management Project (KUDCEMP) and commissioned in 2007-2008 and the sewerage system was upgraded for an ultimate flow of 88.75MLD for a design population of 624,432.

Sewerage network extended to adjoining areas of old city and to other areas in Mangalore City Corporation (MCC) boundary covering 50.60 km². Overall 60% of Mangalore, 75.60 km², is covered with sewerage systems.

Mangalore city is divided into two parts as Surathkal and Mangalore, further subdivided into seven sewerage districts. Each district has one STP. The total length of sewerage network is about 360 km including 14,875 Manholes with pipe diameter varying from 150 mm to 900 mm, and 22 wetwells.

North District consists of 10 zones (complete Surathkal area) covers about 25 km². West district consists of 6 zones (city center of Mangalore) covers 30.82 km². South district consists of 3 zones (Jeppinamogaru, Bajal, Padil) covers 19.66 km². East district consists of 1 zone (Pachanady, Bondel and Shakatinagara) covers 18.78 km².

Table 1: Salient Features of Existing Sewerage System in Mangalore

Location	12°87'N Latitude 74°88'E Longitude
Area	132.45 km ²
Population 2011	488,487
Number of households	115,036
Road length	1,134 km
Projected population for the year 2016	554,183
Projected population for the year 2031	756,903
Projected population for the year 2046	1,033,778
Existing Underground Drainage (1961 Scheme) by Public Health Department	
Underground drainage Network	250 km (diameter varying from 150 mm to 750 mm) Sewers of stoneware pipes
Total Number of Manholes	8000
Total Number of Wet Wells	8
Total area covered	25 km ²
Designed Population	2,00,000 for the year 1991
Extension of Underground drainage system (1974) by KUWSDB and MCC	
Underground drainage Network	245 km
Total Number of Manholes	8000
Underground drainage system (2005) under KUDCEMP by KUIDFC	
No. of Sewerage Catchments	24
Underground drainage Network	360 km - diameter varying from 150 mm to 900 mm
Total Number of Manholes	14,815
Total Number of Wet Wells	22
Total Area Covered	70%
Designed Population	624,432
Capacity and Technology of STP	
• STP at Kavour	43.5 MLD UASB
• STP at Pachanady	8.75 MLD ASP
• STP at Bajal	20 MLD ASP
• STP at Surathkal	16 MLD ASP
Total Number of House ServiceConnections	45,000

ASP = activated sludge process, km = kilometer, KUDCEMP = Karnataka Urban Development and Coastal Environment Management Project, KUIDFC = Karnataka Urban Infrastructure Development and Finance Corporation, KUWSDB=Karnataka Urban Water Supply and Drainage Board, MCC = Mangalore City Corporation, mm = millimeter, MLD = million liters per day, STP = sewage treatment plant, km² = square kilometer, UASB = up-flow anaerobic sludge blanket.

3. The proposed subproject:

Under this subproject, it is proposed to replace existing sewage pumping mains, which are damaged, undersized and/or choked up in sewerage zones 3, 4, 6 and 7.

The subproject include providing following sewage mains:

- 7.65 kilometer (km) length 1,100 millimeter (mm) diameter sewer pumping main from Kudroli wet well no.-3 to Kavour sewage treatment plant (STP);
- 0.95 km length 900 mm diameter main from Kandathpalli wet well no.-4 to Kudroli wet well no.3;
- 1.7 km length 450 mm diameter main from Mulihitilu wet well no.-6 to Ridge Manhole near Morgans gate; and
- 1.1 km length 450 mm diameter main from JeppuBappal wet well no.7 to ridge manhole near Yekkur, inside old sewage treatment plant (STP).

includes of replacement of sewerage pumping mains from wet wells to the STP. Table 2 shows the nature and size of the various components of the subproject, based on the detailed engineering design of the subproject. Figure 1 shows the location of four proposed pumping main sections in Mangalore City.

Figure 1 Key Plan Showing Pumping Main Alignments

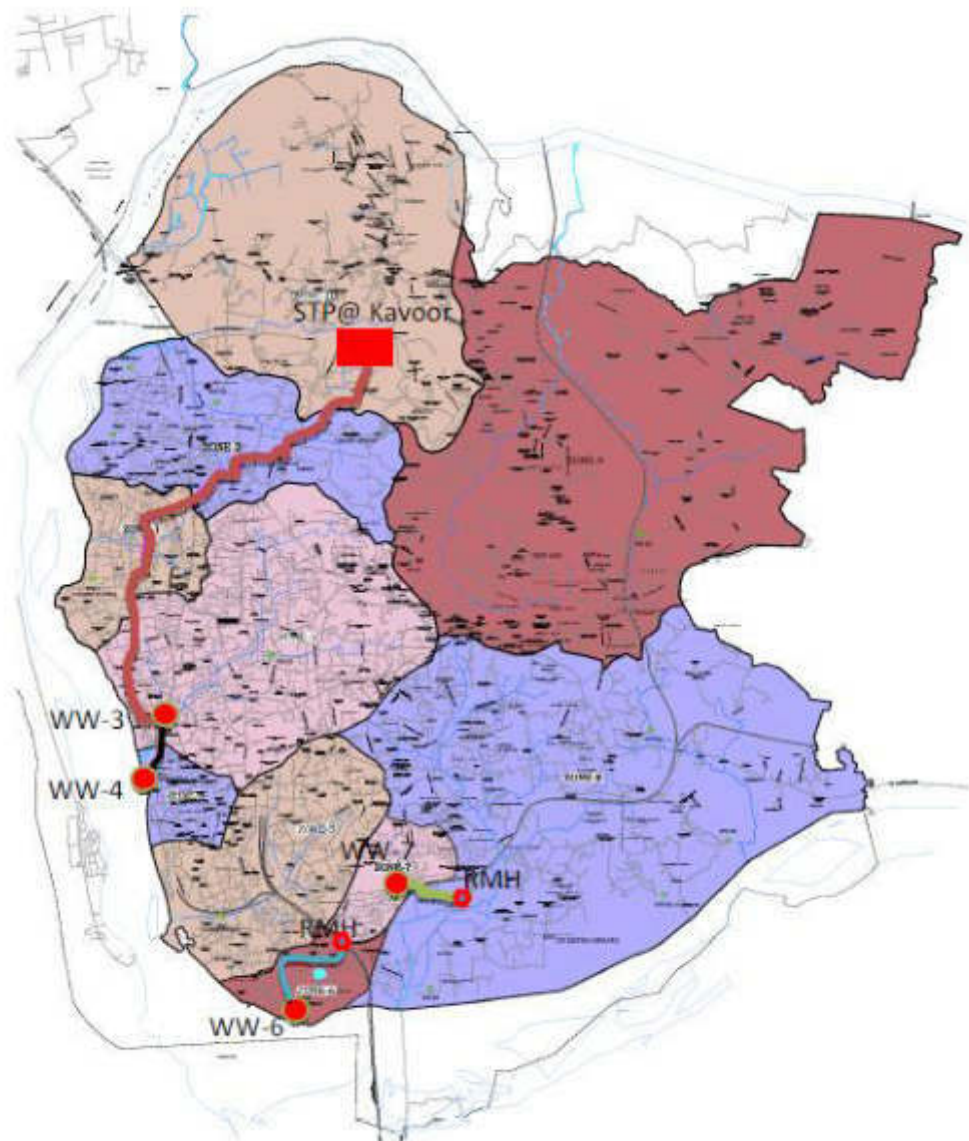


Table 2: Proposed Subprojectand Components

Infrastructure	Function	Description	Location
Pumping Mains	Convey the collected sewage from wet well to the STP	<p>Replacement of old pumping main of total length 11.4 km with new mains of ductile iron pipes at following section:</p> <ul style="list-style-type: none"> (i) From Kudroli wet well 3 to Kavoor STP: 7.65 km length and 1,100 mm diameter (ii) From Kandathpalli wet well 4 to Kudroli wet well 3: 0.95 km length and 900 mm diameter (iii) From Mulihitlu wet well 6 to Ridge manhole near Morgans gate: 1.7 km length and 450 mm diameter (iv) From Jeppu Bappal wet well 7 to Ridge manhole near Yekkur, inside old STP: 1.1 km length and 450 mm diameter 	<p>New pumping mains will be laid along the public roads – in the vacant earthen shoulder where it is available, or in the tarmac portion, where there is no vacant land. New pipeline will be mostly laid adjacent to the existing ones which are currently in operation:</p> <p>Road width varies from 3.5 m to 8 m. List of roads and alignment details of each pipeline section is provided in Table 11.</p>

km = kilometer, mm = millimeter, STP = sewage treatment plant.

4. Environmental Management Plan

An environmental management plan (EMP) is included as part of this IEE, which includes: (i) mitigation measures for environmental impacts during implementation; (ii) an environmental monitoring program, and the responsible entities for mitigating, monitoring, and reporting; (iii) public consultation and information disclosure; and (iv) a grievance redress mechanism. A number of impacts and their significance have already been reduced by amending the designs.

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Replacement of Old Sewerage Pumping Mains for Mangalore City	Name of the Contractor: DRS Infra Tech Pvt, Ltd.,
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Mangalore	Name of SE/EE/AE Of concerned division PIU :- AE - Mr. Shiv Kumar
Date of monitoring: 23/07/2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr. Madukar

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction– Mangalore

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
Construction Impacts	<ul style="list-style-type: none"> Impacts due to excess excavated earth, excess construction materials, solid waste etc.; and Occupational hazards which can occur to workers and public during work. 	<p>Prepare and submit a Method Statement for pumping main pipeline works in a table format with appended site layout map and cover the following:</p> <ol style="list-style-type: none"> Work description; No. of workers (skilled and unskilled); Details of Plant, equipment and machinery, vehicles; Work duration (total, and activity-wise, for example for pipe laying, from excavation to road resurfacing/testing); Personal Protection Equipment (PPE) (helmet, gloves, boots, etc.) details for each type of work; Details of materials at each site (type and quantity); 	Construction Contractor	<ul style="list-style-type: none"> Site inspection and record verification; - Done. Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work - Done Site specific Occupational Health and Safety (OHS) plan; Spoil and waste management plan; and Complaints from sensitive receptors and public. 	Good construction practice to be followed by contractor – no additional costs	<ol style="list-style-type: none"> Maintaining daily work records Attached in Jan 2020 annexure 5 a & b Complied. Attached in Sep 2019 annexure 3 Complied and PPEs are provided to workers on site. Attached in annexure Sep 2019 1.v Contractor maintained registers for

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>5. Risks/hazards associated with the work (for example, Trench excavation will have risks such as trench collapse, persons/vehicles falling into trench, structural risk to nearby buildings, damage to buildings, infrastructure etc.);</p> <p>6. Construction waste/debris generated (details and quantity);</p> <p>7. Detail the sequence of work process (step-by- step) including specific details of each work;</p> <p>8. Contractor's supervision and management arrangements for the work; Emergency: Designate (i) Responsible person on site, and (ii) first aider; and (iii) Typical site layout plan including pipe trenching, placement of material, excavated earth, barricading, etc.</p> <p>9. The pumping main lines are to be laid along the roads, Roads are provided with side drains to carry rain water. The excavated soil, placed along the trench may get disturbed due to wind, rain water and the movement of</p>				<p>pumping main sites and recommended to maintain for each site</p> <p>5. Due to Rain execution work is stopped. Building and infrastructure were not found near excavation area. And instructed contracting agency to put hard barricades.</p> <p>6. Due to Rain execution work is stopped. Contractor maintained register for damaged infrastructure. Attached as Annexure-11 in May - 2019 report. Recommended contracting agency to Updated work</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>workers, vehicles and pedestrians, and spill onto road way – disturbing road users, creating dust, road safety issues, etc., and also into nearby open drains.</p> <p>The following should be included in the site layout plan:</p> <ul style="list-style-type: none"> a) Provide barricading/security personnel at the site to prevent entry/trespassing of pedestrian/vehicles into the work zone; b) Location of temporary stockpiles and provision of bunds; c) Separation of stockpiles areas with workers/vehicle movement paths to avoid disturbing the stockpiled soil; d) Wetting of soil to arrest dust generation by sprinkling water; and e) Waste/surplus soil utilization and disposal plan – indicate expected duration of temporary stockpiling along the trench at each site and identify final surplus soil utilization/disposal site in consultation with program implementation unit (PIU). 				<p>record monthly</p> <p>7. Not complied. Work plan has to be prepared.</p> <p>8. Not Complied. First aider not provided.</p> <p>9. Typical site layout plan not prepared</p> <p>a) Barricading and security personals are provided on working site.</p> <p>b) Contractor is dumping surplus soil in the Pachanady Solid waste management with permission of PIU.</p> <p>c) Contractor is dumping surplus soil in the Pachanady Solid waste management.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
						<p>d) Complied.</p> <p>e) Site layout plan Not prepared as per given mitigation Measures.</p>
Utilities	<p>Disturbance/ damage to existing utilities on the sites</p> <p>(Telephone lines, electric poles and wires, water lines within proposed project sites)</p>	<p>10. At least two-weeks prior to start of work at any section, Identify utilities that will be required to be temporarily disturbed / shifted for the construction work;</p> <p>11. Liaise with the respective utility department, provide prior information to the affected public and restore the utilities as soon as the work is complete</p> <p>12. Provide contingency services where required (temporary</p>	Construction Contractor and PIU	<p>Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken</p> <p>Record to confirm that contingency services are provided and all damaged utilities are restored after the work</p>	Part of project cost	<p>10 Complied-Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>11 Proper record of restoration of the utilities and letter of communication with Different departments and Public is available and Copy should be maintained by Contractor. Attached as Annexures-2, 3, 4 & 5 in May - 2019 report</p> <p>12 Due to Rain</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<div>diversion of drains, provision of water supply by tankers, etc.,)</div> <div>13. Coordinate with the respective department and ensure that electricity and telephone services are restored quickly</div> <div>14. Reconstruct the damaged compound walls, culverts and drains immediately after the completion of pipeline work in that particular section</div>				<div>execution work is stopped and recommended contractors to provide diversion of drains and provision of water tanker whenever and wherever required on site.</div> <div>13 Due to Rain execution work is stopped and instructed contractors to restore such damages in same condition as before.</div> <div>14 Due to Rain execution work is stopped and instructed contractors to restore such damages in same condition as before.</div> <div>And List of identified damaged compound walls, culverts and drains for</div>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
						reconstruction have to be maintained. Record of before and after Condition also to be maintained at site by contractor.
Construction work camps, stockpile areas, storage areas, and disposal areas	Disruption to traffic flow and sensitive areas and receptors	<p>15. Prioritize areas within or nearest possible vacant space in the subproject location;</p> <p>16. Avoid locating construction work camps close (100 m away) to residential areas;</p> <p>17. Do not consider residential areas; for stockpiling the waste/surplus soil; and</p>	Construction Contractor	<p>List of selected sites for construction work camp, storage area and disposal area.</p> <p>Complaints from sensitive receptors</p>	Good construction practice to be followed by contractor –no additional costs	<p>15 Compiled</p> <p>16 Compiled – Advised contractor to mark dumping yard location on google map which is complied. Attached in Sep 2019annexure 4</p> <p>17 Complied- Contractor Dumping surplus soil in the Pachanady Solid waste management treatment plant.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		18. Material stockpiles shall be protected by bunds during the monsoon to arrest the silt laden runoff into drains.				Location is marked on Google map. Attached in Sep 2019 annexure 4 18 Instructed contracting agency, if any stockpiles have been stored temporarily in working site must be provided by bunds or dumped in the stock yard. Attached in Jan 2020 in annexure 4
Source of construction materials	Extraction of materials can disrupt natural land contours and vegetation resulting in accelerated erosion, disturbance in natural drainage patterns, ponding and water logging, and water pollution	19. Contractor should obtain material from existing mines approved/licensed by Mines and Geology Department/ Revenue Department only; 20. Verify suitability of all material sources and obtain approval of	Construction Contractor	Check Sources and approval	Good construction practice to be followed by contractor –no additional costs	19 Contractor obtained material from authorised agency but no supporting documents maintained by Contractor. 20 Contractor has been

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		implementing agency; 21. No new quarry sites shall be developed for the subproject purpose; and 22. Submit a monthly statement of construction material procured indicating material type, source and quantity.				recommended to maintain the Proper Documentation. 21 Complied - No new quarry sites developed by contractor for this project 22 Complied
Air quality	Dust and emissions from construction activity may de-grade the air quality	23. Consult with PIU on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; 24. Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; 25. Bring materials (aggregates, sand, etc. gravel) as and when required; 26. Use tarpaulins to cover sand and other loose material when transported by vehicles; 27. Stockpile sand and other loose material only in barricaded area and protect/cover by tarpaulins to avoid dust generation 28. Clean wheels and undercarriage of vehicles prior to leaving construction site; 29. Fit all heavy equipment and machinery with air pollution	Construction Contractor	Site observations Informal Ambient air quality monitoring (4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months, parameters - SPM, RSPM, SOx, NOx)	Good construction practice to be followed by contractor Contractor's cost – air quality monitoring (4 locations x 9 samples in construction x 5000 = INR 1,80,000)	23 Complied- Recommended contractor to maintain the copy of Document. 24 Due to Rain execution work is stopped. And No such exposed soil and stockpiled were found but instructed contracting agency must spray water wherever necessary. 25 Complied 26 Instructed

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		control devices which are operating correctly; ensure valid Pollution Under Control (PUC) Certificates for all vehicles and equipment used in the construction activity; and				contractors to cover sand, gravel and aggregates with tarpaulins to avoid flow during rainy season
						27 Complied. Stockpile, sand and other loose material are kept in barricaded areas.
						28 Complied
						29 Not Complied. Recommended to Contractor to maintain Pollution under Control (PUC) Certificates for all vehicles and equipments used in the construction.
		30. Carry out air quality monitoring.				30 Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
						but report yet to be submitted with PIU letter.
Noise Level	High noisy construction activities may have adverse impacts on sensitive receptors and structures	<p>31. Plan activities in consultation with the PIU so that activities with the greatest potential to generate noise (road cutting activity) are conducted during periods of the day which will result in least disturbance;</p> <p>32. Construction work shall be limited to day light hours (6 AM to 6 PM) for all the works located within the town; Provide prior information to the local public about the work schedule;</p> <p>33. Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiselling;</p> <p>34. Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p>	Construction Contractor	<p>Complaints from sensitive receptors</p> <p>Site observations</p> <p>Ambient noise monitoring (day and night time / 24 hours monitoring at 4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months)</p>	<p>Good construction practice to be followed by contractor</p> <p>Contractor's cost – noise level monitoring (4 locations x 9 samples in construction x 2500 = ₹90.000)</p>	<p>31 Complied.</p> <p>32 Complied.</p> <p>33 Till now such buildings are not found and will be complied when such sensitive buildings observed.</p> <p>34 However; noise will be minimized by using construction equipment by using vehicle silencers.</p> <p>Recommended to fit jackhammers</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		35. Maintain maximum sound levels not exceeding 80 decibels (dB) when measured at a distance of 10 m or more from the vehicles				with noise-reducing mufflers, and portable street barriers at sensitive receptors. 35 Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter
Water Quality	Impacts on surface drainage and water quality due to contaminated runoff from construction areas in monsoon	36. Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 37. Stockpiles shall be provided with temporary bunds; 38. Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed,	Construction Contractor	Site observations	Good construction practice to be followed by contractor –no additional costs	36 Contractor not carried out Major Construction works during monsoon season. Stockpiling of earth fill not observed during site visit. 37 Work in progress and no such stockpiles found on work site. 38 Due to Rain execution work is stopped. Complied-

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>consult with Implementing Agency on designated disposal areas;</p> <p>39. Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>40. Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund;</p> <p>41. Dispose any wastes generated by construction activities in designated sites; and,</p> <p>42. Ensure that there is no spill over of excavated earth, construction materials like cement concrete into the drain near wet well no. 3; also ensure that the drain flow is not blocked / disturbed during the work</p>				<p>Contractor Dumping surplus soil in the Pachanady Solid waste management treatment plant</p> <p>39 NA - Surface water bodies not observed along the Project alignment.</p> <p>40 Complied. Contractor not using fuels and lubricants in bulk. Whenever required fuel used on particular day onsite. But instructed contracting agency to provide storage yard if fuel stored in bulk.</p> <p>41 Complied Followed by contracting agency</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
						42 Complied Followed by contracting agency
Landscape and aesthetics	Impacts on landscape and aesthetics due to construction activity	<p>43. Manage surplus soil, construction debris and solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>44. Coordinate with PIU / MCC for beneficial uses of road debris and surplus soils in on-going construction works or for temporary storage for future use or disposal in landfill</p> <p>45. In unavoidable case of disposal, debris shall be disposed at landfill site or site approved by PIU / MCC; waste shall not be disposed in the forest areas and in or near water bodies/ rivers;</p> <p>46. Prepare and implement Waste Management Plan – it should present how the surplus waste generated will temporarily stocked at the site, transported, reused and disposed properly;</p> <p>47. Surplus soil and debris from work site shall be removed / cleared at the end of each day of work;</p>	Construction Contractor	<p>Work site inspection</p> <p>Complaints from public</p>	Good construction practice to be followed by contractor – no additional costs	<p>43 Complied</p> <p>44 Compiled-disposed in the Pachanady Solid waste management treatment plant</p> <p>45 No such activities observed at the time of inspection</p> <p>46 Partially Complied-Waste Management Plan prepared by contractor needs to be updated.</p> <p>47 Complied Followed by</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>there shall be no stock piling of debris / surplus soil at the site</p> <p>48. Recover used oil and lubricants and reuse or remove from the sites;</p> <p>49. Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>50. Request program implementation unit (PIU)/ project management, design and construction supervision consultant (PMDSCS) to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>				<p>contracting agency</p> <p>48 Complied</p> <p>49 Complied</p> <p>50 Construction phase work is in progress.</p>
Construction works	Hindrance to traffic movement / accessibility	<p>51. Plan pipeline work in consultation with the traffic police; Prepare a Traffic Management Plan – a template is provided for reference at Appendix 8.</p> <p>52. Strictly follow the pipe laying method presented in Table 13 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time</p> <p>53. Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimise disturbance to the</p>	Construction Contractor	Work Program Review	Good construction practice to be followed	<p>51 Traffic Management Plan prepared by Contractor and it needs to be updated again.</p> <p>52 Complied</p> <p>53 Complied.</p> <p>54 Complied.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>traffic movement;</p> <p>54. Do not close the road completely, ensure that work is conducted onto edge of the road; allow traffic to move on one line;</p> <p>55. In narrow roads with considerable traffic (Jama Masjid- Road, Ashok Nagara road, and old port / Kandathapalli Road), work shall be undertaken between two intersections and diverting traffic in that section to a parallel road, so that through traffic is not blocked fully.</p> <p>56. In some sections on Jama Masjid- Road, Old Port Road and Kandathapalli Road there are no parallel roads to divert traffic; in those sections work shall be conducted in the nights or in low traffic hours in day time; but in case of day-time work traffic shall not be blocked for more than 2-3 hours at a stretch; prior information shall be provided to public – a week before and a day before work, about the schedule of the work and temporary road closure; proper signage shall be provided</p> <p>57. Maintain safe pedestrian access at all times to the houses along the work site</p> <p>58. At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing</p>				<p>55 Complied. (Attached in june 2019)</p> <p>56 Complied. Due to Rain execution work is stopped. And work is carried out in low traffic hours in day time and; prior information given about the schedule of the work.</p> <p>57 Complied (Attached in June 2019) and</p> <p>58 Due to Rain execution work is stopped. but Caution board provided at work site. Entry restriction information; competent</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints.</p> <p>59. In densely populated areas like market place or layouts, roads with heavy traffics additional care has to be taken.</p> <p>60. Hard barricades should be mandatorily provided along with caution board and traffic diversion boards. Some of the densely populated area identified in project area are Old Port Road, Jeppubappal to Suterpete</p>				<p>official's name and contact for public complaints provided. Recommended all sign board must be Retro reflective (Attached in Sep 2019 annexure 4 g, h, i, j, k and l)</p> <p>59 Respective Engineers present on the site for continuous monitoring</p> <p>60 Traffic diversion boards, hard barricading and Caution boards provided. Recommended all sign board must be Retro reflective (Attached in Sep 2019 annexure 4 g, h, i, j, k and l)</p>
Nuisance/ disturbance to sensitive areas	Schools, hospitals and religious places) due construction work in the proximity (within 250 m	<p>61. No material should be stocked in this area; material shall be brought to the site as and when required</p> <p>62. Conduct work manually with</p>	Construction Contractor	Complaints from sensitive receptors Work program	Good construction practice to be followed by contractor – no	<p>61 Complied</p> <p>Followed by contracting</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
	of such place)	<p>small group of workers and less noise; minimize use of equipment and vehicles</p> <p>63. No work should be conducted near the religious places during religious congregations</p> <p>64. Material transport to the site should be arranged considering school timings; material should be in place before school starts;</p> <p>65. Notify concerned schools, hospitals, etc. 2 weeks prior to the work; conduct a 30 minutes awareness program at on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites.</p>			additional costs	<p>agency</p> <p>62 Complied</p> <p>Followed by contracting agency</p> <p>63 Followed by contracting agency</p> <p>64 Complied</p> <p>Followed by contracting agency</p> <p>65 Complied – Recommended to maintain documentary Evidence</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
Socio-Economic-Livelihood Impediment of access to houses and business	Impediment of access to houses and business	66. Leave space for access between mounds of excavated soil, where required	Construction Contractor	<ul style="list-style-type: none"> Number of walkways, wooden planks and foot bridges; Complaints from public; Spoil Management Plan; and Traffic Management plan. 	Good construction practice to be followed by contractor – no additional costs	66 Complied.
		67. Provide wooden planks/footbridges for pedestrians and metal sheets for vehicles to allow access across trenches to premises where required.				67 Complied – access provided by contractor. (Attached in june 2019)
		68. Consult affected business people to inform them in advance when work will occur				68 Complied - Public Consultation were conducted for the affected people to provide prior information about the work.
		69. Address livelihood issues, if any; implement the Resettlement Plan to address these issues				69 Complied implementation Resettlement Plan to address these issues in progress (Attached in June 2019)
		70. Provide sign/caution/warning boards at work site indicating work schedule and traffic information; prevent public entry into work sites through barricading and security; and				70 Complied -

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>71. Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p> <p>72. Prepare a Traffic Management Plan – a template is provided for reference at Appendix 8. The site-specific traffic management plan should be part of the Construction Management Plan.</p>				<p>Traffic diversion boards, Hard barricading and Caution boards provided(Attached in June 2019) Work schedule not provided.</p> <p>71 Complied. Recommended all project information board and sign board must be Retro reflective (Attached in annexure 4 g, h, i, j, k and l)</p> <p>72 Site-Specific Traffic Management Plan Prepared by contractor is not adequate and to get it updated again. Recommended to comply (Attached in June 2019)</p>
Socio-Economic Employment	Impact on local employment generation	73. Employ local labour force to the maximum extent, if manpower is available	Construction Contractor	Employment Records Compliance to labour laws	NA	73 Complied
Occupational Health and Safety	Workers occupational health and safety	74. Develop and implement site-specific Health and Safety (H&S) Plan which will include measures such as: (a) excluding public from the	Construction Contractor	Site specific OHSEquipped first aid station.	Good construction practice to be followed by contractor – no	74 Complied Site-specific Health and Safety (H&S) Plan prepared by

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>site; (b) ensuring all workers are provided with and use Personal Protective Equipment (PPE); (c) H&S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>75. All trenches in sandy and mixed sandy soils irrespective of depth and trenches deeper than 2m (or less, if designed by the engineer) in other soils shall be protected against collapse to avoid safety risks to workers, public and nearby buildings/structures; provision has been made for well point type dewatering, sheet piling for shoring and strutting etc., precaution shall be taken at the time of execution;</p> <p>76. Take all necessary precaution during isolation and blocking of existing pumping main and connecting the new main to the existing system. Skilled supervision, appropriate apparatus and PPEs must be used;</p> <p>77. Extreme care shall be taken while working on existing sewer lines/ manholes, where they are required to be shifted, to safeguard the workers against the gaseous emissions and</p>		<p>Potable water supply and clean eating area.</p> <p>PPE and medical insurance</p>	additional costs	<p>contractor. Proper implementation required.</p> <p>75 Not Complied.</p> <p>76 Complied. PPEs like nose masks, oxygen masks for emergency, ear plugs and Hand gloves are provided. (Attached Sep 2019 in annexure 1.v)</p> <p>77 PPEs like nose masks, oxygen masks for emergency. ear plugs and Hand gloves are</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		hazardous working conditions				provided
		78. Create awareness among all workers, supervisors and site engineers on potential hazard conditions and safety risks in working with existing/old sewer lines; working conditions may be hazardous with harmful gaseous emissions (hydrogen sulphide, carbon monoxide, methane, etc.) and oxygen deficiency;				78 Complied
		79. Provide all necessary personnel protection equipment; including oxygen masks for emergency use;				79 Oxygen masks for emergency not provided PPEs are provided
		80. Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;				80 Not Complied
		81. Provide medical insurance coverage for workers;				81 Employees Compensation Insurances taken for 40 Unskilled and for 10 semiskilled workers
		82. Secure all installations from unauthorized intrusion and				

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>accident risks;</p> <p>83. Provide supplies of potable drinking water;</p> <p>84. Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>85. Provide H & S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>86. Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>87. Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>88. Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>89. Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>90. Signage shall be in accordance</p>				<p>82 Complied.</p> <p>83 Complied.</p> <p>84 Specific eating area not provided.</p> <p>85 Safety and Tool box meeting conducted. (Attached in Sep 2019 annexure 1.u)</p> <p>86 Not Complied</p> <p>87 Complied.</p> <p>88 Compiled</p> <p>89 Not Complied.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>91. Disallow worker exposure to noise level greater than 85 dB for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively; and</p> <p>92. Overall, the contractor should comply with IFC EHS Guidelines on Occupational Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2BOccupational%2BHealth%2BAnd%2BSafety.pdf?MOD=AJPERES).</p>				<p>90 Signage are Provided but not in accordance with international standards</p> <p>91. Duration of working hours- 8 hours per day. Hearing protection is provided by contractor. (Attached in Sep 2019 annexure 1.v)</p> <p>92. Not Complied</p>
Community Health and Safety	Danger due to deep excavations, hindrance to traffic and chances of accident,	93. All trenches in sandy and mixed sandy soils irrespective of depth, and trenches deeper than 2m (or less, if desired by engineer) shall be protected against collapse to avoid safety risks to workers, public and nearby buildings/structures; provision has been made for well point type dewatering, sheet piling for shoring and strutting etc., precaution shall be taken at the time of execution;	Construction Contractor	<ul style="list-style-type: none"> Traffic Management Plan Complaints from public 	Good construction practice to be followed by contractor – no additional costs	<p>93 Traffic Management Plan submitted by contractor is not sufficient and it needs updation.</p> <p>No such deep trench found during site visit but instructed contracting agency to Provide sheet piling</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>94. Plan material and waste routes to avoid times of peak-pedestrian activities;</p> <p>95. One week prior to start of work at any section, a joint inspection shall be conducted along with PIU and MCC to identify risk areas and buildings and take necessary precautions for safe conduct of work;</p> <p>96. Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>97. Provide road signs and flag persons to warn of dangerous conditions, for all the sites along the roads; and</p> <p>98. Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/dd673400488559ae83c4d36a6515bb18/3%2BCommunity%2Bhealth%2Band%2B</p>				<p>for shoring and strutting if depth is more than 2m.</p> <p>94 Partially Complied – waste management plan not prepared</p> <p>95 Complied. Joint inspection conducted along with PIU and MCC to identify risk areas and buildings to take necessary precautions but not maintained record of joint inspection.</p> <p>96 Partially Complied</p> <p>97 Complied Followed by contracting agency</p> <p>98 Contractor Not Complied with IFC EHS Guidelines Community Health and Safety Recommended and attached as</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		Safety.pdf?MOD=AJPERES).				
Worker Camps	Temporary worker camps	<p>99 The contractor should operate the temporary worker camps in compliance with IFC EHS Guidelines specific to workers accommodation (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/publications/publications_gpn_workers_accommodation), including the following:</p> <p>100 Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located within reasonable distance of work site;</p> <p>101 Minimize removal of vegetation and disallow cutting of trees;</p> <p>102 Labour camps shall include accommodation for workers/labourers along with other basic amenities such as kitchen, potable water supply, sanitation (toilets, bathrooms, washing areas and water supply for such needs), first aid room as well as garbage collection and disposal facility.</p> <p>103 The roof height of the worker's and labour camp shall not be less than 3 m from floor level to the lowest part of the roof.</p> <p>104 The camps shall be floored with concrete, shall be kept clean, and with proper cross ventilation, and the space provided shall be on the basis of one sq.mt per</p>	Construction Contractor	<p>List of selected sites. Written consent of land owner</p> <p>Waste Management plan</p>	Good construction practice to be followed by contractor – no additional costs	<p>99. Contractor Not operating the temporary worker camps in compliance with IFC EHS Guidelines specific to workers accommodation. And instructed to provide awareness to all workers to follow H& S measures of COVID-19 on site and in their camps</p> <p>100 Complied.</p> <p>101 Complied.</p> <p>102 Proper Kitchen, bathrooms garbage room yet to be provided.</p> <p>103 Complied.</p> <p>104 Not Complied</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>head or as per the relevant regulation, whichever is higher.</p> <p>105 Fire and electrical safety pre-cautions shall be adhered to.</p> <p>106 Cooking, sanitation and washing areas shall be provided separately.</p> <p>107 The Contractor shall maintain necessary living accommodation and ancillary facilities (including provision of clean fuel to prevent damage to forests and to prevent fuel wood cutting and burning by labor) in functional and hygienic manner.</p> <p>108 The site must be graded and rendered free from depressions such that water does not get stagnant anywhere.</p> <p>109 The entire boundary of the site should be fenced all around with barbed wire so as to prevent the trespassing of humans and animals.</p> <p>110 Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 lpcd); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>111 Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less</p>				<p>105. Not Complied.</p> <p>106. Not Complied Separate Cooking area yet to be provided by Contractor. Washing area is not proper as per the stipulated norms.</p> <p>107. Partially Complied</p> <p>108. Such depressions not found during site visit</p> <p>109. Not complied.</p> <p>110. Complied.</p> <p>111. Complied.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>persons;</p> <p>112 Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>113 Recover used oil and lubricants and reuse or remove from the site;</p> <p>114 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>115 Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>116 Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>112. Complied.</p> <p>113. Reused.</p> <p>114. Complied.</p> <p>115. Complied.</p> <p>116. Work is in progress.</p>

Conclusion:-

Overall The Contractor's compliance with the Environment and Health and safety requirements of the Project needs improvement. Contractor maintained copy of IEE. Instructed contracting agency has to conduct HIV AIDS Awareness Training programme. Contracting agency has not submitted **April, June and July 2020** Site specific EMP report with PIU letter.

Recommendation:-

Key Issues: Following are the key issues which required immediate necessary action / further improvement.

S.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Site inspection and record verification	<ul style="list-style-type: none"> Site inspection Register must be maintained 	Complied
2.	Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work – Done		Complied
3.	Site specific Occupational Health and Safety (OHS) plan;	<p>Site specific Occupational Health and Safety including (International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety)</p> <ul style="list-style-type: none"> Institutional setup List of PPE provided and standards followed, Site specific OHS Equipped first aid station, Medical insurance. Hospitals recognized in emergency. Health Camps and Check -up should conducted for the workers Necessary HIV/AIDS prevention measures and awareness programme conducted by Contractor. Electrical measures safety Fire safety measures should be reflect in OHS plan. Weekly and monthly monitoring and safety training programs have to be documented properly including mock drill register 	<p>OHS Plan submitted – but not adequate, recommended the contractor to update the same and submit</p> <p>Comply with in 5 days</p>
4.	Waste management plan; and	<ul style="list-style-type: none"> Type of waste generated (Solid and Hazardous) Quantity of different waste generated at site List and type of garbage bins provided 	Comply with in 15 days

		<ul style="list-style-type: none"> • Time of waste collection • Location of Waste disposal site identified consultation with PIU • If private land NOC from owner. • Location of Waste disposal site mark on google map. • The contractor will provide garbage bins in the camp and construction site and it will be ensured that these are regularly emptied and waste is disposed off in a hygienic manner as per the Solid Waste (Handling and Management) Rules, 2016. 	
5.	Complaints from sensitive receptors and public.	<ul style="list-style-type: none"> • Complaints register must be maintained at each site. 	Complaint register maintained at pumping station and recommended the contractor to maintain the complaint register at all working sites
6.	Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken	<ul style="list-style-type: none"> • Section-wise list of utilities to be shifted/ disturbed • Submission Letters of Section-wise list of utilities to be shifted/ disturbed to PIU • Plan to shift and contingency steps to be taken 	Complied partially - Communication Letters to different Departments from PIU maintained. Contractor has to maintain the recommended documents Comply with in 7 days
7.	Record to confirm that contingency services are provided and all damaged utilities are restored after the work		Complied
8.	List of selected sites for construction work camp, storage area and disposal area	<ul style="list-style-type: none"> • Identify the location consultation with PIU • Letters of communications and finalization location • Mark the location on google map. 	Complied - letter for finalization of the disposal site. The letters for finalization of the locations for (work camp, storage area) have to be complied. Marking the locations on Google map complied
9.	Check Sources and approval	<ul style="list-style-type: none"> • Maintain Copy of Certification of authorized material sources 	Comply with in 5 days
10.	Site observations Informal Ambient air quality monitoring (4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months, parameters - SPM, RSPM, SO _x , NO _x)	<ul style="list-style-type: none"> • During the construction phase, the contractor will carry out environmental monitoring Air quality by engaging NABL approved laboratory 	<p>Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter</p> <p>Instructed contractors to conduct Air monitoring test every quarterly Comply with in 5 days</p>

11.	Site observations	<ul style="list-style-type: none"> Maintain Register for site observation at site 	Complied
12.	Ambient noise monitoring (day and night time / 24 hours monitoring at 4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months)	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring Air quality by engaging NABL approved laboratory 	<p>Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter</p> <p>Instructed contractors to conduct Noise monitoring test every quarterly Comply with in 5 days</p>
13.	Work Program Review	<ul style="list-style-type: none"> Work plan must be prepared and review 	Comply with in 7 days
14.	Number of walkways, wooden planks and foot bridges;	<ul style="list-style-type: none"> List of walkways, wooden planks and foot bridges provided with location must be maintained 	Work in progress and instructed contractors to provide walkways, wooden planks and foot bridge if area is excavated.
15.	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated will be waste generated. Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on google map 	<p>Spoil Management Plan submitted – not adequate</p> <p>Comply with in 5 days</p>
16.	Traffic Management plan		<p>Traffic Management Plan submitted – not adequate and recommended the contractor to update the same and submit</p> <p>Comply with in 5 days</p>
17.	Employment Records Compliance to labour laws	<ul style="list-style-type: none"> Attendance registers of labour at each site. Register of payment to the workers at each site. 	<p>Attendance register is maintained. but Register of payment to the workers Not maintained Comply with in 5 days</p>
18.	Site specific OHS Equipped first aid station	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. 	<p>Comply with in 10 days (when work is in progress all this facilities must be provided)</p>

		<ul style="list-style-type: none"> Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account.</p>	
19.	Potable water supply and clean eating area.	<ul style="list-style-type: none"> Potable water supply: Sufficient (minimum 20 liters at any given point of time) and clean (potable) water for drinking shall be placed in the mess/labour camp and at the each construction site. 	Complied
20.	PPE and medical insurance	<ul style="list-style-type: none"> The Contractor shall provide and ensure enforcement with zero tolerance the following: Safety vests will be used by workers when on the construction site. Hard hat or helmets to all workers, supervising staff and inspecting official entering work site, plant area, and engaged in loading/unloading operations Protective footwear, protective goggles and nose masks (as required) will be provided to the workers employed. These shall be provided to all workers employed for handling of cement, mortar, concrete and similar dust generating operations shall be provided. During reinforcement/fabrication operation, safety appliances like: helmets, protective eye wear, gum boots and hand gloves shall be provided to labour/workers at the construction site. Welder's protective eye-shields will be provided to workers who are engaged in welding works. Nettings below and on the sides of overhead construction to prevent mishaps due to accidental fall of a workman, tool and/or debris shall be provided. Proper moving guards will be provided at all moving machines, like motors and pulleys. All workforces on the construction site shall be provided with identity cards. High risk areas are to be provided with warning signage. 	Complied

21.	List of selected sites. Written consent of land owner	<ul style="list-style-type: none"> If any Activity related to project carrying out in private land written consent of land owner (NOC) must be taken. 	If any, Comply with in 20 days
22.	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness to all office staffs and site workers to follow H& S measures of COVID-19 	<p>Complied.</p> <p>Implementation of H & S at work site is done. Attached as Annexure 3. H & S plan is to be prepared by contractors</p> <p>Comply with in 3 days</p>




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Annexure -3


Status of Site Observations for the month of 29th February 2020


S.N o	Observation		Recommendation	Status
a	Proper barricading and Cautionary Sign.		<p>Barricading is done at kunttikana site</p> <p>Instructed contracting agency to put hard barricading continuous without gap.</p>	Partially complied

b	Flag man at kunttikanna Work location		Flagman provided t both side of the road to maintain traffic and avoid any accident and incident Again instructed to follow it properly	Partially complied
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c	PPEs at work locations		<p>All workers are wear PPEs during site visit at kuttikana and kandatpalli locations</p> <p>Instructed to follow it properly at all work site</p> <p>Drinking water must be provided at all working locations for workers</p> <p>One mobil toilet should be provided site site</p>	<p>Complied</p> <p>Not complied</p> <p>Not complied</p>
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d	Labour Camp at Shakti Nagar		Proper housekeeping must be maintained in and around the camp	Partially complied
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e	Gas stove is being used for cooking food	 <p>The top photograph shows a cluttered kitchen area with a gas stove, various containers, and laundry hanging in the background. The bottom photograph shows a close-up of a white electrical switchboard mounted on a brick wall, with loose wires and a red cloth hanging nearby, indicating unsafe electrical practices.</p>	<p>Gas cylinder is to be provided for cooking</p> <p>Kitchen must be separate for cooking</p> <p>Lose electrical cables or boards must be replaced to avoid from electric shocks</p>	Not complied
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f	Material stocks at shaktinagara locations		<p>Proper sign board in frame with stand should be at site</p> <p>And soft barricading should be done for every stocked materials</p>	Partially complied
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g	Water Tank for daily use of water at Low Height		Water Tank should be provided at proper Height	Not complied
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i	Water Tap and electricity connections not provided		Water Tap and electricity connections are to be provided	Not complied
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Annexure -2

Status of Site Observations for the month of 27th May 2020


S.No	Observation		Recommendation	Status
a	Water sprinkling at dry location at konchady site		Water is sprinkled by contracting agency after work in dry areas to avoid dust generation at work site konchady site	Complied

b	PPEs for workers at work locations	 	<p>All workers should wear PPEs helmet, jacket, hand gloves and shoes during work at site</p> <p>Drinking Water facility should be provided to workers at all site</p>	Partially complied
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c	Sign boards and hard barricade at work site	 	Work in progress sign board should be kept and hard barricading must be done during road cement concreting work to avoid public entrance to carry safe work	Partially complied
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d	One toilet was found damaged		Repair the Toilet	Not complied
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e	Labours are cooking food in their staying room		Separate Cooking facility is to be provided for the Contractor's labours and sub-contractor's labours	Not complied
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f	Loose electrical wires found		Electrical wires should be properly fitted with in safety electrical pipes and new switchboard	Not complied
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g	Poor Housekeeping at shakti nagar labour camp of subcontractor		Labour camp of subcontractor at shaktinagar is not properly maintained. Housekeeping should be done properly to keep surrounding area clean.	Partially complied
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Annexure -3

Status of Site Observations for the month of 24th June 2020


S.No	Observation		Recommendation	Status
a	PPEs for workers at work locations		<p>All workers should wear PPEs helmet, jacket, hand gloves and shoes during work at site</p> <p>Instructed contractors to provided PPEs to all worker at site</p> <p>Drinking Water facility should be provided to workers at all site</p>	Partially Complied

b	Sign boards and hard barricading at work site		<p>Road restoration Work in progress sign board should be kept and hard barricading must be done during road loose earth filling or cement concreting work to avoid public entrance to carry safe work</p> <p>Flag mans should be kept on either side of the road if JCB, road roller are being used</p>	Partially Complied
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d	One toilet was found damaged		Repair the Toilet	Not Complied
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e	Labours are cooking food in their staying room		Separate Cooking facility is to be provided for the Contractor's labours and sub-contractor's labours	Not Complied
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f	Loose electrical wires found		Electrical wires should be properly fitted with in safety electrical pipes and new switchboard	Not Complied
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g	Poor Housekeeping at shakti nagar labour camp of subcontractor		Labour camp of subcontractor at shaktinagar is not properly maintained. Housekeeping should be done properly to keep surrounding area clean.	Not Complied
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Monthly Environmental Monitoring Report

Project Number: 43253-027
July 2020

IND: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Puttur

Package No. 02PTR01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be improved water resource planning, monitoring and service delivery in 24x7 water supply for Puttur City. Project 2 will have 3 outputs: (i) UWSS and sanitation infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) institutional capacity of KUIDFC and ULBs strengthened. The IEE is based on an assessment of these components within the project area.

2 Need for Infrastructure Improvement in Puttur

At present, Puttur City meets its water supply requirement through surface source. River Kumaradhara is the main surface source of water supply to Puttur. A new vented dam was constructed under KUDCEMP with a storage capacity of 0.61 million cubic meter (MCM) and a storage spreading of 2,400 m upstream the vented dam. Existing water supply system is depicted in Figure 1.

3 The proposed subproject:

This subproject includes the following components:

- (i) Replacement of two old pumps with new vertical turbine pumps in Jackwell at Nekkilady;
- (ii) construction of 1.68 kilometer (km) of raw water pumping main (400 millimeter (mm) diameter) from Jackwell to water treatment plant (WTP) at Nekkilady;
- (iii) construction of 12.42 km clear water main of 400 mm diameter from the proposed new Water Treatment Plant (WTP) at Nekkilady to ground level service reservoir (GLSR) at Tenkila;
- (iv) construction of new WTP of capacity 8.7 million litres per day (MLD) at Nekkilady;
- (v) replacement of clear water pumps in existing WTP at Nekkilady;
- (vi) construction of 5.06 km of clear water feeder mains;
- (vii) construction of six new overhead tanks (OHTs) – (a) 300 kiloliters (kl) capacity in Zone-2 at Mura Shantinagra, Padnur, (b) 100 kl in Zone-3 at Karmala near Microwave station, (c) 600 kl in Zone-4A at Darbe; (d) 250 kl in zone-5 at Lingadagudda, Kabaka, (e) 200 kl in Zone-6A at Balnad Helipad, and (f) 100 kl zone-8 at BalnadKelyadi, Vitla Road;
- (viii) construction of two GLSRs - (a) 1,000 kl capacity at Seethigudda, and (b) 2,000 KL at Tenkila;
- (ix) Intermediate pumping station at Tenkila; (x) booster pumping station at Balnad Helipad, (xi) 29 bulk water meters;
- (x) 142.66 km of distribution network to cover 24x7 water supply to Puttur city for 8 zones; and

- (xi) Replacement of 8,441 existing meters and providing new house service connections of 4,500 for un-covered households.

Figure 1: Existing Water Supply System in Puttur

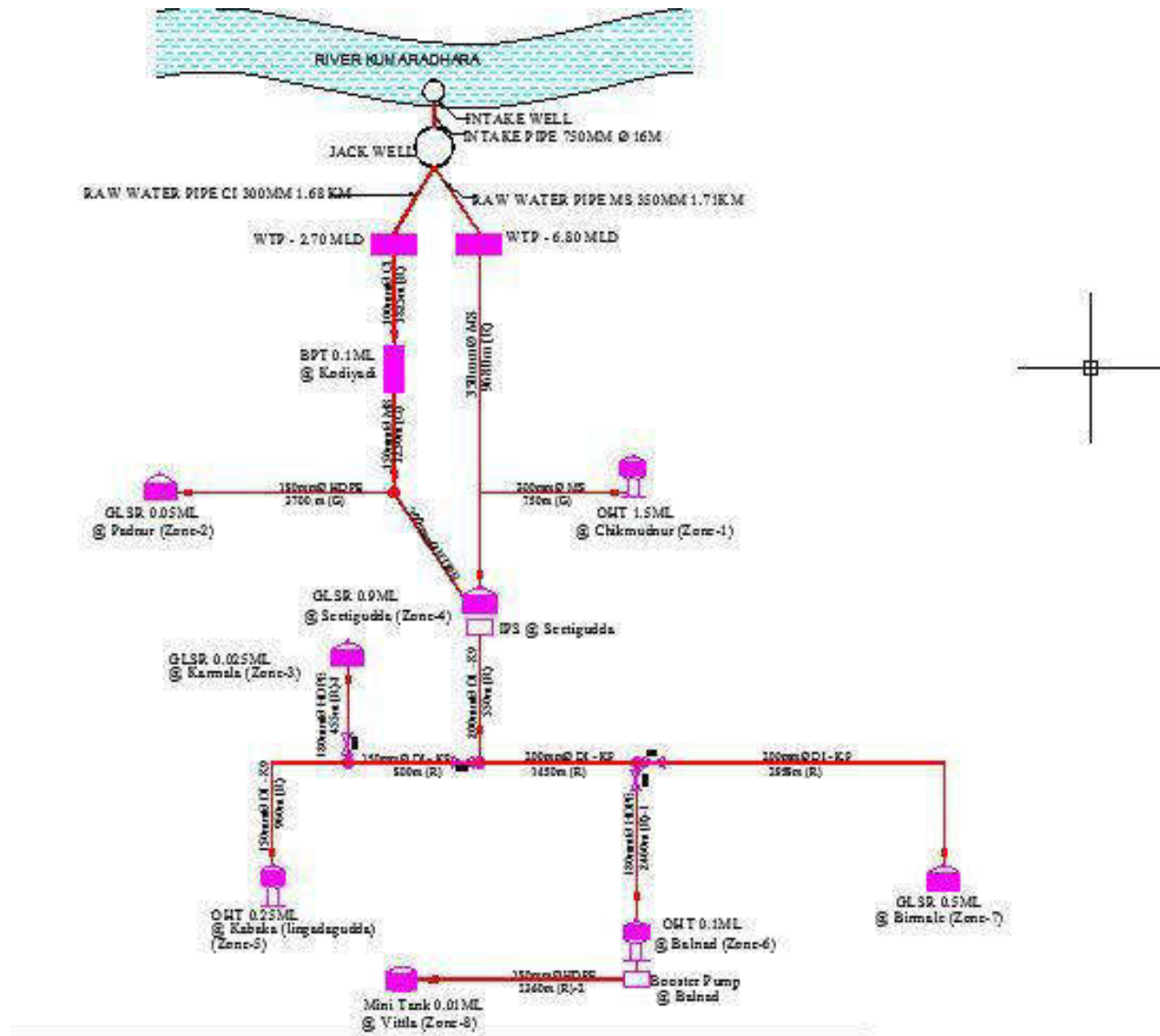


Table 1: Proposed Components for 24x7 Water Supply System

Infrastructure	Function	Description	Location
Raw water pumps in existing Jack well	Pumping of Raw water from Jack well Standby power supply arrangement for pumping	-Replacement of two old pumps with new vertical turbine pumps of capacity 335 m ³ /h, 75 m head (1+1) Procurement of diesel generator of 500 kilovolt-ampere -(kVA)	Jack well site at Nekkilady Jack well site at Nekkilady
Raw water Transmission Main	Conveys raw water to WTP by pumping	1.68 km length 400 mm diameter DI pipe	Pipe will be laid underground from Nekkilady to WTP all along the existing road
Water Treatment Plant	Treats raw water to meet drinking water standards	New 8.7 MLD capacity WTP based on conventional treatment Process. The components Include Cascade Aerator Parshall flume Flash mixer Flocculators – 2 units Tube settlers – 2 units Rapid sand filters - 4 beds Chlorination system with safety measures Lime and alum mixing Tanks Clear water sump and pump house Backwash water recirculation and sludge management system (sludge collection, drying beds) – a combined system of adequate capacity for backwash and sludge management will be developed to cater to both new and existing WTPs. This component addresses the issues of concern identified in the environmental audit of existing WTP (Ref Corrective Action Plan, Table 8)	Nekkilady Adjacent to the existing WTP; sufficient land available within the existing WTP campus to accommodate the new WTP
Clear water Pumps in existing WTP	Pumps clear water to Service reservoirs	Replacement of old pumps within new pumps: 2 pump sets of capacity 325 m ³ /hour and 84 m head (1+1)	Pumps will be installed in the existing clear water pumping station at WTP, Nekkilady
Clear Water Transmission Main	Pumping of clear water from WTP (water treatment plant) to service reservoirs	12.42 km length 400 mm diameter DI pipe	Pipe will be laid underground from Nekkilady to Tenkila GLSR along the public roads within the road right of way
Clear water feeder main	Pumping of clear water from MBR to Service Reservoirs	5.06 km length 180 – 300 mm diameter DI /HDPE) pipes DI pipe of 300 mm diameter – 1.134 km DI Pipe of 200 mm diameter – 2.422 km	Laying of pipes underground along public roads within the ULB area

Infrastructure	Function	Description	Location
Water service reservoirs	Water storage for supply	<p>DI Pipe of 150 mm diameter – 0.591 km HDPE pipe of 180 mm – 0.918 km</p> <p>Six OHTs and two GLSRs of RCC including compound walls at the selected sites:</p> <p>OHT 300KL for Zone-2 at Mura Shantinagra, Padnur</p> <p>100KL for Zone-3 at Karmala near Microwave station 600KL for Zone-4A at CTO, Darbe 250KL for Zone-5 at Lingadagudda, Kabaka 200KL for Zone-6A at Balnad Helipad 100KL for zone-8 at, Balnad Kelyadi, Vitla Road1</p> <p>GLSR 1,000KL in Zone-4 at Seethigudda 2,000 KL GLSR at Tenkila</p>	<p>OHT Existing within ULB Properties. No non-title users are present at these sites</p> <p>GLSR Seetigudda land is ULB property. And Tenkila is purchase by Karnataka Housing Board, Government of Karnataka, and it will be purchased through negotiated Settlement.</p>
Intermediate Pumping Stations (IPS)	To provide adequate pressure in the system for supply	<p>Intermediate pumping station at Tenkila Pump capacities: 65m³/h and 85 m head for zone 3 and 5 (1+1) 82 m³/h and 33 m head for zone 4A, (1+1) 119 m³/h and 100 m head for zone 6, 6A and 7, (1+1)</p> <p>Booster pumping station at Balnad Pump capacity 11 m³/h and 80 m head (1+1)</p>	<p>Pumping station will be located within Tenkila GLSR site</p> <p>Pumping station will be located within the site identified for Zone 6A OHT at Balnad Helipad</p>
Distribution system	Supply of water from service reservoirs to consumers	<p>142.66 km of pipe lines of diameter 75 mm to 280 mm (HDPE / DI pipes)</p> <p>75 mm – 106.139 km 90 mm – 1.853 km 110 mm – 21.744 km 150 mm (DI) - 2.784 km 160 mm – 2.889 km 200 mm – 1.403 km</p>	<p>In 8 zones within the city limits Pipes will be laid underground along the roads within the ROW</p>

	250 mm – 0.362 km	
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Infrastructure	Function	Description	Location
		250 mm (DI)- 4.916 km 280 mm – 0.570 km	
Bulk Water Meters	To record data of volume of flow to each Distribution System zones at desired time interval.	29 no.	Bulk meters will be fixed at strategic locations in the pipe line at Jack well point, WTP and service reservoir points
House Service Connections (HSC)	For each house connection will be provided with meters to supply water and record volume of water. W	4,500 new HSC connections 9226 replacement of existing domestic water meters	In 8 zones for all the houses within the city limits

CMC = City Municipal Council, m³/h = cubic meter per hour, DI = ductile iron, GLSR = ground level service reservoir, HDPE = high density polyethylene, HSC = House Service Connections, IPS = Intermediate Pumping Stations, km = kilometer, m = meter, mm = millimeter, MLD = million liters per day, OHT = overhead tank, RCC = reinforced cement concrete, ROW = right-of-way, ULB = urban local body, WTP = water treatment plant.

4 Environmental Management Plan

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Puttur	Name of the Contractor: Suez Civil Engineering services Pvt,LTD
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Puttur	Name of SE/EE/AE Of concerned division PIU :- Mr.Shamath, AE
Date of monthly monitoring: 23/07/2020	Name of Environment, Health And Safety (EHS) engineer :- Mr.YAmruth

Table 2: Status of implementation Environmental Management Plan for Anticipated Impacts –Construction Stage - PUTTUR

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of Implementation
Environmental Management Plan (EMP) Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<p>1) Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOPs) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.; and</p> <p>2) appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work</p>	Construction Contractor/ Program Implementation Unit (PIU)/ Project Management Design, Construction and Supervision Consultant (PMDSC)	<p>(i) Certificate of Completion (Safeguards Compliance Orientation);</p> <p>(ii) Posting Certification Completion</p> <p>(iii) Posting of EMP at worksites</p>	Cost of EMP Implementation Orientation Training to contractor is Responsibility Other costs Responsibility	<p>1) Spoil management submitted but it needs to be updated</p> <p>2) EHS Engineer appointed</p>
Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<p>3) Consult with PIU/PMDSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4) Damp down exposed soil and any stockpiled on-site by spraying with water when necessary during dry weather;</p> <p>5) Enclose the area with dust screens of sufficient height during the dismantling work; employ proper construction methods limiting the dust generation;</p> <p>6) Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>7) Clean wheels and undercarriage of vehicles prior to leaving construction site; and</p>	Construction Contractor	<p>(i) Location of stockpiles;</p> <p>(ii) Complaints from sensitive receptors;</p> <p>(iii) Heavy equipment and machinery with air pollution</p> <p>(iv) Certification that vehicles are compliant with Air Act.</p>	Cost for implementation of mitigation measures responsibility	<p>3) Complied</p> <p>4) Pipe execution work is not in progress due to rain. But instructed contracting agency to spray water at commercial and residential areas if stock piled on-site.</p> <p>5) Not complied</p> <p>6) Not complied. Instructed to cover sand and loose earth with tarpaulins is transported</p> <p>7) Complied</p>

		8) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.				8) Complied
Surface water quality	Mobilization of settled silt, materials and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	9) Prepare and implement a spoils management plan as the part of the Construction Management Plan; 10) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 11) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; 12) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund;	Construction Contractor	(i) Areas for stockpiles, storage of fuels and lubricants and waste materials; (ii) Number of silt traps installed along trenches leading to water bodies; (iii) Records of surface water (iv) Effectiveness of water management measures; and (v) No visible degradation to nearby drainages, nallahs or	Cost for implementation of mitigation measures responsibility	9) Spoil management plan is submitted during preconstruction stage. Updation is to be done for construction stage 10) Instructed contracting agency to use tarpaulins or sheets for Stockpiling during monsoon season 11) No such water bodies found during site visit but instructed contracting agency to use silt trap if any water bodies found 12) Contracting agency not using fuels and lubricants in bulk but instructed to provide separate room for bulk quantity

		<p>13) Dispose any wastes generated by installation of pipeline in designated sites; and</p> <p>14) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>		waterbodies due to civil works.		<p>13) Complied</p> <p>14) Not complied</p>
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<p>15) Plan activities in consultation with PIU/PMDCSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>16) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>17) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor;</p> <p>18) Properly enclose the dismantling area with temporary noise barriers; and</p> <p>19) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Use of silencers in noise-producing equipment and sound barriers; and</p> <p>(iii) Equivalent day and night time noise levels (See Appendix 4 of this IEE).</p>	Cost for implementation of mitigation measures responsibility	<p>15) Complied</p> <p>16) Complied</p> <p>17) Complied</p> <p>18) Complied</p> <p>19) Complied</p>

Landscape and aesthetics	Impacts due to excess excavated earth, excess construction and demolition materials and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items. C & D materials after dismantling of the old WTP and old GLSR are identified	<p>20) Prepare and implement spoils management plan;</p> <p>21) Avoid stockpiling of excess excavated soils;</p> <p>22) Coordinate with Puttur CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>23) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>24) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>25) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>26) Request PIU/PMD CSC to report in writing that the necessary environmental restoration works has been adequately performed before acceptance of work. C&D materials after dismantling of the old WTP and old GLSR shall be managed as per C&D Rules 2016,</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Worksite clear of hazardous wastes such as oil/fuel; and Worksite clear of any excess excavated earth, and solid waste such as removed concrete, wood, packaging materials, empty containers.</p>	Cost for implementation of mitigation measures responsibility	<p>20) Spoil management plan is prepared (attached in annexure 3a July 2019 but updation is to be done) and contractor agency following and found no surplus soil found in sites</p> <p>21) Complied</p> <p>22) Complied (attached in annexure 4 September 2019)</p> <p>23) Used oil and lubricants not generated on site</p> <p>24) Complied (attached in annexure 4 september 2019)</p> <p>25) Complied</p> <p>26) Pipe execution work is not in progress due to rain but instructed contracting agency to restore immediately and when work gets completed, joint site inspection will be conducted and report / letter will be issued.</p>
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Existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<p>27) Obtain from PIU/PMDcSC the list of affected utilities and operators if any;</p> <p>28) Prepare a contingency plan to include actions to be done in case of unintentional interruption of service; and</p> <p>29) The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.</p>	Construction Contractor	Existing Utilities Contingency Plan	Cost for implementation of mitigation measures responsibility	<p>27) No such utilities were shifted or damaged but Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>28) Not complied</p> <p>29) Complied</p>
Ecological Resources – Terrestrial	Loss of vegetation and tree cover	<p>30) Minimal tree cutting is envisaged as part of this sub project. to safeguard any tree removal, following measures to be implemented;</p> <p>(a) Minimize removal of vegetation and disallow cutting of trees;</p>	Construction Contractor	PMU/PMDcSC to report in writing the no of trees cut and planted.	Cost for implementation of mitigation measures responsibility	<p>30) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p> <p>a) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p>
		<p>b) If tree-removal will be required, obtain tree-cutting permit from the Forest Department; and</p> <p>c) Plant two native trees for every one that is removed.</p>				<p>b) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p> <p>c) Instructed contracting agency</p>

Accessibility	Traffic problems and conflicts near project locations and haul road	<p>31) Traffic Management Plan (TMP) should be part of the Construction Management Plan.</p> <p>a) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>b) Schedule transport and hauling activities during non-peak hours;</p> <p>c) Locate entry and exit points in areas where there is low potential for traffic congestion;</p> <p>d) Keep the site free from all unnecessary obstructions;</p> <p>e) Drive vehicles in a considerate manner;</p> <p>f) Coordinate with Traffic Police for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p> <p>g) Notify affected sensitive receptors 2 days in advance by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints;</p> <p>h) Plan and execute the work in such a way that the period of disturbance/ loss of access is minimum; and</p> <p>i) Provide pedestrian access in all the locations until normalcy is restored.</p>	Construction Contractor	<p>(i) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (refer outline TMP is provided in Appendix 12);</p> <p>(ii) Complaints from sensitive receptors; and</p> <p>(iii) Number of signages placed at project location.</p>	Cost for implementation of mitigation measures responsibility	<p>31) Traffic Management Plan is prepared by contracting agency (attached in annexture 3b July 2019 but updation is to be done)</p> <p>a) Not complied. Instructed to prepare plan</p> <p>b) Complied</p> <p>c) Complied</p> <p>d) Complied</p> <p>e) Complied</p> <p>f) Pipe execution work is not in progress due to rain. But instructed contracting agency to inform traffic department for temporary road diversion before two days start of the work.</p> <p>g) Complied</p> <p>h) Complied</p> <p>i) Pipe execution work is not in progress due to rain. But instructed contracting agency to provide pedestrian wherever required</p>
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Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	32) Prepare and implement spoils management plan; 33) Leave spaces for access between mounds of soil; 34) Provide walkways and metal sheets where required for people; 35) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 36) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and 37) Provide sign boards for pedestrians to inform nature and duration of construction works and contact	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Spoils management plan; and (iii) Number of walkways, signages, and metal sheets placed at project location.	Cost for implementation of mitigation measures responsibility	32) Spoil management plan is prepared (attached in annexure 3a july 2019 but updation is to be done) 33) Complied 34) Complied 35) Complied 36) Complied 37) Complied
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	38) Employ local labor force to the maximum extent, if manpower is available; and 39) Comply with core labor laws	Construction Contractor	(i) Employment records; and (ii) Compliance to core labor laws (See Appendix 2 of this IEE).	Cost for implementation of mitigation measures responsibility	38) Register maintained by contractor attached as Annexure – 4 in dec 2019 39) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled).

Occupational Health and Safety	Occupational hazards which can arise during work	<p>40) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE);</p> <p>41) Develop and implement site-specific occupational health and safety (OHS) Plan, and include in the Construction Management plan. The OHS plan will include measures such as:</p> <p>(a) excluding public from the site; (b) ensuring all workers are provided with and use</p>	Construction Contractor	<p>(i) Site-specific OHS Plan;</p> <p>(ii) Equipped first-aid stations;</p> <p>(iii) Medical insurance coverage for workers;</p> <p>(iv) Number of accidents;</p> <p>(v) Supplies of potable drinking water;</p>	Cost for implementation of mitigation measures responsibility	<p>40) Contractor following Company EHS Policy Site-specific OHS Plan Have to be prepared by Contractor.</p> <p>41) Contractor following Company EHS Policy-PPE'S provided by Contractor.</p> <p>a) Complied</p> <p>b) Complied. PPE'S provided by Contractor to workers and tool box training provided at site.</p>
		<p>personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs;</p> <p>(c) OHS Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>42) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>43) Provide medical insurance coverage for workers;</p> <p>44) Secure all installations from unauthorized intrusion and accident risks;</p> <p>45) Provide supplies of potable drinking water;</p> <p>46) Provide clean eating areas where workers are not exposed to hazardous or</p>		<p>(vi) Clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) record of health and safety orientation trainings;</p> <p>(viii) personal protective equipment;</p> <p>(ix) % of moving equipment outfitted with audible back-up alarms;</p> <p>(x) permanent sign boards for hazardous areas such as</p>		<p>c) Complied</p> <p>d) Not complied</p> <p>e) Accident and incident register maintained</p> <p>42) Partially Complied. Instructed to keep first-aid box at each working sites separately Annexure-4 in Dec 2019</p> <p>43) Not complied</p> <p>44) Complied</p> <p>45) Complied</p> <p>46) Complied</p>

		<p>noxioussubstances;</p> <p>47) Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of workatthesite,personalprotective protection, and preventing injuring to fellowworkers;</p> <p>48) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>49) Ensure the visibility of workers through their use of highvisibility</p>		<p>energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal; and</p> <p>(xi) Compliance to core labor laws (See Appendix 2 of this IEE).</p>		<p>47) Not complied. Instructed to Provide health and safety orientation training to all workers</p> <p>48) Not complied</p> <p>49) Complied Annexure-1 in dec 2019</p>
		<p>vests when working in or walking through heavy equipment operating areas;</p> <p>50) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>51)Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well knownto,andeasilyunderstood by workers, visitors, and the general public as appropriate;and</p> <p>52) Disallow worker exposure to noise level greater than 85 dBAfor</p>				<p>50) Complied</p> <p>51) Complied</p> <p>52) Workers not allowed to work more than 8 hours per day without hearing protection who are exposing to noise level greater than 85 dB. Recommended Contractor to use hearing protection Measures to workers</p>

		aduration of more than 8 hours per day without the ring protection. The Use of hearing protection shall be enforced actively.				
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<p>53) Plan routes to avoid times of peak-pedestrian activities.</p> <p>54) Liaise with PIU/PMD CSC in identifying high-risk areas on route cards/maps.</p> <p>55) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.</p> <p>56) Provide road signs and flag persons to warn of on-going trenching activities.</p>	Construction Contractor	<p>(i) Traffic Management Plan; and</p> <p>(ii) Complaints from sensitive receptors.</p>	Cost for implementation of mitigation measures responsibility	<p>53) Not complied And instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and to office staffs</p> <p>54) Not complied</p> <p>55) Not complied</p> <p>56) Complied</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation	<p>57) Consult with PIU before locating workers camps/sheds, and construction plants; as far as</p>	Construction Contractor	(i) Complaints from sensitive receptors;	Cost for implementation of mitigation measures	<p>57) Complied Contractor informed to PIU office regarding labor camp construction at mottetadka opposite NCRC but they not having letter from PIU. And also instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and camps</p>

	<p>water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers.</p>	<p>possible located at least 200 m from residential areas;</p> <p>58) Minimize removal of vegetation and disallow cutting of trees;</p> <p>59) Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuge;</p> <p>60) The camp site should be adequately drained to avoid the accumulation of stagnant water;</p> <p>61) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60-80LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>62) Provide separate facilities for men and women; sanitary facilities shall be properly built and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>63) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>64) Recover used oil and lubricants and reuse or remove from the site;</p> <p>65) Manage solid waste</p>	<p>(ii) Drinking water and sanitation facilities for employees.</p>	<p>responsibility</p>	<p>58) Removal of vegetation Minimize by selecting best alignment.</p> <p>59) Instructed contracting agency to built labour shed with sheets with proper ventilation in clean hygienic area. And also instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and camps</p> <p>60) Instructed contracting agency to built labour shed with sheets with proper ventilation in clean hygienic area.</p> <p>61) Instructed contracting agency to provide drinking water as per the standards at camp</p> <p>62) Instructed contracting agency to provide separate toilet facilities for men and women at camp and working sites</p> <p>63) Instructed contracting agency to provide training of solid and liquid materials handling at camp</p> <p>64) Instructed to contracting agency</p>
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		<p>according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>66) Remove all wreckage, rubbish, or temporary structures which are no longer required;</p> <p>67) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work; and</p> <p>68) The work camp details should be included in the Construction Management Plan.</p>				<p>65) Complied</p> <p>66) Complied</p> <p>67) Construction work is in progress.</p> <p>68) Not complied</p>
Social and Cultural Resources	Risk of archaeological chance finds	<p>69) Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>70) Stop work immediately if any finds are suspected to allow further investigation;</p> <p>71) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ; and</p> <p>72) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility	<p>69) Till now no such suspected items found nor recorded</p> <p>70) Till now no such suspected items found nor recorded</p> <p>71) Till now no such archaeological items recorded</p> <p>72) No such damages recorded during the visit. But instructed to maintain if such damages happens.</p>

Submission of EMP implementation report	Unsatisfactory compliance to EMP	73) Appointment of EHS Engineer to ensure EMP implementation; and 74) Timely submission of monitoring reports including pictures.	Construction contractor	Availability and competency of appointed EHS engineer Monthly report	Cost for implementation of mitigation measures responsibility	73) EHS Engineer appointed 74) Not Complied
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	75) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; 76) All excavated roads shall be reinstated to original condition.	Construction Contractor	PIU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to	Cost for implementation of mitigation measures responsibility	75) Complied 76) No such bitumen or concrete road damaged during site visit. But instructed to restore road same as it was before damage
		77) All disrupted utilities restored; 78) All affected structures rehabilitated/compensated; 79) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up; 80) All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be topsoiled and regressed using the		pre-project conditions; and (iii) all construction related structures not relevant to O&M are removed; and (iv) worksite clean-up is satisfactory.		77) If utilities are to be shifted contracting agency must take permission from concern authorities before start the work and restore it properly as it was before the damage 78) Till now no structures affected 79) Not complied Instructed contracting agency to properly

		<p>guidelines set out in the revegetation specification that forms part of this document;</p> <p>81) The contractor must arrange the cancellation of all temporary services; and</p> <p>82) Request PMU/PMDCSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>clean surface area free of oil and paints for construction camp</p> <p>80) Not complied</p> <p>81) Not complied</p> <p>82) Construction work is in progress</p>
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Conclusion:-

Construction stage is in progress. Health and safety training and HIV AIDS Awareness Training programme has to be conducted by Contractor. Proper Record maintenance should be improved by Contractor. Proper safety measures like project information boards, safety sign boards, hard barricading and register books should be maintained at all work sites. Contractor has to submit Site Specific EMP of **January, February, March, April, May, June and July 2020 month** with PIU letter, Puttur. Overall the work in the projects for health and safety needs improvement.

Recommendation:-

Sl.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Mobilization of Environment, Health And Safety(EHS)engineer		Complied
2.	Submission of Site specific EMP		Before start of Construction work Comply with in 7days
3.	Submission of monthly reports.	<ul style="list-style-type: none"> Construction status or compliance report 	Contractor has to submit Site specific EMP of January, Feb, March, April, May, June and July 2020 Month Comply with in 7 days
4.	Telephone lines, electricPoles and wires, water Lines within proposedproject area	<ul style="list-style-type: none"> List of utilities going to effect will be submitted to PIU 	Before start of Construction work
5.	Heavy equipment and machinery with air pollution control devices;	<ul style="list-style-type: none"> PUC certification for all vehicles/equipment used for/during construction and certification of users at site. 	Comply with in 7days
6.	Certification that vehicles are compliant with Air Act	<ul style="list-style-type: none"> Register of Equipment and Vehicles maintenance certificates at site 	Comply with in 5 days
7.	Layout plan of overhead tanks (OHTs);		Comply with in 7 days
8.	Tree cutting/pruning permission; and	<ul style="list-style-type: none"> If any of the tree is getting affected, it is to be noted in the survey and its permission has to be taken 	Comply with in 7 days
9.	Compensatory tree plantation as part of the project.	NA	Identify Before start of Construction work and Compensate during Construction
10	Areas for stockpiles, storage of fuels and lubricants and waste materials;	<ul style="list-style-type: none"> Storage of materials like fuel, chemicals, and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water. 	Comply with in 7 days
11	List of selected sites forconstruction work camps, hot mixplants, stockpileareas, storage	<ul style="list-style-type: none"> Location must be identified and marked on google map and consult with PIU and after joint inspection and with consideration of all 	Complied Attached as Annexure -2 & 3 in may 2019.

	areas, and disposal Areas.	given mitigation measure given.	Take site approval letter from PIU (for construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas.) Before start of Construction work
12	Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	<ul style="list-style-type: none"> If any private land is selected NOC from owner has to be taken 	Comply with in 15 days
13	List of selected sites for disposal	<ul style="list-style-type: none"> Location must be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. If any private land is selected ,NOC from owner have to be taken 	Debris disposal land location identified and Permission letter has been issued by PIU. Attached as annexure 4 in September 2019.
14	List of approved quarry Sites and Sources of materials; and		Before start of Construction work
15	Bid document to include requirement for verification of suitability of sources and permit for additional quarry sites if necessary.		Before start of Construction work
16	Method of statement in table format	<ul style="list-style-type: none"> As mention in mitigation measures 	Comply with in 10 days
17	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated. Identify the impact Spoil Transportation Methodology Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on Google map 	Draft copy shown and submitted attached as an annexure 3a in August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts Debris disposal land location identified and Permission letter has been issued by PIU. Attached as annexure 4 in September 2019.
18	Traffic management plan		Draft copy shown and submitted attached as annexure 3b August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts Comply with in 7 days
19	Environmental management plan		Draft copy shown and submitted attached as an annexure 3c in August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts

			Comply with in 7 days Comply with in 7 days
20	Site specific OHS Plan	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account.</p>	
21	Equivalent day and night time noise levels	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	Partially Complied. Pre-construction and construction stage noise test conducted in November 2019 and February 2020 noise report has to submit by contractors
22	Records of Air quality inspection	<ul style="list-style-type: none"> If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	Complied. Pre-construction and construction test conducted in November 2019 and February 2020. Air report has to submit by contractors
23	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	Partially complied. Implementation of H & S at work site is done. Attached as Annexure 3. H & S plan is to be prepared by contractors Comply with in 3 days



Mahammad Raphiyoddin Shaphiyoddin Malik
Environmental Specialist
KIUWMIP – Tranche 2

Annexure-1

Status of Site Visit observations on 28th February 2019

1	Project information board and sign boards must be provided at work site.	 <p>Latitude: 12.782035 Longitude: 75.175814 Elevation: 149.31m Accuracy: 3.2m Time: 02-28-2020 15:00 Note: OHT at padnoor site, puttur</p>	<p>Provide project information board related to the particular project work and place at all working site</p> <p>Project information Board is to be provided both in English and Kannada. And board should be properly placed with steel or wooden stand</p>	Not complied
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2	Sign boards , barricading should be provided at work site	 <p>Latitude: 12.772377 Longitude: 75.213101 Elevation: 84.78m Accuracy: 3.2m Time: 02-28-2020 17:43 Note: 110mm dia Distribution line laying at zone 1, puttur</p> <p>Powered by NoteCam</p>	<ul style="list-style-type: none"> • Project information board, Go slow board, Grievance redressal committee board and flag man should be there at work site. • Labour attendance register, labour wages register, grievance redressal register and accident and incident register compulsory be at all work site. • Drinking Water can must be provided at all work site 	<ul style="list-style-type: none"> • Not complied • Complied • Not complied
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		 <p>Latitude: 12.771951 Longitude: 75.213244 Elevation: 100.67m Accuracy: 7.5m Time: 02-28-2020 17:40 Note: 110mm dia Distribution line laying at zone 1, puttur</p> <p>Powered by NoteC</p>		
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3	Bunding materials of	 <p>Latitude: 12.756595 Longitude: 75.172078 Elevation: 238.65m Accuracy: 3.2m Time: 02-28-2020 16:05 Note: OHT at balnad kelledi site, puttur</p> <p>Powered by NoteCam</p>	<p>Materials like sand, aggregates should be properly banded with sand bags to avoid flow along slope</p>	<ul style="list-style-type: none">• Not complied
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	 <p>Latitude: 12.782042 Longitude: 75.17585 Elevation: 150.85m Accuracy: 3.2m Time: 02-28-2020 15:00 Note: OHT at padnoor site, puttur</p> <p>Reviewed by: KRM/CDP</p>		
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4	Scrap and materials storage at work locations	 	Instructed contracting agency to avoid scarp steel and other materials storage at works sites	<ul style="list-style-type: none"> Not complied
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5	Labour Camp at mottetadka site, puttur	 <p>Latitude: 12.741233 Longitude: 75.228483 Elevation: 99.01m Accuracy: 4.3m Time: 02-28-2020 16:50 Note: OHT at CTO darbe site, puttur</p>  <p>Latitude: 12.741326 Longitude: 75.22837 Elevation: 107.05m Accuracy: 3.2m Time: 02-28-2020 16:41 Note: Labour camp mottetadka site, puttur</p>	<p>Labour camp is properly maintained</p> <p>Toilets are provided to workers</p> <p>Drinking water tap connection provided at the camp</p>	<p>Complied</p> <p>Complied</p>
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		 <p>Latitude: 12.741406 Longitude: 75.226242 Elevation: 101.94m Accuracy: 3.2m Time: 02-28-2020 16:43 Note: Labour camp mottetadka site, puttur</p>	<p>Instructed contracting agency to provided separate bathrooms with proper sheet shed for workers at camp</p>	<p>Not complied</p>
		 <p>Latitude: 12.741339 Longitude: 75.226203 Elevation: 105.14m Accuracy: 6.4m Time: 02-28-2020 16:39 Note: Labour camp mottetadka site, puttur</p>	<p>Instructed contracting agency to randomly check worker room to keep clean and hygienic to avoid any diseases</p>	<p>Partially complied</p>

6	PPEs for workers at work site	 <p>Latitude: 12.747124 Longitude: 75.1867 Elevation: 183.91m Accuracy: 3.2m Time: 02-28-2020 15:53 Note: OHT at balnad helipad site, gothly</p> <p>Powered by N</p>	Workers wearing PPEs at works site	Partially complied
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Annexure-2

Status of Site Visit on 26th May 2020

1	PPEs provided at work site.		<p>PPEs provided to workers at work site and instructed to provide PPEs to all worker at all working site</p> <p>Project information Board is to be provided both in English and Kannada. And board should be properly placed with steel or wooden stand</p> <p>Labour attendance register, labour wages register, grievance redresal register and accident and incident register compulsory be at all work site.</p> <p>Drinking Water can must be provided at all work site</p>	<p>Partially complied</p> <p>Partially complied</p> <p>Complied</p> <p>Not complied</p>
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2	Bunding of materials at all OHT sites, Puttur		Materials like sand, aggregates should be properly banded with sand bags to avoid flow along slope	Not complied
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3	Scrap, steel rods and materials storage at all OHT work sites,Puttur		Instructed contracting agency to avoid scarp steel and other materials storage at works sites	Not complied
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Annexure-3

Status of Site Visit observations on 25th June 2020

1	PPEs to workers at Nekkeladi WTP work site.		<p>Instructed contracting agency to Project information Board is to be provided both in English and Kannada.</p> <p>PPEs provided to workers at work site and instructed to provide PPEs to all worker at all working site</p> <p>Labour attendance register, labour wages register, grievance redresal register and accident and incident register compulsory be at all work site.</p> <p>Drinking Water can must be provided at all work site</p>	<p>Not complied</p> <p>Partially complied</p> <p>Partially complied</p> <p>Not complied</p>
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2	Barrication and sign boards at CTO Darbe OHT		Sign boards and soft barricading should be done at work site for public awareness to avoid their entry at work place	Not complied
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3	Project information board at OHT sites	 	Project information board should be present at all work site and should be place at the entrance of the work sites	Not complied
4	Housekeeping at work sites, puttur		Instructed contracting agency to maintain proper housekeeping at work sites. Rods, wooden, sheets should be kept at safe place after its usage to avoid any cuts to works or publics during visits	Not complied



Monthly Environmental Monitoring Report

Project Number: 43253-027
July 2020

IND: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Udupi

Package No. 02UDP01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) institutional capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an water supply projects within the project area i.e. Udupi

2 Need for Infrastructure Improvement in Udupi

A detailed assessment of existing situation was carried out and it concludes that the present water production of 27.24 million liters per day (MLD), is insufficient to meet water demand of Udupi till the year 2031 as per national standards. Besides Udupi town, this subproject investment also need to provide water supply covering 5 en-route villages, 5 outgrowth villages and 7 adjacent villages.

The present inadequacy in the water supply system, is due to

- (i) mainly shortage in water source in summer season;
- (ii) increased water demand; and
- (iii) old and leaking distribution system, along with weak management system.

In order to meet required water demand of Udupi, an alternate water source from River Varahi is proposed under a government funded bulk water supply project. The necessary improvements and augmentation in water distribution system is proposed under the ADB funded KIUWMIP Tranche 2

3 The proposed subproject:

Subproject includes the following components:

- (i) clear water feeder mains of 7.47 kilometer (km) of diameter 150 millimeters (mm) to 355 mm to feed tonew overhead tanks (OHTs);
- (ii) 7 OHTs of total storage capacity 5.2 ml;
- (iii) distribution network of 358.17 km (diameter 150 mm to 355 mm); and,
- (iv) Replacement of 16,870 existing meters and providing new metered house service connections of 15,000 for uncovered households. Distribution network pipes will be laid along existing road right-of-way (ROW) and OHTs will be constructed in government-owned lands. New water source from river Varahi about 38.5 kms from Udupi has been selected to meet shortage of water for summer four months. RCC Intake well, RCC Jackwell cum pump house and raw water pipe line for 38.5 Kms is proposed under AMRUTH Scope. Also it is proposed 30 MLD WTP at Baje to meet additional demand of Udupi under State fund.

Table 1 provides details of the KIUWMIP Tranche 2 subproject components in Udupi based on the detailed engineering design of the subproject

Table 1: Proposed Subproject Components

No.	Component	Details	Location
1	Clear water feeder main to feed treated water to overhead tanks (OHTs)	<p>7.47 km length 150 mm – 355 mm diameter Ductile Iron Pipes</p> <ul style="list-style-type: none"> □ 1.50 km - 150 mm diameter from ground level service reservoir (GLSR) at Manipal to OHT for Zone 5 at Manipal near Manapalla lake □ 0.5 km - 200 mm diameter from GLSR at Manipal to zone-3 OHT at Manipal <p>Mild Steel Pipes</p> <ul style="list-style-type: none"> □ 60 m - 219 mm diameter for zone -7C OHT at Kolambe 	Along the public roads within the road right of way

No.	Component	Details	Location
		<ul style="list-style-type: none"> □ 45 m - 219 mm diameter for zone -8C OHT at Indrali □ 1.7 km - 273.1 mm diameter for zone-6B OHT at Manchi □ 815 m - 323.90 mm diameter for zone-8B at Kakkunje □ 2.85 km - 355.6 mm diameter, for zone-9B at Santhekatte 	
2	OHTs	<p>7 OHTs of total storage capacity 5.2 ml</p> <ul style="list-style-type: none"> □ Zone 3 – 750 kl at Manipal □ Zone-5 – 300 kl at Manipal near Manapalla lake □ Zone 6B – 750 kl at Manchi □ Zone 7C – 300 kl near Kolambe □ Zone 8B – 1,000 kl at kakkunje □ Zone 8C – 500 kl at Indrali □ Zone 9B – 1,600 kl at Santhekatte 	For all 7 OHTs, government owned land parcels have been identified.
3	Distribution network	<p>358.16 km pipes of diameter 63 mm to 350 mm High Density Poly Ethylene (HDPE) pipes</p> <ul style="list-style-type: none"> □ 63 mm dia - 294.4 km □ 75 mm dia - 0.375 km □ 90 mm dia - 0.796 km □ 110 mm dia - 25.575 km □ 160 mm dia - 3.336 km □ 200 mm dia - 5.602 km □ 250 mm dia - 13.824 km □ 280 mm dia - 0.330 km □ 315 mm dia - 0.291 km <p>DI PIPES:</p> <ul style="list-style-type: none"> □ 150 mm dia - 0.252 km □ 300 mm dia - 10.282 km □ 350 mm dia- 3.098 km 	<p>Pipes will be laid along the public roads within the road right of way.</p> <p>Rider lines will be laid parallel to the existing pipes, and within the road right of way.</p> <p>Pipes will be mostly laid in earthen shoulder to avoid road cuttings</p>
4	House Service Connections	Replacement of non-functioning 16,870 water meters for existing connections and providing new water supply connections of 15,000 to un-covered households	At each household

4 Environmental Management Plan.

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Udupi	Name of the Contractor: Suez Civil Engineering Services Pvt,LTD& DRS Infra Tech Pvt, Ltd
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Udupi	Name of SE/EE/AE Of concerned division PIU :- Mr. Sudarshan, Sr.AE
Date of monthly monitoring: 20-07-2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr.Pradeep Sheety

Table 2: Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of implementations
EMP Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<p>1) Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.</p> <p>2) Appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work</p>	Construction Contractor / PIU / PMDCSC	<p>(i) Certificate of Completion (Safeguards Compliance Orientation)</p> <p>(ii) Posting of Certification of Completion at worksites</p> <p>(iii) Posting of EMP at work sites</p>	<p>Cost of EMP Implementation Orientation Training to contractor is responsibility of PMU.</p> <p>Other costs responsibility of contractor.</p>	<p>1) Spoil management submitted</p> <p>2) EHS Engineer appointed</p>

Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous	<p>3) Consult with PIU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>5) Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>6) Clean wheels and undercarriage of vehicles prior to leaving construction site</p>	Construction Contractor	<p>(i) Location of stockpiles;</p> <p>(ii) Complaints from sensitive receptors;</p> <p>(iii) Heavy equipment and machinery with air pollution control devices;</p> <p>(iv) Certification that vehicles are compliant with Air Act</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>3) Complied</p> <p>4) Instructed contracting agency to spray water at commercial and residential areas if stock piled on-site.</p> <p>5) Not complied</p> <p>6) Complied</p>
	oxides, and hydrocarbons .	7) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.				7) Complied

Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<p>8) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets.</p> <p>9) Laying of pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping.</p> <p>10) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Implementing Agency on designated disposal areas (Appendix6).</p>	Construction Contractor	<p>(i) Areas for stockpiles, storage of fuels and lubricants and waste materials;</p> <p>(ii) Number of silt traps installed along trenches leading to water bodies;</p> <p>(iii) Records of surface water quality inspection;</p> <p>(iv) Effectiveness of water management measures;</p> <p>(v) No visible degradation to near by drainages,</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>8) Instructed contracting agency to use tarpaulins or sheets for Stockpiling during monsoon season</p> <p>9) Instructed contracting agency to fill the excavated trenches at all locations before rainy season</p> <p>10) Complied. Contracting agency dumping excess earth in CMC shown area but they contractor don't have authorized letter from PIU or CMC. Recommended contractor to get letter from PIU or CMC</p>
		<p>11) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies</p> <p>12) Provide temporary bunds for stockpiles and materials</p> <p>13) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund</p> <p>14) Dispose any wastes generated by construction activities in designated sites.</p>		nallahs or water bodies due to civil works		<p>11) No such water bodies found during site visit but instructed contracting agency to use silt trap if any water bodies found</p> <p>12) Not complied</p> <p>13) Contracting agency not using fuels and lubricants in bulk but instructed to provide separate room for bulk quantity</p> <p>14) Complied. Contracting agency dumping excess earth in CMC shown area but the contractor don't have authorized letter from PIU or CMC.</p>

		15) Conduct surface quality inspection and monitoring.				Recommended contractor to get letter from PIU or CMC
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<p>16) Plan activities in consultation with PIU/PMDCSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>17) Construction work shall be limited to day light hours (6 AM to 6PM)</p> <p>18) Provide prior information to the local public about the work schedule;</p> <p>19) Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiseling;</p> <p>20) Minimize noise from construction equipment/pneumatic drills by using silencers, fitting jackhammers with noise- reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>21) Maintain maximum sound levels not exceeding 80 decibels (db A) when measured at a distance of 10 m or more from the vehicle/s.</p> <p>22) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>ii) Use of silencers in noise-producing equipment and sound barriers;</p> <p>(iii) Equivalent day and night time noise levels (See Appendix 3 of this IEE)</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>15) Not complied</p> <p>16) Complied</p> <p>17) Complied</p> <p>18) Complied</p> <p>19) No such old or sensitive building found which comes in work alignments. But instructed contracting agency to take safe precautions while executing the works</p> <p>20) Complied</p> <p>21) Complied</p> <p>22) Complied</p>

Landscape and aesthetics	Impacts due to excess excavated earth, excess construction materials, and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items.	<p>23) Prepare and implement spoils management plan</p> <p>24) Avoid stockpiling of excess excavated soils;</p> <p>25) Coordinate with Udupi CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>26) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>27) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>28) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>29) Request PMU/PMDCSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Worksite clear of hazardous wastes such as oil/fuel</p> <p>(iiv) Worksite clear of any excess excavated earth, excess construction materials, and solid waste such as removed concrete, wood, packaging materials, empty containers</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>23) Spoil management plan is prepared (attached in annexure 2a august 2019 but updation is to be done).</p> <p>24) Found no such surplus and stockpiling of soils found in sites</p> <p>25) Contracting agency dumping excess earth in CMC shown area but the contractor don't have authorized letter from PIU or CMC. Recommended contractor to get letter from PIU or CMC</p> <p>26) Used oil and lubricants not generated on site</p> <p>27) Contracting agency reusing by backfilling and dumping excess solid waste to the designated areas</p> <p>28) Complied</p> <p>29) No such damages found during the site visits but instructed contracting agency to restore immediately and when work gets completed, joint site inspection will be conducted and report / letter will be issued.</p>
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Existing Infrastructure and Facilities Accessibility	Disruption of service and damage to existing infrastructure at specified project location Traffic problems and conflicts near project locations and haul road	<p>30) Obtain from PIU/PMDCSC the list of affected utilities and operators if any;</p> <p>31) Prepare a contingency plan to include actions to be done in case of unintentional interruption of service</p> <p>32) (iii) The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.</p> <p>33) Plan pipeline work in consultation with the traffic police</p> <p>34) Plan work such that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>35) Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>36) Schedule transport and hauling activities during non-peak hours;</p> <p>37) Do not close the road completely, allow traffic to move on one line;</p> <p>38) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>39) In unavoidable circumstances of road closure, provide alternative routes, and ensure that public is informed about such traffic diversions;</p> <p>40) At all work sites public</p>	Construction Contractor Construction Contractor	Existing Utilities Contingency Plan (i) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (Appendix7); (ii) Complaints from sensitive receptors; (iii) Number of signages placed at project location.	Cost for implementation of mitigation measures responsibility of contractor. Cost for implementation of mitigation measures responsibility of contractor.	<p>30) No such utilities were shifted or damaged but Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>31) Not complied</p> <p>32) No accidental breaking of any properties yet recorded but instructed contracting agency to rectify immediately</p> <p>33) Contractor should inform and take permission from traffic police for any pipe line laying/execution on roads.</p> <p>34) Complied</p> <p>35) Instructed to contractor agency to backfill and restore the excavated area immediately to avoid traffic</p> <p>36) Complied</p> <p>37) Complied</p> <p>38) Not Complied</p> <p>39) Instructed contract agency to provide one separate person at site to give route information to public</p> <p>40) Partially complied. Project information</p>

		<p>information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints.</p> <p>41) Keep the site free from all unnecessary obstructions;</p> <p>42) Drive vehicles in a considerate manner;</p> <p>43) Prepare a Traffic Management Plan –a Template is provided for reference at Appendix 7.</p>				<p>board should be both in Kannada and English format.</p> <p>41) Complied</p> <p>42) Complied</p> <p>43) Traffic Management Plan is prepared by contracting agency (attached in annexure 2b august 2019 but updation is to be done).</p>
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	<p>44) Prepare and implement spoils management plan</p> <p>45) Leave spaces for access between mounds of soil; and Provide walkways and metal sheets where required for people;</p> <p>46) Increase work force in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</p> <p>47) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and</p> <p>48) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Spoils management plan</p> <p>(iii) Number of walkways, signages, and metal sheets placed at project location.</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>44) Spoil management plan is prepared (attached in annexure 3 august 2019 but updation is to be done)</p> <p>45) Complied</p> <p>46) Complied</p> <p>47) Complied</p> <p>48) Complied</p>
Socio cultural resources	Disturbance to socio cultural	48) No material should be stocked close to these areas; material shall be	Construction Contractor	(i) Visual site observations	Cost for implementation of mitigation	48) Complied

	resources					
	(religious, educational, health care etc.), access disruptions etc.,	<p>brought to the site as and when required.</p> <p>49) Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles</p> <p>50) No work should be conducted near the religious places during religious congregations</p> <p>51) Material transport to the site should be arranged considering school timings; material should be in place before school starts;</p> <p>52) Notify concerned schools, hospitals etc., 2 weeks prior to the work; conduct a 30-minute awareness program on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts</p> <p>53) Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites.</p>		(i) Public complaints	Measures responsibility of contractor.	<p>49) Complied</p> <p>50) Complied and instructed to follow</p> <p>51) Complied and instructed to follow</p> <p>52) Partially complied</p> <p>53) Not complied</p>
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	<p>54) Employ local labor force to the maximum extent, if manpower is available;</p> <p>55) Comply with labor laws</p>	Construction Contractor	(i) Employment records; (ii) Records of sources of materials (iii) Compliance to core labor laws (See appendix 2 of this IEE)	Cost for implementation of mitigation measures responsibility of contractor.	<p>54) Register maintained by contractor</p> <p>55) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled).</p>
Occupational Health and Safety	Occupational hazards which can arise during work	56) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE)	Construction Contractor	(i) Site-specific OHS Plan; (ii) Equipped	Cost for implementation of mitigation measures responsibility of contractor.	56) Contractor following Company EHS Policy Site-specific OHS Plan Have to be prepared by

		<p>57) Develop and implement site-specific occupational health and safety (OHS) Plan, and include in the Construction Management plan. The OHS plan will include measures such as:</p> <p>(a) excluding public from the site; (b) ensuring all workers are provided with and use personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs; (c) OHS Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>58) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>59) Provide medical insurance coverage for workers;</p> <p>60) Secure all installations from unauthorized intrusion and accident risks;</p> <p>61) Provide supplies of potable drinking water;</p> <p>62) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p>	<p>first- aid stations;</p> <p>(iii) Medical insurance coverage for workers;</p> <p>(iv) Number of accidents;</p> <p>(v) Supplies of potable drinking water;</p> <p>(vi) Clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) record of health and safety orientation trainings</p> <p>(viii) personal protective equipment;</p> <p>(ix) % of moving equipment outfitted with audible back- up alarms;</p> <p>(xi) permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>(xii) Compliance to core labor laws</p>		<p>Contractor. Instructed contracting agency to provide H&S safety measures about COVID-19 to all worker and employees</p> <p>57) Contractor following Company EHS Policy- PPE'S provided by Contractor.</p> <p>a) Complied</p> <p>b) Complied. PPE'S provided by Contractor to workers</p> <p>c) Complied</p> <p>d) Not complied</p> <p>e) Accident and incident register maintained</p> <p>58) Partially Complied. Instructed to keep first-aid box at each working sites separately</p> <p>59) Not complied</p> <p>60) Complied</p> <p>61) Partially Complied</p> <p>62) Not Complied</p>
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		<p>63) Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>64) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>65) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>66) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>67) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>68) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>69) Overall, the contractor should comply with International Finance Corporation (IFC) EHS</p>		(See appendix 2 of this IEE)		<p>63) Complied. Instructed to Provide health and safety orientation training on COVID-19 on site daily to all workers</p> <p>64) Not complied</p> <p>65) Complied</p> <p>66) Complied</p> <p>67) Complied</p> <p>68) Not complied</p> <p>69) Not complied</p>
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		Guidelines on Occupational Health and Safety				
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<p>70) Provide hard barricading for all deep excavations that may require especially for pipe lines; identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work</p> <p>71) Plan material and waste routes to avoid times of peak-pedestrian activities</p> <p>72) Liaise with Udupi CMC in identifying risk areas on route cards/maps</p> <p>73) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure</p> <p>74) Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads</p> <p>75) Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety</p>	Construction Contractor	(i) Traffic Management Plan; (ii) Complaints from sensitive receptors	Cost for implementation of mitigation measures responsibility of contractor.	<p>70) No such deep trenches found during laying pipes. But instructed contracting agency to put hard barricading if trenches are more than 1.5m depth</p> <p>71) Not complied</p> <p>72) Not complied</p> <p>73) Not complied</p> <p>74) Complied</p> <p>75) Not complied</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants	<p>76) Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located at least 200 m from residential areas.</p> <p>77) Minimize removal of vegetation and disallow cutting of trees</p> <p>78) Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuse</p>	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Drinking water and sanitation facilities for employees	Cost for implementation of mitigation measures responsibility of contractor.	<p>76) Not Complied Labour camp location was finalized but Letter has to be issued from PIU to contractors. And instructed to provide awareness to all workers to follow H& S measures of COVID-19</p> <p>77) Removal of vegetation</p>

	Unsanitary and poor living conditions for workers	<p>79) The camp site should be adequately drained to avoid the accumulation of stagnant water</p> <p>80) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination</p> <p>81) Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons</p> <p>82) Train employees in the storage and handling of materials which can</p>				<p>Minimize by selecting best alignment.</p> <p>78) Instructed contracting agency to built labour shad with sheets with proper ventilation in clean hygienic area and drinking water.</p> <p>79) Instructed contracting agency to built camp in dry and plan area where there is no water logging and must hygienic area.</p> <p>80) Instructed contracting agency to provide drinking water as per the standards at camp</p> <p>81) Instructed contracting agency to provide separate toilet facilities for men and women at camp and working sites</p> <p>82) Instructed contracting agency to provide training of solid and liquid materials handling to the persons at campcare fully to avoid soil contamination</p>
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		<p>potentially cause soil contamination;</p> <p>83) Recover used oil and lubricants and reuse or remove from the site;</p> <p>84) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>85) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>86) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p> <p>87) The work camp details should be included in the Construction Management Plan.</p>				<p>83) Instructed to contracting agency to train persons not to spill oil and lubricant and use carefully to avoid soil contamination</p> <p>84) Instructed to contracting agency to follow at camp</p> <p>85) Instructed to contracting agency to follow at camp</p> <p>86) Construction work is in progress</p> <p>87) Not complied</p>
Social and Cultural Resources	Risk of archaeological chance finds	<p>88) Create awareness among the workers and supervisors about the chance finds during excavation work</p> <p>89) Stop work immediately if any finds are suspected to allow further investigation</p> <p>90) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ.</p> <p>91) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility of contractor.	<p>88) Till now no such suspected items found nor recorded</p> <p>89) Till now no such suspected items found nor recorded</p> <p>90) Till now no such archaeological items recorded</p> <p>91) No such damages recorded during the visit. But instructed to maintain if such damages happen.</p>

Submission of EMP implementation report	Unsatisfactory compliance to EMP	<p>92) Appointment of EHS engineer to ensure EMP implementation</p> <p>93) Timely submission of monitoring reports including pictures</p>	Construction contractor	<p>Availability and competency of appointed EHS engineer</p> <p>Monthly report</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>92) EHS Engineer appointed</p> <p>93) Complied</p>
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	<p>94) Remove all spoils wreckage, rubbish, or temporary structures(such as buildings, shelters, and latrines) which are no longer required; and</p> <p>95) All excavated roads shall be reinstated to original condition.</p> <p>96) All disrupted utilities restored</p> <p>97) All affected structures rehabilitated/compensated</p> <p>98) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up.</p> <p>99) All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regrassed using the guidelines set out in the revegetation specification that forms part of this document.</p>	Construction Contractor	<p>PMU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to pre-project conditions; (iii) all construction related structures not relevant to O&M are removed; and (iv) worksite clean-up is satisfactory.</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>94) Complied</p> <p>95) Work was not in progress. But instructed to restore road same as it was before damage</p> <p>96) If utilities are to be shifted contracting agency must take permission from concern authorities before start the work and restore it properly as it was before the damage</p> <p>97) Till now no structures affected</p> <p>98) Not complied Instructed contracting agency to properly clean surface area free of oil and paints for construction camp</p> <p>99) Not complied</p>
		<p>100) The contractor must arrange the cancellation of all temporary services.</p> <p>101) Request PMU/PMDCSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>100) Not complied</p> <p>101) Construction work is in progress</p>

Conclusion:-

Construction stage is in progress. Disposal yard is to be identified and consultations with PIU have to be taken. Health and HIV AIDS Awareness Training programme has to be conducted by Contractor. Proper Record maintenance should be improved by Contractor. Contractor has to submit Site specific EMP of January as similar to the construction stage table in IEE report with PIU letter, Udupi.

Recommendation:

S.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Mobilization of Environment, Health And Safety(EHS)Engineer		Complied
2.	Submission of Site specific EMP		Comply with in 7 days
3.	Submission of monthly reports.	<ul style="list-style-type: none"> Construction status or complacence report 	Contractor has to submit Site specific January as construction stage EMP present in IEE report, Udupi Comply with in 7 days
4.	Telephone lines, electric Poles and wires, water Lines within proposed project area	<ul style="list-style-type: none"> List of utilities going to effect will be submit to PIU 	Comply with in 7 days
5.	Layout plan of overhead tanks (OHTs);		Comply with in 7 days
6.	Tree cutting/pruning permission; and	<ul style="list-style-type: none"> If any tree affected are noted in survey permission have to be taken 	Comply with in 7 days
7.	Compensatory tree plantation as part of the project.		Comply with in 5 days
8.	List of selected sites for construction work camps, hot mix plants, stockpile areas, storage areas, and disposal Areas.	<ul style="list-style-type: none"> Location most be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. 	Comply with in 15 days
9.	Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	<ul style="list-style-type: none"> If any private land is selected NOC from owner have to be taken 	Comply with in 5days
10.	List of selected sites for disposal	<ul style="list-style-type: none"> Location most be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. If any private land is selected NOC from owner have to be taken 	Comply with in 5 days
11.	List of approved quarry Sites and Sources of materials; and		Comply with in 7 days
12.	Bid document to include requirement for verification of suitability of sources and permit for additional quarry sites if necessary.		Comply with in 5 days

13.	Method of statement in table format	<ul style="list-style-type: none"> As mention in mitigation measures 	Comply with in 10 days
14.	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated will be waste generated. Identify the impact Spoil Transportation Methodology Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on google map 	Draft copy shown and submitted and attached as annexure 3a in Aug 2019 report and informed contractor to update plan once construction phase starts
15.	Traffic management plan		Draft copy shown, submitted and attached as annexure 3b in Aug 2019 report and informed contractor to update plan once construction phase starts
16.	Environmental management plan		Draft copy shown, submitted and attached as annexure 3c in Aug 2019 report and informed contractor to update plan once construction phase starts
17.	Site specific OHS Plan	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account.</p>	Comply with in 5 days

		International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety attached in june 2019 month	
18.	Equivalent day and night time noise levels	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	Complied. Construction test conducted in Jan 2020 and noise report attached as annexure 5 in feb 2020
19.	Records of Air quality inspection	<ul style="list-style-type: none"> If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	Complied. Construction test conducted in Jan 2020 and air report attached as annexure 5 in feb 2020
20.	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	Complied. Implementation of H & S at work site is done. Attached as Annexure 4. H & S plan is to be prepared by contractors Comply with in 5 days



Mahammad Raphiyoddin Shaphiyoddin Malik
Environmental Specialist
KIUWMIP – Tranche 2

Annexure 1

Site visit observations of 25th May 2020

S.No	Observation		Recommendation	Status
1	Sign board and flag man at site		<p>Instructed contractors to provide cones, go slow boards</p> <p>Drinking water can should be kept at all working site for workers</p> <p>Mobil toilets facility should be provided for workers at site</p>	<p>Partially complied</p> <p>Complied</p> <p>Not complied</p>

2	Excavated earth at work site		<p>Instructed contractor agency to immediately reuse the loose stored earth at site and dispose the remaining earth to dumping yard after the pipe laying</p> <p>And flag man at both the ends at all main road work places</p> <p>And to sprinkle water by water tank to avoid dust generation near residential and commercial areas</p>	<p>Complied</p> <p>Execution Work was not in progress</p>
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3	Aggregates, sand and excavated earth Material stored at santtekatti OHT site		<p>Instructed contracting agency to make bunds for sand and aggregates storage to avoid flow and mix</p> <p>Instructed to remove steel rods used for sheet support And dispose loose earth stored at site to dumping yard</p>	Not complied
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4	Water tank at santekatte OHT for worker usage		Instructed contracting agency to provide separate water can for drinking purpose and to use present tank for other usage	Not complied
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5	Housekeeping at santekatte OHT for work site		Proper housekeeping should be done at work site Instructed not use fire wood burning for cooking and other purpose at work site place	Not complied
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Annexure 2

Site visit observations of 23th June 2020

S.No	Observation		Recommendation	Status
1	Sign board, hard barricading and project information board at Indrali OHT site	 	Instructed contractors to provide Sign board, hard barricading around deep excavated area and project information board at the entrance of the all OHT sites	Not complied

2	Steel rod Material stored at OHT sites	 <p>Latitude: 13.945083 Longitude: 74.721257 Elevation: 38.36m Accuracy: 3.2m Time: 06-23-2020 16:20 Note: At Indrali OHT site, udipi Powered by NoteCam</p> <p>Latitude: 13.387479 Longitude: 74.737933 Elevation: 38.04m Accuracy: 3.2m Time: 06-23-2020 15:53 Note: At santtekatte OHT site, udupi Powered by NoteCam</p>	Instructed contracting agency to store the steel rods away from the walkways to avoid injury or else soft/hard barricade the steel surround area	Not complied
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3	Water tank at santekatte OHT for worker usage		Instructed contracting agency to provide separate water can for drinking purpose	Not complied
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4	Waste scrape and loose earth at santekatte OHT for work site		Instructed contracting agency to remove all scrap and loose earth material to dumping yard and steel rods should be not use as fencing of the excavated OHT	Not complied
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SPPL-SIPL-DRS JV/KUIDFC/ UCMC/256/2020-21

13 August 2020

To,

The Executive Engineer,
KUIDFC-KIUWMIP-PIU,
Tranche-2, Udupi.

Sub.: KUIDFC & KIUWMIP – "Construction of Distribution System for 24x7 Water Supply including Services for Operation and Management for Udupi City- Package No.02UDP01": Submission of EMP Reports for Month of July 2020, Udupi.

Ref.:

- (1) LOA Letter No: UCMC/Udupi/KUIDFC/ADB/UDP03/2017-18 Dated 10th October 2018.
- (2) Contract Agreement for Package No. 02UDP01, Dated 16th November 2018.

Dear Sir,

With reference to the above subject, we are submitting the "Environmental Monitoring Plans (EMP) Reports" as follows for your reference and needful records.

1. Submission of Month HSE Report for month of July 2020.
2. Accident records and Grievance register copy.
3. Induction and Toolbox training attendance sheet.
4. Good Practice Photographs.

Thanking you and assuring you of our best services at all times.

For SPPL-SIPL-DRS JV

(Authorized Signatory)

CC:

- 1) Deputy Project Director, KUIDFC; Mangaluru, for kind information.
- 2) The Commissioner, City Municipal Council; Udupi, for Kind information.
- 3) Team Leader, Egis India Consulting Engineers Pvt Ltd; Mangaluru.

Encl: EMP Reports.



Monthly Environmental Monitoring Report

Document stage: Draft for Consultation Project Number: 43253-027 May 2018

IND: Karnataka Integrated Urban Water Management Investment Program
(Tranche 2) – Improvements for 24x7 Water Supply System – Distribution
System for City Municipal Council, Udupi

Package No: 02UDP01

Prepared by



Karnataka Urban Infrastructure Development and Finance Corporation, Government of Karnataka for the Asian Development Bank.	
Name of the Work: Improvements for 24x7 Water Supply System – Distribution System for City Municipal Council, Udupi	Name of the Contractor: SPPL-SIPL DRS INFRA JV
Package No: 02UDP01	
Name of the city: UDUPI	Name of SE/EE/AE Of concerned division PIU :-Executive Engineer – Umashankar
Month -July -2020	Name of Environment, Health and Safety (EHS)- Mr. Pradeep Shetty

REV	Date	Prepared By	Checked By	For Approval
00		Pradeep shetty	Srinivas Rao	Submission Purpose

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction– Udupi

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
EMP Implementation Training	Impacts on the environment, workers, and community due to improper implementation	<p>1. Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.;</p> <p>2. appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work.</p>	Construction Contractor / PIU /PMDSC	1. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<p>3. Consult with PIU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4. Damp down exposed soil and any stockpiled-on site by spraying with water when necessary during dry weather;</p> <p>5. Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>6. Clean wheels and undercarriage of vehicles prior to leaving construction site;</p> <p>7. Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Construction Contractor	<p>3. Adopted</p> <p>4. Adopted</p> <p>5. Adopted</p> <p>6. Adopted</p> <p>7. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<p>8. Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets.</p> <p>9. Lay pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping.</p> <p>10. Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Implementing Agency on designated disposal areas (Appendix 6).</p> <p>11. Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies.</p> <p>12. Provide temporary bunds for stockpiles and materials.</p> <p>13. Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund.</p> <p>14. Dispose any wastes generated by construction activities in designated sites.</p> <p>15. Conduct surface quality inspection and monitoring</p>	Construction Contractor	<p>8. no plastic materials were used</p> <p>9. de watering pump available in site</p> <p>10. extra soils disposed in alevooru dumping yard</p> <p>11. not applicable</p> <p>12. not applicable</p> <p>13. not applicable</p> <p>14. disposed in dumping yard</p> <p>15. water testing conducted in December</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Noise Levels	Increase in noise level due to earthmoving and excavation equipment, and the transportation of equipment, materials, and people	<p>16. Plan activities in consultation with PIU/PMDSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance.</p> <p>17. Construction work shall be limited to day light hours (6 AM to 6 PM).</p> <p>18. Provide prior information to the local public about the work schedule.</p> <p>19. Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiseling.</p> <p>20. Minimize noise from construction equipment/ pneumatic drills by using silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor.</p> <p>21. Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicles.</p> <p>22. Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach.</p>	Construction Contractor	<p>16. noise testing conducted in December</p> <p>17. Adopted</p> <p>18. informing to local public before start of work</p> <p>19. Not Applicable</p> <p>20. Adopted</p> <p>21. Adopted</p> <p>22. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Landscape and aesthetics	Impacts due to excess excavated earth, excess construction materials, and solid waste such as removed concrete wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items	<p>23. Prepare and implement spoils management plan;</p> <p>24. Avoid stockpiling of excess excavated soils;</p> <p>25. Coordinate with Udupi CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>26 Recover used oil and lubricants and reuse or remove from the sites;</p> <p>27 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>28 Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>29 Request PMU/PMDSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>	Construction Contractor	<p>23. submitted</p> <p>24. Adopted</p> <p>25. soil disposed to designated areas .</p> <p>26. Adopted</p> <p>27. soil disposed at Alevooru debris land</p> <p>28. Adopted</p> <p>29.</p>
Existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<p>30 Obtain from PMU/PMDSC the list of affected utilities and operators if any;</p> <p>31 Prepare a contingency plan to include actions to be done in case of unintentional interruption of service;</p> <p>32 The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.</p>	Construction Contractor	<p>30. Adopted</p> <p>31. Detecting cables and performing trial pits before start of work</p> <p>32 Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Accessibility	Traffic problems and conflicts near projections and haul road	<p>33 Plan pipeline work in consultation with the traffic police;</p> <p>34 Plan work such that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>35 Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>36 Schedule transport and hauling activities during non-peak hours;</p> <p>37 Do not close the road completely, allow traffic to move on one line;</p> <p>38 Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>39 In unavoidable circumstances of road closure, provide alternative routes, and ensure that public is informed about such traffic diversions;</p> <p>40 At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints;</p> <p>41 Keep the site free from all unnecessary obstructions;</p> <p>42 Drive vehicles in a considerate manner;</p> <p>43 Prepare a Traffic Management Plan – a template is provided for reference at Appendix.</p>	Construction Contractor	<p>33. Adopted</p> <p>34. Adopted</p> <p>35. road restoration work in progress</p> <p>36. Adopted 37. Adopted</p> <p>38. Adopted</p> <p>39. showing alternative diversion routes</p> <p>40 provided project information and contact numbers on board</p> <p>41. Adopted</p> <p>42. Adopted</p> <p>43. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	44 Prepare and implement spoils management plan; 45 Leave spaces for access between mounds of soil; 46 Provide walkways and metal sheets where required for people; 47 Increase workforces in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 48 Consult businesses and institutions regarding operating hours and factoring this in work schedules; 49 Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Construction Contractor	45.adopted 46. adopted 47. Adopted 48. Adopted 49. provided project information and contact numbers on board

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio cultural resources	Disturbance to socio cultural resources (religious, educational, health care etc.), access disruptions etc.,	50 No material should be stocked close to these areas; material shall be brought to the site as and when required; 51 Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles; 52.No work should be conducted near the religious places during religious congregations; 53 Material transport to the site should be arranged considering school timings; material should be in place before school starts	Construction Contractor	50. Required materials were taken from store and after completion of work the same materials were transferred back to store every day. 51. Adopted 52. Adopted 53. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	54 Employ local labor force to the maximum extent, if manpower is available 55 Comply with labor laws	Construction Contractor	54. Adopted 55. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Occupational Health and Safety	Occupational hazards which can arise during work	<p>56 Comply with all national, state and local core labor laws (See Appendix 2 of this IEE);</p> <p>57 Develop and implement site-specific occupational health and safety (OHS) Plan and include in the Construction Management plan.</p> <p>The OHS plan will include measures such as:</p> <p>(a) excluding public from the site;</p> <p>(b) ensuring all workers are provided with and use personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs;</p> <p>(c) OHS Training for all site personnel;</p> <p>(d) documented procedures to be followed for all site activities; and</p> <p>(e) documentation of work-related accidents;</p> <p>58 Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>59 Provide medical insurance coverage for workers;</p> <p>60 Secure all installations from unauthorized intrusion and accident risks;</p> <p>61 Provide supplies of potable drinking water;</p> <p>62 Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>63 Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p>	Construction Contractor	<p>56. Adopted</p> <p>57. Adopted</p> <p>58. first Aid box provided at working areas</p> <p>59. provided medical insurance</p> <p>60. Adopted</p> <p>61. provided</p> <p>62. Adopted</p> <p>63. Conducting safety training and providing PPE and safety induction to workers.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Occupational Health and Safety	Occupational hazards which can arise during work	<p>64 Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>65 Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>66 Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>67 Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>68 Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively;</p> <p>69 Overall, the contractor should comply with International Finance Corporation (IFC) EHS Guidelines on Occupational Health and Safety.</p>	Construction Contractor	<p>64. Adopted</p> <p>65. Adopted</p> <p>66. Adopted</p> <p>67. provided sign boards at site</p> <p>68. Adopted</p> <p>69. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation.	<p>70 Provide hard barricading for all deep excavations that may require especially for pipe lines; identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work;</p> <p>71 Plan material and waste routes to avoid times of peak pedestrian activities;</p> <p>72 Liaise with Udupi CMC in identifying risk areas on route cards/maps;</p> <p>73 Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>74 Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads; and</p> <p>75 Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety.</p>	Construction Contractor	<p>70.provided hard barricade .</p> <p>71. Adopted</p> <p>72.No</p> <p>73. Adopted</p> <p>74. sign boards provided</p> <p>75. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Work Camps and worksites	<p>Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>76 Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located at least 200 m from residential areas;</p> <p>77 Minimize removal of vegetation and disallow cutting of trees;</p> <p>78 Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuge;</p> <p>79 The camp site should be adequately drained to avoid the accumulation of stagnant water;</p> <p>80 Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>81 Provide separate facilities for men and women; sanitary facilities shall be properly built and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>82 Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>83 Recover used oil and lubricants and reuse or remove from the site;</p> <p>84 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>85 Remove all wreckage, rubbish, or temporary structures which are no longer required;</p>	Construction Contractor	<p>76. Adopted</p> <p>77. Not Applicable</p> <p>78. Adopted</p> <p>79. Adopted</p> <p>80. Adopted</p> <p>81. Adopted</p> <p>82. Adopted</p> <p>84. Adopted</p> <p>85. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Work Camps and worksites	<p>Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>86 Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work;</p> <p>87 The work camp details should be included in the Construction Management Plan</p>	Construction Contractor	<p>86. Adopted</p> <p>87. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Social and Cultural Resources	Risk of archaeological chance finds	<p>88 Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>89 Stop work immediately if any finds are suspected to allow further investigation;</p> <p>89 Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ; and</p> <p>90 Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building</p>	Construction Contractor	<p>88. conducted training to workers and engineers</p> <p>89. Adopted</p> <p>90. not applicable</p>
Submission of EMP implementation report	Damage due to debris, spoils, excess construction materials	<p>91 Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p> <p>92 All excavated roads shall be reinstated to original condition;</p> <p>93 All disrupted utilities restored;</p> <p>94 All affected structures rehabilitated/compensated;</p> <p>95 The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up;</p> <p>96 All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document;</p> <p>97 The contractor must arrange the cancellation of all temporary services;</p> <p>98 Request PMU/PMDSC to report in writing that worksites and camps have been vacated and restored to pre-project</p>	Construction Contractor	<p>91. Adopted</p> <p>92. Adopted</p> <p>93. Adopted</p> <p>94 Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	<p>99 Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p> <p>100 All excavated roads shall be reinstated to original condition;</p> <p>101 All disrupted utilities restored;</p> <p>102 All affected structures rehabilitated/compensated;</p> <p>103 The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up;</p> <p>104 All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document;</p> <p>105 The contractor must arrange the cancellation of all temporary services;</p> <p>106 Request PMU/PMD CSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.</p>	Construction Contractor	<p>99. Adopted</p> <p>100. Adopted</p> <p>101. Adopted</p> <p>102 Adopted</p> <p>104. Adopted</p> <p>105.</p> <p>106. Adopted</p>

Sl. No.	Date	Labour Name	Father's Name	Age	Sex	Check In Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
1	1/07/2020	Alokvarma	Ravindar	27	M	8:30AM	5:30PM	3T Intp of this	<i>[Signature]</i>	
	1/07/2020	Balakaram	Anbari	29	M	8:30AM	5:30PM	Bq lq kq r q m	<i>[Signature]</i>	
	1/07/2020	Akmed Anbari	Mohamed	29	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	1/07/2020	Pradeep	Ravi	23	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	1/07/2020	Ramesh	Pavadasappa	26	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	1/07/2020	Sanjewa	Shiva	32	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	1/07/2020	Parasheeran	Homermautha	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
2	2/07/2020	Balakaram	Anbari	29	M	8:30AM	5:30PM	Bq lq kq r q m	<i>[Signature]</i>	
	2/07/2020	Alokvarma	Ravindar	27	M	8:30AM	5:30PM	3T Intp	<i>[Signature]</i>	
	2/07/2020	Pradeep	Ravi	23	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	2/07/2020	S. Kumar	Narasima	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	2/07/2020	R. Naidu	Shivanaidu	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	2/07/2020	Senu	Basappa	33	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	2/07/2020	Shakar	Chenuappa	32	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
3	3/07/2020	Balakaram	Anbari	29	M	8:30AM	5:30PM	Bq lq kq r q m	<i>[Signature]</i>	
	3/07/2020	Alokvarma	Ravindar	27	M	8:30AM	5:30PM	3T Intp	<i>[Signature]</i>	
	3/07/2020	Pradeep	Ravi	23	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	3/07/2020	S. Kumar	Narasima	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	3/07/2020	R. Naidu	Shivanaidu	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	3/07/2020	Senu	Basappa	33	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
4	4/07/2020	Ramesh	Pavadasappa	26	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	4/07/2020	Yamunappa	Madappa	33	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	4/07/2020	Sanjewa	Shiva	32	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	4/07/2020	Mahesha	Malappa	24	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	4/07/2020	Parasheeran	Homermautha	27	M	8:30AM	5:30PM	<i>[Signature]</i>	<i>[Signature]</i>	
	4/07/2020									
	4/07/2020									

Sl. No	Date	Labour's Name	Father's Name	Age	Sex	Check In Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
①	10/7/2020	Mahesha	Malappa	24	M	8:30AM	5:30PM			
	10/7/2020	Raju	Ninganba	27	M	8:30AM	5:30PM			
	10/7/2020	Parashuram	Harumautha	27	M	8:30AM	5:30PM			
	10/7/2020	Ajay	Krishnamma	29	M	8:30AM	5:30PM			
	10/7/2020	Pradeep	Ravi	23	M	8:30AM	5:30PM			
②	13/7/2020	R. Naidu	Shivanaidu	27	M	8:30AM	5:30PM			
	13/7/2020	Seenu	Basappa	33	M	8:30AM	5:30PM			
③	14/7/2020	R. Naidu	Shiva Naidu	27	M	8:30AM	5:30PM			
	14/7/2020	Seenu	Basappa	33	M	8:30AM	5:30PM			
	14/7/2020	Peer Bab	Harif	26	M	8:30AM	5:30PM			
	14/7/2020	Onkar			M	8:30AM	5:30PM			
	14/7/2020	Gurumurthy			M	8:30AM	5:30PM			
	14/7/2020	Manoj			M	8:30AM	5:30PM			
④	15/7/2020	Chondrashekar	Yamunappa	35	M	8:30AM	5:30PM			
	15/7/2020	Yamunappa	Nadappa	30	M	8:30AM	5:30PM			
	15/7/2020	Gurumurthy			M	8:30AM	5:30PM			
	15/7/2020	Alesh			M	8:30AM	5:30PM			
	15/7/2020	Onkar			M	8:30AM	5:30PM			
⑤	16/7/2020	S. Kumar	S. Narasimha	27	M	8:30AM	5:30PM			
	16/7/2020	R. Naidu	Shivanaidu	27	M	8:30AM	5:30PM			
	16/7/2020	Peer Bab	Harif	26	M	8:30AM	5:30PM			
	16/7/2020	Seenu	Basappa	33	M	8:30AM	5:30PM			
	16/7/2020	Gurumurthy			M	8:30AM	5:30PM			

Sl. No	Date	Labour's Name	Father's Name	Age	Sex	Check in Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
①	14/7/2020	Yamunnappa	Madappa	30	M	8:30 AM	5:30 PM	ಯಮುನಪ್ಪ.	<u>Dr. S. S. S.</u>	
	14/7/2020	Chandrabhakar	Yallappa	35	M	8:30 AM	5:30 PM	ಚಂದ್ರಭಟ್.	<u>Dr. S. S. S.</u>	
	14/7/2020	Guemmy	Malappa	30	M	8:30 AM	5:30 PM		<u>Dr. S. S. S.</u>	
	14/7/2020	Ranganath	Shakappa	42	M	8:30 AM	5:30 PM	ರಂಗನಾಥ.	<u>Dr. S. S. S.</u>	
②	18/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	ಸೀನು.	<u>MS.</u>	
	18/7/2020	Naidu	Shiva Naidu	27	M	8:30 AM	5:30 PM	ನಾಯ್ಡು.	<u>MS.</u>	
	18/7/2020	Peerab	Haniff	26	M	8:30 AM	5:30 PM	ಪೀರಬ.	<u>MS.</u>	
	18/7/2020	Skumar	Narasimha	27	M	8:30 AM	5:30 PM	ಸ್ಕುಮರ್.	<u>MS.</u>	
③	20/7/2020	Seenu.	Basappa	33	M	8:30 AM	5:30 PM	ಸೀನು.	<u>MS.</u>	
	20/7/2020	R. Naidu	Shiva Naidu	27	M	8:30 AM	5:30 PM	ರ. ನಾಯ್ಡು.	<u>MS.</u>	
	20/7/2020	Peerab	Haniff	26	M	8:30 AM	5:30 PM	ಪೀರಬ.	<u>MS.</u>	
	20/7/2020	Skumar.	Narasimha	27	M	8:30 AM	5:30 PM	ಸ್ಕುಮರ್.	<u>MS.</u>	
④	21/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 AM	ಸೀನು.	<u>MS.</u>	
	21/7/2020	R. Naidu	Shiva Naidu	27	M	8:30 AM	5:30 PM	ರ. ನಾಯ್ಡು.	<u>MS.</u>	
	21/7/2020	Peerab	Haniff	26	M	8:30 AM	5:30 PM	ಪೀರಬ.	<u>MS.</u>	
	21/7/2020	Skumar	Narasimha	27	M	8:30 AM	5:30 PM	ಸ್ಕುಮರ್.	<u>MS.</u>	
⑤	22/7/2020	Seenu.	Basappa	33	M	8:30 AM	5:30 PM	ಸೀನು.	<u>MS.</u>	
	22/7/2020	Skumar.	Narasimha	27	M	8:30 AM	5:30 PM	ಸ್ಕುಮರ್.	<u>MS.</u>	
	22/7/2020	Naidu.	Shiva Naidu	27	M	8:30 AM	5:30 PM	ನಾಯ್ಡು.	<u>MS.</u>	
	22/7/2020	Peerab	Haniff	26	M	8:30 AM	5:30 PM	ಪೀರಬ.	<u>MS.</u>	
⑥	23/7/2020	Skumar	Narasimha	27	M	8:30 AM	5:30 PM	ಸ್ಕುಮರ್.	<u>Dr. S. S. S.</u>	
	23/7/2020	Peerab	Haniff	26	M	8:30 AM	5:30 PM	ಪೀರಬ.	<u>Dr. S. S. S.</u>	
	23/7/2020	Seenu.	Basappa	33	M	8:30 AM	5:30 PM	ಸೀನು.	<u>Dr. S. S. S.</u>	
	23/7/2020	Naidu	Shiva Naidu	27	M	8:30 AM	5:30 PM	ನಾಯ್ಡು.	<u>Dr. S. S. S.</u>	

Sl. No	Date	Labour's Name	Father's Name	Age	Sex	Check In Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
①	24/7/2020	Yamunappa	Madappa	30	M	8:30 AM	5:30 PM	absent	MS.	
	24/7/2020	Chondrashekar	Narasimha	35	M	8:30 AM	5:30 PM		MS.	
	24/7/2020	S. Kumar	Narasimha	27	M	8:30 AM	5:30 PM	S. Kumar	MS.	
	24/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	21st	MS.	
	24/7/2020	Naidu	Shivanaidu	27	M	8:30 AM	5:30 PM	Naidu	MS.	
②	25/7/2020	Skumar	Narasimha	27	M	8:30 AM	5:30 PM	S. Kumar	MS.	
	25/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	21st	MS.	
	25/7/2020	R. Naidu	Shivanaidu	27	M	8:30 AM	5:30 PM	Naidu	MS.	
	25/7/2020									
	25/7/2020									
③	27/7/2020	Ravi	Dhanpal	32	M	8:30 AM	5:30 PM	Ravi	MS.	
	27/7/2020	Ramappa	Shekappa	32	M	8:30 AM	5:30 PM	absent	MS.	
	27/7/2020	Skumar	Narasimha	27	M	8:30 AM	5:30 PM	S. Kumar	MS.	
	27/7/2020	R. Naidu	Shivanaidu	27	M	8:30 AM	5:30 PM	Naidu	MS.	
	27/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	21st	MS.	
④	28/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	21st	MS.	
	28/7/2020	R. Naidu	Shivanaidu	27	M	8:30 AM	5:30 PM	Naidu	MS.	
	28/7/2020	S. Kumar	Narasimha	27	M	8:30 AM	5:30 PM	S. Kumar	MS.	
	28/7/2020	Peersab	Harif	26	M	8:30 AM	5:30 PM	Peersab	MS.	
⑤	29/7/2020	Gangadara	Basavaraj	40	M	8:30 AM	5:30 PM	not present	Ravi	
	29/7/2020	Yalappa	Shekappa	35	M	8:30 AM	5:30 PM	absent	Ravi	
	29/7/2020	Ravi	Kalappa	35	M	8:30 AM	5:30 PM	21st	Ravi	
	29/7/2020	Manohar	Sonjenu	37	M	8:30 AM	5:30 PM	Manohar	Ravi	
	29/7/2020	Mahabala	Mahesh	29	M	8:30 AM	5:30 PM	Manohar	Ravi	

SL No	Date	Labour's name	Father's name	Age	Sex	Check In Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
①	30/7/2020	Mahabala			M	8:30 AM	5:30 PM	ಮಹಾಲಾ		
	30/7/2020	Vijay			M	8:30 AM	5:30 PM	Vijay		
	30/7/2020	Sundara			M	8:30 AM	5:30 PM	Sundara		
	30/7/2020	S kumar	Narasimha	24	M	8:30 AM	5:30 PM	S kumar		
	30/7/2020	Gunu	Basappa	33	M	8:30 AM	5:30 PM	ಗುಣು		
②	31/7/2020	Mahabala			M	8:30 AM	5:30 PM	ಮಹಾಲಾ		
	31/7/2020	Vijay			M	8:30 AM	5:30 PM	Vijay		
	31/7/2020	Sundara			M	8:30 AM	5:30 PM	Sundara		
	31/7/2020	Bogga			M	8:30 AM	5:30 PM	ಬೊಗ್ಗಾ		
	31/7/2020	Srinjeelva			M	8:30 AM	5:30 PM	ಸ್ರೀನಿವಾಸ		
	31/7/2020	Shekara			M	8:30 AM	5:30 PM	ಶೇಕರಾ		

URL for online Pre-Health assessment form is below: <https://suez.co.in/health-assessment-form>

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Android: <https://play.google.com/store/apps/details?id=com.aarogya.setu>

Covid Induction Attendance Sheet

04/07/2020

Sl. No	Name	Dept.	Signature
1.	Ramesh	Store	Ramesh
2.	Parashuram	"	Parashuram
3.	Yamunappa	"	YAMUNAPPA
4.	Saraseela	"	Saraseela
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Name & Sign. of Trainer

~~Pradeep~~
Pradeep
04/07/20

SUEZ	SUEZ PROJECTS PVT. LTD.	No.
	udupi	Rev.000
	Training Attendance Sheet	Date. Jan' 2019 Page. 1 of 1

Training program: *Fire Fighting Training*

Date: *11/07/2020*

Time: *11:30 AM to 12 PM*

Conducted by: *Pradeep Shetty*

Topics Covered: *Fire Extinguisher operating*

I ACKNOWLEDGE THAT I HAVE UNDERSTOOD THE ABOVE MENTIONED TOPICS

S/N	NAME	COMPANY / DEPTT.	DESIGNATION	SIGNATURE
1.	B. Vishnu	EPC	Engineer	<i>[Signature]</i>
2.	Shrikanth P	EPC	Network Assistant	<i>[Signature]</i>
3.	Magmoot Khan	EPC	Engineer	<i>[Signature]</i>
4.	Babar Azeem Hk	C.S	Engineer	<i>[Signature]</i>
5.	Sajesh C	EPC	STORE INCHARGE	<i>[Signature]</i>
6.	Nagachandiro	Admin	offic asst	<i>[Signature]</i>
7.	MITHUN SURESH R	EPC	Customer Surveyor	<i>[Signature]</i>
	MITHUN KUMAR	EPC	NETWORK ASSISTANT	<i>[Signature]</i>
9.	Supriya Shetty	Admin	Document Controller	<i>[Signature]</i>
10.	Chaitanya V. R	EPC	Net/Assistant	<i>[Signature]</i>
11.				
12.				
13.				
14.				
15.				

Man Hours:

Sign of Trainer:

[Signature]
Pradeep Shetty

SIPL

Covid Induction Attendance Sheet

Date: 20/4/2020
Doc No: SIPL/HSE/HDURL for online Pre-Health assessment form is below: <https://aapn.com/health-assessment-form>

Link for downloading Aarogya Setu app in my cell phone:

IOS: <https://apps.apple.com/in/app/aarogya-setu/id1535106637>Android: <https://play.google.com/store/apps/details?id=com.digitalsatya.aarogya.setu>

Covid Induction Attendance Sheet

15/07/20

Sl. No	Name	Dept.	Signature
1.	Yamunappa	HSE	YAMUNAPPA
2.	Clondra Shelman	"	Clondra Shelman
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Name & Sign. of Trainer



15/07/20

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Android: <https://play.google.com/store/apps/details?id=com.suez.aerogya.setu>

Covid Induction Attendance Sheet

18/07/20

Sl. No.	Name	Dept.	Signature:
1.	Seenu	Hqabinting	2/10
2.	R. Naidu	"	R. Naidu
3.	Peersab	"	do
4.	S. Kumar	"	S. Kumar
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Name & Sign. of Trainer


18/07/20

URL for online Pre-Health assesment form is below <https://suez.co.in/health-assessment-form>

Link for downloading Aarogya Setu app in my cell phone

IOS: <https://apps.apple.com/in/app/aarogya-setu/id1488305085>

Android: <https://play.google.com/store/apps/details?id=in.gov.aarogya>

Covid Induction Attendance Sheet

17/07/20

Sl. No	Name	Dept.	Signature
1.	Yamunappa		YAMUNAPPA
2.	Chandra Shekhara		Chandra Shekhara
3.	Susmi		Susmi
4.	Ranganatha		Ranganatha
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Name & Sign. of Trainer

[Signature]
17/07/20

URL for online Pre-Health assessment form is below <http://suezgls.com/Health-Safety/covid-19.html>

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IOS: <https://apps.apple.com/in/app/aarogya-setu/id1505825357>

Android: <https://play.google.com/store/apps/details?id=nic.goi.aarogya-setu>

Covid Induction Attendance Sheet

20/07/2020

Sl. No	Name	Dept.	Signature
1.	Manoj	Helper	Manoj
2.	Alesh	"	Alesh
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Name & Sign. of Trainer


20/07/2020

URL for online Pre-Health assessment form is below <http://suezgls.com/Health-Safety/covid-19.html>

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Android: <https://play.google.com/store/apps/details?id=nic.gpi.aarogya-setu>

Covid Induction Attendance Sheet

28/07/2020

Sl. No	Name	Dept.	Signature
1.	Sagar. Ch.	pipe laying	Sagar Ch.
2.	Ahesh	"	Ahesh
3.	Manoj	"	Manoj
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Name & Sign. of Trainer


28/07/20

URL for online Pre-Health assessment form is below <http://suezgis.com/Health-Safety/covid-19.html>



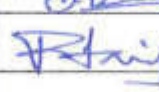
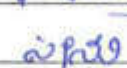
Link for downloading Aarogya Setu app in my cell phone

IOS: <https://apps.apple.com/in/app/aarogya-setu/id1505315357>

Android: <https://play.google.com/store/apps/details?id=nic.zoi.aarogya-setu>

Covid Induction Attendance Sheet

30/07/20

Sl. No	Name	Dept.	Signature
1.	Peersab	Hydrotesting	
2.	S. Kumar	Hydrotesting	
3.	R. Naidu	Hydrotesting	
4.	Seenu	Hydrotesting	
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Name & Sign. of Trainer


30/7/20

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Journal of Management Studies, 19(6), 701-718.

1992

Safety Training and Good Practices Photos-July 2020

ready for the resource revolution



Safety Training for Workers



Thermal Screening



Thermal Screening



Fire Fighting Training for staff



Fire Fighting Training for staff



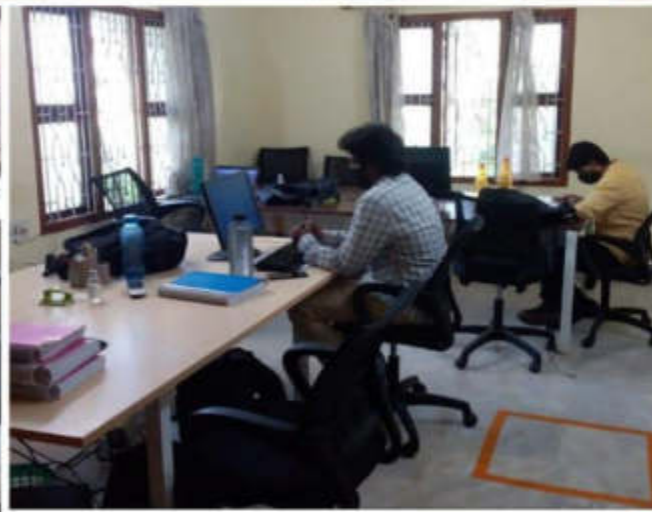
Office cleaning



office decontamination



Social Distance



Vehicle cleaning



Road Restoration



Site work



Road Diversion



Monthly Environmental Monitoring Report

Project Number: 43253-027
August 2020

IND: Karnataka Integrated Urban Water Management
Investment Program (Tranche2) – Improvements for 24
x 7 Water Supply System for Town Municipal Council in
Kundapura

Package No. 02KDP01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur, and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) project management capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an assessment sewerage projects within the project area, i.e., Mangalore.

2. Existing Water Supply System in Kundapura

Kundapura is located in Udupi District in Karnataka and is the headquarters of the Kundapura Taluk placed 92 km from Mangalore and 416 km from Bangalore (Figure 1). Geographically, Kundapura Town is located at a latitude of 13°08'N and longitude of 74°07'E at an average altitude of 80 m above the mean sea level (msl). The municipality spreads in an area of 14 square kilometer (km²) and consists of Kundapura Kasaba and Vaderahobli villages, with 23 municipal wards. Population of Kundapura is 30,450 (2011 Census). Kundapura is well connected to other parts of the state and country by highways and railways. National highway (NH-66) passes through the town. Nearest airport is Mangalore International Airport, 87 km from Kundapura. Kundapura is also connected to the Konkan Railway, which runs from Mumbai to Mangalore. Nearest railway station is at about 4 km from the town.

Kundapuram Town Municipal Council (TMC) provides urban services to the people efficiently and is well recognized by the state and central governments. Kundapura TMC has been awarded following certificates of appreciation by the Government of Karnataka:

- (i) Best Urban Local Body in the year of 1996-1997;
- (ii) Best Urban Local Body Award in the 2009-2010;
- (iii) Second Best Practices Award in the year 2010 for Reduction of Nonrevenue Water Supply;
- (iv) Third Best Practices Award-2010 for Solid Waste Management (SWM) for providing excellent Municipal Services, maintaining Healthy Environment;
- (v) The best Utilization of reserved Fund for the social Service Activities; and
- (vi) Town Municipal Council also grabbed Green Leaf Award-2009, Nation Urban Water Awards-2009, and ICONSMW Award-2011 in National level.

3. Need for Infrastructure Improvement in Kundapura

River Varahi is the main surface source of water supply to Kundapura. The intake works, located in Jambu beside Jambukeshwara Temple, about 11 km from Kundapura, pump raw water to the WTP constructed on a hillock in Japhthi village at a distance of about 2.5 km from the intake works by 400 mm diameter mild steel (MS) rising main. Treated water from WTP is pumped through a 400mm diameter MS rising main to the 500

clear water transmission main passes through Kundapura-Shimoga Road and pass through four-enroute villages viz., Japhthi, Balkur, Basrur and Koni. A Schematic diagram of the existing water supply system is shown in the Figure 1.

Figure 1: Existing Water Supply System in Kundapura

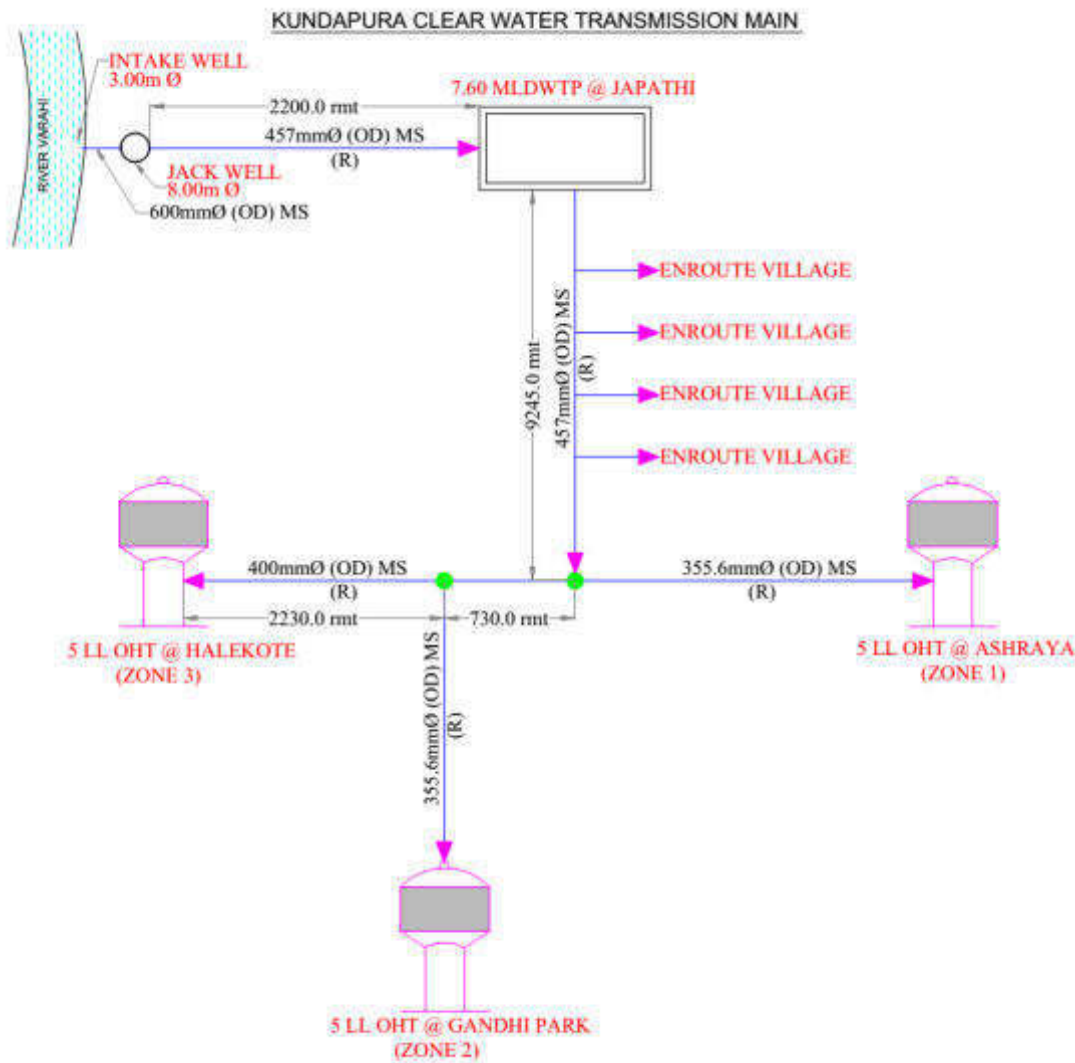


Table 1: Component of Existing Water Supply System in Kundapura

WTP Location	Capacity (MLD)	Treatment Process	Preliminary Design Stage? (Y/N)	Distance of WTP to nearest receptors in meters	Receiving Water of WTP Backwash /Wastewater Discharge	Uses of the receiving water (swimming, boating, fishing, irrigation, others [please specify])
Japthi, Kundapura	7.6	Inlet chamber ,Parshall flume,Flash Mixer , ClrifloculatorFilterhouse, Chlorination,	Existing WTP Rehabilitation	79	Discharged to drain	Irrigation

4. The proposed subproject:

The subproject formulated under this Investment Program to address gaps in current water supply system. Detailed design of all the subproject components is completed prior to the bidding, and as per the detailed design the subproject includes the following components:

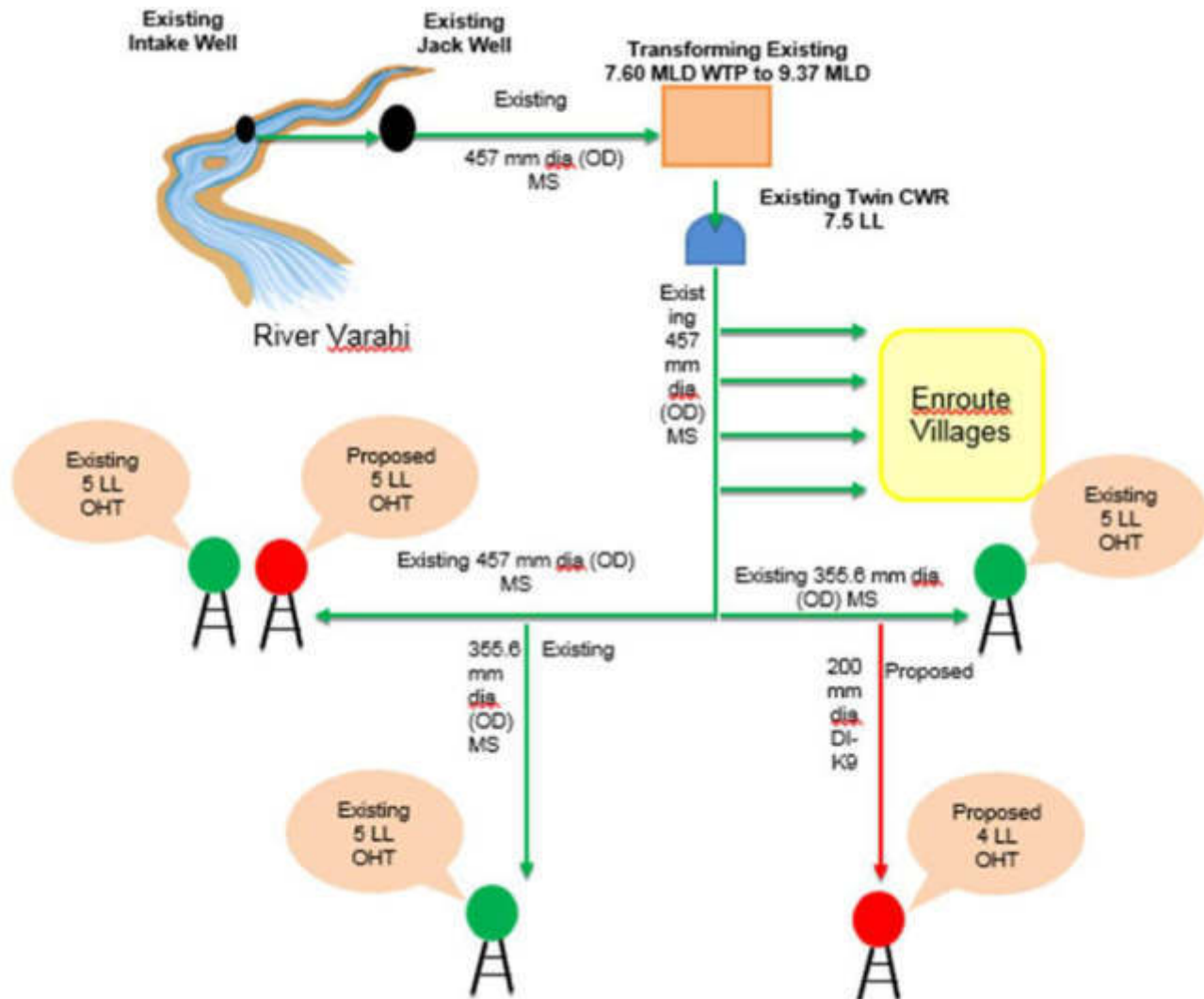
- (i) rehabilitation works and replacement of electromechanical equipment in Jack well at Jambu (Japthi village) to sufficiently supply 9.37 million liters per day (MLD) of raw water to the water treatment plant (WTP), and provision of a new diesel generator set for the un-interrupted power supply;
- (ii) rehabilitation of the existing 7.60 MLD WTP in Japthi village including provision of backwash water recirculation and sludge management system;
- (iii) laying of 4.8 kilometer (km) feeder main tapping from existing clear water main with 200 millimeter (mm) diameter pipe to feed to the proposed overhead tank (OHT) located in Kodi for the newly added zone 4;
- (iv) construction of 2 OHTs with a total capacity of 0.9 million liter;
- (v) extension of 31.64 km distribution network of diameter of 75 mm to 250 mm; and
- (vi) replacement of 4,200 existing meters and providing new metered house service connection (HSC) of 2,250 for uncovered households.

Following Table 2 provides details of the KIUWMIP Tranche 2 subproject components in Kundapura based on the detailed engineering design of the subproject. Schematic diagram of water supply system in Kundapura is shown in Figure 2. Locations of proposed components in Kundapura are shown. The position of the pipe alignment shown on road section is not exact due to mapping scale and underground utilities, and it will be fixed exactly during the pipeline laying work on site. All pipelines will be laid in the road shoulder, wherever it is available, or into the edge of road carriage way.

Table 2: Proposed Components for 24x7 Water Supply Systems

Infrastructure	Function	Description	Location
Jack well and Pump House	Pumping raw water to water treatment plant (WTP)	Rehabilitation works in Jack well by replacing mechanical equipment inside the pump house (pressure gauges, dewatering pumps, and electrical improvements) Provision of diesel generator set of 200 kilovolt ampere (kVA) for the un-interrupted power supply to the Jack well.	Works will be conducted within the existing Jack well near Jambukeshwara Temple in Jambu village
WTP	Treats raw water	Rehabilitation works in WTP by replacement equipment (flow meters, valves, pressure gauges, flash mixer, clari-floculator, alum and lime mixer, chlorinator, lab equipment etc.), Provision of diesel generator set (160 kVA) at WTP. Provision of backwash water recirculation and sludge management system to cater to total capacity of WTP (7.6 MLD); clarified water will be re-circulated to WTP inlet and accumulated sludge will be disposed in sanitary landfill	Works will be conducted within the existing WTP at Japthi village Sufficient land available within the WTP campus to develop backwash and sludge management facilities (see Figure 7)
Clear Water Transmission Main	Conveys clear water to service reservoirs	4.8 kilometer (km) length 200 millimeter (mm) diameter ductile iron pipe	Pipeline will be laid from the existing clear water main on NH-66 near Vinayaka theater to proposed new overhead tank (OHT) Kodi. Alignment is all along Kodi Road Alignment and profile drawings are shown in Figures 9 to 16.
Water service reservoirs	Water storage for supply	2 no.OHTs (of reinforced cement concrete, RCC) including compound walls at the sites: 500kiloliter (kl) capacity for Zone-3 at Halekote 400klcapacity for Zone-4 at Kodi	Site is vacant and owned by TMC Site is vacant and owned by Government of Karnataka Layout plans and elevations of OHTs are shown in Figures 17 to 20.
Distribution system Pipelines	Distributes clear water to the houses for the entire Town	31.64 km length diameter 75 - 250 mm high density poly ethylene (HDPE)pipes 75 mm dia-12.01km 90 mm dia- 5.89 km 110 mm dia- 7.08 km 160 mm dia- 2.27 km 200 mm dia- 2.33 km 250 mm dia- 2.06 km	Distribution pipes will be laid along the roads, within the road right of way, in 4 zones in KundapuraTown Municipal Council (TMC) area. Distribution zones with existing and proposed pipelines are shown Zone wise in Figures 21 to 24.
House Service Connections (HSC)	Individual houses get water after HSC.	HSC with Class B Multijet water meters 2,250 new 4,200 replacement	All households in four zones

Figure 2: Proposed 24/7 Water Supply System for Kundapura



CWR = clear water reservoir, dia = diameter, LL = lakh liter, mm = millimeter, MLD = million liters per day, MS = mild steel, OHT = overhead tank, WTP = water treatment plant.

5. Environmental Management Plan

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with.

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for Town Municipal Council in Kundapura	Name of the Contractor: Laxmi Civil Engineering Services Pvt,Ltd
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Kundapura	Name of SE/EE/AE of concerned division PIU :- Mr.HarishWalmiki, AEE
Date of monthly monitoring: 13/08/2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr. Vijay

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction–Kundapura

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of implementation
Environmental Management Plan (EMP) Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<ol style="list-style-type: none"> Project manager and all key workers will be required to undergo EMP implementation including spoils management, standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.; and Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work. 	Construction Contractor/ project implementation unit (PIU)/ Project Management Design and Construction Supervision Consultant (PMDSC)	<ol style="list-style-type: none"> Certificate of Completion (Safeguards Compliance Orientation) Posting of Certification of Completion at worksites Posting of EMP at worksites. 	Cost of EMP Implementation Orientation Training to contractor is responsibility of Program Management Unit (PMU). Other costs responsibility of contractor.	<ol style="list-style-type: none"> Contractor has to update SOPs. OHS plan and Activities are going on as per company EHS Policies. Complied Environmental, Health and Safety (EHS) Engineer appointed by contractor.

Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<ol style="list-style-type: none"> 1) Consult with PMU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; 2) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; 3) Use tarpaulins to cover sand and other loose material when transported by trucks; and 4) Stockpile sand and other loose material only in barricaded area and protect/cover by tarpaulins to avoid dust generation 5) Clean wheels and undercarriage of vehicles prior to leaving construction site; and 6) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly. 	Construction Contractor	<ol style="list-style-type: none"> a) Location of stockpiles; b) Complaints from sensitive receptors; c) Heavy equipment and machinery with air pollution control devices; d) Certification that vehicles are compliant with Air Act 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Instructed to contracting agency to Spray water on exposed soil and stock piled mainly in commercial and residential area 3) Complied 4) Partially Complied. 5) Complied 6) Complied
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<ol style="list-style-type: none"> 1) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 2) Laying of pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping; 3) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, 	Construction Contractor	<ol style="list-style-type: none"> a) Areas for stockpiles, storage of fuels and lubricants and waste materials; b) Number of silt traps installed along trenches leading to water bodies; c) Records of surface water quality inspection; d) Effectiveness of water 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Stockpiling of earth fill not found during the site visit 2) Work was not in progress due to Rain but Instructed to contracting agency to close all opened trenches Before rainy season 3) Partially Complied - Spoil Management plan prepared by Contractor Annexure attached

		<p>dispose in municipal landfill (Sample Spoils Management Plan in Appendix 10);</p> <p>4) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>5) Provide temporary bunds for stockpiles and materials;</p> <p>6) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 100% capacity bund; and</p> <p>7) Dispose any wastes generated by construction activities in landfill or reuse in beneficial purposes</p>		<p>management measures;</p> <p>e) No visible degradation to nearby drainages, nallahs or water bodies due to civil works</p>		<p>in Feb 2019 report and recommended to update according to the suggestions given and submit Spoil Management Plan.</p> <p>updated /Corrected Spoil Management plan yet to be submitted by Contractor</p> <p>4) Surface Water bodies not found along the Project site.</p> <p>5) Partially Complied</p> <p>6) Fuels and lubricants in bulk are not stored by contractor at site.</p> <p>7) Debris generated by construction is disposed in the ULB designated areas. Waste is used to fill the low line area</p>
	Contamination of coastal water due to works in coastal zone	<p>In addition to the above measures following measures given below for piling works:</p> <p>8) Piling activities for OHT foundation work at Kodi shall be conducted carefully; there shall no spillage of bentonite on the ground; bentonite slurry shall be properly collected in leak proof containers and re-circulated in the piling activity; excess</p>			Cost for implementation of mitigation measures responsibility of contractor.	<p>8) Piling activities for OHT foundation work at Kodi beach has been done and OHT Construction work in progress and excess earth is disposed in landfill</p>

		bentonite slurry shall be dried properly in containers, and disposed in landfill safely				
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<ol style="list-style-type: none"> 1) Plan activities in consultation with PMU/PMDCSC so that activities with the greatest potential to generate noise (road cutting and piling activity) are conducted during periods of the day which will result in least disturbance; 2) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach; 3) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and 4) Maintain maximum sound levels not exceeding 80 decibels (dB) when measured at a distance of 10 m or more from the vehicle/s. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Use of silencers in noise-producing equipment and sound barriers; and c) Equivalent day and night time noise levels (Appendix 3) 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied
Landscape and aesthetics	Impacts due to excess excavated earth, excess construction and demolition materials and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants,	<ol style="list-style-type: none"> 1) Manage surplus soil, debris and solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; 2) Coordinate with PIU / Kundapura TMC for beneficial uses of road debris and surplus soils in on-going construction works or for temporary 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Worksite clear of hazardous wastes such as oil/fuel; and c) Worksite clear of any excess excavated earth, excess construction materials, and 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied. No excess excavated earth at work site. 2) Complied - Contractor Coordinated with PIU / Kundapura TMC and surplus soils Disposed in Authorized landfill.

	and other similar items.	<p>storage for future use or disposal in landfill</p> <p>3) In unavoidable case of disposal, debris shall be disposed at landfill site or site approved by PIU / Kundapura; waste shall not be disposed in the forest areas and in or near water bodies/ rivers / coast</p> <p>4) Prepare and implement spoils management plan;</p> <p>5) Surplus soil and debris from work site shall be removed / cleared at the end of each day of work; there shall be no stock piling of debris / surplus soil at the site</p> <p>6) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>7) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>8) Request PIU/PMDSC to report in writing that the necessary environmental restoration works have been adequately performed before acceptance of work.</p>		<p>solid waste such as removed concrete, wood, packaging materials, empty containers</p>		<p>3) Complied</p> <p>4) Partially Complied spoil management plan Prepared and Implementation is going on accordingly (SPM attached as Annexure in Feb 2019 Monthly report. Recommended the Contractor for update as per suggestions given and to submit SM Plan. Updated /Corrected Spoil Management plan not submitted by Contractor</p> <p>5) Complied</p> <p>6) Used oil and lubricants not generated on site</p> <p>7) Complied</p> <p>8) Work was not in progress due to Rain</p>
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Utilities - existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<ol style="list-style-type: none"> 1) At least two-weeks prior to start of work at any section, Identify utilities that will be required to be temporarily disturbed / shifted for the construction work; 2) Liaise with the respective utility department, provide prior information to the affected public and restore the utilities as soon as the work is complete 3) Provide contingency services where required (temporary diversion of drains, provision of water supply by tankers, etc.,) 4) Coordinate with the respective department and ensure that electricity and telephone services are restored quickly 5) Reconstruct the damaged footpath and drains immediately after the completion of pipeline work in that particular section 	Construction Contractor and PIU	<ol style="list-style-type: none"> a) Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken b) Record to confirm that contingency services are provided and all damaged utilities are restored after the work 	Part of project cost	<ol style="list-style-type: none"> 1) Complied 2) Complied contingency services are provided and restoration is going on after the work. 3) Complied 4) Complied 5) Complied
Ecological Resources – Terrestrial	Loss of vegetation and tree cover	<ol style="list-style-type: none"> 1) Except four (4) coconut trees at Kodi OHT site, and pruning of large tree to the minimum required extent at Halekoti OHT site, no trees shall be removed for the subproject. 2) Trees in the pipeline alignments shall be avoided during construction by locally 	Construction Contractor	<ol style="list-style-type: none"> a) PMU/PMDSC to report in writing the number of trees cut and planted. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied. 6 trees got felled and Compensations were paid to the owners. Attached as Annexures 10 in the May 2019 report. And also ADB Social safeguard team visited on 23/9/2019 to particular affected persons to provide further training for them.

		3) altering the alignment. Obtain tree cutting and pruning permission from Tree Officer; plant and maintain 10 trees for each tree that is removed				2) Complied 3) Compensation paid to the owner of the tree.
Accessibility	Traffic problems and conflicts near project locations and haul road	<p>1) Plan pipeline work in consultation with the traffic police; prepare a Traffic Management Plan – a template is provided for reference at Appendix 11.</p> <p>2) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>3) Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>4) Schedule transport and hauling activities during non-peak hours;</p> <p>5) No road shall be completely closed for traffic; in unavoidable circumstances of road closure (eg, NH service road closure at Shastri Circle for trenchless work), provide alternative route, and ensure that public is informed about such traffic</p>	Construction Contractor	<p>a) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (Appendix 11);</p> <p>b) Complaints from sensitive receptors; and</p> <p>c) Number of signages placed at project location.</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Traffic Management Plan prepared by contractor and followed accordingly. Traffic Management Plan attached as Annexure– 9 in the May 2019 report. It was advised to contractor to update Traffic Management Plan.</p> <p>Traffic management plan yet to be updated</p> <p>2) Complied</p> <p>3) Complied</p> <p>4) Complied</p> <p>5) Contractor has to provide traffic management plan for their all working areas to minimize the traffic in busy and small</p>

		<p>diversions;</p> <p>6) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>7) Maintain safe pedestrian access at all times to the houses along the work site;</p> <p>8) Hard barricades should be mandatorily provided for work sites in residential and commercial areas, along with caution board.</p> <p>9) At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints;</p> <p>10) Keep the site free from all unnecessary obstructions;</p> <p>11) Drive vehicles in a considerate manner</p> <p>In narrow roads listed above, Inform the affected local population on week in advance, and again a day before the work</p>				<p>congested areas</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Work was not in progress due to Rain but Instructed to contracting agency to close all opened trenches Before rainy season</p> <p>MS tubular barricades are provided by Contractor at HaleKote OHT and Kodi OHT Site.</p> <p>9) The public information/caution boards at work sites not provided with details mentioned in Mitigation Measures except at Kodi Beach which is also in Kannada.</p>
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						10) Complied 11) Partially Complied
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	<ol style="list-style-type: none"> 1) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time; 2) Leave spaces for access between mounds of soil; 3) Provide walkways and metal sheets where required for people; 4) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 5) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and 6) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Spoils management plan; and c) Number of walkways, signs, and metal sheets placed at project location. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied 5) Complied 6) Not Complied. Work was not in progress due to Rain but instructed contracting agency to provide Project information board was at all working areas.

Socio cultural resources	Disturbance to socio cultural resources (religious, educational, health care etc.), access disruptions etc.,	<ol style="list-style-type: none"> 1) No material should be stocked close to these areas; material shall be brought to the site as and when required; 2) Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles; 3) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time; 4) No work should be conducted near the religious places during religious congregations; 5) Material transport to the site should be arranged considering school timings; material should be in place before school starts; 6) Notify concerned schools, hospitals etc., 2 weeks prior to the work; conduct a 30-minute awareness program on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts; and 7) Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites. 	Construction Contractor	<ol style="list-style-type: none"> a) Visual site observations b) Public complaints 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Contractor conducting work manually for all possible works to minimize the use of equipment. 3) Complied 4) Complied 5) Complied 6) Work was not in progress due to Rain but Recommended contacting agency when work starts to provide information about project work and Proper record has to be maintained 7) Improvement is required in Implementation.
Socio-Economic - Employment	Generation of contractual	<ol style="list-style-type: none"> 1) Employ local labor force to the maximum extent, if 	Construction Contractor	<ol style="list-style-type: none"> a) Employment records; 	Cost for implementation	<ol style="list-style-type: none"> 1) Register maintained by

	employment and increase in local revenue	manpower is available; and 2) Comply with labor laws		b) Records of sources of materials; and c) Compliance to core labor laws (See Appendix 2 of this IEE)	n of mitigation measures responsibility of contractor.	contractor attached as Annexure – 7 in May 2019 report. 2) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled). Attached as Annexure 11 and 12 in May 2019 report.
Occupational Health and Safety	Occupational hazards which can arise during work	1) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE); 2) Develop and implement site-specific health and safety (H&S) plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H&S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;	Construction Contractor	a) Site-specific OHS Plan; b) Equipped first-aid stations; c) Medical insurance coverage for workers; d) Number of accidents; e) Supplies of potable drinking water; f) Clean eating areas where workers are not exposed to hazardous or noxious substances; g) record of H&S orientation trainings h) personal protective equipment; i) % of moving	Cost for implementation of mitigation measures responsibility of contractor.	1) Contractor following Company EHS Policy Site-specific OHS Plan Not prepared by Contractor and is yet to be submitted 2) Contractor following Company EHS Policy-PPE'S provided by Contractor. Proper Documentation has to be maintained by Contractor

		<p>3) All trenches in sandy and mixed sandy soils irrespective of depth shall be protected with safety shoring / strutting to avoid safety risks to workers, public and nearby buildings/structures</p> <p>4) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>5) Provide medical insurance coverage for workers;</p> <p>6) Secure all installations from unauthorized intrusion and accident risks;</p> <p>7) Provide supplies of potable drinking water;</p> <p>8) Provide clean eating areas where workers are not exposed to hazardous or noxious substances</p> <p>9) Provide H&S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p>		<p>equipment outfitted with audible back-up alarms;</p> <p>j) permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>k) Compliance to core labor laws (Appendix 2)</p>		<p>3) Recommended contractor to implement the mitigation measure when such deep trenches are to be executed.</p> <p>4) First aid box is available but not adequate as per standards. The equipped first-aid station not provided.</p> <p>5) Employees Compensation Insurances for Workers (Skilled and unskilled).</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Separate clean eating areas not provided by contractor.</p> <p>9) H&S orientation training for workers not found during the work and proper documentation required need to be done</p> <p>10) Not Complied</p>
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		<p>10) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>11) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>12) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>13) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>14) Disallow worker exposure to noise level greater than 85 dB for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively; and</p>				<p>11) Complied</p> <p>12) Complied</p> <p>13) Not Complied</p> <p>14) Not Complied Recommend the Contractor to use hearing protection measures and not allow worker to work more than 8 hours per day during the work.</p>
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		15) Overall, the contractor should comply with International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety. (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2Boccupational%2Bhealth%2Band%2Bsafety.pdf?MOD=AJPERES)				15) Not complied
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<ol style="list-style-type: none"> 1) Provide protective shorting / strutting hard barricading for all deep excavations in sandy and mixed sandy that may require especially for pipe lines soils (>1m); 2) One week prior to start of work at any section, a joint inspection shall be conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and take necessary precautions for safe conduct of work. 3) identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work; 	Construction Contractor	<ol style="list-style-type: none"> a) Traffic Management Plan; and b) Complaints from sensitive receptors 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Recommended contractor to implement the mitigation measure when such deep trench were executed. 2) Complied 3) Joint inspection conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and should take necessary precautions for safe conduct of work, No such record found at time of inspection 4) Complied 5) Complied

		<p>4) Plan material and waste routes to avoid times of peak-pedestrian activities;</p> <p>5) Liaise with Kundapura TMC in identifying risk areas on route cards/maps;</p> <p>6) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>7) Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads; and</p> <p>8) Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/dd673400488559ae83c4d36a6515bb18/3%2Bcommunity%2Bhealth%2Band%2Bsafety.pdf?MOD=AJPERES).</p>				<p>6) Not complied- Register of Equipment and Vehicles maintenance certificates not found at site during the site visit.</p> <p>7) Work in progress at Halekote OHT and sign boards provided at work site but no pipe execution work was in progress during inspection. Instructed contracting agency to keep necessary sign boards when pipe execution work starts.</p> <p>8) Not Complied.</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation, water pollution from storage and use	1) Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located within reasonable distance of work site;	Construction Contractor	<p>a) Complaints from sensitive receptors;</p> <p>b) Drinking water and sanitation facilities for employees</p>	Cost for implementation of mitigation measures responsibility of contractor.	1) Complied. Instructed contracting agency to provide H&S safety measures about COVID-19 to all worker and employees

	<p>of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>2) Minimize removal of vegetation and disallow cutting of trees;</p> <p>3) Labor camps shall include accommodation for workers/laborers along with other basic amenities such as kitchen, potable water supply, sanitation (toilets, bathrooms, washing areas and water supply for such needs), first aid room as well as garbage collection and disposal facility.</p> <p>4) The roof height of the worker's and labor camp shall not be less than 3 m from floor level to the lowest part of the roof.</p> <p>5) The camps shall be floored with concrete, shall be kept clean, and with proper cross ventilation, and the space provided shall be on the basis of one sq.mt per head or as per the relevant regulation, whichever is higher.</p> <p>6) Fire and electrical safety precautions shall be adhered to.</p> <p>7) Cooking, sanitation and washing areas shall be provided separately.</p> <p>8) The Contractor shall maintain necessary living accommodation and ancillary facilities (including provision of clean fuel to prevent damage to forests and to prevent fuel wood cutting and burning by labor) in functional and hygienic manner.</p> <p>9) The site must be graded and rendered free from depressions such that water does not get stagnant anywhere.</p> <p>10) The entire boundary of the site should be fenced all around with</p>				<p>2) Removal of vegetation minimized by selecting best alignment.</p> <p>3) Labor camp facilities provided by the Contractor needed to be improved.</p> <p>4) Not Complied</p> <p>5) Not Complied</p> <p>6) Fire Extinguisher not provided and electrical cable connections are not safely maintained.</p> <p>7) Separate Cooking areas has not been provided</p> <p>8) Gas Cylinder has been Provided by Contractor</p> <p>9) Complied</p>
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		<p>barbed wire so as to prevent the trespassing of humans and animals.</p> <p>11) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 lpcd); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>12) Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>13) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>14) Recover used oil and lubricants and reuse or remove from the site;</p> <p>15) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>16) Remove all wreckage, rubbish, or temporary structures which are no longer required;</p> <p>17) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>10) Not complied</p> <p>11) Complied</p> <p>12) Not Complied. The toilets are in unhygienic conditions.</p> <p>13) Not Complied</p> <p>14) Complied - reused.</p> <p>15) Complied</p> <p>16) Complied</p> <p>17) Still Construction Phase is in progress.</p>
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Social and Cultural Resources	Risk of archaeological chance finds	<p>18) Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>19) Stop work immediately if any finds are suspected to allow further investigation;</p> <p>20) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in site; and</p> <p>21) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility of contractor.	<p>18) Complied</p> <p>19) Till now no such suspected items found nor recorded</p> <p>20) Till now no such archaeological items recorded</p> <p>21) Till now no such change found nor recorded</p>
Submission of EMP implementation report	Unsatisfactory compliance to EMP	22) Timely submission of monitoring reports including pictures.	Construction contractor	a) Availability and competency of appointed supervisor Monthly report	Cost for implementation of mitigation measures responsibility of contractor.	23) Not complied. Contractor agency not submitting monthly report timely
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	<p>24) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p> <p>25) All excavated roads shall be reinstated to original condition.</p> <p>26) All disrupted utilities restored.</p> <p>27) All affected structures rehabilitated/compensated.</p> <p>28) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these</p>	Construction Contractor	a) PMU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to pre-project conditions; (iii) all construction related structures not relevant to operation and maintenance (O&M) are removed; and (iv) Worksite clean-up is satisfactory.	Cost for implementation of mitigation measures responsibility of contractor.	<p>24) Complied</p> <p>25) Complied</p> <p>26) Complied</p> <p>27) Till now no structures affected</p> <p>28) Complied</p>

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Conclusion:-

Overall The Contractor's compliance with the Environment and Health and safety requirements of the Project is not satisfactory. Contractor is maintaining copy of IEE. **HIV AIDS Awareness Training programme** have to be conducted by the Contractor. Proper Safety precautions at site and **Safety against COVID-19** should be improved by the Contractor. **January, February, March, April, May, June, July and August 2020 site specific EMP Monthly report** with PIU letter has to be submitted from the contracting agency.

Recommendation:-

Key Issues: Following are the key issues which required immediate necessary action / further improvement.

S.No	Monitoring of Mitigation /Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Certificate of Completion (Safeguards Compliance Orientation)	<ul style="list-style-type: none"> Register of Clearances required /status 	1) CRZ Clearance attached as Annexures 2,3 & 4 in June 2019 report 2) Tree cutting permission from tree officer not provided yet.
2.	Posting of Certification of Completion at worksites	<ul style="list-style-type: none"> If any Respective Project Site work completed - Certification of Completion will be provided at worksites on Information board. 	Within 3 day of work Completion
3.	Posting of EMP at worksites.	<ul style="list-style-type: none"> Project Information board should also be in Kannada Language along with contact numbers for grievance Redressal 	Comply with in 15 days
4.	Location of stockpiles;	<ul style="list-style-type: none"> To prepare the Google map of the Locations of identified stockpiles 	Comply with in 5 days
5.	Complaints from sensitive receptors;	<ul style="list-style-type: none"> Complaints/Grievance Redressal Registers should be maintained at each work site. 	Compiled and maintaining grievance registers at site
6.	Heavy equipment and machinery with air pollution control devices;	<ul style="list-style-type: none"> PUC certification for all vehicles/equipment used for/during construction and certification of users at site. 	Comply with in 7 days
7.	Certification that vehicles are compliant with Air Act	<ul style="list-style-type: none"> Register of Equipment and Vehicles maintenance certificates at site 	Comply with in 5 days
8.	Areas for stockpiles, storage of fuels and lubricants and waste materials;	<ul style="list-style-type: none"> Storage of materials like fuel, chemicals, and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water. 	Comply with in 7 days
9.	Number of silt traps installed along trenches leading to water bodies;	<ul style="list-style-type: none"> Prepare list of silt traps installed along trenches 	If applicable in 8 days
10	Records of surface water quality inspection;	<ul style="list-style-type: none"> If any surface water body is Present nearby project area during the construction phase, the contractor will carry out environmental monitoring and testing for Surface water engaging NABL approved laboratory. 	For every 3 months, Complied (Jan to March Monitoring).Annexure 2 in May 2019 report. The Water quality

			monitoring is done in January 2020 and attached as Annexure-5c in Jan 2020 report
11	Use of silencers in noise-producing equipment and sound barriers; and	<ul style="list-style-type: none"> • Only acoustic enclosures fitted DG set will be allowed at the construction site and camp sites. • Maintenance of equipment and machinery (including proper lubrication, tuning and checks for muffler effectiveness) shall be regular and up to the satisfaction of the Engineer to keep noise level under control. • Barricading- Hard Barricade should be provided to protect from unauthorized access of common people 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work.</p>
12	Equivalent day and night time noise levels (Appendix 3)	<ul style="list-style-type: none"> • During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure 2in May 2019 report. And informed contractors to conduct the noise test every 3 months. The Noise level monitoring is done in January 2020 and attached as Annexure-5b in Jan 2020 report</p>
13	Records of Air quality inspection	<ul style="list-style-type: none"> • If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure-2during the work. Informed the contractors to conduct the air quality test every 3 months. The Air quality monitoring is done in January 2020 and attached as Annexure-5a in Jan 2020 report</p>
14	Worksite clear of hazardous wastes such as oil/fuel;	<ul style="list-style-type: none"> • Used oil generated from vehicles/DG set at plant/camp site will be collected in closed containers and sold to MoEF&CC/SPCB approved used oil recyclers. • No solid or hazardous wastes (such as oil contaminated waste) will be dumped in drains or in open areas 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work</p>
15	Solid waste such as removed concrete, wood, packaging materials, empty containers	<ul style="list-style-type: none"> • Burning of wastes will not be allowed. • The contractor will provide garbage bins in the camp and construction site and it will be ensured that these are regularly emptied and waste is disposed off in a hygienic manner as per 	<p>Daily monitoring required at site during the work</p> <p>Comply all the issues during the work</p>

		<ul style="list-style-type: none"> the Solid Waste (Handling and Management) Rules, 2016. Solid waste generated at the construction site, plant/camp site, will be collected in covered wasted bins and segregated as biodegradable (food waste, paper, etc) and non-biodegradable (plastic, polyethylene bag etc.). Polyethylene/plastic wastes will be stored in empty cement bags and should be sent for recycling. Biodegradable (food waste, paper etc.) solid waste will be disposed in a compost pit. 	
16	Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken	<ul style="list-style-type: none"> Maintain copy of Section-wise list of utilities to be shifted / disturbed. 	Partially Complied. Communication letter maintained by PIU attached as Annexures 3&4 in the May 2019 report. Contactor should also have copy with him Section-wise list of utilities to be shifted comply within 7 days.
17	Record to confirm that contingency services are provided and all damaged utilities are restored after the work	<ul style="list-style-type: none"> Register of damaged infrastructure Register of reinstated infrastructure 	Comply with in 3 days
18	PMU/PMDCSC to report in writing the number of trees cut and planted.	<ul style="list-style-type: none"> Maintain separate file with all relevant documents of tree cutting, felling permission and Compensation. 	Complied attached as Annexures 10 in the May 2019 report
19	Number of signage's placed at project location.	<ul style="list-style-type: none"> Maintain the signages placed at project location 	Comply with in 5 days
20	Visual site observations	<ul style="list-style-type: none"> Register of official visiting the site and directions given if any at each site. 	Comply with in 3 days
21	Employment records;	<ul style="list-style-type: none"> Attendance registers of labour at each site. 	Complied and attached as Annexure 7 in the May 2019 report and maintaining the attendance register.
22	Records of sources of materials; and	<ul style="list-style-type: none"> Maintain separate record of quantity of materials used and with all authorized certificates of suppliers 	Comply with in 5 days
23	Compliance to core labor laws (See Appendix 2 of this IEE)	<ul style="list-style-type: none"> Register of payment to the workers 	Comply Immediately
24	Site-specific OHS Plan;	<ul style="list-style-type: none"> Site-specific Occupational Health and Safety Plan 	Comply with in 4 days
25	Equipped first-aid stations;	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. 	Comply with in 7 days

		<ul style="list-style-type: none"> • Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. • The contractor shall identify nearby hospital, which could be used in case of emergency. • First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account. 	
26	Medical insurance coverage for workers;	<ul style="list-style-type: none"> • File of insurance as per 13.1 PCC with contents showing the validity. • Health Camps and Check -up should be conducted for the workers • Necessary HIV/AIDS prevention measures and awareness programme conducted by Contractor. 	Comply with in 12 days
27	Number of accidents;	<ul style="list-style-type: none"> • Accident and Incident register will be maintained by Contractor at each work site. 	Complied. Attached in Annexure 1 in Aug 2019
28	Supplies of potable drinking water;	<ul style="list-style-type: none"> • Potable water supply: Sufficient (minimum 20 liters at any given point of time) and clean (potable) water for drinking shall be placed in the mess/labour camp and at the construction site. 	Complied
29	Clean eating areas where workers are not exposed to hazardous or noxious substances;	<ul style="list-style-type: none"> • Since a common mess is not provided/operated, separate space for cooking and eating shall be provided. 	Comply with in 4 days
30	Record of H&S orientation trainings personal protective equipment;	<ul style="list-style-type: none"> • Weekly and monthly monitoring and safety training programs have to be documented properly including mock drill register • The list of PPEs to be provided. 	Comply with in 7 days
31	Personal protective equipment;	<p>The Contractor shall provide and ensure enforcement with zero tolerance the following:</p> <ul style="list-style-type: none"> • Safety vests will be used by workers whenever on the construction site. • Hard hat or helmets to all workers, supervising staff and inspecting official entering work site, plant area, and engaged in loading/ unloading operations • Protective footwear, protective goggles and nose masks (as required) will be provided to the workers employed. These shall be provided to all workers employed for handling of cement, mortar, concrete and similar dust generating operations shall be provided. • During reinforcement/fabrication operation, safety appliances like: helmets, protective eye wear, gum boots and hand gloves shall be provided to labour/workers at the construction site. • Welder's protective eye-shields will be provided to workers 	Comply with in 5 days

		<ul style="list-style-type: none"> who are engaged in welding works. • Nettings below and on the sides of overhead construction to prevent mishaps due to accidental fall of a workman, tool and/or debris shall be provided. • Proper moving guards will be provided at all moving machines, like motors and pulleys. • All workforces on the construction site shall be provided with identity cards. • High risk areas are to be provided with warning signage. 	
32	Permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.	<ul style="list-style-type: none"> • The contractor should comply with International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety. Guidelines. 	Comply with in 10 days
33	Records of chance finds	<ul style="list-style-type: none"> • Concerned records should be maintained if any chance find transpires. 	Comply immediately as soon as chance find occurs.
34	Availability and competency of appointed supervisor	<ul style="list-style-type: none"> • Certified and Experienced supervisor will be appointed by Contractor 	Contractor must appoint certified and Experienced supervisor.
35	Monthly report	<ul style="list-style-type: none"> • Contractor submitted Monthly report to PIU & PMU 	January, February, March, April, May, June , July and August 2020 Monthly report has to be submitted by contractor
36	Camp has been vacated and restored to pre-project conditions	<ul style="list-style-type: none"> • All construction related structures not relevant to operation and maintenance (O&M) are removed; and • Worksite clean-up must be satisfactory. 	Will be Compiled Within 2 days of Work Completion
37	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> • Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	Partially complied. Implementation of H & S at work site is done. Attached as Annexure 4. H & S plan is to be prepared by contractors Comply with in 10 days




MAHMAD RAPHIYODDIN SHAPHIYODDIN MALIK
Environmental Specialist, EGIS,
Mangalore, KIUWMIP – Tranche 2.

SITE OBSERVATIONS VISITED ON AUG 13th 2020

Instructed contractor agency to dispose all loose earth stored to dumping yard

Material at kodi OHT site were properly stored and bundled

b	First Aid Box at Kodi OHT Site , Kundapura		To have proper first hand treatment at site if any injury occurs to any personnel, First Aid Box as per standards is to be provided at site immediately.
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C	Housekeeping at Kodi OHT Site , Kundapura	 <p>Latitude: 13.630487 Longitude: 74.669884 Elevation: 7.09m Accuracy: 3.2m Time: 08-13-2020 14:30 Note: At Kodi OHT site, kundapura</p> <p>Powered By: MapCam</p>	Instructed contractor agency to remove all material covers, cardboard boxes stored at Kodi OHT Store yard and also steel rods to keep in proper places and to maintain proper housekeeping near store and site
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d	<p>One side of the ClariflocculatorJa pti WTP Site, Kundapurais open and it may endanger the life or may cause injuries to any person, animal by risking to fall inside Clariflocculator.</p>		<p>One side Opening is required with proper channel/Gate/tubular rods.</p>
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e	Electrical Switch Board Panel is without proper Enclosure at WTP Jabti, Kundapura		Electrical Switch Board Panel should be covered with proper box cover which prevents rain water from entering inside the panel box.
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f	Housekeeping at OHT Site,Halekote			<p>Instructed contractor agency maintain proper housekeeping at site and to keep valves and others important materials in store room instead of keeping outside in rain</p>
				

g	OHT Halkote work site	 <p>Latitude: 13.635485 Longitude: 74.704272 Elevation: 9.07m Accuracy: 4.3m Time: 02-27-2020 16:02 Note: OHT hallekote site, kundapura</p> <p>Powered by NoteCam</p>	Hard barricading by sheetmust be provided so that residential staying nearby and animals should not enter into the OHT site during work
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H	Toilet is not properly maintained at OHT Halekote, Kundapura		Toilet facilities at works camp at Halekote must be maintained properly
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I	Store room at kodi beach	 <p>Latitude: 13.62853 Longitude: 74.670233 Accuracy: 2500.0m Time: 08-13-2020 14:27 Note: At Kodi OHT site, kundapur</p> <p>Powered by Note</p>	Instructed contractors to provide proper door for storing OHT and pipe work materials
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ANNEXURE-2

SITE VISIT OBSERVATIONS VISITED ON 25rd May 2020

S.No	Observation		Recommendation	Status
1	Sign Boards at Kodi Beach OHT are not proper		<p>Work in progress Board is to be placed at site, which should be legible</p> <p>Project Information Board also to be in English along with necessary contact numbers for Grievance Redressal.</p>	Complied


2	Barricading, PPEs and water facility to workers at pipe laying work site		<p>Instructed contractors to provide soft barricading at side of the excavation</p> <p>PPEs should be provided at all work site</p> <p>Drinking water facility should be provided at site for worker</p>	Not complied
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3	Registers maintained at site		Contracting Agency has been recommended to maintain all necessary registers asked by time to time.	Complied
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4	Steel bars/iron rods openly laying on roads without any hard barricading or caution sign, which can cause harm		<p>Immediately shift the steel bars from the present location and keep near the Store Room, where space is available. Put proper caution signboards near the storage area.</p> <p>Steel Reinforcement Work should be carried out in safe working location</p>	Partially complied
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5	Housekeeping near store room not maintained		The housekeeping near store room should be done properly	Partially complied
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7	<p>Proper Barricading is not done at valley side and proper platform/place has not been provided for washing or bathing at OHT Site Hallekote</p>		<p>Proper Hard Barricading is to be done completely along with sign boards from behind the labour room to washing area up to last point of working area at backside in order to prevent fall of any of the persons. Proper bathrooms and washing platform need to be provided.</p>	Not complied
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8	Toilet is not properly maintained at OHT Halekote, Kundapura		Toilet facilities at works camp at Halekote must be maintained properly along with provision of Water and electricity connection. The cleanliness should be maintained.	Not complied
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9	Found damaged cable cover used for the trial run checking of rotating mechanism of Clariflocculator.		It should be replaced with another cable of required specifications and with no damage	Not complied
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ANNEXURE-3

STATUS OF SITE OBSERVATIONS VISITED ON 23rd June 2020

S.No	Observation		Recommendation	Status
1	Sign Boards at Kodi Beach OHT are not proper	 <p>Latitude: 13.630562 Longitude: 74.669485 Elevation: 10.89m Accuracy: 4.3m Time: 06-23-2020 13:59 Note: At Kodi beach kundapur...</p>	Project Information Board provided in English and Kannada. And instructed to contracting agency to put same in Halekote OHT site.	Partially complied

2	Material Store room at Kodi OHT site	 <p>Latitude: 13.630666 Longitude: 74.669713 Elevation: 5.89m Accuracy: 3.2m Time: 06-23-2020 14:02 Note: At Kodi beach kundapur OHT site</p>	Instructed contractors to provide proper sheet door for store room to avoid injury to workers during opening the door	Not complied
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3	DI materials stored at kodi OHT site	 <p>Latitude: 13.630553 Longitude: 74.670016 Elevation: 5.27m Accuracy: 3.2m Time: 06-23-2020 14:03 Note: At Kodi beach kundapuram, Nellore</p> <p>Powered by NoteCam</p>	Instructed contracting agency to place material on wooden platform and to cover the material with tarpaulin to avoid the rusting	Not complied
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4	HDPE materials stored at kodi OHT site		Instructed contracting agency to place properly HDPE role one on one, to provide sign board and to soft barricade the hdpe surrounding area	Not complied
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5	Housekeeping near store room not maintained		The housekeeping near store room should be done properly	Not complied
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6	<p>Proper Barricading is not done at valley side and proper platform/place has not been provided for washing or bathing at OHT Site Hallekote</p>		<p>Proper Hard Barricading is to be done completely along with sign boards from behind the labour room to washing area up to last point of working area at backside in order to prevent fall of any of the persons. Proper bathrooms and washing platform need to be provided.</p>	<p>Not complied</p>
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7	Toilet is not properly maintained at OHT Halekote, Kundapura	 <p>Latitude: 13.638331 Longitude: 74.703162 Accuracy: 2100.0m Time: 06-23-2020 14:22 Note: At halekote kundapura OHT site</p> <p>Powered by NoteCam</p>	Toilet facilities at works camp at Halekote must be maintained properly along with provision of Water and electricity connection. The cleanliness should be maintained.	Not complied
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8	Scrape materials stored at Halekote area.	 <p>Latitude: 13.635577 Longitude: 74.704435 Elevation: 10.4m Accuracy: 3.2m Time: 06-23-2020 14:23 Note: At halekote kundapura OHT site</p> <p>Latitude: 13.6354 Longitude: 74.704139 Elevation: 17.33m Accuracy: 3.2m Time: 06-23-2020 14:27 Note: At halekote kundapura OHT site</p>	Instructed contracting agency to remove all scrape materials and sand, aggregates from OHT site.	Not complied
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Monthly Environmental Monitoring Report

Project Number: 43253-027
August 2020

IND: Karnataka Integrated Urban Water
Management Investment Program (Tranche 2) –
Replacement of Old Sewerage Pumping Mains for
Mangalore City

Package No. 02MNG02

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur, and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) project management capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an assessment sewerage projects within the project area, i.e., Mangalore.

2. Existing Sewerage System in Mangalore

The first sewerage system in Mangalore was built in 1961 and was designed for an ultimate flow of 27.04 million liters per day (MLD) estimated for a design population of 200,000 of the year 1991. This scheme was implemented by Public Health Department. The total area covered by the sewerage network is about 25 km² with two sewerage districts and seven zones. Total length of sewerage network constructed was about 250 km with pipe diameter varying from 150mm to 600mm with 7,000 manholes

and eight wet wells-cum-pump houses. In 1974, Karnataka Urban Water Supply and Sewerage Board (KUWSDB) extended the sewerage networks within the existing 25 km² area by another 245 km with 8,000 units of manholes.

The second scheme was established in 2003 under the ADB funded Karnataka Urban Development and Coastal Environmental Management Project (KUDCEMP) and commissioned in 2007-2008 and the sewerage system was upgraded for an ultimate flow of 88.75 MLD for a design population of 624,432.

Sewerage network extended to adjoining areas of old city and to other areas in Mangalore City Corporation (MCC) boundary covering 50.60 km². Overall 60% of Mangalore, 75.60 km², is covered with sewerage systems.

Mangalore city is divided into two parts as Surathkal and Mangalore, further subdivided into seven sewerage districts. Each district has one STP. The total length of sewerage network is about 360 km including 14,875 Manholes with pipe diameter varying from 150 mm to 900 mm, and 22 wetwells.

North District consists of 10 zones (complete Surathkal area) covers about 25 km². West district consists of 6 zones (city center of Mangalore) covers 30.82 km². South district consists of 3 zones (Jeppinamogaru, Bajal, Padil) covers 19.66 km². East district consists of 1 zone (Pachanady, Bondel and Shakatinagara) covers 18.78 km².

Table 1: Salient Features of Existing Sewerage System in Mangalore

Location	12°87'N Latitude 74°88'E Longitude
Area	132.45 km ²
Population 2011	488,487
Number of households	115,036
Road length	1,134 km
Projected population for the year 2016	554,183
Projected population for the year 2031	756,903
Projected population for the year 2046	1,033,778
Existing Underground Drainage (1961 Scheme) by Public Health Department	
Underground drainage Network	250 km (diameter varying from 150 mm to 750 mm) Sewers of stoneware pipes
Total Number of Manholes	8000
Total Number of Wet Wells	8
Total area covered	25 km ²
Designed Population	2,00,000 for the year 1991
Extension of Underground drainage system (1974) by KUWSDB and MCC	
Underground drainage Network	245 km
Total Number of Manholes	8000
Underground drainage system (2005) under KUDCEMP by KUIDFC	
No. of Sewerage Catchments	24
Underground drainage Network	360 km - diameter varying from 150 mm to 900 mm
Total Number of Manholes	14,815
Total Number of Wet Wells	22
Total Area Covered	70%
Designed Population	624,432
Capacity and Technology of STP	
• STP at Kavour	43.5 MLD UASB
• STP at Pachanady	8.75 MLD ASP
• STP at Bajal	20 MLD ASP
• STP at Surathkal	16 MLD ASP
Total Number of House ServiceConnections	45,000

ASP = activated sludge process, km = kilometer, KUDCEMP = Karnataka Urban Development and Coastal Environment Management Project, KUIDFC = Karnataka Urban Infrastructure Development and Finance Corporation, KUWSDB=Karnataka Urban Water Supply and Drainage Board, MCC = Mangalore City Corporation, mm = millimeter, MLD = million liters per day, STP = sewage treatment plant, km² = square kilometer, UASB = up-flow anaerobic sludge blanket.

3. The proposed subproject:

Under this subproject, it is proposed to replace existing sewage pumping mains, which are damaged, undersized and/or choked up in sewerage zones 3, 4, 6 and 7.

The subproject include providing following sewage mains:

- (i) 7.65 kilometer (km) length 1,100 millimeter (mm) diameter sewer pumping main from Kudroli wet well no.-3 to Kavour sewage treatment plant (STP);
- (ii) 0.95 km length 900 mm diameter main from Kandathpalli wet well no.-4 to Kudroli wet well no.3;
- (iii) 1.7 km length 450 mm diameter main from Mulihitilu wet well no.-6 to Ridge Manhole near Morgans gate; and
- (iv) 1.1 km length 450 mm diameter main from JeppuBappal wet well no.7 to ridge manhole near Yekkur, inside old sewage treatment plant (STP).

includes of replacement of sewerage pumping mains from wet wells to the STP. Table 2 shows the nature and size of the various components of the subproject, based on the detailed engineering design of the subproject. Figure 1 shows the location of four proposed pumping main sections in Mangalore City.

Figure 1 Key Plan Showing Pumping Main Alignments

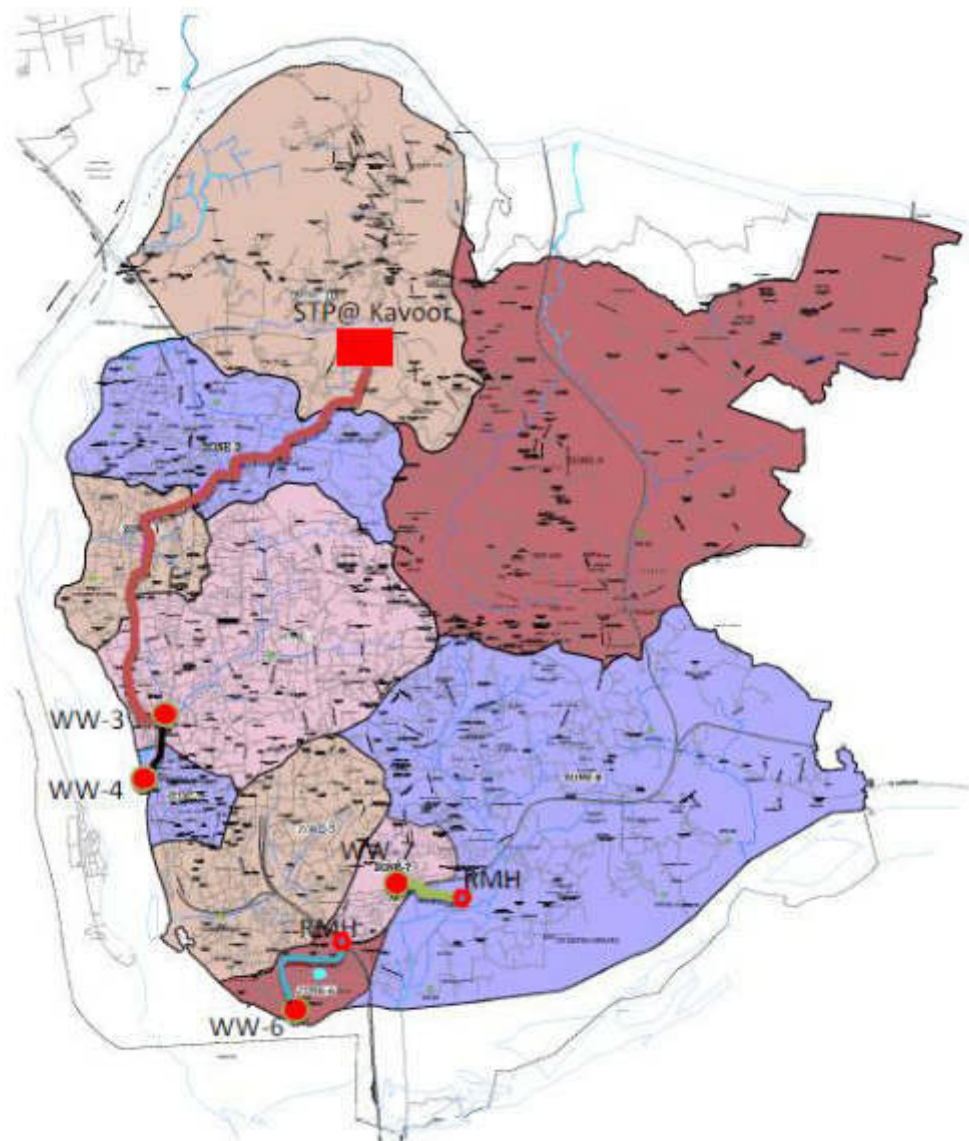


Table 2: Proposed Subprojectand Components

Infrastructure	Function	Description	Location
Pumping Mains	Convey the collected sewage from wet well to the STP	<p>Replacement of old pumping main of total length 11.4 km with new mains of ductile iron pipes at following section:</p> <ul style="list-style-type: none"> (i) From Kudroli wet well 3 to Kavoor STP: 7.65 km length and 1,100 mm diameter (ii) From Kandathpalli wet well 4 to Kudroli wet well 3: 0.95 km length and 900 mm diameter (iii) From Mulihitlu wet well 6 to Ridge manhole near Morgans gate: 1.7 km length and 450 mm diameter (iv) From Jeppu Bappal wet well 7 to Ridge manhole near Yekkur, inside old STP: 1.1 km length and 450 mm diameter 	<p>New pumping mains will be laid along the public roads – in the vacant earthen shoulder where it is available, or in the tarmac portion, where there is no vacant land. New pipeline will be mostly laid adjacent to the existing ones which are currently in operation:</p> <p>Road width varies from 3.5 m to 8 m. List of roads and alignment details of each pipeline section is provided in Table 11.</p>

km = kilometer, mm = millimeter, STP = sewage treatment plant.

4. Environmental Management Plan

An environmental management plan (EMP) is included as part of this IEE, which includes: (i) mitigation measures for environmental impacts during implementation; (ii) an environmental monitoring program, and the responsible entities for mitigating, monitoring, and reporting; (iii) public consultation and information disclosure; and (iv) a grievance redress mechanism. A number of impacts and their significance have already been reduced by amending the designs.

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Replacement of Old Sewerage Pumping Mains for Mangalore City	Name of the Contractor: DRS Infra Tech Pvt, Ltd.,
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Mangalore	Name of SE/EE/AE Of concerned division PIU :- AE - Mr. Shiv Kumar
Date of monitoring: 20/08/2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr. Madukar

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction– Mangalore

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
Construction Impacts	<ul style="list-style-type: none"> Impacts due to excess excavated earth, excess construction materials, solid waste etc.; and Occupational hazards which can occur to workers and public during work. 	<p>Prepare and submit a Method Statement for pumping main pipeline works in a table format with appended site layout map and cover the following:</p> <ol style="list-style-type: none"> Work description; No. of workers (skilled and unskilled); Details of Plant, equipment and machinery, vehicles; Work duration (total, and activity-wise, for example for pipe laying, from excavation to road resurfacing/testing); Personal Protection Equipment (PPE) (helmet, gloves, boots, etc.) details for each type of work; Details of materials at each site (type and quantity); 	Construction Contractor	<ul style="list-style-type: none"> Site inspection and record verification; - Done. Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work - Done Site specific Occupational Health and Safety (OHS) plan; Spoil and waste management plan; and Complaints from sensitive receptors and public. 	Good construction practice to be followed by contractor – no additional costs	<ol style="list-style-type: none"> Maintaining daily work records Attached in Jan 2020 annexure 5 a & b Complied. Attached in Sep 2019 annexure 3 Complied and PPEs are provided to workers on site. Attached in annexure Sep 2019 1.v Contractor maintained registers for

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		<p>5. Risks/hazards associated with the work (for example, Trench excavation will have risks such as trench collapse, persons/vehicles falling into trench, structural risk to nearby buildings, damage to buildings, infrastructure etc.);</p> <p>6. Construction waste/debris generated (details and quantity);</p> <p>7. Detail the sequence of work process (step-by- step) including specific details of each work;</p> <p>8. Contractor's supervision and management arrangements for the work; Emergency: Designate (i) Responsible person on site, and (ii) first aider; and (iii) Typical site layout plan including pipe trenching, placement of material, excavated earth, barricading, etc.</p> <p>9. The pumping main lines are to be laid along the roads, Roads are provided with side drains to carry rain water. The excavated soil, placed along the trench may get disturbed due to wind, rain water and the movement of</p>				<p>pumping main sites and recommended to maintain for each site</p> <p>5. Building and infrastructure were not found near excavation area. And instructed contracting agency to put hard barricades.</p> <p>6. Contractor maintained register for damaged infrastructure. Attached as Annexure-11 in May - 2019 report. Recommended contracting agency to Updated work record monthly</p> <p>7. Not complied. Work plan has to be prepared.</p> <p>8. Not Complied. First aider not</p>

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		<p>workers, vehicles and pedestrians, and spill onto road way – disturbing road users, creating dust, road safety issues, etc., and also into nearby open drains.</p> <p>The following should be included in the site layout plan:</p> <ul style="list-style-type: none"> a) Provide barricading/security personnel at the site to prevent entry/trespassing of pedestrian/vehicles into the work zone; b) Location of temporary stockpiles and provision of bunds; c) Separation of stockpiles areas with workers/vehicle movement paths to avoid disturbing the stockpiled soil; d) Wetting of soil to arrest dust generation by sprinkling water; and e) Waste/surplus soil utilization and disposal plan – indicate expected duration of temporary stockpiling along the trench at each site and identify final surplus soil utilization/disposal site in consultation with program implementation unit (PIU). 				<p>provided.</p> <p>9. Typical site layout plan not prepared</p> <p>a) Barricading and security personals are provided on working site.</p> <p>b) Contractor is dumping surplus soil in the Pachanady Solid waste management with permission of PIU.</p> <p>c) Contractor is dumping surplus soil in the Pachanady Solid waste management.</p> <p>d) Complied.</p> <p>e) Site layout plan Not prepared as per given mitigation Measures.</p>

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Utilities	Disturbance/ damage to existing utilities on the sites (Telephone lines, electric poles and wires, water lines within proposed project sites)	<p>10. At least two-weeks prior to start of work at any section, Identify utilities that will be required to be temporarily disturbed / shifted for the construction work;</p> <p>11. Liaise with the respective utility department, provide prior information to the affected public and restore the utilities as soon as the work is complete</p> <p>12. Provide contingency services where required (temporary diversion of drains, provision of water supply by tankers, etc.,)</p>	Construction Contractor and PIU	<p>Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken</p> <p>Record to confirm that contingency services are provided and all damaged utilities are restored after the work</p>	Part of project cost	<p>10 Complied-Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>11 Proper record of restoration of the utilities and letter of communication with Different departments and Public is available and Copy should be maintained by Contractor. Attached as Annexures-2, 3, 4 & 5 in May - 2019 report</p> <p>12 Recommended contractors to provide diversion of drains and provision of water tanker whenever and wherever</p>

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		<p>13. Coordinate with the respective department and ensure that electricity and telephone services are restored quickly</p> <p>14. Reconstruct the damaged compound walls, culverts and drains immediately after the completion of pipeline work in that particular section</p>				<p>required on site.</p> <p>13 Instructed contractors to restore such damages in same condition as before.</p> <p>14 Instructed contractors to restore such damages in same condition as before.</p> <p>And List of identified damaged compound walls, culverts and drains for reconstruction have to be maintained. Record of before and after Condition also to be maintained at site by contractor.</p>
Construction work camps, stockpile areas, storage areas, and disposal areas	Disruption to traffic flow and sensitive areas and receptors	<p>15. Prioritize areas within or nearest possible vacant space in the subproject location;</p> <p>16. Avoid locating construction work camps close (100 m away) to residential areas;</p>	Construction Contractor	<p>List of selected sites for construction work camp, storage area and disposal area.</p> <p>Complaints from sensitive receptors</p>	Good construction practice to be followed by contractor –no additional costs	<p>15 Compiled</p> <p>16 Compiled – Advised contractor to mark dumping yard location on google map which is complied.</p>

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		<p>17. Do not consider residential areas; for stockpiling the waste/surplus soil; and</p> <p>18. Material stockpiles shall be protected by bunds during the monsoon to arrest the silt laden runoff into drains.</p>				<p>Attached in Sep 2019annexure 4</p> <p>17 Complied- Contractor Dumping surplus soil in the Pachanady Solid waste management treatment plant. Location is marked on Google map. Attached in Sep 2019 annexure 4</p> <p>18 Instructed contracting agency, if any stockpiles have been stored temporarily in working site must be provided by bunds or dumped in the stock yard. Attached in Jan 2020 in annexure 4</p>
Source of	Extraction of materials	19. Contractor should obtain	Construction	Check Sources and	Good construction	19 Contractor

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construction materials	can disrupt natural land contours and vegetation resulting in accelerated erosion, disturbance in natural drainage patterns, ponding and water logging, and water pollution	<p>material from existing mines approved/licensed by Mines and Geology Department/ Revenue Department only;</p> <p>20. Verify suitability of all material sources and obtain approval of implementing agency;</p> <p>21. No new quarry sites shall be developed for the subproject purpose; and</p> <p>22. Submit a monthly statement of construction material procured indicating material type, source and quantity.</p>	Contractor	approval	practice to be followed by contractor –no additional costs	<p>obtained material from authorised agency but no supporting documents maintained by Contractor.</p> <p>20 Contractor has been recommended to maintain the Proper Documentation.</p> <p>21 Complied - No new quarry sites developed by contractor for this project</p> <p>22 Complied</p>
Air quality	Dust and emissions from construction activity may de-grade the air quality	<p>23. Consult with PIU on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>24. Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>25. Bring materials (aggregates, sand, etc. gravel) as and when required;</p> <p>26. Use tarpaulins to cover sand and</p>	Construction Contractor	Site observations Informal Ambient air quality monitoring (4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months, parameters - SPM, RSPM, SOx, NOx)	<p>Good construction practice to be followed by contractor</p> <p>Contractor's cost – air quality monitoring (4 locations x 9 samples in construction x 5000 = INR 1,80,000)</p>	<p>23 Complied- Recommended contractor to maintain the copy of Document.</p> <p>24 No such exposed soil and stockpiled were found but instructed contracting</p>

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		<p>other loose material when transported by vehicles;</p> <p>27. Stockpile sand and other loose material only in barricaded area and protect/cover by tarpaulins to avoid dust generation</p> <p>28. Clean wheels and undercarriage of vehicles prior to leaving construction site;</p> <p>29. Fit all heavy equipment and machinery with air pollution control devices which are operating correctly; ensure valid Pollution Under Control (PUC) Certificates for all vehicles and equipment used in the construction activity; and</p>				<p>agency must spray water wherever necessary.</p> <p>25 Complied</p> <p>26 Instructed contractors to cover sand, gravel and aggregates with tarpaulins to avoid flow during rainy season</p> <p>27 Complied. Stockpile, sand and other loose material are kept in barricaded areas.</p> <p>28 Complied</p> <p>29 Not Complied.</p> <p>Recommended to Contractor to maintain Pollution under Control (PUC) Certificates for all vehicles and equipments used in the construction.</p>

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		30. Carry out air quality monitoring.				30 Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter.
Noise Level	High noisy construction activities may have adverse impacts on sensitive receptors and structures	<p>31. Plan activities in consultation with the PIU so that activities with the greatest potential to generate noise (road cutting activity) are conducted during periods of the day which will result in least disturbance;</p> <p>32. Construction work shall be limited to day light hours (6 AM to 6 PM) for all the works located within the town; Provide prior information to the local public about the work schedule;</p> <p>33. Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiselling;</p> <p>34. Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive</p>	Construction Contractor	<p>Complaints from sensitive receptors</p> <p>Site observations</p> <p>Ambient noise monitoring (day and night time / 24 hours monitoring at 4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months)</p>	<p>Good construction practice to be followed by contractor</p> <p>Contractor's cost – noise level monitoring (4 locations x 9 samples in construction x 2500 = ₹90.000)</p>	<p>31 Complied.</p> <p>32 Complied.</p> <p>33 Till now such buildings are not found and will be complied when such sensitive buildings observed.</p> <p>34 However; noise will be minimized by using construction</p>

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		receptor; and 35. Maintain maximum sound levels not exceeding 80 decibels (dB) when measured at a distance of 10 m or more from the vehicles				equipment by using vehicle silencers. Recommended to fit jackhammers with noise-reducing mufflers, and portable street barriers at sensitive receptors. 35 Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter
Water Quality	Impacts on surface drainage and water quality due to contaminated runoff from construction areas in monsoon	36. Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 37. Stockpiles shall be provided with temporary bunds;	Construction Contractor	Site observations	Good construction practice to be followed by contractor –no additional costs	36 Contractor not carried out Major Construction works during monsoon season. Stockpiling of earth fill not observed during site visit. 37 Work in progress and no such

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		<p>38. Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Implementing Agency on designated disposal areas;</p> <p>39. Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>40. Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund;</p> <p>41. Dispose any wastes generated by construction activities in designated sites; and,</p> <p>42. Ensure that there is no spill over of excavated earth, construction</p>				<p>stockpiles found on work site.</p> <p>38 Complied- Contractor Dumping surplus soil in the Pachanady Solid waste management treatment plant</p> <p>39 NA - Surface water bodies not observed along the Project alignment.</p> <p>40 Complied. Contractor not using fuels and lubricants in bulk. Whenever required fuel used on particular day onsite. But instructed contracting agency to provide storage yard if fuel stored in bulk.</p> <p>41 Complied</p> <p>Followed by</p>

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		materials like cement concrete into the drain near wet well no. 3; also ensure that the drain flow is not blocked / disturbed during the work				contracting agency 42 Complied Followed by contracting agency
Landscape and aesthetics	Impacts on landscape and aesthetics due to construction activity	<p>43. Manage surplus soil, construction debris and solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>44. Coordinate with PIU / MCC for beneficial uses of road debris and surplus soils in on-going construction works or for temporary storage for future use or disposal in landfill</p> <p>45. In unavoidable case of disposal, debris shall be disposed at landfill site or site approved by PIU / MCC; waste shall not be disposed in the forest areas and in or near water bodies/ rivers;</p> <p>46. Prepare and implement Waste Management Plan – it should present how the surplus waste generated will temporarily stocked at the site, transported, reused and disposed properly;</p>	Construction Contractor	Work site inspection Complaints from public	Good construction practice to be followed by contractor – no additional costs	<p>43 Compiled</p> <p>44 Compiled-disposed in the Pachanady Solid waste management treatment plant</p> <p>45 No such activities observed at the time of inspection</p> <p>46 Partially Complied-Waste Management Plan prepared by contractor needs to be updated.</p>

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		<p>47. Surplus soil and debris from work site shall be removed / cleared at the end of each day of work; there shall be no stock piling of debris / surplus soil at the site</p> <p>48. Recover used oil and lubricants and reuse or remove from the sites;</p> <p>49. Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>50. Request program implementation unit (PIU)/ project management, design and construction supervision consultant (PMDSCS) to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>				<p>47 Complied</p> <p>Followed by contracting agency</p> <p>48 Complied</p> <p>49 Complied</p> <p>50 Construction phase work is in progress.</p>
Construction works	Hindrance to traffic movement / accessibility	<p>51. Plan pipeline work in consultation with the traffic police; Prepare a Traffic Management Plan – a template is provided for reference at Appendix 8.</p> <p>52. Strictly follow the pipe laying method presented in Table 13 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time</p> <p>53. Provide for immediate consolidation of backfilling material to desired compaction –</p>	Construction Contractor	Work Program Review	Good construction practice to be followed	<p>51 Traffic Management Plan prepared by Contractor and it needs to be updated again.</p> <p>52 Complied</p> <p>53 Complied.</p>

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		<p>this will allow immediate road restoration and therefore will minimise disturbance to the traffic movement;</p> <p>54. Do not close the road completely, ensure that work is conducted onto edge of the road; allow traffic to move on one line;</p> <p>55. In narrow roads with considerable traffic (Jama Masjid- Road, Ashok Nagara road, and old port / Kandathapalli Road), work shall be undertaken between two intersections and diverting traffic in that section to a parallel road, so that through traffic is not blocked fully.</p> <p>56. In some sections on Jama Masjid- Road, Old Port Road and Kandathapalli Road there are no parallel roads to divert traffic; in those sections work shall be conducted in the nights or in low traffic hours in day time; but in case of day-time work traffic shall not be blocked for more than 2-3 hours at a stretch; prior information shall be provided to public – a week before and a day before work, about the schedule of the work and temporary road closure; proper signage shall be provided</p> <p>57. Maintain safe pedestrian access at all times to the houses along the work site</p> <p>58. At all work sites public information/caution boards shall</p>				<p>54 Complied.</p> <p>55 Complied. (Attached in june 2019)</p> <p>56 Complied.</p> <p>And work is carried out in low traffic hours in day time and; prior information given about the schedule of the work.</p> <p>57 Complied (Attached in June 2019) and</p> <p>58 Partially complied instructed to provide Caution board at work site. Entry restriction</p>

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		<p>be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints.</p> <p>59. In densely populated areas like market place or layouts, roads with heavy traffics additional care has to be taken.</p> <p>60. Hard barricades should be mandatorily provided along with caution board and traffic diversion boards. Some of the densely populated area identified in project area are Old Port Road, Jeppubappal to Suterpete</p>				<p>information; competent official's name and contact for public complaints provided. Recommended all sign board must be Retro reflective (Attached in Sep 2019 annexure 4 g, h, i, j, k and l)</p> <p>59 Respective Engineers present on the site for continuous monitoring</p> <p>60 Traffic diversion boards, hard barricading and Caution boards provided. Recommended all sign board must be Retro reflective (Attached in Sep 2019 annexure 4 g, h, i, j, k and l)</p>

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Nuisance/ disturbance to sensitive areas	Schools, hospitals and religious places) due construction work in the proximity (within 250 m of such place)	<p>61. No material should be stocked in this area; material shall be brought to the site as and when required</p> <p>62. Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles</p> <p>63. No work should be conducted near the religious places during religious congregations</p> <p>64. Material transport to the site should be arranged considering school timings; material should be in place before school starts;</p> <p>65. Notify concerned schools, hospitals, etc. 2 weeks prior to the work; conduct a 30 minutes awareness program at on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites.</p>	Construction Contractor	<p>Complaints from sensitive receptors</p> <p>Work program</p>	Good construction practice to be followed by contractor – no additional costs	<p>61 Complied</p> <p>Followed by contracting agency</p> <p>62 Complied</p> <p>Followed by contracting agency</p> <p>63 Followed by contracting agency</p> <p>64 Complied</p> <p>Followed by contracting agency</p> <p>65 Complied – Recommended to maintain documentary Evidence</p>

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Socio-Economic-Livelihood Impediment of access to houses and business	Impediment of access to houses and business	66. Leave space for access between mounds of excavated soil, where required	Construction Contractor	<ul style="list-style-type: none"> Number of walkways, wooden planks and foot bridges; Complaints from public; Spoil Management Plan; and Traffic Management plan. 	Good construction practice to be followed by contractor – no additional costs	66 Complied.
		67. Provide wooden planks/footbridges for pedestrians and metal sheets for vehicles to allow access across trenches to premises where required.				67 Complied – access provided by contractor. (Attached in june 2019)
		68. Consult affected business people to inform them in advance when work will occur				68 Complied - Public Consultation were conducted for the affected people to provide prior information about the work.
		69. Address livelihood issues, if any; implement the Resettlement Plan to address these issues				69 Complied implementation Resettlement Plan to address these issues in progress (Attached in June 2019)
		70. Provide sign/caution/warning boards at work site indicating work schedule and traffic information; prevent public entry into work sites through barricading and security; and				70 Complied -

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		<p>71. Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p> <p>72. Prepare a Traffic Management Plan – a template is provided for reference at Appendix 8. The site-specific traffic management plan should be part of the Construction Management Plan.</p>				<p>Traffic diversion boards, Hard barricading and Caution boards provided(Attached in June 2019) Work schedule not provided.</p> <p>71 Complied. Recommended all project information board and sign board must be Retro reflective (Attached in annexure 4 g, h, i, j, k and l)</p> <p>72 Site-Specific Traffic Management Plan Prepared by contractor is not adequate and to get it updated again. Recommended to comply (Attached in June 2019)</p>
Socio-Economic Employment	Impact on local employment generation	73. Employ local labour force to the maximum extent, if manpower is available	Construction Contractor	Employment Records Compliance to labour laws	NA	73 Complied
Occupational Health and Safety	Workers occupational health and safety	74. Develop and implement site-specific Health and Safety (H&S) Plan which will include measures such as: (a) excluding public from the	Construction Contractor	Site specific OHSEquipped first aid station.	Good construction practice to be followed by contractor – no	74 Complied Site-specific Health and Safety (H&S) Plan prepared by

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		<p>site; (b) ensuring all workers are provided with and use Personal Protective Equipment (PPE); (c) H&S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>75. All trenches in sandy and mixed sandy soils irrespective of depth and trenches deeper than 2m (or less, if designed by the engineer) in other soils shall be protected against collapse to avoid safety risks to workers, public and nearby buildings/structures; provision has been made for well point type dewatering, sheet piling for shoring and strutting etc., precaution shall be taken at the time of execution;</p> <p>76. Take all necessary precaution during isolation and blocking of existing pumping main and connecting the new main to the existing system. Skilled supervision, appropriate apparatus and PPEs must be used;</p> <p>77. Extreme care shall be taken while working on existing sewer lines/ manholes, where they are required to be shifted, to safeguard the workers against the gaseous emissions and</p>		<p>Potable water supply and clean eating area.</p> <p>PPE and medical insurance</p>	additional costs	<p>contractor. Proper implementation required.</p> <p>75 Not Complied.</p> <p>76 Complied. PPEs like nose masks, oxygen masks for emergency, ear plugs and Hand gloves are provided. (Attached Sep 2019 in annexure 1.v)</p> <p>77 PPEs like nose masks, oxygen masks for emergency. ear plugs and Hand gloves are</p>

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		hazardous working conditions				provided
		78. Create awareness among all workers, supervisors and site engineers on potential hazard conditions and safety risks in working with existing/old sewer lines; working conditions may be hazardous with harmful gaseous emissions (hydrogen sulphide, carbon monoxide, methane, etc.) and oxygen deficiency;				78 Complied
		79. Provide all necessary personnel protection equipment; including oxygen masks for emergency use;				79 Oxygen masks for emergency not provided PPEs are provided
		80. Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;				80 Not Complied
		81. Provide medical insurance coverage for workers;				81 Employees Compensation Insurances taken for 40 Unskilled and for 10 semiskilled workers
		82. Secure all installations from unauthorized intrusion and				

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		<p>accident risks;</p> <p>83. Provide supplies of potable drinking water;</p> <p>84. Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>85. Provide H & S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>86. Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>87. Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>88. Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>89. Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>90. Signage shall be in accordance</p>				<p>82 Complied.</p> <p>83 Complied.</p> <p>84 Specific eating area not provided.</p> <p>85 Safety and Tool box meeting conducted. (Attached in Sep 2019 annexure 1.u)</p> <p>86 Not Complied</p> <p>87 Complied.</p> <p>88 Compiled</p> <p>89 Not Complied.</p>

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		<p>with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>91. Disallow worker exposure to noise level greater than 85 dB for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively; and</p> <p>92. Overall, the contractor should comply with IFC EHS Guidelines on Occupational Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2BOccupational%2BHealth%2BAnd%2BSafety.pdf?MOD=AJPERES).</p>				<p>90 Signage are Provided but not in accordance with international standards</p> <p>91. Duration of working hours- 8 hours per day. Hearing protection is provided by contractor. (Attached in Sep 2019 annexure 1.v)</p> <p>92. Not Complied</p>
Community Health and Safety	Danger due to deep excavations, hindrance to traffic and chances of accident,	93. All trenches in sandy and mixed sandy soils irrespective of depth, and trenches deeper than 2m (or less, if desired by engineer) shall be protected against collapse to avoid safety risks to workers, public and nearby buildings/structures; provision has been made for well point type dewatering, sheet piling for shoring and strutting etc., precaution shall be taken at the time of execution;	Construction Contractor	<ul style="list-style-type: none"> Traffic Management Plan Complaints from public 	Good construction practice to be followed by contractor – no additional costs	<p>93 Traffic Management Plan submitted by contractor is not sufficient and it needs updation.</p> <p>No such deep trench found during site visit but instructed contracting agency to Provide sheet piling</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>94. Plan material and waste routes to avoid times of peak-pedestrian activities;</p> <p>95. One week prior to start of work at any section, a joint inspection shall be conducted along with PIU and MCC to identify risk areas and buildings and take necessary precautions for safe conduct of work;</p> <p>96. Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>97. Provide road signs and flag persons to warn of dangerous conditions, for all the sites along the roads; and</p> <p>98. Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/dd673400488559ae83c4d36a6515bb18/3%2BCommunity%2Bhealth%2Band%2B</p>				<p>for shoring and strutting if depth is more than 2m.</p> <p>94 Partially Complied – waste management plan not prepared</p> <p>95 Complied. Joint inspection conducted along with PIU and MCC to identify risk areas and buildings to take necessary precautions but not maintained record of joint inspection.</p> <p>96 Partially Complied</p> <p>97 Complied Followed by contracting agency</p> <p>98 Contractor Not Complied with IFC EHS Guidelines Community Health and Safety Recommended and attached as</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
Worker Camps	Temporary worker camps	<p>Safety.pdf?MOD=AJPERES).</p> <p>99 The contractor should operate the temporary worker camps in compliance with IFC EHS Guidelines specific to workers accommodation (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/publications/publications_gpn_workers_accommodation), including the following:</p> <p>100 Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located within reasonable distance of work site;</p> <p>101 Minimize removal of vegetation and disallow cutting of trees;</p> <p>102 Labour camps shall include accommodation for workers/labourers along with other basic amenities such as kitchen, potable water supply, sanitation (toilets, bathrooms, washing areas and water supply for such needs), first aid room as well as garbage collection and disposal facility.</p> <p>103 The roof height of the worker's and labour camp shall not be less than 3 m from floor level to the lowest part of the roof.</p> <p>104 The camps shall be floored with concrete, shall be kept clean, and with proper cross ventilation, and the space provided shall be on the basis of one sq.mt per</p>	Construction Contractor	<p>List of selected sites. Written consent of land owner</p> <p>Waste Management plan</p>	Good construction practice to be followed by contractor – no additional costs	<p>99. Contractor Not operating the temporary worker camps in compliance with IFC EHS Guidelines specific to workers accommodation. And instructed to provide awareness to all workers to follow H& S measures of COVID-19 on site and in their camps</p> <p>100 Complied.</p> <p>101 Complied.</p> <p>102 Proper Kitchen, bathrooms garbage room yet to be provided.</p> <p>103 Complied.</p> <p>104 Not Complied</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>head or as per the relevant regulation, whichever is higher.</p> <p>105 Fire and electrical safety pre-cautions shall be adhered to.</p> <p>106 Cooking, sanitation and washing areas shall be provided separately.</p> <p>107 The Contractor shall maintain necessary living accommodation and ancillary facilities (including provision of clean fuel to prevent damage to forests and to prevent fuel wood cutting and burning by labor) in functional and hygienic manner.</p> <p>108 The site must be graded and rendered free from depressions such that water does not get stagnant anywhere.</p> <p>109 The entire boundary of the site should be fenced all around with barbed wire so as to prevent the trespassing of humans and animals.</p> <p>110 Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 lpcd); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>111 Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less</p>				<p>105. Not Complied.</p> <p>106. Not Complied Separate Cooking area yet to be provided by Contractor. Washing area is not proper as per the stipulated norms.</p> <p>107. Partially Complied</p> <p>108. Such depressions not found during site visit</p> <p>109. Not complied.</p> <p>110. Complied.</p> <p>111. Complied.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Monitoring of Mitigation	Cost and Source of Fund	Status of Implementation
		<p>persons;</p> <p>112 Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>113 Recover used oil and lubricants and reuse or remove from the site;</p> <p>114 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>115 Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>116 Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>112. Complied.</p> <p>113. Reused.</p> <p>114. Complied.</p> <p>115. Complied.</p> <p>116. Work is in progress.</p>

Conclusion:-

Overall the Contractor's compliance with the Environment and Health and safety requirements of the Project needs improvement. Contractor maintained copy of IEE. Instructed contracting agency has to conduct HIV AIDS Awareness Training programme. Contracting agency has not submitted April, June, July and August 2020 Site specific EMP report with PIU letter.

Recommendation:-

Key Issues: Following are the key issues which required immediate necessary action / further improvement.

S.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Site inspection and record verification	<ul style="list-style-type: none"> Site inspection Register must be maintained 	Complied
2.	Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work – Done		Complied
3.	Site specific Occupational Health and Safety (OHS) plan;	<p>Site specific Occupational Health and Safety including (International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety)</p> <ul style="list-style-type: none"> Institutional setup List of PPE provided and standards followed, Site specific OHS Equipped first aid station, Medical insurance. Hospitals recognized in emergency. Health Camps and Check -up should conducted for the workers Necessary HIV/AIDS prevention measures and awareness programme conducted by Contractor. Electrical measures safety Fire safety measures should be reflect in OHS plan. Weekly and monthly monitoring and safety training programs have to be documented properly including mock drill register 	OHS Plan submitted – but not adequate , recommended the contractor to update the same and submit
4.	Waste management plan; and	<ul style="list-style-type: none"> Type of waste generated (Solid and Hazardous) Quantity of different waste generated at site List and type of garbage bins provided 	Comply with in 15 days

		<ul style="list-style-type: none"> • Time of waste collection • Location of Waste disposal site identified consultation with PIU • If private land NOC from owner. • Location of Waste disposal site mark on google map. • The contractor will provide garbage bins in the camp and construction site and it will be ensured that these are regularly emptied and waste is disposed off in a hygienic manner as per the Solid Waste (Handling and Management) Rules, 2016. 	
5.	Complaints from sensitive receptors and public.	<ul style="list-style-type: none"> • Complaints register must be maintained at each site. 	Complaint register maintained at pumping station and recommended the contractor to maintain the complaint register at all working sites
6.	Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken	<ul style="list-style-type: none"> • Section-wise list of utilities to be shifted/ disturbed • Submission Letters of Section-wise list of utilities to be shifted/ disturbed to PIU • Plan to shift and contingency steps to be taken 	Complied partially - Communication Letters to different Departments from PIU maintained. Contractor has to maintain the recommended documents Comply with in 7 days
7.	Record to confirm that contingency services are provided and all damaged utilities are restored after the work		Complied
8.	List of selected sites for construction work camp, storage area and disposal area	<ul style="list-style-type: none"> • Identify the location consultation with PIU • Letters of communications and finalization location • Mark the location on google map. 	Complied - letter for finalization of the disposal site. The letters for finalization of the locations for (work camp, storage area) have to be complied. Marking the locations on Google map complied
9.	Check Sources and approval	<ul style="list-style-type: none"> • Maintain Copy of Certification of authorized material sources 	Comply with in 5 days
10.	Site observations Informal Ambient air quality monitoring (4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months, parameters - SPM, RSPM, SOx, NOx)	<ul style="list-style-type: none"> • During the construction phase, the contractor will carry out environmental monitoring Air quality by engaging NABL approved laboratory 	<p>Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter</p> <p>And instructed contractors to do quarterly but contracting agency not done all monitoring tests.</p>

11.	Site observations	<ul style="list-style-type: none"> Maintain Register for site observation at site 	Complied
12.	Ambient noise monitoring (day and night time / 24 hours monitoring at 4 locations, frequency – quarterly - 4 times a year, 9 times in 24 months)	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring Air quality by engaging NABL approved laboratory 	<p>Air, Noise and Water monitoring tests has been conducted by Contractor on December 2019 but report yet to be submitted with PIU letter.</p> <p>And instructed contractors to do quarterly but contracting agency not done all monitoring tests.</p>
13.	Work Program Review	<ul style="list-style-type: none"> Work plan must be prepared and review 	Comply with in 7 days
14.	Number of walkways, wooden planks and foot bridges;	<ul style="list-style-type: none"> List of walkways, wooden planks and foot bridges provided with location must be maintained 	Work in progress and instructed contractors to provide walkways, wooden planks and foot bridge if area is excavated.
15.	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated will be waste generated. Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on google map 	<p>Spoil Management Plan submitted – not adequate</p> <p>Comply with in 5 days</p>
16.	Traffic Management plan		<p>Traffic Management Plan submitted – not adequate and recommended the contractor to update the same and submit</p> <p>Comply with in 5 days</p>
17.	Employment Records Compliance to labour laws	<ul style="list-style-type: none"> Attendance registers of labour at each site. Register of payment to the workers at each site. 	<p>Attendance register is maintained. but Register of payment to the workers Not maintained Comply with in 5 days</p>
18.	Site specific OHS Equipped first aid station	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. 	<p>Comply with in 10 days</p> <p>(when work is in progress all this facilities must be provided)</p>

		<ul style="list-style-type: none"> Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account.</p>	
19.	Potable water supply and clean eating area.	<ul style="list-style-type: none"> Potable water supply: Sufficient (minimum 20 liters at any given point of time) and clean (potable) water for drinking shall be placed in the mess/labour camp and at the each construction site. 	Complied
20.	PPE and medical insurance	<ul style="list-style-type: none"> The Contractor shall provide and ensure enforcement with zero tolerance the following: Safety vests will be used by workers when on the construction site. Hard hat or helmets to all workers, supervising staff and inspecting official entering work site, plant area, and engaged in loading/unloading operations Protective footwear, protective goggles and nose masks (as required) will be provided to the workers employed. These shall be provided to all workers employed for handling of cement, mortar, concrete and similar dust generating operations shall be provided. During reinforcement/fabrication operation, safety appliances like: helmets, protective eye wear, gum boots and hand gloves shall be provided to labour/workers at the construction site. Welder's protective eye-shields will be provided to workers who are engaged in welding works. Nettings below and on the sides of overhead construction to prevent mishaps due to accidental fall of a workman, tool and/or debris shall be provided. Proper moving guards will be provided at all moving machines, like motors and pulleys. All workforces on the construction site shall be provided with identity cards. High risk areas are to be provided with warning signage. 	Complied

21.	List of selected sites. Written consent of land owner	<ul style="list-style-type: none"> If any Activity related to project carrying out in private land written consent of land owner (NOC) must be taken. 	If any, Comply with in 20 days
22.	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness to all office staffs and site workers to follow H& S measures of COVID-19 	<p>Not Complied.</p> <p>Comply with in 3 days</p>



Mahmad Raphiyoddin Shaphiyoddin Malik
Environmental Specialist, EGIS,
Mangalore, KIUWMIP – Tranche 2.


Annexure -1

Site Observations for the month of 20th August 2020

S.No	Observation		Recommendation
a	Proper barricading and Cautionary Sign.	 	<p>Hard Barricading is to be done at Mulihitlu valve chamber work site</p> <p>Instructed contracting agency to put hard barricading all around the excavated area to avoid human and animal fall.</p>

b	PPEs at work locations		<p>Instructed to provide PPEs at all work site</p> <p>Drinking water must be provided at all working locations for workers</p> <p>One mobil toilet should be provided site site</p>
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d	Labour Camp at Shakti Nagar		Proper housekeeping must be maintained in and around the camp
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e	Gas stove is being used for cooking food		<p>Gas cylinder is to be provided for cooking</p> <p>Kitchen must be separate for cooking</p> <p>Lose electrical cables or boards must be replaced to avoid from electric shocks</p>
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f	Material stocks at shaktinagara locations		<p>Proper sign board in frame with stand should be at site</p> <p>And soft barricading should be done for every stocked materials</p>
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g	Water Tank for daily use of water at Low Height		Water Tank should be provided at proper Height
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i	Water Tap and electricity connections not provided		Water Tap and electricity connections are to be provided
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Annexure -2

Status of Site Observations for the month of 27th May 2020


S.No	Observation		Recommendation	Status
a	Water sprinkling at dry location at konchady site		Water is sprinkled by contracting agency after work in dry areas to avoid dust generation at work site konchady site	Complied

b	PPEs for workers at work locations	 	<p>All workers should wear PPEs helmet, jacket, hand gloves and shoes during work at site</p> <p>Drinking Water facility should be provided to workers at all site</p>	Partially complied
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c	Sign boards and hard barricade at work site	 	Work in progress sign board should be kept and hard barricading must be done during road cement concreting work to avoid public entrance to carry safe work	Partially complied
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d	One toilet was found damaged		Repair the Toilet	Not complied
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e	Labours are cooking food in their staying room		Separate Cooking facility is to be provided for the Contractor's labours and sub-contractor's labours	Not complied
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f	Loose electrical wires found		Electrical wires should be properly fitted with in safety electrical pipes and new switchboard	Not complied
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g	Poor Housekeeping at shakti nagar labour camp of subcontractor		Labour camp of subcontractor at shaktinagar is not properly maintained. Housekeeping should be done properly to keep surrounding area clean.	Partially complied
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Annexure -3

Status of Site Observations for the month of 24th June 2020


S.No	Observation		Recommendation	Status
a	PPEs for workers at work locations		<p>All workers should wear PPEs helmet, jacket, hand gloves and shoes during work at site</p> <p>Instructed contractors to provided PPEs to all worker at site</p> <p>Drinking Water facility should be provided to workers at all site</p>	Partially Complied

b	Sign boards and hard barricading at work site		<p>Road restoration Work in progress sign board should be kept and hard barricading must be done during road loose earth filling or cement concreting work to avoid public entrance to carry safe work</p> <p>Flag mans should be kept on either side of the road if JCB, road roller are being used</p>	Partially Complied
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d	One toilet was found damaged		Repair the Toilet	Not Complied
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e	Labours are cooking food in their staying room		Separate Cooking facility is to be provided for the Contractor's labours and sub-contractor's labours	Not Complied
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f	Loose electrical wires found		Electrical wires should be properly fitted with in safety electrical pipes and new switchboard	Not Complied
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g	Poor Housekeeping at shakti nagar labour camp of subcontractor		Labour camp of subcontractor at shaktinagar is not properly maintained. Housekeeping should be done properly to keep surrounding area clean.	Not Complied
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Monthly Environmental Monitoring Report

Project Number: 43253-027
August 2020

IND: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Puttur

Package No. 02PTR01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udipi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be improved water resource planning, monitoring and service delivery in 24x7 water supply for Puttur City. Project 2 will have 3 outputs: (i) UWSS and sanitation infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) institutional capacity of KUIDFC and ULBs strengthened. The IEE is based on an assessment of these components within the project area.

2 Need for Infrastructure Improvement in Puttur

At present, Puttur City meets its water supply requirement through surface source. River Kumaradhara is the main surface source of water supply to Puttur. A new vented dam was constructed under KUDCEMP with a storage capacity of 0.61 million cubic meter (MCM) and a storage spreading of 2,400 m upstream the vented dam. Existing water supply system is depicted in Figure 1.

3 The proposed subproject:

This subproject includes the following components:

- (i) Replacement of two old pumps with new vertical turbine pumps in Jackwell at Nekkilady;
- (ii) construction of 1.68 kilometer (km) of raw water pumping main (400 millimeter (mm) diameter) from Jackwell to water treatment plant (WTP) at Nekkilady;
- (iii) construction of 12.42 km clear water main of 400 mm diameter from the proposed new Water Treatment Plant (WTP) at Nekkilady to ground level service reservoir (GLSR) at Tenkila;
- (iv) construction of new WTP of capacity 8.7 million litres per day (MLD) at Nekkilady;
- (v) replacement of clear water pumps in existing WTP at Nekkilady;
- (vi) construction of 5.06 km of clear water feeder mains;
- (vii) construction of six new overhead tanks (OHTs) – (a) 300 kiloliters (kl) capacity in Zone-2 at Mura Shantinagra, Padnur, (b) 100 kl in Zone-3 at Karmala near Microwave station, (c) 600 kl in Zone-4A at Darbe; (d) 250 kl in zone-5 at Lingadagudda, Kabaka, (e) 200 kl in Zone-6A at Balnad Helipad, and (f) 100 kl zone-8 at BalnadKelyadi, Vitla Road;
- (viii) construction of two GLSRs - (a) 1,000 kl capacity at Seethigudda, and (b) 2,000 KL at Tenkila;
- (ix) Intermediate pumping station at Tenkila; (x) booster pumping station at Balnad Helipad, (xi) 29 bulk water meters;
- (x) 142.66 km of distribution network to cover 24x7 water supply to Puttur city for 8 zones; and

- (xi) Replacement of 8,441 existing meters and providing new house service connections of 4,500 for un-covered households.

Figure 1: Existing Water Supply System in Puttur

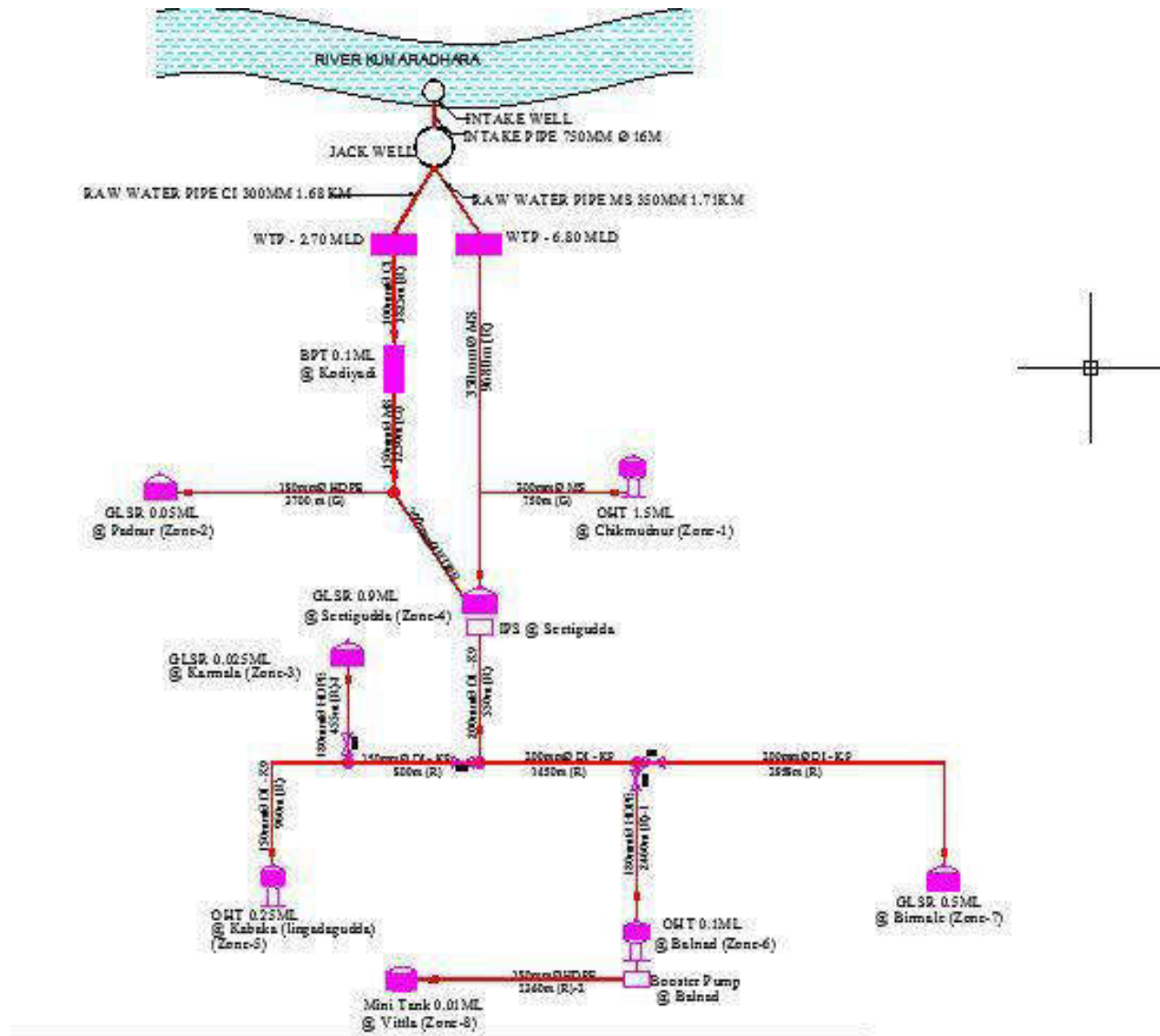


Table 1: Proposed Components for 24x7 Water Supply System

Infrastructure	Function	Description	Location
Raw water pumps in existing Jack well	Pumping of Raw water from Jack well Standby power supply arrangement for pumping	-Replacement of two old pumps with new vertical turbine pumps of capacity 335 m ³ /h, 75 m head (1+1) Procurement of diesel generator of 500 kilovolt-ampere -(kVA)	Jack well site at Nekkilady Jack well site at Nekkilady
Raw water Transmission Main	Conveys raw water to WTP by pumping	1.68 km length 400 mm diameter DI pipe	Pipe will be laid underground from Nekkilady to WTP all along the existing road
Water Treatment Plant	Treats raw water to meet drinking water standards	New 8.7 MLD capacity WTP based on conventional treatment Process. The components Include Cascade Aerator Parshall flume Flash mixer Flocculators – 2 units Tube settlers – 2 units Rapid sand filters - 4 beds Chlorination system with safety measures Lime and alum mixing Tanks Clear water sump and pump house Backwash water recirculation and sludge management system (sludge collection, drying beds) – a combined system of adequate capacity for backwash and sludge management will be developed to cater to both new and existing WTPs. This component addresses the issues of concern identified in the environmental audit of existing WTP (Ref Corrective Action Plan, Table 8)	Nekkilady Adjacent to the existing WTP; sufficient land available within the existing WTP campus to accommodate the new WTP
Clear water Pumps in existing WTP	Pumps clear water to Service reservoirs	Replacement of old pumps within new pumps: 2 pump sets of capacity 325 m ³ /hour and 84 m head (1+1)	Pumps will be installed in the existing clear water pumping station at WTP, Nekkilady
Clear Water Transmission Main	Pumping of clear water from WTP (water treatment plant) to service reservoirs	12.42 km length 400 mm diameter DI pipe	Pipe will be laid underground from Nekkilady to Tenkila GLSR along the public roads within the road right of way
Clear water feeder main	Pumping of clear water from MBR to Service Reservoirs	5.06 km length 180 – 300 mm diameter DI /HDPE) pipes DI pipe of 300 mm diameter – 1.134 km DI Pipe of 200 mm diameter – 2.422 km	Laying of pipes underground along public roads within the ULB area

Infrastructure	Function	Description	Location
Water service reservoirs	Water storage for supply	<p>DI Pipe of 150 mm diameter – 0.591 km HDPE pipe of 180 mm – 0.918 km</p> <p>Six OHTs and two GLSRs of RCC including compound walls at the selected sites:</p> <p>OHT 300KL for Zone-2 at Mura Shantinagra, Padnur</p> <p>100KL for Zone-3 at Karmala near Microwave station 600KL for Zone-4A at CTO, Darbe 250KL for Zone-5 at Lingadagudda, Kabaka 200KL for Zone-6A at Balnad Helipad 100KL for zone-8 at, Balnad Kelyadi, Vitla Road1</p> <p>GLSR 1,000KL in Zone-4 at Seethigudda 2,000 KL GLSR at Tenkila</p>	<p>OHT Existing within ULB Properties. No non-title users are present at these sites</p> <p>GLSR Seetigudda land is ULB property. And Tenkila is purchase by Karnataka Housing Board, Government of Karnataka, and it will be purchased through negotiated Settlement.</p>
Intermediate Pumping Stations (IPS)	To provide adequate pressure in the system for supply	<p>Intermediate pumping station at Tenkila Pump capacities: 65m³/h and 85 m head for zone 3 and 5 (1+1) 82 m³/h and 33 m head for zone 4A, (1+1) 119 m³/h and 100 m head for zone 6, 6A and 7, (1+1)</p> <p>Booster pumping station at Balnad Pump capacity 11 m³/h and 80 m head (1+1)</p>	<p>Pumping station will be located within Tenkila GLSR site</p> <p>Pumping station will be located within the site identified for Zone 6A OHT at Balnad Helipad</p>
Distribution system	Supply of water from service reservoirs to consumers	<p>142.66 km of pipe lines of diameter 75 mm to 280 mm (HDPE / DI pipes)</p> <p>75 mm – 106.139 km 90 mm – 1.853 km 110 mm – 21.744 km 150 mm (DI) - 2.784 km 160 mm – 2.889 km 200 mm – 1.403 km</p>	<p>In 8 zones within the city limits Pipes will be laid underground along the roads within the ROW</p>

	250 mm – 0.362 km	
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Infrastructure	Function	Description	Location
		250 mm (DI)- 4.916 km 280 mm – 0.570 km	
Bulk Water Meters	To record data of volume of flow to each Distribution System zones at desired time interval.	29 no.	Bulk meters will be fixed at strategic locations in the pipe line at Jack well point, WTP and service reservoir points
House Service Connections (HSC)	For each house connection will be provided with meters to supply water and record volume of water. W	4,500 new HSC connections 9226 replacement of existing domestic water meters	In 8 zones for all the houses within the city limits

CMC = City Municipal Council, m³/h = cubic meter per hour, DI = ductile iron, GLSR = ground level service reservoir, HDPE = high density polyethylene, HSC = House Service Connections, IPS = Intermediate Pumping Stations, km = kilometer, m = meter, mm = millimeter, MLD = million liters per day, OHT = overhead tank, RCC = reinforced cement concrete, ROW = right-of-way, ULB = urban local body, WTP = water treatment plant.

4 Environmental Management Plan

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Puttur	Name of the Contractor: Suez Civil Engineering services Pvt,LTD
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Puttur	Name of SE/EE/AE Of concerned division PIU :- Mr.Shamath, AE
Date of monthly monitoring: 19/08/2020	Name of Environment, Health And Safety (EHS) engineer :- Mr.YAmruth

Table 2: Status of implementation Environmental Management Plan for Anticipated Impacts –Construction Stage - PUTTUR

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of Implementation
Environmental Management Plan (EMP) Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<p>1) Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOPs) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.; and</p> <p>2) appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work</p>	Construction Contractor/ Program Implementation Unit (PIU)/ Project Management Design, Construction and Supervision Consultant (PMDSC)	<p>(i) Certificate of Completion (Safeguards Compliance Orientation);</p> <p>(ii) Posting Certification Completion</p> <p>(iii) Posting of EMP at worksites</p>	Cost of EMP Implementation Orientation Training to contractor is Responsibility Other costs Responsibility	<p>1) Spoil management submitted but it needs to be updated</p> <p>2) EHS Engineer appointed</p>
Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, Sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<p>3) Consult with PIU/PMDSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4) Damp down exposed soil and any stockpiled on-site by spraying with water when necessary during dry weather;</p> <p>5) Enclose the area with dust screens of sufficient height during the dismantling work; employ proper construction methods limiting the dust generation;</p> <p>6) Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>7) Clean wheels and undercarriage of vehicles prior to leaving construction site; and</p>	Construction Contractor	<p>(i) Location of stockpiles;</p> <p>(ii) Complaints from sensitive receptors;</p> <p>(iii) Heavy equipment and machinery with air pollution</p> <p>(iv) Certification that vehicles are compliant with Air Act.</p>	Cost for implementation of mitigation measures responsibility	<p>3) Complied</p> <p>4) Pipe execution work is not in progress due to rain but OHT construction under progress. And instructed contracting agency to remove stock piled at work site and to spray water at commercial and residential areas if stock piled on-site to avoid dust generation.</p> <p>5) Not complied</p> <p>6) Not complied.</p>

		8) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.				Instructed to cover sand and loose earth with tarpaulins is transported 7) Complied 8) Complied
Surface water quality	Mobilization of settled silt, materials and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	9) Prepare and implement a spoils management plan as the part of the Construction Management Plan; 10) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 11) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; 12) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund;	Construction Contractor	(i) Areas for stockpiles, storage of fuels and lubricants and waste materials; (ii) Number of silt traps installed along trenches leading to water bodies; (iii) Records of surface water (iv) Effectiveness of water management measures; and (v) No visible degradation to nearby drainages, nallahs or	Cost for implementation of mitigation measures responsibility	9) Spoil management plan is submitted during preconstruction stage. Updation is to be done for construction stage 10) Instructed contracting agency to use tarpaulins or sheets for Stockpiling during monsoon season 11) No such water bodies found during site visit but instructed contracting agency to use silt trap if any water bodies found 12) Contracting agency not using fuels and lubricants in bulk but instructed to provide separate room for bulk quantity

		<p>13) Dispose any wastes generated by installation of pipeline in designated sites; and</p> <p>14) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>		waterbodies due to civil works.		<p>13) Complied</p> <p>14) Not complied</p>
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<p>15) Plan activities in consultation with PIU/PMDCSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>16) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>17) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor;</p> <p>18) Properly enclose the dismantling area with temporary noise barriers; and</p> <p>19) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Use of silencers in noise-producing equipment and sound barriers; and</p> <p>(iii) Equivalent day and night time noise levels (See Appendix 4 of this IEE).</p>	Cost for implementation of mitigation measures responsibility	<p>15) Complied</p> <p>16) Complied</p> <p>17) Complied</p> <p>18) Complied</p> <p>19) Complied</p>

Landscape and aesthetics	Impacts due to excess excavated earth, excess construction and demolition materials and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items. C & D materials after dismantling of the old WTP and old GLSR are identified	<p>20) Prepare and implement spoils management plan;</p> <p>21) Avoid stockpiling of excess excavated soils;</p> <p>22) Coordinate with Puttur CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>23) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>24) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>25) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>26) Request PIU/PMD CSC to report in writing that the necessary environmental restoration works has been adequately performed before acceptance of work. C&D materials after dismantling of the old WTP and old GLSR shall be managed as per C&D Rules 2016,</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Worksite clear of hazardous wastes such as oil/fuel; and Worksite clear of any excess excavated earth, and solid waste such as removed concrete, wood, packaging materials, empty containers.</p>	Cost for implementation of mitigation measures responsibility	<p>20) Spoil management plan is prepared (attached in annexure 3a July 2019 but updation is to be done) and contractor agency following and found no surplus soil found in sites</p> <p>21) Complied</p> <p>22) Complied (attached in annexure 4 September 2019)</p> <p>23) Used oil and lubricants not generated on site</p> <p>24) Complied (attached in annexure 4 september 2019)</p> <p>25) Complied</p> <p>26) Pipe execution work is not in progress due to rain but instructed contracting agency to restore immediately and when work gets completed, joint site inspection will be conducted and report / letter will be issued.</p>
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Existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<p>27) Obtain from PIU/PMDcSC the list of affected utilities and operators if any;</p> <p>28) Prepare a contingency plan to include actions to be done in case of unintentional interruption of service; and</p> <p>29) The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.</p>	Construction Contractor	Existing Utilities Contingency Plan	Cost for implementation of mitigation measures responsibility	<p>27) No such utilities were shifted or damaged but Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>28) Not complied</p> <p>29) Complied</p>
Ecological Resources – Terrestrial	Loss of vegetation and tree cover	<p>30) Minimal tree cutting is envisaged as part of this sub project. to safeguard any tree removal, following measures to be implemented;</p> <p>(a) Minimize removal of vegetation and disallow cutting of trees;</p>	Construction Contractor	PMU/PMDcSC to report in writing the no of trees cut and planted.	Cost for implementation of mitigation measures responsibility	<p>30) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p> <p>a) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p>
		<p>b) If tree-removal will be required, obtain tree-cutting permit from the Forest Department; and</p> <p>c) Plant two native trees for every one that is removed.</p>				<p>b) Instructed contracting agency to avoid tree cutting and to get permission from concerned department before start of the work</p> <p>c) Instructed contracting agency</p>

Accessibility	Traffic problems and conflicts near project locations and haul road	<p>31) Traffic Management Plan (TMP) should be part of the Construction Management Plan.</p> <p>a) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>b) Schedule transport and hauling activities during non-peak hours;</p> <p>c) Locate entry and exit points in areas where there is low potential for traffic congestion;</p> <p>d) Keep the site free from all unnecessary obstructions;</p> <p>e) Drive vehicles in a considerate manner;</p> <p>f) Coordinate with Traffic Police for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p> <p>g) Notify affected sensitive receptors 2 days in advance by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints;</p> <p>h) Plan and execute the work in such a way that the period of disturbance/ loss of access is minimum; and</p> <p>i) Provide pedestrian access in all the locations until normalcy is restored.</p>	Construction Contractor	<p>(i) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (refer outline TMP is provided in Appendix 12);</p> <p>(ii) Complaints from sensitive receptors; and</p> <p>(iii) Number of signages placed at project location.</p>	Cost for implementation of mitigation measures responsibility	<p>31) Traffic Management Plan is prepared by contracting agency (attached in annexure 3b July 2019 but updation is to be done)</p> <p>a) Not complied. Instructed to prepare plan</p> <p>b) Complied</p> <p>c) Complied</p> <p>d) Complied</p> <p>e) Complied</p> <p>f) Pipe execution work is not in progress due to rain. But instructed contracting agency to inform traffic department for temporary road diversion before two days start of the work.</p> <p>g) Complied</p> <p>h) Complied</p> <p>i) Pipe execution work is not in progress due to rain. But instructed contracting agency to provide pedestrian wherever required</p>
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Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	32) Prepare and implement spoils management plan; 33) Leave spaces for access between mounds of soil; 34) Provide walkways and metal sheets where required for people; 35) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 36) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and 37) Provide sign boards for pedestrians to inform nature and duration of construction works and contact	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Spoils management plan; and (iii) Number of walkways, signages, and metal sheets placed at project location.	Cost for implementation of mitigation measures responsibility	32) Spoil management plan is prepared (attached in annexure 3a july 2019 but updation is to be done) 33) Complied 34) Complied 35) Complied 36) Complied 37) Complied
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	38) Employ local labor force to the maximum extent, if manpower is available; and 39) Comply with core labor laws	Construction Contractor	(i) Employment records; and (ii) Compliance to core labor laws (See Appendix 2 of this IEE).	Cost for implementation of mitigation measures responsibility	38) Register maintained by contractor attached as Annexure – 4 in dec 2019 39) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled).

Occupational Health and Safety	Occupational hazards which can arise during work	<p>40) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE);</p> <p>41) Develop and implement site-specific occupational health and safety (OHS) Plan, and include in the Construction Management plan. The OHS plan will include measures such as:</p> <p>(a) excluding public from the site; (b) ensuring all workers are provided with and use</p>	Construction Contractor	<p>(i) Site-specific OHS Plan;</p> <p>(ii) Equipped first-aid stations;</p> <p>(iii) Medical insurance coverage for workers;</p> <p>(iv) Number of accidents;</p> <p>(v) Supplies of potable drinking water;</p>	Cost for implementation of mitigation measures responsibility	<p>40) Contractor following Company EHS Policy Site-specific OHS Plan Have to be prepared by Contractor.</p> <p>41) Contractor following Company EHS Policy-PPE'S provided by Contractor.</p> <p>a) Complied</p> <p>b) Complied. PPE'S provided by Contractor to workers and tool box training provided at site.</p>
		<p>personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs;</p> <p>(c) OHS Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>42) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>43) Provide medical insurance coverage for workers;</p> <p>44) Secure all installations from unauthorized intrusion and accident risks;</p> <p>45) Provide supplies of potable drinking water;</p> <p>46) Provide clean eating areas where workers are not exposed to hazardous or</p>		<p>(vi) Clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) record of health and safety orientation trainings;</p> <p>(viii) personal protective equipment;</p> <p>(ix) % of moving equipment outfitted with audible back-up alarms;</p> <p>(x) permanent sign boards for hazardous areas such as</p>		<p>c) Complied</p> <p>d) Not complied</p> <p>e) Accident and incident register maintained</p> <p>42) Partially Complied. Instructed to keep first-aid box at each working sites separately Annexure-4 in Dec 2019</p> <p>43) Not complied</p> <p>44) Complied</p> <p>45) Complied</p> <p>46) Complied</p>

		<p>noxioussubstances;</p> <p>47) Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of workatthesite,personalprotective protection, and preventing injuring to fellowworkers;</p> <p>48) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>49) Ensure the visibility of workers through their use of highvisibility</p>		<p>energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal; and</p> <p>(xi) Compliance to core labor laws (See Appendix 2 of this IEE).</p>		<p>47) Not complied. Instructed to Provide health and safety orientation training to all workers</p> <p>48) Not complied</p> <p>49) Complied Annexure-1 in dec 2019</p>
		<p>vests when working in or walking through heavy equipment operating areas;</p> <p>50) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>51)Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well knownto,andeasilyunderstood by workers, visitors, and the general public as appropriate;and</p> <p>52) Disallow worker exposure to noise level greater than 85 dBAfor</p>				<p>50) Complied</p> <p>51) Complied</p> <p>52) Workers not allowed to work more than 8 hours per day without hearing protection who are exposing to noise level greater than 85 dB.</p> <p>Recommended Contractor to use hearing protection Measures to workers</p>

		aduration of more than 8 hours per day without the ring protection. The Use of hearing protection shall be enforced actively.				
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<p>53) Plan routes to avoid times of peak-pedestrian activities.</p> <p>54) Liaise with PIU/PMD CSC in identifying high-risk areas on route cards/maps.</p> <p>55) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.</p> <p>56) Provide road signs and flag persons to warn of on-going trenching activities.</p>	Construction Contractor	<p>(i) Traffic Management Plan; and</p> <p>(ii) Complaints from sensitive receptors.</p>	Cost for implementation of mitigation measures responsibility	<p>53) Not complied And instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and to office staffs</p> <p>54) Not complied</p> <p>55) Not complied</p> <p>56) Complied</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation	<p>57) Consult with PIU before locating workers camps/sheds, and construction plants; as far as</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p>	Cost for implementation of mitigation measures	<p>57) Complied Contractor informed to PIU office regarding labor camp construction at mottetadka opposite NCRC but they not having letter from PIU. And also instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and camps</p>

	<p>water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers.</p>	<p>possible located at least 200 m from residential areas;</p> <p>58) Minimize removal of vegetation and disallow cutting of trees;</p> <p>59) Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuge;</p> <p>60) The camp site should be adequately drained to avoid the accumulation of stagnant water;</p> <p>61) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60-80LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>62) Provide separate facilities for men and women; sanitary facilities shall be properly built and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>63) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>64) Recover used oil and lubricants and reuse or remove from the site;</p> <p>65) Manage solid waste</p>	<p>(ii) Drinking water and sanitation facilities for employees.</p>	<p>responsibility</p>	<p>58) Removal of vegetation Minimize by selecting best alignment.</p> <p>59) Instructed contracting agency to built labour shed with sheets with proper ventilation in clean hygienic area. And also instructed to provide awareness to follow H& S measures of COVID-19 to the worker at site and camps</p> <p>60) Instructed contracting agency to built labour shed with sheets with proper ventilation in clean hygienic area.</p> <p>61) Instructed contracting agency to provide drinking water as per the standards at camp</p> <p>62) Instructed contracting agency to provide separate toilet facilities for men and women at camp and working sites</p> <p>63) Instructed contracting agency to provide training of solid and liquid materials handling at camp</p> <p>64) Instructed to contracting agency</p>
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		<p>according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>66) Remove all wreckage, rubbish, or temporary structures which are no longer required;</p> <p>67) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work; and</p> <p>68) The work camp details should be included in the Construction Management Plan.</p>				<p>65) Complied</p> <p>66) Complied</p> <p>67) Construction work is in progress.</p> <p>68) Not complied</p>
Social and Cultural Resources	Risk of archaeological chance finds	<p>69) Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>70) Stop work immediately if any finds are suspected to allow further investigation;</p> <p>71) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ; and</p> <p>72) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility	<p>69) Till now no such suspected items found nor recorded</p> <p>70) Till now no such suspected items found nor recorded</p> <p>71) Till now no such archaeological items recorded</p> <p>72) No such damages recorded during the visit. But instructed to maintain if such damages happens.</p>

Submission of EMP implementation report	Unsatisfactory compliance to EMP	73) Appointment of EHS Engineer to ensure EMP implementation; and 74) Timely submission of monitoring reports including pictures.	Construction contractor	Availability and competency of appointed EHS engineer Monthly report	Cost for implementation of mitigation measures responsibility	73) EHS Engineer appointed 74) Not Complied
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	75) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; 76) All excavated roads shall be reinstated to original condition.	Construction Contractor	PIU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to	Cost for implementation of mitigation measures responsibility	75) Complied 76) No such bitumen or concrete road damaged during site visit. But instructed to restore road same as it was before damage
		77) All disrupted utilities restored; 78) All affected structures rehabilitated/compensated; 79) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up; 80) All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be topsoiled and regressed using the		pre-project conditions; and (iii) all construction related structures not relevant to O&M are removed; and (iv) worksite clean-up is satisfactory.		77) If utilities are to be shifted contracting agency must take permission from concern authorities before start the work and restore it properly as it was before the damage 78) Till now no structures affected 79) Not complied Instructed contracting agency to properly

		<p>guidelines set out in the revegetation specification that forms part of this document;</p> <p>81) The contractor must arrange the cancellation of all temporary services; and</p> <p>82) Request PMU/PMDCSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>clean surface area free of oil and paints for construction camp</p> <p>80) Not complied</p> <p>81) Not complied</p> <p>82) Construction work is in progress</p>
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Conclusion:-

Construction stage is in progress. Health and safety training and HIV AIDS Awareness Training programme has to be conducted by Contractor. Proper Record maintenance should be improved by Contractor. Proper safety measures like project information boards, safety sign boards, hard barricading and register books should be maintained at all work sites. Contractor has to submit Site Specific EMP of **January, February, March, April, May, June, July and August 2020 month** with PIU letter, Puttur. Overall the work in the projects for health and safety needs improvement.

Recommendation:-

Sl.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Mobilization of Environment, Health And Safety(EHS)engineer		Complied
2.	Submission of Site specific EMP		Before start of Construction work Comply with in 7days
3.	Submission of monthly reports.	<ul style="list-style-type: none"> Construction status or compliance report 	Contractor has to submit Site specific EMP of January, Feb, March, April, May, June, July and August 2020 Month Comply with in 7 days
4.	Telephone lines, electricPoles and wires, water Lines within proposedproject area	<ul style="list-style-type: none"> List of utilities going to effect will be submitted to PIU 	Before start of Construction work
5.	Heavy equipment and machinery with air pollution control devices;	<ul style="list-style-type: none"> PUC certification for all vehicles/equipment used for/during construction and certification of users at site. 	Comply with in 7days
6.	Certification that vehicles are compliant with Air Act	<ul style="list-style-type: none"> Register of Equipment and Vehicles maintenance certificates at site 	Comply with in 5 days
7.	Layout plan of overhead tanks (OHTs);		Comply with in 7 days
8.	Tree cutting/pruning permission; and	<ul style="list-style-type: none"> If any of the tree is getting affected, it is to be noted in the survey and its permission has to be taken 	Comply with in 7 days
9.	Compensatory tree plantation as part of the project.	NA	Identify Before start of Construction work and Compensate during Construction
10	Areas for stockpiles, storage of fuels and lubricants and waste materials;	<ul style="list-style-type: none"> Storage of materials like fuel, chemicals, and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water. 	Comply with in 7 days
11	List of selected sites forconstruction work camps, hot mixplants, stockpileareas, storage	<ul style="list-style-type: none"> Location must be identified and marked on google map and consult with PIU and after joint inspection and with consideration of all 	Complied Attached as Annexure -2 & 3 in may 2019.

	areas, and disposal Areas.	given mitigation measure given.	Take site approval letter from PIU (for construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas.) Before start of Construction work
12	Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	<ul style="list-style-type: none"> If any private land is selected NOC from owner has to be taken 	Comply with in 15 days
13	List of selected sites for disposal	<ul style="list-style-type: none"> Location must be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. If any private land is selected ,NOC from owner have to be taken 	Debris disposal land location identified and Permission letter has been issued by PIU. Attached as annexure 4 in September 2019.
14	List of approved quarry Sites and Sources of materials; and		Before start of Construction work
15	Bid document to include requirement for verification of suitability of sources and permit for additional quarry sites if necessary.		Before start of Construction work
16	Method of statement in table format	<ul style="list-style-type: none"> As mention in mitigation measures 	Comply with in 10 days
17	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated. Identify the impact Spoil Transportation Methodology Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on Google map 	Draft copy shown and submitted attached as an annexure 3a in August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts Debris disposal land location identified and Permission letter has been issued by PIU. Attached as annexure 4 in September 2019.
18	Traffic management plan		Draft copy shown and submitted attached as annexure 3b August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts Comply with in 7 days
19	Environmental management plan		Draft copy shown and submitted attached as an annexure 3c in August 2019 report but updation is to be done and informed contractors to update plan once construction phase starts

			Comply with in 7 days Comply with in 7 days
20	Site specific OHS Plan	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account.</p>	
21	Equivalent day and night time noise levels	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	Partially Complied. Pre-construction and construction stage noise test conducted in November 2019 and February 2020 noise report has to submit by contractors
22	Records of Air quality inspection	<ul style="list-style-type: none"> If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	Complied. Pre-construction and construction test conducted in November 2019 and February 2020. Air report has to submit by contractors
23	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	Partially complied. Implementation of H & S at work site is done. Attached as Annexure 3. H & S plan is to be prepared by contractors Comply with in 3 days



Mahammad Raphiyoddin Shaphiyoddin Malik
Environmental Specialist
KIUWMIP – Tranche 2

Annexure-1

Site Visit observations on 19th August 2019

1	Project information board and sign boards must be provided at work site.		<p>Provide project information board related to the particular project work and place at entrance of the all working site</p> <p>Project information Board is to be provided both in English and Kannada. And board should be properly placed with steel or wooden stand</p>
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2	Sign boards , barricading should be provided at work site		<ul style="list-style-type: none">• Project information board, Go slow board, Grievance redressal committee board and flag man should be there at work site.• Drinking Water can must be provided at all work site
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3	Bunding materials of		<p>Materials like sand, aggregates should be properly banded with sand bags to avoid flow along slope</p>
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4	Scrap and materials storage at work locations		Instructed contracting agency to avoid scarp steel and other materials storage at works sites
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5	Labour Camp at mottetadka site, puttur	 	<p>Labour camp is properly maintained</p> <p>Toilets are provided to workers</p> <p>Drinking water tap connection provided at the camp</p>
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		 	<p>Instructed contracting agency to provided separate bathrooms with proper sheet shed for workers at camp</p> <p>Instructed contracting agency to randomly check worker room to keep clean and hygienic to avoid any diseases</p>
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Annexure-2

Status of Site Visit on 26th May 2020

1	PPEs provided at work site.		<p>PPEs provided to workers at work site and instructed to provide PPEs to all worker at all working site</p> <p>Project information Board is to be provided both in English and Kannada. And board should be properly placed with steel or wooden stand</p> <p>Labour attendance register, labour wages register, grievance redresal register and accident and incident register compulsory be at all work site.</p> <p>Drinking Water can must be provided at all work site</p>	<p>Partially complied</p> <p>Partially complied</p> <p>Complied</p> <p>Not complied</p>
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2	Bunding of materials at all OHT sites, Puttur		Materials like sand, aggregates should be properly banded with sand bags to avoid flow along slope	Not complied
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3	Scrap, steel rods and materials storage at all OHT work sites,Puttur		Instructed contracting agency to avoid scarp steel and other materials storage at works sites	Not complied
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Annexure-3

Status of Site Visit observations on 25th June 2020

1	PPEs to workers at Nekkeladi WTP work site.		<p>Instructed contracting agency to Project information Board is to be provided both in English and Kannada.</p> <p>PPEs provided to workers at work site and instructed to provide PPEs to all worker at all working site</p> <p>Labour attendance register, labour wages register, grievance redresal register and accident and incident register compulsory be at all work site.</p> <p>Drinking Water can must be provided at all work site</p>	<p>Not complied</p> <p>Partially complied</p> <p>Partially complied</p> <p>Not complied</p>
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2	Barrication and sign boards at CTO Darbe OHT		Sign boards and soft barricading should be done at work site for public awareness to avoid their entry at work place	Not complied
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3	Project information board at OHT sites	 	<p>Project information board should be present at all work site and should be place at the entrance of the work sites</p>	Not complied
4	Housekeeping at work sites, puttur		<p>Instructed contracting agency to maintain proper housekeeping at work sites. Rods, wooden, sheets should be kept at safe place after its usage to avoid any cuts to works or publics during visits</p>	Not complied



Monthly Environmental Monitoring Report

Project Number: 43253-027
August 2020

IND: Karnataka Integrated Urban Water Management
Investment Program (Tranche 2) – Improvements for
24 x 7 Water Supply System for City Municipal Council
in Udupi

Package No. 02UDP01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) institutional capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an water supply projects within the project area i.e. Udupi

2 Need for Infrastructure Improvement in Udupi

A detailed assessment of existing situation was carried out and it concludes that the present water production of 27.24 million liters per day (MLD), is insufficient to meet water demand of Udupi till the year 2031 as per national standards. Besides Udupi town, this subproject investment also need to provide water supply covering 5 en-route villages, 5 outgrowth villages and 7 adjacent villages.

The present inadequacy in the water supply system, is due to

- (i) mainly shortage in water source in summer season;
- (ii) increased water demand; and
- (iii) old and leaking distribution system, along with weak management system.

In order to meet required water demand of Udupi, an alternate water source from River Varahi is proposed under a government funded bulk water supply project. The necessary improvements and augmentation in water distribution system is proposed under the ADB funded KIUWMIP Tranche 2

3 The proposed subproject:

Subproject includes the following components:

- (i) clear water feeder mains of 7.47 kilometer (km) of diameter 150 millimeters (mm) to 355 mm to feed tonew overhead tanks (OHTs);
- (ii) 7 OHTs of total storage capacity 5.2 ml;
- (iii) distribution network of 358.17 km (diameter 150 mm to 355 mm); and,
- (iv) Replacement of 16,870 existing meters and providing new metered house service connections of 15,000 for uncovered households. Distribution network pipes will be laid along existing road right-of-way (ROW) and OHTs will be constructed in government-owned lands. New water source from river Varahi about 38.5 kms from Udupi has been selected to meet shortage of water for summer four months. RCC Intake well, RCC Jackwell cum pump house and raw water pipe line for 38.5 Kms is proposed under AMRUTH Scope. Also it is proposed 30 MLD WTP at Baje to meet additional demand of Udupi under State fund.

Table 1 provides details of the KIUWMIP Tranche 2 subproject components in Udupi based on the detailed engineering design of the subproject

Table 1: Proposed Subproject Components

No.	Component	Details	Location
1	Clear water feeder main to feed treated water to overhead tanks (OHTs)	<p>7.47 km length 150 mm – 355 mm diameter Ductile Iron Pipes</p> <ul style="list-style-type: none"> □ 1.50 km - 150 mm diameter from ground level service reservoir (GLSR) at Manipal to OHT for Zone 5 at Manipal near Manapalla lake □ 0.5 km - 200 mm diameter from GLSR at Manipal to zone-3 OHT at Manipal <p>Mild Steel Pipes</p> <ul style="list-style-type: none"> □ 60 m - 219 mm diameter for zone -7C OHT at Kolambe 	Along the public roads within the road right of way

No.	Component	Details	Location
		<ul style="list-style-type: none"> □ 45 m - 219 mm diameter for zone -8C OHT at Indrali □ 1.7 km - 273.1 mm diameter for zone-6B OHT at Manchi □ 815 m - 323.90 mm diameter for zone-8B at Kakkunje □ 2.85 km - 355.6 mm diameter, for zone-9B at Santhekatte 	
2	OHTs	<p>7 OHTs of total storage capacity 5.2 ml</p> <ul style="list-style-type: none"> □ Zone 3 – 750 kl at Manipal □ Zone-5 – 300 kl at Manipal near Manapalla lake □ Zone 6B – 750 kl at Manchi □ Zone 7C – 300 kl near Kolambe □ Zone 8B – 1,000 kl at kakkunje □ Zone 8C – 500 kl at Indrali □ Zone 9B – 1,600 kl at Santhekatte 	For all 7 OHTs, government owned land parcels have been identified.
3	Distribution network	<p>358.16 km pipes of diameter 63 mm to 350 mm High Density Poly Ethylene (HDPE) pipes</p> <ul style="list-style-type: none"> □ 63 mm dia - 294.4 km □ 75 mm dia - 0.375 km □ 90 mm dia - 0.796 km □ 110 mm dia - 25.575 km □ 160 mm dia - 3.336 km □ 200 mm dia - 5.602 km □ 250 mm dia - 13.824 km □ 280 mm dia - 0.330 km □ 315 mm dia - 0.291 km <p>DI PIPES:</p> <ul style="list-style-type: none"> □ 150 mm dia - 0.252 km □ 300 mm dia - 10.282 km □ 350 mm dia- 3.098 km 	<p>Pipes will be laid along the public roads within the road right of way.</p> <p>Rider lines will be laid parallel to the existing pipes, and within the road right of way.</p> <p>Pipes will be mostly laid in earthen shoulder to avoid road cuttings</p>
4	House Service Connections	Replacement of non-functioning 16,870 water meters for existing connections and providing new water supply connections of 15,000 to un-covered households	At each household

4 Environmental Management Plan.

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with

Table 2: Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction

Karnataka Integrated Urban Water Management Investment Program						
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for City Municipal Council in Udupi				Name of the Contractor: Suez Civil Engineering Services Pvt, LTD& DRS Infra Tech Pvt, Ltd		
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)						
Name of the city : Udupi				Name of SE/EE/AE Of concerned division PIU :- Mr. Sudarshan, Sr.AE		
Date of monthly monitoring: 13-08-2020				Name of Environment, Health And Safety (EHS) Engineer :- Mr.Pradeep Sheety		
Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of implementations
EMP Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	1) Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc. 2) Appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work	Construction Contractor / PIU / PMDCSC	(i) Certificate of Completion (Safeguards Compliance Orientation) (ii) Posting of Certification of Completion at worksites (iii) Posting of EMP at work sites	Cost of EMP Implementation Orientation Training to contractor is responsibility of PMU. Other costs responsibility of contractor.	1) Spoil management submitted 2) EHS Engineer appointed

Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<p>3) Consult with PIU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>5) Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>6) Clean wheels and undercarriage of vehicles prior to leaving construction site</p> <p>7) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Construction Contractor	(i) Location of stockpiles; (ii) Complaints from sensitive receptors; (iii) Heavy equipment and machinery with air pollution control devices; (iv) Certification that vehicles are compliant with Air Act	Cost for implementation of mitigation measures responsibility of contractor.	<p>3) Complied</p> <p>4) Pipe execution work stopped during the visit due to rain. But instructed contracting agency to spray water at commercial and residential areas if stock piled on-site.</p> <p>5) Not complied</p> <p>6) Complied</p> <p>7) Complied</p>
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<p>8) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets.</p> <p>9) Laying of pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping.</p> <p>10) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Implementing Agency on designated disposal areas (Appendix6).</p> <p>11) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies</p>	Construction Contractor	(i) Areas for stockpiles, storage of fuels and lubricants and waste materials; (ii) Number of silt traps installed along trenches leading to water bodies; (iii) Records of surface water quality inspection; (iv) Effectiveness of water management measures; (v) No visible	Cost for implementation of mitigation measures responsibility of contractor.	<p>8) Instructed contracting agency to use tarpaulins or sheets for Stockpiling during monsoon season</p> <p>9) Pipe execution work stopped during the visit due to rain. Instructed contracting agency to fill the excavated trenches at all locations before rainy season</p> <p>10) Complied. Contracting agency dumping excess earth in CMC shown area but they contractor don't have authorized letter from PIU or CMC. Recommended</p>

		<p>12) Provide temporary bunds for stockpiles and materials</p> <p>13) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund</p> <p>14) Dispose any wastes generated by construction activities in designated sites.</p> <p>15) Conduct surface quality inspection and monitoring.</p>		<p>degradation to near by drainages, nallahs or water bodies due to civil works</p>		<p>contractor to get letter from PIU or CMC</p> <p>11) No such water bodies found during site visit but instructed contracting agency to use silt trap if any water bodies found</p> <p>12) Not complied</p> <p>13) Contracting agency not using fuels and lubricants in bulk but instructed to provide separate room for bulk quantity</p> <p>14) Complied. Contracting agency dumping excess earth in CMC shown area but the contractor don't have authorized letter from PIU or CMC. Recommended contractor to get letter from PIU or CMC</p> <p>15) Not complied</p>
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Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<p>16) Plan activities in consultation with PIU/PMDCSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>17) Construction work shall be limited to day light hours (6 AM to 6PM)</p> <p>18) Provide prior information to the local public about the work schedule;</p> <p>19) Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiseling;</p> <p>20) Minimize noise from construction equipment/pneumatic drills by using silencers, fitting jackhammers with noise- reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>21) Maintain maximum sound levels not exceeding 80 decibels (db A) when measured at a distance of 10 m or more from the vehicle/s.</p> <p>22) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>i) Use of silencers in noise-producing equipment and sound barriers;</p> <p>(iii) Equivalent day and night time noise levels (See Appendix 3 of this IEE)</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>16) Complied</p> <p>17) Complied</p> <p>18) Complied</p> <p>19) No such old or sensitive building found which comes in work alignments. But instructed contracting agency to take safe precautions while executing the works</p> <p>20) Complied</p> <p>21) Complied</p> <p>22) Complied</p>
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Landscape and aesthetics	Impacts due to excess excavated earth, excess construction materials, and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items.	<p>23) Prepare and implement spoils management plan</p> <p>24) Avoid stockpiling of excess excavated soils;</p> <p>25) Coordinate with Udupi CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>26) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>27) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>28) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>29) Request PMU/PMDCSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>	Construction Contractor	<p>(i) Complaints from sensitive receptors;</p> <p>(ii) Worksite clear of hazardous wastes such as oil/fuel</p> <p>(iv) Worksite clear of any excess excavated earth, excess construction materials, and solid waste such as removed concrete, wood, packaging materials, empty containers</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>23) Spoil management plan is prepared (attached in annexure 2a august 2019 but updation is to be done).</p> <p>24) Pipe execution work stopped during the visit due to rain. Found no such surplus and stockpiling of soils found in sites</p> <p>25) Contracting agency dumping excess earth in CMC shown area but the contractor don't have authorized letter from PIU or CMC. Recommended contractor to get letter from PIU or CMC</p> <p>26) Used oil and lubricants not generated on site</p> <p>27) Pipe execution work stopped during the visit due to rain. Contracting agency reusing by backfilling and dumping excess solid waste to the designated areas</p> <p>28) Complied</p> <p>29) Pipe execution work stopped during the visit due to rain. But instructed contracting agency to restore immediately and when work gets completed, joint site inspection will be conducted and report / letter will be issued.</p>
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Existing Infrastructure and Facilities Accessibility	Disruption of service and damage to existing infrastructure at specified project location Traffic problems and conflicts near project locations and haul road	<p>30) Obtain from PIU/PMDCSC the list of affected utilities and operators if any;</p> <p>31) Prepare a contingency plan to include actions to be done in case of unintentional interruption of service</p> <p>32) (iii) The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.</p> <p>33) Plan pipeline work in consultation with the traffic police</p> <p>34) Plan work such that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>35) Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>36) Schedule transport and hauling activities during non-peak hours;</p> <p>37) Do not close the road completely, allow traffic to move on one line;</p> <p>38) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>39) In unavoidable circumstances of road closure, provide alternative routes, and ensure that public is informed about such traffic diversions;</p> <p>40) At all work sites public</p>	Construction Contractor Construction Contractor	Existing Utilities Contingency Plan (i) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (Appendix7); (ii) Complaints from sensitive receptors; (iii) Number of signages placed at project location.	Cost for implementation of mitigation measures responsibility of contractor. Cost for implementation of mitigation measures responsibility of contractor.	<p>30) No such utilities were shifted or damaged but Recommended Contractor to maintain list of utilities identified prior to start of work at any section.</p> <p>31) Not complied</p> <p>32) No accidental breaking of any properties yet recorded but instructed contracting agency to rectify immediately</p> <p>33) Contractor should inform and take permission from traffic police for any pipe line laying/execution on roads.</p> <p>34) Complied</p> <p>35) Instructed to contractor agency to backfill and restore the excavated area immediately to avoid traffic</p> <p>36) Complied</p> <p>37) Complied</p> <p>38) Not Complied</p> <p>39) Instructed contract agency to provide one separate person at site to give route information to public</p> <p>40) Partially complied. Project information board should be both in</p>
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		<p>information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints.</p> <p>41) Keep the site free from all unnecessary obstructions;</p> <p>42) Drive vehicles in a considerate manner;</p> <p>43) Prepare a Traffic Management Plan –a Template is provided for reference at Appendix 7.</p>				<p>Kannada and English format.</p> <p>41) Complied</p> <p>42) Complied</p> <p>43) Traffic Management Plan is prepared by contracting agency (attached in annexure 2b august 2019 but updation is to be done).</p>
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	<p>44) Prepare and implement spoils management plan</p> <p>45) Leave spaces for access between mounds of soil; and Provide walkways and metal sheets where required for people;</p> <p>46) Increase work force in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</p> <p>47) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and</p> <p>48) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p>	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Spoils management plan (iii) Number of walkways, signages, and metal sheets placed at project location.	Cost for implementation of mitigation measures responsibility of contractor.	<p>44) Spoil management plan is prepared (attached in annexure 3c august 2019 but updation is to be done)</p> <p>45) Complied</p> <p>46) Complied</p> <p>47) Complied</p> <p>48) Complied</p>

Socio cultural resources	Disturbance to socio cultural resources	48) No material should be stocked close to these areas; material shall be	Construction Contractor	(i) Visual site observations	Cost for implementation of mitigation	48) Complied
	(religious, educational, health care etc.), access disruptions etc.,	<p>brought to the site as and when required.</p> <p>49) Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles</p> <p>50) No work should be conducted near the religious places during religious congregations</p> <p>51) Material transport to the site should be arranged considering school timings; material should be in place before school starts;</p> <p>52) Notify concerned schools, hospitals etc., 2 weeks prior to the work; conduct a 30-minute awareness program on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts</p> <p>53) Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites.</p>		(i) Public complaints	Measures responsibility of contractor.	<p>49) Complied</p> <p>50) Complied and instructed to follow</p> <p>51) Complied and instructed to follow</p> <p>52) Partially complied</p> <p>53) Not complied</p>
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	<p>54) Employ local labor force to the maximum extent, if manpower is available;</p> <p>55) Comply with labor laws</p>	Construction Contractor	(i) Employment records; (ii) Records of sources of materials (iii) Compliance to core labor laws (See appendix 2 of this IEE)	Cost for implementation of mitigation measures responsibility of contractor.	<p>54) Register maintained by contractor</p> <p>55) Contractor Obtained Labour license and Employees Compensation Insurances for Workers (Skilled and unskilled).</p>
Occupational Health and Safety	Occupational hazards which can arise	56) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE)	Construction Contractor	(i) Site-specific OHS Plan;	Cost for implementation of mitigation measures responsibility of	56) Contractor following Company EHS Policy Site-specific OHS Plan Have to

	during work	<p>57) Develop and implement site-specific occupational health and safety (OHS) Plan, and include in the Construction Management plan. The OHS plan will include measures such as:</p> <p>(a) excluding public from the site; (b) ensuring all workers are provided with and use personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs; (c) OHS Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>58) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>59) Provide medical insurance coverage for workers;</p> <p>60) Secure all installations from unauthorized intrusion and accident risks;</p> <p>61) Provide supplies of potable drinking water;</p> <p>62) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p>	<p>(ii) Equipped first-aid stations;</p> <p>(iii) Medical insurance coverage for workers;</p> <p>(iv) Number of accidents;</p> <p>(v) Supplies of potable drinking water;</p> <p>(vi) Clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) record of health and safety orientation trainings</p> <p>(viii) personal protective equipment;</p> <p>(ix) % of moving equipment outfitted with audible back-up alarms;</p> <p>(xi) permanent sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>(xii) Compliance to core labor laws</p>	contractor.	<p>be prepared by Contractor. Instructed contracting agency to provide H&S safety measures about COVID-19 to all worker and employees</p> <p>57) Contractor following Company EHS Policy- PPE'S provided by Contractor.</p> <p>a) Complied</p> <p>b) Complied. PPE'S provided by Contractor to workers</p> <p>c) Complied</p> <p>d) Not complied</p> <p>e) Accident and incident register maintained</p> <p>58) Partially Complied. Instructed to keep first-aid box at each working sites separately</p> <p>59) Not complied</p> <p>60) Complied</p> <p>61) Partially Complied</p> <p>62) Not Complied</p>
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		<p>63) Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>64) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>65) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>66) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>67) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>68) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>69) Overall, the contractor should comply with International Finance Corporation (IFC) EHS</p>		(See appendix 2 of this IEE)		<p>63) Complied. Instructed to Provide health and safety orientation training on COVID-19 on site daily to all workers</p> <p>64) Not complied</p> <p>65) Complied</p> <p>66) Complied</p> <p>67) Complied</p> <p>68) Not complied</p> <p>69) Not complied</p>
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		Guidelines on Occupational Health and Safety				
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<p>70) Provide hard barricading for all deep excavations that may require especially for pipe lines; identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work</p> <p>71) Plan material and waste routes to avoid times of peak-pedestrian activities</p> <p>72) Liaise with Udupi CMC in identifying risk areas on route cards/maps</p> <p>73) Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure</p> <p>74) Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads</p> <p>75) Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety</p>	Construction Contractor	(i) Traffic Management Plan; (ii) Complaints from sensitive receptors	Cost for implementation of mitigation measures responsibility of contractor.	<p>70) Work was not in progress due to rain. But instructed contracting agency to put hard barricading if trenches are more than 1.5m depth</p> <p>71) Not complied</p> <p>72) Not complied</p> <p>73) Not complied</p> <p>74) Complied</p> <p>75) Not complied</p>
Work Camps and worksites	Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants	<p>76) Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located at least 200 m from residential areas.</p> <p>77) Minimize removal of vegetation and disallow cutting of trees</p> <p>78) Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuge</p>	Construction Contractor	(i) Complaints from sensitive receptors; (ii) Drinking water and sanitation facilities for employees	Cost for implementation of mitigation measures responsibility of contractor.	<p>76) Not Complied Labour camp location was finalized but Letter has to be issued from PIU to contractors. And instructed to provide awareness to all workers to follow H&S measures of COVID-19</p> <p>77) Removal of vegetation Minimize by selecting best</p>

	Unsanitary and poor living conditions for workers	<p>79) The camp site should be adequately drained to avoid the accumulation of stagnant water</p> <p>80) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination</p> <p>81) Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons</p> <p>82) Train employees in the storage and handling of materials which can</p>				<p>alignment.</p> <p>78) Instructed contracting agency to built labour shad with sheets with proper ventilation in clean hygienic area and drinking water.</p> <p>79) Instructed contracting agency to built camp in dry and plan area where there is no water logging and must hygienic area.</p> <p>80) Instructed contracting agency to provide drinking water as per the standards at camp</p> <p>81) Instructed contracting agency to provide separate toilet facilities for men and women at camp and working sites</p> <p>82) Instructed contracting agency to provide training of solid and liquid materials handling to the persons at campcare fully to avoid soil contamination</p>
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		<p>potentially cause soil contamination;</p> <p>83) Recover used oil and lubricants and reuse or remove from the site;</p> <p>84) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>85) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>86) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p> <p>87) The work camp details should be included in the Construction Management Plan.</p>				<p>83) Instructed to contracting agency to train persons not to spill oil and lubricant and use carefully to avoid soil contamination</p> <p>84) Instructed to contracting agency to follow at camp</p> <p>85) Instructed to contracting agency to follow at camp</p> <p>86) Construction work is in progress</p> <p>87) Not complied</p>
Social and Cultural Resources	Risk of archaeological chance finds	<p>88) Create awareness among the workers and supervisors about the chance finds during excavation work</p> <p>89) Stop work immediately if any finds are suspected to allow further investigation</p> <p>90) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ.</p> <p>91) Adjacent to important religious sites, undertake excavation and Construction work in such a way that no structural damage is caused to the building.</p>	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility of contractor.	<p>88) Till now no such suspected items found nor recorded</p> <p>89) Till now no such suspected items found nor recorded</p> <p>90) Till now no such archaeological items recorded</p> <p>91) Work was not in progress due to rain. No such damages recorded during the visit. But instructed to maintain if such damages happens.</p>

Submission of EMP implementation report Post-construction clean-up	Unsatisfactory compliance to EMP Damage due to debris, spoils, excess construction materials	<p>92) Appointment of EHS engineer to ensure EMP implementation</p> <p>93) Timely submission of monitoring reports including pictures</p> <p>94) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and</p> <p>95) All excavated roads shall be reinstated to original condition.</p> <p>96) All disrupted utilities restored</p> <p>97) All affected structures rehabilitated/compensated</p> <p>98) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up.</p> <p>99) All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document.</p>	Construction contractor Construction Contractor	<p>Availability and competency of appointed EHS engineer</p> <p>Monthly report PMU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to pre-project conditions; (iii) all construction related structures not relevant to O&M are removed; and (iv) worksite clean-up is satisfactory.</p>	<p>Cost for implementation of mitigation measures responsibility of contractor.</p> <p>Cost for implementation of mitigation measures responsibility of contractor.</p>	<p>92) EHS Engineer appointed</p> <p>93) Complied</p> <p>94) Complied</p> <p>95) Work was not in progress due to rain. But instructed to restore road same as it was before damage</p> <p>96) If utilities are to be shifted contracting agency must take permission from concern authorities before start the work and restore it properly as it was before the damage</p> <p>97) Till now no structures affected</p> <p>98) Not complied Instructed contracting agency to properly clean surface area free of oil and paints for construction camp</p> <p>99) Not complied</p>
		<p>100) The contractor must arrange the cancellation of all temporary services.</p> <p>101) Request PMU/PMDCSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>100) Not complied</p> <p>101) Construction work is in progress</p>

Conclusion:-

Construction stage is in progress. Disposal yard is to be identified and consultations with PIU have to be taken. Health and HIV AIDS Awareness Training programme has to be conducted by Contractor. Proper Record maintenance should be improved by Contractor. Contractor has to submit Site specific EMP of January as similar to the construction stage table in IEE report with PIU letter, Udupi.

Recommendation:

S.No	Monitoring of Mitigation / Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Mobilization of Environment, Health And Safety(EHS)Engineer		Complied
2.	Submission of Site specific EMP		Comply with in 7 days
3.	Submission of monthly reports.	<ul style="list-style-type: none"> Construction status or complacence report 	<p>Contractor has to submit Site specific January as construction stage EMP present in IEE report, Udupi</p> <p>Comply with in 7 days</p>
4.	Telephone lines, electric Poles and wires, water Lines within proposed project area	<ul style="list-style-type: none"> List of utilities going to effect will be submit to PIU 	Comply with in 7 days
5.	Layout plan of overhead tanks (OHTs);		Comply with in 7 days
6.	Tree cutting/pruning permission; and	<ul style="list-style-type: none"> If any tree affected are noted in survey permission have to be taken 	Comply with in 7 days
7.	Compensatory tree plantation as part of the project.		Comply with in 5 days
8.	List of selected sites for construction work camps, hot mix plants, stockpile areas, storage areas, and disposal Areas.	<ul style="list-style-type: none"> Location most be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. 	Comply with in 15 days
9.	Written consent of landowner/s (not lessee/s) for reuse of excess spoils to agricultural land	<ul style="list-style-type: none"> If any private land is selected NOC from owner have to be taken 	Comply with in 5days
10.	List of selected sites for disposal	<ul style="list-style-type: none"> Location most be identified and marked on google map and consult with PIU and after joint inspection with consideration of all given mitigation measure given. If any private land is selected NOC from owner have to be taken 	Comply with in 5 days
11.	List of approved quarry Sites and Sources of materials; and		Comply with in 7 days
12.	Bid document to include requirement for		Comply with in 5 days

	verification of suitability of sources and permit for additional quarry sites if necessary.		
13.	Method of statement in table format	<ul style="list-style-type: none"> As mention in mitigation measures 	Comply with in 10 days
14.	Spoil Management Plan	<p>Waste material brought up during the course of an excavation or a dredging or mining operation.</p> <ul style="list-style-type: none"> Type and quantity of waste generated will be waste generated. Identify the impact Spoil Transportation Methodology Reuse of quantity of waste generated in any other projects or any other place Amount of waste disposed in identified disposal areas consultation with PIU If private land NOC from owner. Location of Waste disposal site mark on google map 	Draft copy shown and submitted and attached as annexure 3a in Aug 2019 report and informed contractor to update plan once construction phase starts
15.	Traffic management plan		Draft copy shown, submitted and attached as annexure 3b in Aug 2019 report and informed contractor to update plan once construction phase starts
16.	Environmental management plan		Draft copy shown, submitted and attached as annexure 3c in Aug 2019 report and informed contractor to update plan once construction phase starts
17.	Site specific OHS Plan	<ul style="list-style-type: none"> Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. Trained first aid personal will be available at the construction site. Emergency numbers will be displayed prominently at camp and construction site. Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. The contractor shall identify nearby hospital, which could be used in case of emergency. <p>First aid facilities and free emergency care shall be provided to all</p>	Comply with in 5 days

		workforce and third party and no cost shall be recovered from them on this account. International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety attached in june 2019 month	
18.	Equivalent day and night time noise levels	<ul style="list-style-type: none"> During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	<p>Complied. Construction test conducted in Jan 2020 and noise report attached as annexure 5 in feb 2020 Informed contractor agency to carryout Noise test every quarterly but still not done at site</p> <p>Comply with in 10 days</p>
19.	Records of Air quality inspection	<ul style="list-style-type: none"> If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	<p>Complied. Construction test conducted in Jan 2020 and air report attached as annexure 5 in feb 2020 Informed contractor agency to carryout Air test every quarterly but still not done at site</p> <p>Comply with in 10 days</p>
20.	H & S Plan for COVID-19 implementation	<ul style="list-style-type: none"> Daily Contractor as to provide awareness all office staffs and site workers to follow H& S measures of COVID-19 	<p>Complied. Implementation of H & S at work site is done. H & S plan is to be prepared by contractors Comply with in 5 days</p>



Mahmad Raphiyoddin Shaphiyoddin Malik
Environmental Specialist
KIUWMIP – Tranche 2

Annexure 1

Site visit observations of 13th August 2020



S.No	Observation		Recommendation
1	Hard barricading and Sign board at OHT Manchi site	 <p>Latitude: 13.323326 Longitude: 74.772339 Elevation: 27.89m Accuracy: 3.2m Time: 08-13-2020 11:58 Note: At Manchu OHT site, Udipi</p>	Instructed contractors to provided hard barricading around the OHT and sign boards



2	Hard barricading and Sign board at OHT Santtekatte site		Instructed contractors to provided hard barricading around the OHT and sign boards near steel rods
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3	Aggregates, sand and excavated earth Material stored at santtekatte OHT site	 <p>Latitude: 13.387502 Longitude: 74.738621 Elevation: 41.48m Accuracy: 3.2m Time: 08-13-2020 12:37 Note: At santtekatte OHT site, udh...</p> <p>Powered by NmapCam</p>	<p>Instructed contracting agency to make bunds for sand and aggregates storage to avoid flow and mix</p> <p>Instructed to remove steel rods used for sheet support And dispose loose earth stored at site to dumping yard</p>
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4	Water tank at santekatte OHT for worker usage		Instructed contracting agency to provide separate water can for drinking purpose and to use present tank for other usage
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5	Labour camp at Manchi OHT site	 <p>Latitude: 13.323364 Longitude: 74.772463 Elevation: 30.2m Accuracy: 3.2m Time: 06-13-2020 11:56 Note: At Manchu OHT site, I</p>  <p>Powered by NiteCam</p>	<p>Instructed contractor agency to provide cooking gas for cooking purpose</p> <p>And also instructed to provide proper light connection inside camp and to concrete the room properly for cooking and resting.</p> <p>Drinking water can facility should be provided at OHT site for workers</p> <p>Mobil toilets facility should be provided for workers at site</p>
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5	Housekeeping at santekatte OHT for work site		<p>Proper housekeeping should be done at work site</p> <p>Instructed not use fire wood burning for cooking and other purpose at work site place</p>
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Annexure 2

Status of Site visit observations of 23th June 2020

S.No	Observation		Recommendation	Status
1	Sign board, hard barricading and project information board at Indrali OHT site	 	Instructed contractors to provide Sign board, hard barricading around deep excavated area and project information board at the entrance of the all OHT sites	Not complied

2	Steel rod Material stored at OHT sites	 <p>Latitude: 13.945083 Longitude: 74.721257 Elevation: 38.36m Accuracy: 3.2m Time: 06-23-2020 16:20 Note: At Indrali OHT site, udipi</p> <p>Latitude: 13.387479 Longitude: 74.737933 Elevation: 38.04m Accuracy: 3.2m Time: 06-23-2020 15:53 Note: At santtekatte OHT site, udupi</p>	Instructed contracting agency to store the steel rods away from the walkways to avoid injury or else soft/hard barricade the steel surround area	Not complied
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3	Water tank at santekatte OHT for worker usage		Instructed contracting agency to provide separate water can for drinking purpose	Not complied
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4	Waste scrape and loose earth at santekatte OHT for work site	 <p>Latitude: 13.387459 Longitude: 74.738437 Elevation: 35.14m Accuracy: 3.2m Time: 06-23-2020 15:51 Note: At santekatte OHT site</p> <p>Powered by MoteCam</p>	Instructed contracting agency to remove all scrap and loose earth material to dumping yard and steel rods should be not use as fencing of the excavated OHT	Not complied
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SPPL-SIPL-DRS JV/KUIDFC/ UCMC/272/2020-21

14 September 2020

To,

The Executive Engineer,
KUIDFC-KIUWMIP-PIU,
Tranche-2, Udupi.

Sub.: KUIDFC & KIUWMIP – "Construction of Distribution System for 24x7 Water Supply including Services for Operation and Management for Udupi City- Package No.02UDP01": **Submission of EMP Reports for Month of August 2020, Udupi.**

Ref.:

- 1) LOA Letter No: UCMC/Udupi/KUIDFC/ADB/UDP03/2017-18 Dated 10th October 2018.
- 2) Contract Agreement for Package No. 02UDP01, Dated 16th November 2018.

Dear Sir,

With reference to the above subject, we are submitting the "Environmental Monitoring Plans (EMP) Reports" as follows for your reference and needful records.

1. Submission HSE Report for Month of August 2020.
2. Accident Records and Grievance Register copy.
3. Induction and Toolbox Training Attendance Sheet.
4. Good Practice Photographs.

Thanking you and assuring you of our best services at all times.

For SPPL-SIPL-DRS JV

(Authorized Signatory)

CC:

- 1) Deputy Project Director, KUIDFC; Mangaluru, for kind information
- 2) The Commissioner, City Municipal Council; Udupi, for Kind information.
- 3) Team Leader, Egis India Consulting Engineers Pvt Ltd; Mangaluru.

Encl: EMP Reports month of August 2020.



Monthly Environmental Monitoring Report

Document stage: Draft for Consultation Project Number: 43253-027 May 2018

IND: Karnataka Integrated Urban Water Management Investment Program
(Tranche 2) – Improvements for 24x7 Water Supply System – Distribution
System for City Municipal Council, Udupi

Package No: 02UDP01

Prepared by



Karnataka Urban Infrastructure Development and Finance Corporation, Government of Karnataka for the Asian Development Bank.	
Name of the Work: Improvements for 24x7 Water Supply System – Distribution System for City Municipal Council, Udupi	Name of the Contractor: SPPL-SIPL DRS INFRA JV
Package No: 02UDP01	
Name of the city: UDUPI	Name of SE/EE/AE Of concerned division PIU :-Executive Engineer – Umashankar
Month -August 2020	Name of Environment, Health and Safety (EHS)- Mr. Pradeep Shetty

REV	Date	Prepared By	Checked By	For Approval
00		Pradeep shetty	Srinivasa Rao	Submission Purpose

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction– Udupi

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
EMP Implementation Training	Impacts on the environment, workers, and community due to improper implementation	<p>1. Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.;</p> <p>2. appointment of Environment, Health and Safety (EHS) Engineer by contractor prior to start of work.</p>	Construction Contractor / PIU /PMDSC	1. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<p>3. Consult with PIU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>4. Damp down exposed soil and any stockpiled-on site by spraying with water when necessary during dry weather;</p> <p>5. Use tarpaulins to cover sand and other loose material when transported by trucks;</p> <p>6. Clean wheels and undercarriage of vehicles prior to leaving construction site;</p> <p>7. Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Construction Contractor	<p>3. Adopted</p> <p>4. Adopted</p> <p>5. Adopted</p> <p>6. Adopted</p> <p>7. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<p>8. Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets.</p> <p>9. Lay pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping.</p> <p>10. Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with Implementing Agency on designated disposal areas (Appendix 6).</p> <p>11. Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies.</p> <p>12. Provide temporary bunds for stockpiles and materials.</p> <p>13. Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 110% capacity bund.</p> <p>14. Dispose any wastes generated by construction activities in designated sites.</p> <p>15. Conduct surface quality inspection and monitoring</p>	Construction Contractor	<p>8. No plastic materials were used</p> <p>9. De watering pump available in site</p> <p>10. Extra soils disposed in alevooru dumping yard</p> <p>11. Not applicable</p> <p>12. Not applicable</p> <p>13. Not applicable</p> <p>14. Disposed in dumping yard</p> <p>15. Water testing conducted in December</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Noise Levels	Increase in noise level due to earthmoving and excavation equipment, and the transportation of equipment, materials, and people	<p>16. Plan activities in consultation with PIU/PMDSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance.</p> <p>17. Construction work shall be limited to day light hours (6 AM to 6 PM).</p> <p>18. Provide prior information to the local public about the work schedule.</p> <p>19. Ensure that there are no old and sensitive buildings that may come under risk due to the use of pneumatic drills; if there is risk, cut the rocks manually by chiseling.</p> <p>20. Minimize noise from construction equipment/ pneumatic drills by using silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor.</p> <p>21. Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicles.</p> <p>22. Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach.</p>	Construction Contractor	<p>16. Noise testing conducted in December</p> <p>17. Adopted</p> <p>18. Informing to local public before start of work</p> <p>19. Not Applicable</p> <p>20. Adopted</p> <p>21. Adopted</p> <p>22. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Landscape and aesthetics	Impacts due to excess excavated earth, excess construction materials, and solid waste such as removed concrete wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items	23. Prepare and implement spoils management plan; 24. Avoid stockpiling of excess excavated soils; 25. Coordinate with Udupi CMC for beneficial uses of excess excavated soils or immediately dispose to designated areas; 26 Recover used oil and lubricants and reuse or remove from the sites; 27 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; 28 Remove all wreckage, rubbish, or temporary structures which are no longer required; and 29 Request PMU/PMDSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.	Construction Contractor	23. Submitted 24. Adopted 25. Soil disposed to designated areas. 26. Adopted 27. Soil disposed at Alevooru debris land 28. Adopted
Existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	30 Obtain from PMU/PMDSC the list of affected utilities and operators if any; 31 Prepare a contingency plan to include actions to be done in case of unintentional interruption of service; 32 The public should be given notice at least three days in advance and any accidental breaking should be rectified immediately.	Construction Contractor	30. Adopted 31. Detecting cables and performing trial pits before start of work 32 Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Accessibility	Traffic problems and conflicts near projections and haul road	<p>33 Plan pipeline work in consultation with the traffic police;</p> <p>34 Plan work such that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>35 Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>36 Schedule transport and hauling activities during non-peak hours;</p> <p>37 Do not close the road completely, allow traffic to move on one line;</p> <p>38 Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>39 In unavoidable circumstances of road closure, provide alternative routes, and ensure that public is informed about such traffic diversions;</p> <p>40 At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints;</p> <p>41 Keep the site free from all unnecessary obstructions;</p> <p>42 Drive vehicles in a considerate manner;</p> <p>43 Prepare a Traffic Management Plan – a template is provided for reference at Appendix.</p>	Construction Contractor	<p>33. Adopted</p> <p>34. Adopted</p> <p>35. Road restoration work in progress</p> <p>36. Adopted 37. Adopted</p> <p>38. Adopted</p> <p>39. Showing alternative diversion routes</p> <p>40 Provided project information and contact numbers on board</p> <p>41. Adopted</p> <p>42. Adopted</p> <p>43. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	44 Prepare and implement spoils management plan; 45 Leave spaces for access between mounds of soil; 46 Provide walkways and metal sheets where required for people; 47 Increase workforces in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 48 Consult businesses and institutions regarding operating hours and factoring this in work schedules; 49 Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Construction Contractor	45. Adopted 46. Adopted 47. Adopted 48. Adopted 49. Provided project information and contact numbers on board

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio cultural resources	Disturbance to socio cultural resources (religious, educational, health care etc.), access disruptions etc.,	50 No material should be stocked close to these areas; material shall be brought to the site as and when required; 51 Conduct work manually with small group of workers and less noise; minimize use of equipment and vehicles; 52.No work should be conducted near the religious places during religious congregations; 53 Material transport to the site should be arranged considering school timings; material should be in place before school starts	Construction Contractor	50. Required materials were taken from store and after completion of work the same materials were transferred back to store every day. 51. Adopted 52. Adopted 53. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	54 Employ local labor force to the maximum extent, if manpower is available 55 Comply with labor laws	Construction Contractor	54. Adopted 55. Adopted

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Occupational Health and Safety	Occupational hazards which can arise during work	<p>56 Comply with all national, state and local core labor laws (See Appendix 2 of this IEE);</p> <p>57 Develop and implement site-specific occupational health and safety (OHS) Plan and include in the Construction Management plan.</p> <p>The OHS plan will include measures such as:</p> <p>(a) excluding public from the site;</p> <p>(b) ensuring all workers are provided with and use personal protective equipment like helmet, gumboot, safety belt, gloves, nose mask and ear plugs;</p> <p>(c) OHS Training for all site personnel;</p> <p>(d) documented procedures to be followed for all site activities; and</p> <p>(e) documentation of work-related accidents;</p> <p>58 Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>59 Provide medical insurance coverage for workers;</p> <p>60 Secure all installations from unauthorized intrusion and accident risks;</p> <p>61 Provide supplies of potable drinking water;</p> <p>62 Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>63 Provide health and safety orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p>	Construction Contractor	<p>56. Adopted</p> <p>57. Adopted</p> <p>58. First Aid box provided at working areas</p> <p>59. Provided medical insurance</p> <p>60. Adopted</p> <p>61. provided</p> <p>62. Adopted</p> <p>63. Conducting safety training and providing PPE and safety induction to workers.</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Occupational Health and Safety	Occupational hazards which can arise during work	<p>64 Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>65 Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>66 Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>67 Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>68 Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively;</p> <p>69 Overall, the contractor should comply with International Finance Corporation (IFC) EHS Guidelines on Occupational Health and Safety.</p>	Construction Contractor	<p>64. Adopted</p> <p>65. Adopted</p> <p>66. Adopted</p> <p>67. Provided sign boards at site</p> <p>68. Adopted</p> <p>69. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation.	<p>70 Provide hard barricading for all deep excavations that may require especially for pipe lines; identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work;</p> <p>71 Plan material and waste routes to avoid times of peak pedestrian activities;</p> <p>72 Liaise with Udupi CMC in identifying risk areas on route cards/maps;</p> <p>73 Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>74 Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads; and</p> <p>75 Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety.</p>	Construction Contractor	<p>70. Provided hard barricade.</p> <p>71. Adopted</p> <p>72. No</p> <p>73. Adopted</p> <p>74. Sign boards provided</p> <p>75. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Work Camps and worksites	<p>Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>76 Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located at least 200 m from residential areas;</p> <p>77 Minimize removal of vegetation and disallow cutting of trees;</p> <p>78 Living facilities shall be built with adequate materials, and should be in good condition and free from rubbish and other refuge;</p> <p>79 The camp site should be adequately drained to avoid the accumulation of stagnant water;</p> <p>80 Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80 LPCD); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>81 Provide separate facilities for men and women; sanitary facilities shall be properly built and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>82 Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>83 Recover used oil and lubricants and reuse or remove from the site;</p> <p>84 Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>85 Remove all wreckage, rubbish, or temporary structures which are no longer required;</p>	Construction Contractor	<p>76. Adopted</p> <p>77. Not Applicable</p> <p>78. Adopted</p> <p>79. Adopted</p> <p>80. Adopted</p> <p>81. Adopted</p> <p>82. Adopted</p> <p>84. Adopted</p> <p>85. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Work Camps and worksites	<p>Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>86 Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work;</p> <p>87 The work camp details should be included in the Construction Management Plan</p>	Construction Contractor	<p>86. Adopted</p> <p>87. Adopted</p>

Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Social and Cultural Resources	Risk of archaeological chance finds	<p>88 Create awareness among the workers and supervisors about the chance finds during excavation work;</p> <p>89 Stop work immediately if any finds are suspected to allow further investigation;</p> <p>89 Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in situ; and</p> <p>90 Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building</p>	Construction Contractor	<p>88. Always Conducting training to workers and engineers</p> <p>89. Adopted</p> <p>90. Not applicable</p>
Submission of EMP implementation report	Damage due to debris, spoils, excess construction materials	<p>91 Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p> <p>92 All excavated roads shall be reinstated to original condition;</p> <p>93 All disrupted utilities restored;</p> <p>94 All affected structures rehabilitated/compensated;</p> <p>95 The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up;</p> <p>96 All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document;</p> <p>97 The contractor must arrange the cancellation of all temporary services;</p> <p>98 Request PMU/PMDSC to report in writing that worksites and camps have been vacated and restored to pre-project</p>	Construction Contractor	<p>91. Adopted</p> <p>92. Adopted</p> <p>93. Adopted</p> <p>94 Adopted</p>





Field	Anticipated Impact	Mitigation Measures	Responsible for Implementation	Status of Complaints
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	99 Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; 100 All excavated roads shall be reinstated to original condition; 101 All disrupted utilities restored; 102 All affected structures rehabilitated/compensated; 103 The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up; 104 All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and regressed using the guidelines set out in the revegetation specification that forms part of this document; 105 The contractor must arrange the cancellation of all temporary services; 106 Request PMU/PMD CSC to report in writing that worksites and camps have been vacated and restored to pre-project conditions before acceptance of work.	Construction Contractor	99. Adopted 100. Adopted 101. Adopted 102 Adopted 104. Adopted 105. 106. Adopted





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August- 2020

S.no	Date	Description of Accident	Severity	Damage of information	Loss of month	Zone	Word no	Addres.	Responsible Person name	Employee/ Non Employee	Remarks
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Ali

Sl No	Date	Labour's Name	Father's Name	Age	Sex	Check In Time	Check out Time	Labour's Sign	Engineer's Sign	Remarks
①	30/7/2020	Mahabala	Shenoy	46	M	8:30 AM	5:30 PM	ಮಾಹಲಾ		
	30/7/2020	Vijay	Rasu	38	M	8:30 AM	5:30 PM	Vijay		
	30/7/2020	Sundara	Kutti	43	M	8:30 AM	5:30 PM	Sundara		
	30/7/2020	S Kumar	Narasimha	27	M	8:30 AM	5:30 PM	ಶುಕ್ಮ		
	30/7/2020	Seenu	Basappa	33	M	8:30 AM	5:30 PM	ನಿನ್		
②	31/7/2020	Mahabala	Shenoy	46	M	8:30 AM	5:30 PM	ಮಾಹಲಾ		
	31/7/2020	Vijay	Rasu	38	M	8:30 AM	5:30 PM	Vijay		
	31/7/2020	Sundara	Kutti	43	M	8:30 AM	5:30 PM	Sundara		
	31/7/2020	Bogga	Rama	45	M	8:30 AM	5:30 PM	ಬೊಗ್ಗ		
	31/7/2020	Sanjewa	Shankara	34	M	8:30 AM	5:30 PM	ಸಂಜೆವಾ		
	31/7/2020	Shikara	Sadamada	27	M	8:30 AM	5:30 PM	ಶಿಕಾರಾ		
①	1/08/2020	Mahabala	Shenoy	46	M	8:30 AM	5:30 PM	ಮಾಹಲಾ		
	1/08/2020	Vijay	Rasu	38	M	8:30 AM	5:30 PM	Vijay		
	1/08/2020	Sundara	Kutti	43	M	8:30 AM	5:30 PM	Sundara		
	1/08/2020	Bogga	Rama	45	M	8:30 AM	5:30 PM	ಬೊಗ್ಗ		
	1/08/2020	Sanjewa	Shankara	34	M	8:30 AM	5:30 PM	ಸಂಜೆವಾ		
	1/08/2020	Bhaskara	Basa	40	M	8:30 AM	5:30 PM	ಭಾಸ್ಕರಾ		
②	4/08/2020	Yamunappa	Shekappa	35	M	8:30 AM	5:30 PM	ಯಮುನಪ್ಪ		
	4/08/2020	Ravi	Kalappa	35	M	8:30 AM	5:30 PM	ರವಿ		
	4/08/2020	Sharanappa	Ravi	38	M	8:30 AM	5:30 PM	ಶರಣಪ್ಪ		
	4/08/2020	Mallesha	Shirappa	34	M	8:30 AM	5:30 PM	ಮಲ್ಲೇಶ್		
	4/08/2020	Rajeshwara	Madhwa	29	M	8:30 AM	5:30 PM	ರಾಜೇಶ್ವರ		
	4/08/2020	Konthesha	Madadeva	25	M	8:30 AM	5:30 PM	ಕೊಂಠೇಶ್		
	4/08/2020	Gurumurthy	Ragu	43	M	8:30 AM	5:30 PM	ಗುರುಮುರ್ತಿ		

Slms	Date ⁷⁶	Labour's name	Father's name	Age	Sex	Check in time	Check out time	Labour's Sign	Engineer's Sign	Remarks ⁷⁷
①	5/08/2020	Boggu	Rama	45	M	8:30 AM	5:30 PM	shriji		
②	5/08/2020	Vijaya	Rasu	38	M	8:30 AM	5:30 PM	vijay		
③	5/08/2020	Sundara	Kutti	43	M	8:30 AM	5:30 PM	Sundara		
④	5/08/2020	Shekara	Sadananda	39	M	8:30 AM	5:30 PM	Shekara		
⑤	5/08/2020	Gurumurthy	Ragu	43	M	8:30 AM	5:30 PM	Gurumurthy		
⑥	5/08/2020	Manoj	Shashi	33	M	8:30 AM	5:30 PM	Manoj		
⑦	5/08/2020	Alesh	Shivappa	28	M	8:30 AM	5:30 PM	Alesh		
⑧	5/08/2020	Sagar	Yashwantha	25	M	8:30 AM	5:30 PM	Sagar		
⑨	6/08/2020	Skuman	S. Kumar	22	M	8:30 AM	5:30 PM	Skuman		
⑩	6/08/2020	Gurumurthy	Ragu	43	M	8:30 AM	5:30 PM	Gurumurthy		
	6/08/2020	Sagar	Yashwantha	25	M	8:30 AM	5:30 PM	Sagar		
	6/08/2020	Manoj	Shashi	29	M	8:30 AM	5:30 PM	Manoj		
	6/08/2020	Alesh	Shivappa	28	M	8:30 AM	5:30 PM	Alesh		
⑪	7/08/2020	Boggu	Rama	45	M	8:30 AM	5:30 PM	shriji		
	7/08/2020	Vijay	Rasu	38	M	8:30 AM	5:30 PM	vijay		
	7/08/2020	Sundara	Kutti	43	M	8:30 AM	5:30 PM	Sundara		
	7/08/2020	Shekara	Sadananda	39	M	8:30 AM	5:30 PM	Shekara		
	7/08/2020	Manoj	Shashi	33	M	8:30 AM	5:30 PM	Manoj		
	7/08/2020	Alesh	Shivappa	28	M	8:30 AM	5:30 PM	Alesh		
⑫	12/08/2020	Yamunappa	Madappa	35	M	8:30 AM	5:30 PM	Yamunappa		
	12/08/2020	Siddappa	Thoma	32	M	8:30 AM	5:30 PM	Siddappa		
	12/08/2020	Shivappa	Rangappa	30	M	8:30 AM	5:30 PM	Shivappa		
	12/08/2020	Shamunukha	Kashinath	23	M	8:30 AM	5:30 PM	Shamunukha		

Sl. No	Date	Laborer's Name	Father's Name	Age	Sex	Check In Time	Check out Time	Laborer's Sign	Engineer's Sign	Remarks
①	13/08/2020	Yamunappa	Madappa	35	M	8:30AM				
	13/08/2020	Shammuka	Kashinath	33	M	8:30AM	5:30PM	అయ్యనపల్లి		
	13/08/2020	Shivappa	Rangappa	28	M	8:30AM	5:30PM	శివమ్మ		
	13/08/2020	Sidappa	Thomma	30	M	8:30AM	5:30PM	సిద్దు		
②	14/08/2020	Shivappa	Rangappa	28	M	8:30AM	5:30PM	శివమ్మ		
	14/08/2020	Yamunappa	Madappa	35	M	8:30AM	5:30PM	అయ్యనపల్లి		
	14/08/2020	Shammuka	Kashinath	33	M	8:30AM	5:30PM	శివమ్మ		
	14/08/2020	Sidappa	Thomma	30	M	8:30AM	5:30PM	సిద్దు		
③	18/08/2020	Yamunappa	Madappa	35	M	8:30AM	5:30PM	అయ్యనపల్లి		
	18/08/2020	Chandrashekar	Shelara	31	M	8:30AM	5:30PM	చంద్రశేఖర్		
	18/08/2020	Santhosh	mahesha	29	M	8:30AM	5:30PM	సం		
	18/08/2020	Ravi	Ragunath	29	M	8:30AM	5:30PM	రవి		
④	19/08/2020	Shekara	Sadananda	29	M	8:30AM	5:30PM	శివార్		
	19/08/2020	Santhosh	mahesha	29	M	8:30AM	5:30PM	సం		
	19/08/2020	Ravi	Ragunath	29	M	8:30AM	5:30PM	రవి		
	19/08/2020	Sidappa	Thomma	30	M	8:30AM	5:30PM	సిద్దు		
	19/08/2020	Vishwamath	Sukumara	31	M	8:30AM	5:30PM	విశ్వమత్తు		
⑤	20/08/2020	Yamunappa	Madara	35	M	8:30AM	5:30PM	అయ్యనపల్లి		
	20/08/2020	Chandrashekar	Shelara	31	M	8:30AM	5:30PM	చంద్రశేఖర్		
	20/08/2020	Shekara	Sadananda	31	M	8:30AM	5:30PM	శివార్		
	20/08/2020	Sanjeeva	Rangappa	42	M	8:30AM	5:30PM	సంజీవ్		
	20/08/2020	Vishwanath	Sukumara	31	M	8:30AM	5:30PM	విశ్వనాథన్		
	20/08/2020	Bogga	Rama	45	M	8:30AM	5:30PM	బొగ్గా		

Slrno	Date	Labadi's name	Father's name	Age	Sex	Check in Time
①	28/08/2020	Devanna	Basavaraj	24	M	8:30 AM
	28/08/2020	Ranganath	Ravi	23	M	8:30 AM
	28/08/2020	Chakravarthy	Sadashiva	26	M	8:30 AM
	28/08/2020	Hemantkumar	Krishna	28	M	8:30 AM
	28/08/2020	Girish	Sanseela	25	M	8:30 AM
	28/08/2020	Narajunda	Siddappa	21	M	8:30 AM
	28/08/2020	Bullesh	Yallappa	27	M	8:30 AM
	28/08/2020	Kumar	Lakappa	30	M	8:30 AM
	28/08/2020	Dishesh	Shama	22	M	8:30 AM
	28/08/2020	Swami	Sada	31	M	8:30 AM

29/08/2020	Devanna	Basavaraj	24	M	8:30 AM
29/08/2020	Rengnath	Ravi	23	M	8:30 AM
29/08/2020	Chakavathy	Sadashiva	26	M	8:30 AM
29/08/2020	Hemant Kumar	Koushma	28	M	8:20 AM
29/08/2020	Girish	Sanjella	25	M	8:30 AM
29/08/2020	Wongjunda	Sidappa	21	M	8:30 AM
29/08/2020	Buthesh	Malleppa	27	M	8:30 AM
29/08/2020	Kumar	Lokayya	30	M	8:30 AM
29/08/2020	Dibesh	Sharma	32	M	8:30 AM

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Covid Induction Attendance Sheet

04/08/2020

Sl. No	Name	Dept.	Signature
1.	Mamaj	Helper/pipe laying	Mamaj
2.	Sagar	"	Sagar
3.	Alesh	"	Alesh
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Name & Sign. of Trainer


04/08/20




suezHealth Safety & Environment
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Covid Induction Attendance Sheet

12/08/20

Sl. No	Name	Dept.	Signature
1.	Sidappa	Road Restoration	
2.	Shonamsha	"	
3.	Yamunappa	"	YAMUNAPPA
4.	Shivappa	"	
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Name & Sign. of Trainer


12/08/20

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Android: <https://play.google.com/store/apps/details?id=nic.gai.aarogya-setu>

Covid Induction Attendance Sheet

13/08/2020

Sl. No	Name	Dept.	Signature
1.	Yamunappa	Road Restoration	YAMUNAPPA
2.	Sidappa	"	20/8/20
3.	Shivappa	"	20/8/20
4.	Shanmukha	"	20/8/20
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Name & Sign. of Trainer


13/08/2020

URL for online Pre-Health assessment form is below <http://suezgls.com/Health-Safety/covid-19.html>

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iOS: <https://apps.apple.com/in/app/aarogya-setu/id1505813357>

Android: <https://play.google.com/store/apps/details?id=nic.goi.aarogya.setu>

Covid Induction Attendance Sheet

19/04/2020

Sl. No	Name	Dept.	Signature
1.	Ravi	Housekeeping	do
2.	Shelkova	"	Akara
3.	Sunil	"	anil
4.	Sidappa	"	sidappa
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Name & Sign. of Trainer

[Signature]
Pralip

**suez**Health Safety & Environment
Covid Induction Attendance SheetDate: 20.4.2020
Doc. No. SIPL/HSE/HDURL for online Pre-Health assessment form is below <http://suezgis.com/Health-Safety/covid-19.html>

Link for downloading Aarogya Setu app in my cell phone

iOS: <https://apps.apple.com/in/app/aarogyasetu/id1505825357>Android: <https://play.google.com/store/apps/details?id=nic.goi.aarogyasetu>**Covid Induction Attendance Sheet**

Sl. No	Name	Dept.	Signature
1.	Devanna	HSE	
2.	Ranganath	HSE	
3.	Chakraborty	HSC	
4.	Hemant Kumar	HSC	
5.	Chirish	HSC	
6.	Nanjunda	HSC	
7.	Buthegi	HSC	
8.	Kumar	HSC	
9.	Dinogli	HSC	
10.	Swarni	HSC	
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Name & Sign. of Trainer

 Pradeep
 22/04/20

Safety Training and Good Practices Photos-August 2020

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environnement

Safety Training for Workers



safety Training for workers



safety Training for workers



safety Training for workers



Thermal screening for workers



Thermal screening for workers



Office Decontamination



Thermal screening



Vehicle cleaning



Office cleaning



Social distance in office



Site Work



Monthly Environmental Monitoring Report

Project Number: 43253-027
September 2020

IND: Karnataka Integrated Urban Water Management
Investment Program (Tranche2) – Improvements for
24 x 7 Water Supply System for Town Municipal
Council in Kundapura

Package No. 02KDP01

Prepared by



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INTRODUCTION

1. Background

The Karnataka Integrated Urban Water Management Investment Program (KIUWMIP, the Program) aims to improve water resource management in urban areas in a holistic and sustainable manner. Investment support will be provided to modernize and expand urban water supply and sanitation (UWSS) while strengthening relevant institutions to enhance efficiency, productivity and sustainability in water use. The Program focuses on priority investments and institutional strengthening in water supply and sanitation within an integrated water resource management (IWRM) context.

The executing agency is the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC) and implementing agencies for the Investment Program will be respective urban local bodies (ULBs). Kundapura, Mangalore, Puttur, and Udupi are the four towns chosen to benefit from the Tranche 2 of the investment.

The expected outcome will be urban water resource management in four coastal towns (Kundapura, Mangalore, Puttur, and Udupi) improved. The outputs are (i) UWSS infrastructure expanded and upgraded; (ii) water resource planning, monitoring and service delivery improved; and (iii) project management capacity of KUIDFC and ULBs strengthened capacity. This initial environmental examination (IEE) is based on an assessment sewerage projects within the project area, i.e., Mangalore.

2. Existing Water Supply System in Kundapura

Kundapura is located in Udupi District in Karnataka and is the headquarters of the Kundapura Taluk placed 92 km from Mangalore and 416 km from Bangalore (Figure 1). Geographically, Kundapura Town is located at a latitude of 13°08'N and longitude of 74°07'E at an average altitude of 80 m above the mean sea level (msl). The municipality spreads in an area of 14 square kilometer (km²) and consists of Kundapura Kasaba and Vaderahobli villages, with 23 municipal wards. Population of Kundapura is 30,450 (2011 Census). Kundapura is well connected to other parts of the state and country by highways and railways. National highway (NH-66) passes through the town. Nearest airport is Mangalore International Airport, 87 km from Kundapura. Kundapura is also connected to the Konkan Railway, which runs from Mumbai to Mangalore. Nearest railway station is at about 4 km from the town.

Kundapuram Town Municipal Council (TMC) provides urban services to the people efficiently and is well recognized by the state and central governments. Kundapura TMC has been awarded following certificates of appreciation by the Government of Karnataka:

- (i) Best Urban Local Body in the year of 1996-1997;
- (ii) Best Urban Local Body Award in the 2009-2010;
- (iii) Second Best Practices Award in the year 2010 for Reduction of Nonrevenue Water Supply;
- (iv) Third Best Practices Award-2010 for Solid Waste Management (SWM) for providing excellent Municipal Services, maintaining Healthy Environment;
- (v) The best Utilization of reserved Fund for the social Service Activities; and
- (vi) Town Municipal Council also grabbed Green Leaf Award-2009, Nation Urban Water Awards-2009, and ICONSMW Award-2011 in National level.

3. Need for Infrastructure Improvement in Kundapura

River Varahi is the main surface source of water supply to Kundapura. The intake works, located in Jambu beside Jambukeshwara Temple, about 11 km from Kundapura, pump raw water to the WTP constructed on a hillock in Japhthi village at a distance of about 2.5 km from the intake works by 400 mm diameter mild steel (MS) rising main. Treated water from WTP is pumped through a 400mm diameter MS rising main to the 500

clear water transmission main passes through Kundapura-Shimoga Road and pass through four-enroute villages viz., Japhthi, Balkur, Basrur and Koni. A Schematic diagram of the existing water supply system is shown in the Figure 1.

Figure 1: Existing Water Supply System in Kundapura

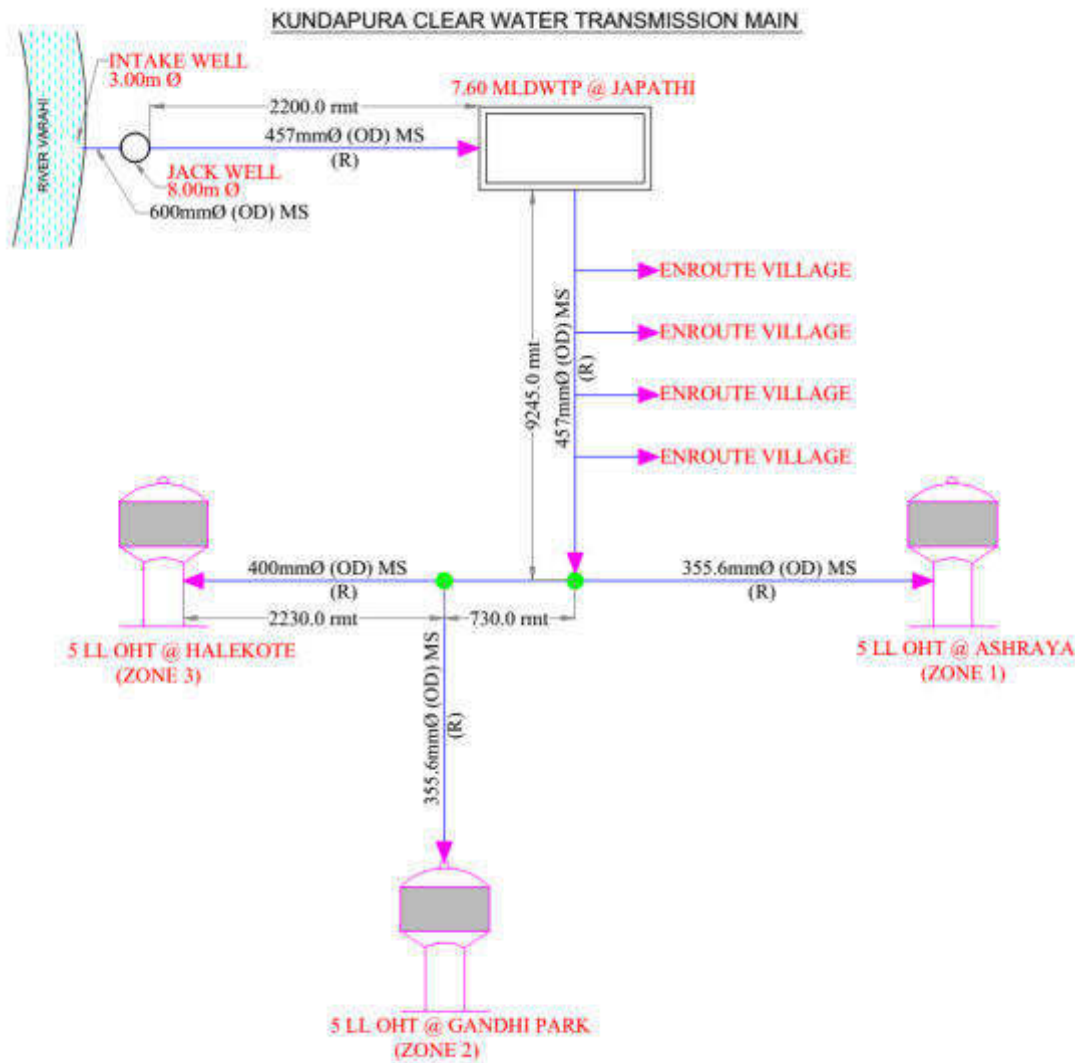


Table 1: Component of Existing Water Supply System in Kundapura

WTP Location	Capacity (MLD)	Treatment Process	Preliminary Design Stage? (Y/N)	Distance of WTP to nearest receptors in meters	Receiving Water of WTP Backwash /Wastewater Discharge	Uses of the receiving water (swimming, boating, fishing, irrigation, others [please specify])
Japthi, Kundapura	7.6	Inlet chamber ,Parshall flume,Flash Mixer , ClrifloculatorFilterhouse, Chlorination,	Existing WTP Rehabilitation	79	Discharged to drain	Irrigation

4. The proposed subproject:

The subproject formulated under this Investment Program to address gaps in current water supply system. Detailed design of all the subproject components is completed prior to the bidding, and as per the detailed design the subproject includes the following components:

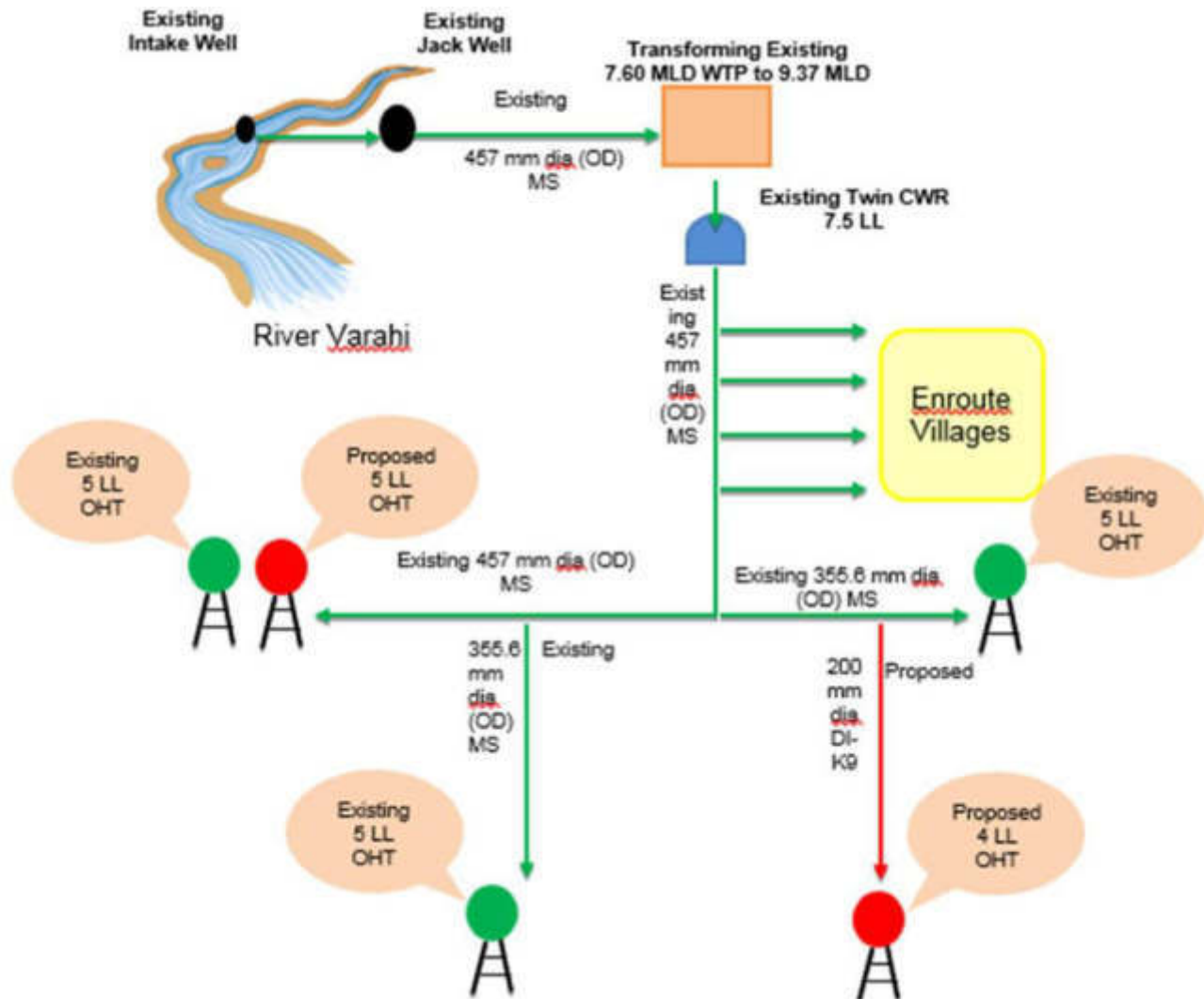
- (i) rehabilitation works and replacement of electromechanical equipment in Jack well at Jambu (Japthi village) to sufficiently supply 9.37 million liters per day (MLD) of raw water to the water treatment plant (WTP), and provision of a new diesel generator set for the un-interrupted power supply;
- (ii) rehabilitation of the existing 7.60 MLD WTP in Japthi village including provision of backwash water recirculation and sludge management system;
- (iii) laying of 4.8 kilometer (km) feeder main tapping from existing clear water main with 200 millimeter (mm) diameter pipe to feed to the proposed overhead tank (OHT) located in Kodi for the newly added zone 4;
- (iv) construction of 2 OHTs with a total capacity of 0.9 million liter;
- (v) extension of 31.64 km distribution network of diameter of 75 mm to 250 mm; and
- (vi) replacement of 4,200 existing meters and providing new metered house service connection (HSC) of 2,250 for uncovered households.

Following Table 2 provides details of the KIUWMIP Tranche 2 subproject components in Kundapura based on the detailed engineering design of the subproject. Schematic diagram of water supply system in Kundapura is shown in Figure 2. Locations of proposed components in Kundapura are shown. The position of the pipe alignment shown on road section is not exact due to mapping scale and underground utilities, and it will be fixed exactly during the pipeline laying work on site. All pipelines will be laid in the road shoulder, wherever it is available, or into the edge of road carriage way.

Table 2: Proposed Components for 24x7 Water Supply Systems

Infrastructure	Function	Description	Location
Jack well and Pump House	Pumping raw water to water treatment plant (WTP)	Rehabilitation works in Jack well by replacing mechanical equipment inside the pump house (pressure gauges, dewatering pumps, and electrical improvements) Provision of diesel generator set of 200 kilovolt ampere (kVA) for the un-interrupted power supply to the Jack well.	Works will be conducted within the existing Jack well near Jambukeshwara Temple in Jambu village
WTP	Treats raw water	Rehabilitation works in WTP by replacement equipment (flow meters, valves, pressure gauges, flash mixer, clari-floculator, alum and lime mixer, chlorinator, lab equipment etc.), Provision of diesel generator set (160 kVA) at WTP. Provision of backwash water recirculation and sludge management system to cater to total capacity of WTP (7.6 MLD); clarified water will be re-circulated to WTP inlet and accumulated sludge will be disposed in sanitary landfill	Works will be conducted within the existing WTP at Japthi village Sufficient land available within the WTP campus to develop backwash and sludge management facilities (see Figure 7)
Clear Water Transmission Main	Conveys clear water to service reservoirs	4.8 kilometer (km) length 200 millimeter (mm) diameter ductile iron pipe	Pipeline will be laid from the existing clear water main on NH-66 near Vinayaka theater to proposed new overhead tank (OHT) Kodi. Alignment is all along Kodi Road Alignment and profile drawings are shown in Figures 9 to 16.
Water service reservoirs	Water storage for supply	2 no.OHTs (of reinforced cement concrete, RCC) including compound walls at the sites: 500kiloliter (kl) capacity for Zone-3 at Halekote 400klcapacity for Zone-4 at Kodi	Site is vacant and owned by TMC Site is vacant and owned by Government of Karnataka Layout plans and elevations of OHTs are shown in Figures 17 to 20.
Distribution system Pipelines	Distributes clear water to the houses for the entire Town	31.64 km length diameter 75 - 250 mm high density poly ethylene (HDPE)pipes 75 mm dia-12.01km 90 mm dia- 5.89 km 110 mm dia- 7.08 km 160 mm dia- 2.27 km 200 mm dia- 2.33 km 250 mm dia- 2.06 km	Distribution pipes will be laid along the roads, within the road right of way, in 4 zones in KundapuraTown Municipal Council (TMC) area. Distribution zones with existing and proposed pipelines are shown Zone wise in Figures 21 to 24.
House Service Connections (HSC)	Individual houses get water after HSC.	HSC with Class B Multijet water meters 2,250 new 4,200 replacement	All households in four zones

Figure 2: Proposed 24/7 Water Supply System for Kundapura



CWR = clear water reservoir, dia = diameter, LL = lakh liter, mm = millimeter, MLD = million liters per day, MS = mild steel, OHT = overhead tank, WTP = water treatment plant.

5. Environmental Management Plan

The environmental management plan (EMP) aims to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of: (i) providing a proactive, feasible, and practical working tool to enable the measurement and monitoring of environmental performance on-site; (ii) guiding and controlling the implementation of findings and recommendations of the environmental assessment conducted for the project; (iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and (iv) ensuring that safety recommendations are complied with.

Karnataka Integrated Urban Water Management Investment Program	
Name of the Work: Karnataka Integrated Urban Water Management Investment Program (Tranche 2) – Improvements for 24 x 7 Water Supply System for Town Municipal Council in Kundapura	Name of the Contractor: Laxmi Civil Engineering Services Pvt,Ltd
Package No: Karnataka Integrated Urban Water Management Investment Program (Tranche 2)	
Name of the city : Kundapura	Name of SE/EE/AE of concerned division PIU :- Mr.HarishWalmiki, AEE
Date of monthly monitoring: 17/09/2020	Name of Environment, Health And Safety (EHS) Engineer :- Mr. Vijay

Status of implementation of Environmental Management Plan for Anticipated Impacts –Construction–Kundapura

Field	Anticipated Impact	Mitigation Measures	Responsible for Mitigation	Monitoring of Mitigation	Cost and Source of Funds	Status of implementation
Environmental Management Plan (EMP) Implementation Training	Impacts on the environment, workers, and community due to improper implementation of EMP	<ol style="list-style-type: none"> Project manager and all key workers will be required to undergo EMP implementation including spoils management, standard operating procedures (SOP) for construction works; occupational health and safety (OHS), core labor laws, applicable environmental laws, etc.; and Appointment of Environmental, Health and Safety (EHS) Engineer by contractor prior to start of work. 	Construction Contractor/ project implementation unit (PIU)/ Project Management Design and Construction Supervision Consultant (PMDSC)	<ol style="list-style-type: none"> Certificate of Completion (Safeguards Compliance Orientation) Posting of Certification of Completion at worksites Posting of EMP at worksites. 	Cost of EMP Implementation Orientation Training to contractor is responsibility of Program Management Unit (PMU). Other costs responsibility of contractor.	<ol style="list-style-type: none"> Contractor has to update SOPs. OHS plan and Activities are going on as per company EHS Policies. Complied Environmental, Health and Safety (EHS) Engineer appointed by contractor.

Air Quality	Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulphur oxides, particulate matter, nitrous oxides, and hydrocarbons.	<ol style="list-style-type: none"> 1) Consult with PMU/PMDCSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; 2) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; 3) Use tarpaulins to cover sand and other loose material when transported by trucks; and 4) Stockpile sand and other loose material only in barricaded area and protect/cover by tarpaulins to avoid dust generation 5) Clean wheels and undercarriage of vehicles prior to leaving construction site; and 6) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly. 	Construction Contractor	<ol style="list-style-type: none"> a) Location of stockpiles; b) Complaints from sensitive receptors; c) Heavy equipment and machinery with air pollution control devices; d) Certification that vehicles are compliant with Air Act 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Instructed to contracting agency to Spray water on exposed soil and stock piled mainly in commercial and residential area 3) Complied 4) Partially Complied. 5) Complied 6) Complied
Surface water quality	Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality.	<ol style="list-style-type: none"> 1) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; 2) Laying of pipelines during dry season and closing of all trenches before rainy season and avoid any chances of collecting the water in the trenches or pumping; 3) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, 	Construction Contractor	<ol style="list-style-type: none"> a) Areas for stockpiles, storage of fuels and lubricants and waste materials; b) Number of silt traps installed along trenches leading to water bodies; c) Records of surface water quality inspection; d) Effectiveness of water 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Stockpiling of earth fill not found during the site visit 2) Instructed to contracting agency to close all opened trenches Before rainy season 3) Partially Complied - Spoil Management plan prepared by Contractor Annexure attached in Feb 2019 report and recommended to

		<p>dispose in municipal landfill (Sample Spoils Management Plan in Appendix 10);</p> <p>4) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>5) Provide temporary bunds for stockpiles and materials;</p> <p>6) Place storage areas for fuels and lubricants away from any drainage leading to water bodies. Storage structure should consider 100% capacity bund; and</p> <p>7) Dispose any wastes generated by construction activities in landfill or reuse in beneficial purposes</p>		<p>management measures;</p> <p>e) No visible degradation to nearby drainages, nallahs or water bodies due to civil works</p>		<p>update according to the suggestions given and submit Spoil Management Plan.</p> <p>updated /Corrected Spoil Management plan yet to be submitted by Contractor</p> <p>4) Surface Water bodies not found along the Project site.</p> <p>5) Partially Complied</p> <p>6) Fuels and lubricants in bulk are not stored by contractor at site.</p> <p>7) Debris generated by construction is disposed in the ULB designated areas. Waste is used to fill the low line area</p>
	Contamination of coastal water due to works in coastal zone	<p>In addition to the above measures following measures given below for piling works:</p> <p>8) Piling activities for OHT foundation work at Kodi shall be conducted carefully; there shall no spillage of bentonite on the ground; bentonite slurry shall be properly collected in leak proof containers and re-circulated in the piling activity; excess bentonite slurry shall be dried properly in containers, and disposed</p>			Cost for implementation of mitigation measures responsibility of contractor.	<p>8) Pilling activities for OHT foundation work at Kodi beach has been done and OHT Construction work in progress and excess earth is disposed in landfill</p>

		in landfill safely				
Noise Levels	Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people	<ol style="list-style-type: none"> 1) Plan activities in consultation with PMU/PMDCSC so that activities with the greatest potential to generate noise (road cutting and piling activity) are conducted during periods of the day which will result in least disturbance; 2) Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach; 3) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and 4) Maintain maximum sound levels not exceeding 80 decibels (dB) when measured at a distance of 10 m or more from the vehicle/s. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Use of silencers in noise-producing equipment and sound barriers; and c) Equivalent day and night time noise levels (Appendix 3) 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied
Landscape and aesthetics	Impacts due to excess excavated earth, excess construction and demolition materials and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants,	<ol style="list-style-type: none"> 1) Manage surplus soil, debris and solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; 2) Coordinate with PIU / Kundapura TMC for beneficial uses of road debris and surplus soils in on-going construction works or for temporary 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Worksite clear of hazardous wastes such as oil/fuel; and c) Worksite clear of any excess excavated earth, excess construction materials, and 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Partially Complied 2) Complied - Contractor Coordinated with PIU / Kundapura TMC and surplus soils Disposed in Authorized landfill.

	and other similar items.	<p>storage for future use or disposal in landfill</p> <p>3) In unavoidable case of disposal, debris shall be disposed at landfill site or site approved by PIU / Kundapura; waste shall not be disposed in the forest areas and in or near water bodies/ rivers / coast</p> <p>4) Prepare and implement spoils management plan;</p> <p>5) Surplus soil and debris from work site shall be removed / cleared at the end of each day of work; there shall be no stock piling of debris / surplus soil at the site</p> <p>6) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>7) Remove all wreckage, rubbish, or temporary structures which are no longer required; and</p> <p>8) Request PIU/PMDSC to report in writing that the necessary environmental restoration works have been adequately performed before acceptance of work.</p>		<p>solid waste such as removed concrete, wood, packaging materials, empty containers</p>		<p>3) Complied</p> <p>4) Partially Complied spoil management plan Prepared and Implementation is going on accordingly (SPM attached as Annexure in Feb 2019 Monthly report. Recommended the Contractor for update as per suggestions given and to submit SM Plan. Updated /Corrected Spoil Management plan not submitted by Contractor</p> <p>5) Complied</p> <p>6) Used oil and lubricants not generated on site</p> <p>7) Complied</p> <p>8) Construction work under progress</p>
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Utilities - existing Infrastructure and Facilities	Disruption of service and damage to existing infrastructure at specified project location	<ol style="list-style-type: none"> 1) At least two-weeks prior to start of work at any section, Identify utilities that will be required to be temporarily disturbed / shifted for the construction work; 2) Liaise with the respective utility department, provide prior information to the affected public and restore the utilities as soon as the work is complete 3) Provide contingency services where required (temporary diversion of drains, provision of water supply by tankers, etc.,) 4) Coordinate with the respective department and ensure that electricity and telephone services are restored quickly 5) Reconstruct the damaged footpath and drains immediately after the completion of pipeline work in that particular section 	Construction Contractor and PIU	<ol style="list-style-type: none"> a) Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken b) Record to confirm that contingency services are provided and all damaged utilities are restored after the work 	Part of project cost	<ol style="list-style-type: none"> 1) Complied 2) Complied contingency services are provided and restoration is going on after the work. 3) Complied 4) Complied 5) Complied
Ecological Resources – Terrestrial	Loss of vegetation and tree cover	<ol style="list-style-type: none"> 1) Except four (4) coconut trees at Kodi OHT site, and pruning of large tree to the minimum required extent at Halekoti OHT site, no trees shall be removed for the subproject. 2) Trees in the pipeline alignments shall be avoided during construction by locally 	Construction Contractor	<ol style="list-style-type: none"> a) PMU/PMDSC to report in writing the number of trees cut and planted. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied. 6 trees got felled and Compensations were paid to the owners. Attached as Annexures 10 in the May 2019 report. And also ADB Social safeguard team visited on 23/9/2019 to particular affected persons to provide further training for them.

		3) altering the alignment. Obtain tree cutting and pruning permission from Tree Officer; plant and maintain 10 trees for each tree that is removed				2) Complied 3) Compensation paid to the owner of the tree.
Accessibility	Traffic problems and conflicts near project locations and haul road	<p>1) Plan pipeline work in consultation with the traffic police; prepare a Traffic Management Plan – a template is provided for reference at Appendix 11.</p> <p>2) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>3) Provide for immediate consolidation of backfilling material to desired compaction – this will allow immediate road restoration and therefore will minimize disturbance to the traffic movement;</p> <p>4) Schedule transport and hauling activities during non-peak hours;</p> <p>5) No road shall be completely closed for traffic; in unavoidable circumstances of road closure (eg, NH service road closure at Shastri Circle for trenchless work), provide alternative route, and ensure that public is informed about such traffic</p>	Construction Contractor	<p>a) Traffic route during construction works including number of permanent signages, barricades and flagmen on worksite (Appendix 11);</p> <p>b) Complaints from sensitive receptors; and</p> <p>c) Number of signages placed at project location.</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Traffic Management Plan prepared by contractor and followed accordingly. Traffic Management Plan attached as Annexure– 9 in the May 2019 report. It was advised to contractor to update Traffic Management Plan.</p> <p>Traffic management plan yet to be updated</p> <p>2) Complied</p> <p>3) Complied</p> <p>4) Complied</p> <p>5) Not complied Contractor has to provide traffic management plan for their all working areas to minimize the traffic in busy</p>

		<p>diversions;</p> <p>6) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>7) Maintain safe pedestrian access at all times to the houses along the work site;</p> <p>8) Hard barricades should be mandatorily provided for work sites in residential and commercial areas, along with caution board.</p> <p>9) At all work sites public information/caution boards shall be provided – information shall inter-alia include: project name, cost and schedule; executing agency and contractor details; nature and schedule of work at that road/locality; traffic diversion details, if any; entry restriction information; competent official's name and contact for public complaints;</p> <p>10) Keep the site free from all unnecessary obstructions;</p> <p>11) Drive vehicles in a considerate manner</p> <p>In narrow roads listed above, Inform the affected local population on week in advance, and again a day before the work</p>				<p>and small congested areas</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Instructed to contracting agency to provide hard barricades for large depth trench or close all opened trenches Before rainy season</p> <p>9) The public information/caution boards at work sites not provided with details mentioned in Mitigation Measures except at Kodi Beach which is also in Kannada.</p> <p>10) Complied</p> <p>11) Partially Complied</p>
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Socio-Economic – Income.	Impede the access of residents and customers to nearby shops	<ol style="list-style-type: none"> 1) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time; 2) Leave spaces for access between mounds of soil; 3) Provide walkways and metal sheets where required for people; 4) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; 5) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and 6) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints. 	Construction Contractor	<ol style="list-style-type: none"> a) Complaints from sensitive receptors; b) Spoils management plan; and c) Number of walkways, signs, and metal sheets placed at project location. 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Complied 3) Complied 4) Complied 5) Complied 6) Not Complied. instructed contracting agency to provide Project information board at all working areas.
Socio cultural resources	Disturbance to socio cultural resources (religious, educational, health care etc.), access disruptions etc.,	<ol style="list-style-type: none"> 1) No material should be stocked close to these areas; material shall be brought to the site as and when required; 2) Conduct work manually with small group of workers and less noise; minimize 	Construction Contractor	<ol style="list-style-type: none"> a) Visual site observations b) Public complaints 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Complied 2) Contractor conducting work manually for all possible works to minimize the

		<p>use of equipment and vehicles;</p> <p>3) Strictly follow the pipe laying method presented in Table 7 so that trench excavation, pipe laying, and refilling including compacting, at a stretch is completed in a minimum possible time;</p> <p>4) No work should be conducted near the religious places during religious congregations;</p> <p>5) Material transport to the site should be arranged considering school timings; material should be in place before school starts;</p> <p>6) Notify concerned schools, hospitals etc., 2 weeks prior to the work; conduct a 30-minute awareness program on nature of work, likely disturbances and risks and construction work, mitigation measures in place, entry restrictions and dos and don'ts; and</p> <p>7) Implement all measures suggested elsewhere in this report – dust and noise control, public safety, traffic management, strictly at the sites.</p>				<p>use of equipment.</p> <p>3) Complied</p> <p>4) Complied</p> <p>5) Complied</p> <p>6) Recommended contacting agency to provide information about project work and Proper record has to be maintained</p> <p>7) Improvement is required in Implementation.</p>
Socio-Economic - Employment	Generation of contractual employment and increase in local revenue	<p>1) Employ local labor force to the maximum extent, if manpower is available; and</p> <p>2) Comply with labor laws</p>	Construction Contractor	<p>a) Employment records;</p> <p>b) Records of sources of materials; and</p> <p>c) Compliance to core labor laws (See Appendix 2 of this IEE)</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Register maintained by contractor attached as Annexure – 7 in May 2019 report.</p> <p>2) Contractor Obtained Labour license and</p>

						Employees Compensation Insurances for Workers (Skilled and unskilled). Attached as Annexure 11 and 12 in May 2019 report.
Occupational Health and Safety	Occupational hazards which can arise during work	<ol style="list-style-type: none"> 1) Comply with all national, state and local core labor laws (See Appendix 2 of this IEE); 2) Develop and implement site-specific health and safety (H&S) plan which will include measures such as: <ol style="list-style-type: none"> (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H&S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; 3) All trenches in sandy and mixed sandy soils irrespective of depth shall be protected with safety shoring / strutting to avoid safety risks to workers, public and nearby buildings/structures 4) Ensure that qualified first-aid can be provided at all times. Equipped first-aid 	Construction Contractor	<ol style="list-style-type: none"> a) Site-specific OHS Plan; b) Equipped first-aid stations; c) Medical insurance coverage for workers; d) Number of accidents; e) Supplies of potable drinking water; f) Clean eating areas where workers are not exposed to hazardous or noxious substances; g) record of H&S orientation trainings h) personal protective equipment; i) % of moving equipment outfitted with audible back-up alarms; j) permanent sign boards for hazardous areas such as energized electrical devices and 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Contractor following Company EHS Policy Site-specific OHS Plan Not prepared by Contractor and is yet to be submitted 2) Contractor following Company EHS Policy-PPE'S provided by Contractor. Proper Documentation has to be maintained by Contractor 3) Recommended contractor to implement the mitigation measure when such deep trenches are to be executed. 4) Partially complied First aid box is available but not adequate as per standards. The equipped first-aid station not provided.

		<p>stations shall be easily accessible throughout the site;</p> <p>5) Provide medical insurance coverage for workers;</p> <p>6) Secure all installations from unauthorized intrusion and accident risks;</p> <p>7) Provide supplies of potable drinking water;</p> <p>8) Provide clean eating areas where workers are not exposed to hazardous or noxious substances</p> <p>9) Provide H&S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>10) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>11) Ensure the visibility of workers through their use</p>		<p>lines, service rooms housing high voltage equipment, and areas for storage and disposal.</p> <p>k) Compliance to core labor laws (Appendix 2)</p>		<p>5) Employees Compensation Insurances for Workers (Skilled and unskilled).</p> <p>6) Complied</p> <p>7) Complied</p> <p>8) Separate clean eating areas not provided by contractor.</p> <p>9) H&S orientation training for workers not found during the work and proper documentation required need to be done</p> <p>10) Not Complied</p> <p>11) Complied</p>
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		<p>of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>12) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>13) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate;</p> <p>14) Disallow worker exposure to noise level greater than 85 dB for duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively; and</p> <p>15) Overall, the contractor should comply with International Finance Corporation (IFC) Environmental, Health and Safety (EHS) Guidelines on occupational health and safety. (this can be downloaded from http://www1.ifc.org/wps/wc</p>				<p>12) Complied</p> <p>13) Not Complied</p> <p>14) Not Complied Recommended the Contractor to use hearing protection measures and not allow worker to work more than 8 hours per day during the work.</p> <p>15) Not complied</p>
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Community Health and Safety.	Traffic accidents and vehicle collision with pedestrians during material and waste transportation	<ol style="list-style-type: none"> 1) Provide protective shorting / strutting hard barricading for all deep excavations in sandy and mixed sandy that may require especially for pipe lines soils (>1m); 2) One week prior to start of work at any section, a joint inspection shall be conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and take necessary precautions for safe conduct of work. 3) identify buildings at risk prior to start of excavation work and take necessary precautions for safe conduct of work; 4) Plan material and waste routes to avoid times of peak-pedestrian activities; 5) Liaise with Kundapura TMC in identifying risk areas on route cards/maps; 6) Maintain regularly the 	Construction Contractor	<ol style="list-style-type: none"> a) Traffic Management Plan; and b) Complaints from sensitive receptors 	Cost for implementation of mitigation measures responsibility of contractor.	<ol style="list-style-type: none"> 1) Recommended contractor to implement the mitigation measure when such deep trench were executed. 2) Complied 3) Joint inspection conducted along with PIU and Kundapura TMC to identify risk areas and buildings at risk (due to excavation, vibration and noise) and should take necessary precautions for safe conduct of work, No such record found at time of inspection 4) Complied 5) Complied 6) Not complied-Register of Equipment and Vehicles maintenance certificates not

		<p>vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure;</p> <p>7) Provide road signs and flag persons to warn of dangerous conditions, for all work sites along the roads; and</p> <p>8) Overall, the contractor should comply with IFC EHS Guidelines Community Health and Safety (this can be downloaded from http://www1.ifc.org/wps/wcm/connect/dd673400488559ae83c4d36a6515bb18/3%2Bcommunity%2Bhealth%2Band%2Bsafety.pdf?MOD=AJPERES).</p>				<p>found at site during the site visit.</p> <p>7) Work in progress at Halekote OHT and sign boards provided at work site but no sign boards are provided at pipe execution work during inspection. Instructed contracting agency to keep necessary sign boards at pipe execution work</p> <p>8) Not Complied.</p>
Work Camps and worksites	<p>Temporary air and noise pollution from machine operation, water pollution from storage and use of fuels, oils, solvents, and lubricants</p> <p>Unsanitary and poor living conditions for workers</p>	<p>1) Consult with PIU before locating workers camps/sheds, and construction plants; as far as possible located within reasonable distance of work site;</p> <p>2) Minimize removal of vegetation and disallow cutting of trees;</p> <p>3) Labor camps shall include accommodation for workers/laborers along with</p>	Construction Contractor	<p>a) Complaints from sensitive receptors;</p> <p>b) Drinking water and sanitation facilities for employees</p>	Cost for implementation of mitigation measures responsibility of contractor.	<p>1) Partially Complied. Instructed contracting agency to provide H&S safety measures about COVID-19 to all worker and employees</p> <p>2) Removal of vegetation minimized by selecting best alignment.</p> <p>3) Labor camp facilities provided by</p>

		<p>other basic amenities such as kitchen, potable water supply, sanitation (toilets, bathrooms, washing areas and water supply for such needs), first aid room as well as garbage collection and disposal facility.</p> <p>4) The roof height of the worker's and labor camp shall not be less than 3 m from floor level to the lowest part of the roof.</p> <p>5) The camps shall be floored with concrete, shall be kept clean, and with proper cross ventilation, and the space provided shall be on the basis of one sq.mt per head or as per the relevant regulation, whichever is higher.</p> <p>6) Fire and electrical safety precautions shall be adhered to.</p> <p>7) Cooking, sanitation and washing areas shall be provided separately.</p> <p>8) The Contractor shall maintain necessary living accommodation and ancillary facilities (including provision of clean fuel to prevent damage to forests and to prevent fuel wood cutting and burning by labor) in functional and hygienic manner.</p> <p>9) The site must be graded and rendered free from depressions such that water does not get stagnant anywhere.</p> <p>10) The entire boundary of the site should be fenced all around with barbed wire so as to prevent the trespassing of humans and animals.</p> <p>11) Provide water and sanitation facilities; water, meeting Indian drinking water standards shall be provided, in adequate quantities (supply of 60- 80</p>				<p>the Contractor needed to be improved.</p> <p>4) Not Complied</p> <p>5) Not Complied</p> <p>6) Fire Extinguisher not provided and electrical cable connections are not safely maintained.</p> <p>7) Separate Cooking areahas not been provided</p> <p>8) Gas Cylinder has been Provided by Contractor</p> <p>9) Complied</p> <p>10) Not complied</p> <p>11) Complied</p>
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		<p>lpcd); all water storage structures must be cleaned regularly and covered properly to avoid any contamination;</p> <p>12) Provide separate facilities for men and women; sanitary facilities shall be properly build and well maintained; toilet and bath facilities should be provided on basis of 1 per 15 or less persons;</p> <p>13) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>14) Recover used oil and lubricants and reuse or remove from the site;</p> <p>15) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>16) Remove all wreckage, rubbish, or temporary structures which are no longer required;</p> <p>17) Report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				<p>12) Not Complied. The toilets are in unhygienic conditions.</p> <p>13) Not Complied</p> <p>14) Complied - reused.</p> <p>15) Complied</p> <p>16) Complied</p> <p>17) Still Construction Phase is in progress.</p>
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Social and Cultural Resources	Risk of archaeological chance finds	18) Create awareness among the workers and supervisors about the chance finds during excavation work; 19) Stop work immediately if any finds are suspected to allow further investigation; 20) Inform archaeological agencies promptly if a find is suspected, and take any action they require to ensure its removal or protection in site; and 21) Adjacent to important religious sites, undertake excavation and construction work in such a way that no structural damage is caused to the building.	Construction Contractor	Records of chance finds	Cost for implementation of mitigation measures responsibility of contractor.	18) Complied 19) Till now no such suspected items found nor recorded 20) Till now no such archaeological items recorded 21) Till now no such change found nor recorded
Submission of EMP implementation report	Unsatisfactory compliance to EMP	22) Timely submission of monitoring reports including pictures.	Construction contractor	a) Availability and competency of appointed supervisor Monthly report	Cost for implementation of mitigation measures responsibility of contractor.	23) Not complied. Contractor agency not submitting monthly report timely
Post-construction clean-up	Damage due to debris, spoils, excess construction materials	24) Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; 25) All excavated roads shall be reinstated to original condition. 26) All disrupted utilities restored. 27) All affected structures rehabilitated/compensated. 28) The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these	Construction Contractor	a) PMU/PMDCSC report in writing that (i) worksite is restored to original conditions; (ii) camp has been vacated and restored to pre-project conditions; (iii) all construction related structures not relevant to operation and maintenance (O&M) are removed; and (iv) Worksite clean-up is satisfactory.	Cost for implementation of mitigation measures responsibility of contractor.	24) Complied 25) Complied 26) Complied 27) Till now no structures affected 28) Complied

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Conclusion:-

Overall The Contractor's compliance with the Environment and Health and safety requirements of the Project is not satisfactory. Contractor is maintaining copy of IEE. **HIV AIDS Awareness Training programme** have to be conducted by the Contractor. Proper Safety precautions at site and **Safety against COVID-19** should be improved by the Contractor. **January, February, March, April, May, June, July, August and September 2020 site specific EMP Monthly report** with PIU letter has to be submitted from the contracting agency.

Recommendation:-

Key Issues: Following are the key issues which required immediate necessary action / further improvement.

S.No	Monitoring of Mitigation /Key Issues to be complied	Recommendation and Action Required by Contractor	Time line/Remarks
1.	Certificate of Completion (Safeguards Compliance Orientation)	<ul style="list-style-type: none"> Register of Clearances required /status 	1) CRZ Clearance attached as Annexures 2,3 & 4 in June 2019 report 2) Tree cutting permission from tree officer not provided yet.
2.	Posting of Certification of Completion at worksites	<ul style="list-style-type: none"> If any Respective Project Site work completed - Certification of Completion will be provided at worksites on Information board. 	Within 3 day of work Completion
3.	Posting of EMP at worksites.	<ul style="list-style-type: none"> Project Information board should also be in Kannada Language along with contact numbers for grievance Redressal 	Comply with in 15 days
4.	Location of stockpiles;	<ul style="list-style-type: none"> To prepare the Google map of the Locations of identified stockpiles 	Comply with in 5 days
5.	Complaints from sensitive receptors;	<ul style="list-style-type: none"> Complaints/Grievance Redressal Registers should be maintained at each work site. 	Compiled and maintaining grievance registers at site
6.	Heavy equipment and machinery with air pollution control devices;	<ul style="list-style-type: none"> PUC certification for all vehicles/equipment used for/during construction and certification of users at site. 	Comply with in 7 days
7.	Certification that vehicles are compliant with Air Act	<ul style="list-style-type: none"> Register of Equipment and Vehicles maintenance certificates at site 	Comply with in 5 days
8.	Areas for stockpiles, storage of fuels and lubricants and waste materials;	<ul style="list-style-type: none"> Storage of materials like fuel, chemicals, and cement shall be done in a manner (with impervious layer on bottom and a covered shed on top) that does not contaminate land and ground/surface water. 	Comply with in 7 days
9.	Number of silt traps installed along trenches leading to water bodies;	<ul style="list-style-type: none"> Prepare list of silt traps installed along trenches 	If applicable in 8 days
10	Records of surface water quality inspection;	<ul style="list-style-type: none"> If any surface water body is Present nearby project area during the construction phase, the contractor will carry out environmental monitoring and testing for Surface water engaging NABL approved laboratory. 	For every 3 months, Complied (Jan to March Monitoring).Annexure 2 in May 2019 report.

			<p>The Water quality monitoring is done in January 2020 and attached as Annexure-5c in Jan 2020 report</p> <p>Instructed contracting agency to conduct water tests every quarterly. But till contractor agency not conducted water test.</p>
11	Use of silencers in noise-producing equipment and sound barriers; and	<ul style="list-style-type: none"> • Only acoustic enclosures fitted DG set will be allowed at the construction site and camp sites. • Maintenance of equipment and machinery (including proper lubrication, tuning and checks for muffler effectiveness) shall be regular and up to the satisfaction of the Engineer to keep noise level under control. • Barricading- Hard Barricade should be provided to protect from unauthorized access of common people 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work.</p>
12	Equivalent day and night time noise levels (Appendix 3)	<ul style="list-style-type: none"> • During the construction phase, the contractor will carry out environmental monitoring noise levels by engaging NABL approved laboratory. 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure 2in May 2019 report. And informed contractors toconduct the noise test every 3 months.The Noise level monitoring is done in January 2020 and attached as Annexure-5b in Jan 2020 report Instructed contracting agency to conduct air, noise and water test every quarterly but still not conducted by CA.</p>
13	Records of Air quality inspection	<ul style="list-style-type: none"> • If contractor carrying out Construction activities near sensitive receptor(residential areas, temples, Hospitals, schools) During the construction phase, the contractor will carry out Ambient Air quality monitoring by engaging NABL approved laboratory 	<p>For every 3 months, Complied (Jan to March Monitoring). Annexure-2during the work.Informed the contractors to conduct the air quality test every 3 months.The Air quality monitoring is done in</p>

			January 2020 and attached as Annexure-5a in Jan 2020 report Instructed contracting agency to conduct air, noise and water test every quarterly but still not conducted by CA.
14	Worksite clear of hazardous wastes such as oil/fuel;	<ul style="list-style-type: none"> Used oil generated from vehicles/DG set at plant/camp site will be collected in closed containers and sold to MoEF&CC/SPCB approved used oil recyclers. No solid or hazardous wastes (such as oil contaminated waste) will be dumped in drains or in open areas 	<p>Daily monitoring required at site during the work</p> <p>Comply during the work</p>
15	Solid waste such as removed concrete, wood, packaging materials, empty containers	<ul style="list-style-type: none"> Burning of wastes will not be allowed. The contractor will provide garbage bins in the camp and construction site and it will be ensured that these are regularly emptied and waste is disposed off in a hygienic manner as per the Solid Waste (Handling and Management) Rules, 2016. Solid waste generated at the construction site, plant/camp site, will be collected in covered waste bins and segregated as biodegradable (food waste, paper, etc) and non-biodegradable (plastic, polyethylene bag etc.). Polyethylene/plastic wastes will be stored in empty cement bags and should be sent for recycling. Biodegradable (food waste, paper etc.) solid waste will be disposed in a compost pit. 	<p>Daily monitoring required at site during the work</p> <p>Comply all the issues during the work</p>
16	Section-wise list of utilities to be shifted / disturbed to be submitted to PIU two-weeks prior to start of work at that section along with a plan to shift and contingency steps to be taken	<ul style="list-style-type: none"> Maintain copy of Section-wise list of utilities to be shifted / disturbed. 	<p>Partially Complied.</p> <p>Communication letter maintained by PIU attached as Annexures 3&4 in the May 2019 report. Contactor should also have copy with him</p> <p>Section-wise list of utilities to be shifted comply within 7 days.</p>
17	Record to confirm that contingency services are provided and all damaged utilities are restored after the work	<ul style="list-style-type: none"> Register of damaged infrastructure Register of reinstated infrastructure 	Comply with in 3 days
18	PMU/PMDCSC to report in writing the number of trees cut and planted.	<ul style="list-style-type: none"> Maintain separate file with all relevant documents of tree cutting, felling permission and Compensation. 	Complied attached as Annexures 10 in the May 2019 report
19	Number of signage's placed at project location.	<ul style="list-style-type: none"> Maintain the signages placed at project location 	Comply with in 5 days
20	Visual site observations	<ul style="list-style-type: none"> Register of official visiting the site and directions given if 	Comply with in 3 days

		any at each site.	
21	Employment records;	<ul style="list-style-type: none"> • Attendance registers of labour at each site. 	Complied and attached as Annexure 7 in the May 2019 report and maintaining the attendance register.
22	Records of sources of materials; and	<ul style="list-style-type: none"> • Maintain separate record of quantity of materials used and with all authorized certificates of suppliers 	Comply with in 5 days
23	Compliance to core labor laws (See Appendix 2 of this IEE)	<ul style="list-style-type: none"> • Register of payment to the workers 	Comply Immediately
24	Site-specific OHS Plan;	<ul style="list-style-type: none"> • Site-specific Occupational Health and Safety Plan 	Comply with in 4 days
25	Equipped first-aid stations;	<ul style="list-style-type: none"> • Readily available first aid box including an adequate supply of sterilized dressing materials and appliances as per rules shall be provided in all work zones. • Trained first aid personal will be available at the construction site. • Emergency numbers will be displayed prominently at camp and construction site. • Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital. Designated vehicle, which can be used as ambulance, will be available at construction site. • The contractor shall identify nearby hospital, which could be used in case of emergency. • First aid facilities and free emergency care shall be provided to all workforce and third party and no cost shall be recovered from them on this account. 	Comply with in 7 days
26	Medical insurance coverage for workers;	<ul style="list-style-type: none"> • File of insurance as per 13.1 PCC with contents showing the validity. • Health Camps and Check -up should be conducted for the workers • Necessary HIV/AIDS prevention measures and awareness programme conducted by Contractor. 	Comply with in 12 days
27	Number of accidents;	<ul style="list-style-type: none"> • Accident and Incident register will be maintained by Contractor at each work site. 	Complied. Attached in Annexure 1 in Aug 2019
28	Supplies of potable drinking water;	<ul style="list-style-type: none"> • Potable water supply: Sufficient (minimum 20 liters at any given point of time) and clean (potable) water for drinking shall be placed in the mess/labour camp and at the construction site. 	Complied
29	Clean eating areas where workers are not exposed to hazardous or noxious substances;	<ul style="list-style-type: none"> • Since a common mess is not provided/operated, separate space for cooking and eating shall be provided. 	Comply with in 4 days
30	Record of H&S orientation trainings personal protective equipment;	<ul style="list-style-type: none"> • Weekly and monthly monitoring and safety training programs have to be documented properly including 	Complywith in 7 days