

ಲೋಕೋಪಯೋಗಿ ಇಲಾಜೆ

ತಾಂತ್ರಿಕ ಇಲಾಖೆಗಳ ಏಕರೂಪ ದರಪಟ್ಟ 2023-2024

ಸಂಪ್ರಚ 1

PUBLIC WORKS DEPARTMENT

COMMON SCHEDULE OF RATES
FOR ENGINEERING DEPARTMENTS 2023-2024

VOLUME 1



## **GOVERNMENT OF KARNATAKA**



# COMMON SCHEDULE OF RATES FOR ENGINEERING DEPARTMENTS 2023 - 2024

**VOLUME - 1** 

## **Tribute**



#### Sayings of Sir M.Visvesvaraya

- It is better to Work out than Rust out.
- Work performed with higher knowledge or skill, capacity or ambitions, usually brings a correspondingly higher reward.
- An Engineer is a person who applies the skills and Knowledge of basic Science for the good of society.
- Hard work performed in a disciplined manner will in most cases keep the worker fit and also prolong his life.

#### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ :- ಎಸ್.ಆರ್. ದರಗಳನ್ನು ಪ್ರಕಟಿಸಲು **ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿ** ರಚಿಸುವ ಕುರಿತು.

- ಒದಲಾಗಿದೆ 1) ಸರ್ಕಾರದ ಸಮ ಸಂಖ್ಯೆ ಪತ್ರ ದಿನಾಂಕ 04-09-2018
  - 2) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಂಕದ ಇವರ ಪತ್ರ ಸಂಖ್ಯೇಮುಅ:ಸಂಕದ:ಸಾಕೋ: ಸಇ-4:2018-19 ದಿನಾಂಕ: 01-10-2018.
  - 3) ಸರ್ಕಾರದ ಸಮ ಸಮಸಂಖ್ಯೆ ಪತ್ರ ದಿನಾಂಕ:-11-10-2018

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#### ಪ್ರಸ್ತಾವನೆ:

2018–19ನೇ ಸಾಲಿನ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವ ಕುರಿತು ಸರ್ಕಾರದ ಆದೇಶ ಸಮ ಸಂಖ್ಯೆ ದಿನಾಂಕ 26–03–2018ರಲ್ಲಿ ಸಮಿತಿಯನ್ನು ಸೃಜಿಸಲಾಗಿತ್ತು. ಸದರಿ ಸಮಿತಿಯು ನೀಡಿದ ವರದಿಯಂತೆ ಉಲ್ಲೇಖ–2ರ ಪತ್ರದಲ್ಲಿ ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಂಕದ ಇವರು 2018–19ನೇ ಸಾಲಿನ ಬೆಂಗಳೂರು ವೃತ್ತದ ಕರಡು ದರಪಟ್ಟಿಯನ್ನು ಸರ್ಕಾರದ ಅನುಮೋದನೆಗಾಗಿ ಸಲ್ಲಿಸಿರುತ್ತಾರೆ. ಉಲ್ಲೇಖ–3ರ ಪತ್ರದಲ್ಲಿ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ರವರು ಸಲ್ಲಿಸಿರುವ ಬೆಂಗಳೂರು ವೃತ್ತದ 2018–19ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯನ್ನು ಮತ್ತು ಉಳಿದ ಎಲ್ಲಾ ವೃತ್ತಗಳು ದಿನಾಂಕ 10–10–2018ರಂದ ಅನ್ವಯವಾಗುವಂತೆ ಪ್ರಕಟಿಸಲು ಸೂಚಿಸಲಾಯಿತು. ಈ ವಿಷಯವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಗಮನಕ್ಕೆ ತರಲಾಗಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳ ಕುರಿತು ಅಗತ್ಯ ಕ್ರಮವಹಿಸುವಂತೆ ತಿಳಿಸಲಾಗಿದೆ.

ಪ್ರಸ್ತುತ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರಮುಖ ಇಲಾಖೆಗಳಾದ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ. ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ನಗರಾಭಿವೃದ್ಧಿ, ವಸತಿ ಇಲಾಖೆ, ಇಂಧನ ಇಲಾಖೆ ಮುಂತಾದವುಗಳು ತಮ್ಮದೇ ಆದ ಅನುಸೂಚಿ ದರಗಳನ್ನು (ಎಸ್.ಆರ್.) ತಯಾರಿಸಿದ್ದು, ವಿವಿಧ ಕಾಮಗಾರಿಗಳ ಅಂದಾಜುಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಬೇರೆ ಬೇರೆ ಇಲಾಖೆಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ. ಪ್ರಸಕ್ತ ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ಅಂದರೆ, ಜಿ.ಎಸ್.ಟಿ. ಅನುಷ್ಟಾನವಾದ ನಂತರ ಅವಧಿಯಲ್ಲಿ ಒಂದು ಇಲಾಖೆಯಲ್ಲಿ ಜಿ.ಎಸ್.ಟಿ. ಪೂರ್ವ ದರಗಳಿದ್ದಲ್ಲಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯಲ್ಲಿ ಜಿ.ಎಸ್.ಟಿ. ನಂತರದ ದರಗಳು ಅಸ್ತಿತ್ವದಲ್ಲಿವೆ. ಇದರಿಂದಾಗಿ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲು ಮತ್ತು ಟೆಂಡರುಗಳನ್ನು ಮೌಲ್ಯಮಾಪನ ಮಾಡುವಲ್ಲಿ ಅನೇಕ ಸಮಸ್ಯೆಗಳು ಉದ್ಭವವಾಗುತ್ತಿವೆ.

II. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಏಕರೂಪದ ಸಮಗ್ರ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಿ ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವೆಂದು ಭಾವಿಸಲಾಗಿದೆ. ಇದಕ್ಕಾಗಿ ಲೊಕೋಪಯೋಗಿ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯನ್ನಾಗಿ ನೇಮಿಸಿ, ಎಲ್ಲಾ ಪ್ರಮುಖ ಇಲಾಖೆಗಳ ಪ್ರತಿನಿಧಿಗಳನ್ನೊಳಗೊಂಡ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ, ಸದರಿ ಸಮಿತಿಯ ಮೂಲಕ ಸಮಗ್ರವಾದ ಅನುಸೂಚಿ ದರಗಳನ್ನು (ಎಸ್.ಆರ್) ತಯಾರಿಸಿ ರಸ್ತೆ, ಸೇತುವೆ ಮತ್ತು ಕಟ್ಟಡಗಳ ಕುರಿತಾದ ಎಲ್ಲ ಎಸ್.ಆರ್ ದರಗಳನ್ನು ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವಾಗಿರುತ್ತದೆ.

ಮೇಲಿನ ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿದಂತೆ ರಾಜ್ಯದಲ್ಲಿ ಏಕರೂಪದ ಸಮಗ್ರ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಲು ಈ ಕೆಳಕಂಡ ಸದಸ್ಯರುಗಳನ್ನೊಳಗೊಂಡಂತೆ ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯನ್ನು ರಚಿಸಲು ಕೆಳಕಂಡ ಆದೇಶ ಹೊರಡಿಸಲಾಗಿದೆ.

#### ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಪಿಡಬ್ಲ್ಯಾಡಿ 65 ಆರ್ಡಿಎಫ್ 2018 ದಿನಾಂಕ 04-04-2019

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಲಾದ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, 2019–20ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಲು "ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿ"ಯನ್ನು ಕೆಳಕಂಡಂತೆ ಸೃಜಿಸಲಾಗಿದೆ.

ಕ್ರ ಸಂ	ಅಧಿಕಾರಿಗಳ ಹೆಸರು/ಪದನಾಮ	
1	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು	ಅಧ್ಯಕ್ಷರು
	ಒಳನಾಡು ಜಲಸಾರಿಗೆ, ಇಲಾಖೆ	
2	ಶ್ರೀ.ಕ್ರಷ್ಣ ಎನ್. ಬುಗಟ್ಯಾಗೋಳ, ವಿಶೇಷಾಧಿಕಾರಿ ಮತ್ತು ಪದನಿಮಿತ್ತ	ಸದಸ್ಯರು
	ಸರ್ಕಾರದ ಜಂಟಿ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, ಲೋಕೋಪಯೋಗಿ	
	ಆರ್ಥಿಕ ಕೋಶ	
3	ಡಿ.ಜಗನ್ನಾಥ ಸಾಗರ, ಅಪರ ವಾಣಿಜ್ಯ ಆಯುಕ್ತರು	ಸದಸ್ಯರು
4	ಕೆ.ಜಿ.ಮಹೇಶ್, ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ	ಸದಸ್ಯರು
5	ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆಯ ಅಧೀಕ್ಷಕ	ಸದಸ್ಯರು
	ಅಭಿಯಂತರರು ವೃಂದದ ಪ್ರತಿನಿಧಿ.	
6	ಇಂಧನ ಇಲಾಖೆಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ.	ಸದಸ್ಯರು
7	ವಸತಿ ಇಲಾಖೆಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ.	ಸದಸ್ಯರು
8	ಬೆಂಗಳೂರು ಜಲ ಮಂಡಳಿಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ	ಸದಸ್ಯರು
9	ಕೆ.ಯು.ಐ.ಡಿ.ಎಫ್.ಸಿ. ಸಂಸ್ಥೆಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ.	ಸದಸ್ಯರು

A-6

ಕ್ರ ಸಂ	ಅಧಿಕಾರಿಗಳ ಹೆಸರು/ಪದನಾಮ	
10	ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ.	ಸದಸ್ಯರು
11	ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆಯ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರ ವೃಂದದ ಪ್ರತಿನಿಧಿ.	ಸದಸ್ಯರು
12	ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ (ಅಭಿವೃದ್ಧಿ), ಅರಣ್ಯ ಇಲಾಖೆ.	ಸದಸ್ಯರು
13	ಶ್ರೀ.ಕೆ.ಮೋಹನ್, ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು (ವಿನ್ಯಾಸ), ಮುಇಂರವರ ಕಛೇರಿ, ಸಂಕದ, ಬೆಂಗಳೂರು	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ

(ಕ್ರಸಂ 5–11ರವರೆಗಿನ ಸದಸ್ಯರುಗಳನ್ನು ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆ/ಮಂಡಳಿ/ಪಾಲಿಕೆ ಇವರು ಅಂತಿಮಗೊಳಿಸುವುದು.)

ಮೇಲಿನ ಸಮಿತಿಯು ಅನುಸೂಚಿ ದರಗಳ ತಯಾರಿಸುವ ಕಾರ್ಯವನ್ನು ದಿನಾಂಕ 01–06–2019ರ ಮನ್ನು ಅಂತಿಮಗೊಳಿಸಿ ಅನುಸೂಚಿ ದರಗಳ ಪರಿತೀಲನಾ ಸಮಿತಿಯ ಅನುಮೋದನೆ ಪಡೆದು ಜಾರಿಗೊಳಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು. ಈ ಆದೇಶವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ ಆಇ 259 ಆಕೋ–2/2018 ದಿನಾಂಕ: 14–03–2019ರನ್ವಯ ಹೊರಡಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

> )+ Haruch (8.25.000) 04/04/2019

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ (ನಬಾರ್ಡ್)

#### ಇವರಿಗೆ:

- 1) ಸನ್ಮಾನ್ಯ ಲೋಕೋಪಯೋಗಿ ಸಚಿವರ ಸಂಸದಿಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ.
- 2) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ.
- 3) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಇಂಧನ ಇಲಾಖೆ, ಕೊಠಡಿ ಸಂಖ್ಯೆ:236, 2ನೇ ಮಹಡಿ, ವಿಕಾಸ ಸೌಧ, ಡಾ॥ ಅಂಬೇಡ್ಕರ್ ಬೀದಿ, ಬೆಂಗಳೂರು.
- 4) ವಾಣಿಜ್ಯ ತೆರಿಗೆ ಇಲಾಖೆಯ ಆಯುಕ್ತರು, ಗಾಂಧಿ ನಗರ, ಬೆಂಗಳೂರು.
- 5) ಪ್ರಧಾನ ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಅರಣ್ಯ ಭವನ, 18ನೇ ಅಡ್ಡ ರಸ್ತೆ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು-560003

- 6) ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ಧೇಶಕರು, ಕರ್ನಾಟಕ ನಗರ ಮೂಲಸೌಕರ್ಯ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಹಣಕಾಸು ನಿಗಮ ನಿಯಮಿತ ನಗರಾಬಿವೃದ್ಧಿ ಭವನ,#22,17ನೇ 'ಎಫ್' ಕ್ರಾಸ್, ಓಲ್ಡ್ ಮದ್ರಾಸ ರಸ್ತೆ, ಇಂದಿರಾನಗರ 2ನೇ ಹಂತ, ಬಿಎಮ್ಟಿಸಿ ಬಸ್ ಡಿಪೋ ಹತ್ತಿರ, ಬೆಂಗಳೂರು-560038
- 7) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಕರ್ನಾಟಕ ಗೃಹ ಮಂಡಳಿ, ಕಾವೇರಿ ಭವನ, ಬೆಂಗಳೂರು.
- 8) ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ, ಬೆಂಗಳೂರು.
- 9) ಪ್ರಧಾನ ಅಭಿಯಂತರರು,ಬಿ.ಬಿ.ಎಂ,ಪಿ ಕೇಂದ್ರ ಕಛೇರಿ, ಅನೆಕ್ಸ್ ಕಟ್ಟಡ,1ನೇ ಮಹಡಿ ಎನ್.ಆರ್,ವೃತ್ತ. ಬೆಂಗಳೂರು.-560002
- 10) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ),(ಉತ್ತರ) ಮತ್ತು (ಈಶಾನ್ಯ) ವಲಯಗಳು. ಲೋಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ.
- 11) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಎಂ ಅಂಡ್ ಇ, ಜಲಸಂಪನ್ಮುಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಆನಂದರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು.
- 12) ಮು.ಇಂ. ಗ್ರಾಮ ಪಂಚಾಯತ್ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ, ಆನಂದರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು.
- 13) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ, ಕಾವೇರಿ ಭವನ, ಕೆಂಪೇಗೌಡ ರಸ್ತೆ ಬೆಂಗಳೂರು.
- 14) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆ, ಕೆ.ಆರ್.ವೃತ್ತ, ಬೆಂಗಳೂರು.
- 15) ಸಮಿತಿ ಸದ್ಯಸರುಗಳಿಗೆ.

#### ಪ್ರತಿ:–

- i) ಸರ್ಕಾರದ ಅವರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಲೊಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ,
- 2) ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಲೊಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ,
- 3) ಶಾಖಾ ರಕ್ಷಣಾ ಕಡತ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿಗಳು.

#### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ: – ಎಸ್.ಆರ್. ದರಗಳನ್ನು ಪ್ರಕಟಿಸಲು ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ ರಚಿಸುವ ಕುರಿತು.

- ಒದಲಾಗಿದೆ -1) ಸರ್ಕಾರದ ಸಮ ಸಂಖ್ಯೆ ಪತ್ರ ದಿನಾಂಕ 04-09-2018
  - 2) ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಂಕದ ಇವರ ಪತ್ರ ಸಂಖ್ಯೇಮುಅ:ಸಂಕದ:ಸಾಕೋ:ಸಇ–4:2018–19 ದಿನಾಂಕ: 01–10–2018.
  - 3) ಸರ್ಕಾರದ ಸಮ ಸಮಸಂಖ್ಯೆ ಪತ್ರ ದಿನಾಂಕ:- 11-10-2018

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#### ಪ್ರಸ್ತಾವನೆ:

2018–19ನೇ ಸಾಲಿನ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವ ಕುರಿತು ಸರ್ಕಾರದ ಆದೇಶ ಸಮ ಸಂಖ್ಯೆ ದಿನಾಂಕ 26–03–2018ರಲ್ಲಿ ಸಮಿತಿಯನ್ನು ಸೃಜಿಸಲಾಗಿತ್ತು. ಸದರಿ ಸಮಿತಿಯು ನೀಡಿದ ವರದಿಯಂತೆ ಉಲ್ಲೇಖ–2ರ ಪತ್ರದಲ್ಲಿ ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಸಂಕದ ಇವರು 2018–19ನೇ ಸಾಲಿನ ಬೆಂಗಳೂರು ವೃತ್ತದ ಕರಡು ದರಪಟ್ಟಿಯನ್ನು ಸರ್ಕಾರದ ಅನುಮೋದನೆಗಾಗಿ ಸಲ್ಲಿಸಿರುತ್ತಾರೆ. ಉಲ್ಲೇಖ–3ರ ಪತ್ರದಲ್ಲಿ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ರವರು ಸಲ್ಲಿಸಿರುವ ಬೆಂಗಳೂರು ವೃತ್ತದ 2018–19ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯನ್ನು ಮತ್ತು ಉಳಿದ ಎಲ್ಲಾ ವೃತ್ತಗಳು ದಿನಾಂಕ 10–10–2018ರಂದ ಅನ್ವಯವಾಗುವಂತೆ ಪ್ರಕಟಿಸಲು ಸೂಚಿಸಲಾಯಿತು. ಈ ವಿಷಯವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಗಮನಕ್ಕೆ ತರಲಾಗಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳ ಕುರಿತು ಅಗತ್ಯ ಕ್ರಮವಹಿಸುವಂತೆ ತಿಳಿಸಲಾಗಿದೆ.

ಪ್ರಸ್ತುತ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರಮುಖ ಇಲಾಖೆಗಳಾದ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ನಗರಾಭಿವೃದ್ಧಿ, ವಸತಿ ಇಲಾಖೆ, ಇಂಧನ ಇಲಾಖೆ ಮುಂತಾದವುಗಳು ತಮ್ಮದೇ ಆದ ಅನುಸೂಚಿ ದರಗಳನ್ನು (ಎಸ್.ಆರ್.) ತಯಾರಿಸಿದ್ದು, ವಿವಧ ಕಾಮಗಾರಿಗಳ ಅಂದಾಜುಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಬೇರೆ ಬೇರೆ ಇಲಾಖೆಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ. ಪ್ರಸಕ್ತ ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ಅಂದರೆ, ಜಿ.ಎಸ್.ಟಿ. ಅನುಷ್ಟಾನವಾದ ನಂತರ ಅವಧಿಯಲ್ಲಿ ಒಂದು ಇಲಾಖೆಯಲ್ಲಿ ಜಿ.ಎಸ್.ಟಿ. ಪೂರ್ವ ದರಗಳಿದ್ದಲ್ಲಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯಲ್ಲಿ ಜಿ.ಎಸ್.ಟಿ. ನಂತರದ ದರಗಳು

- ಅಸ್ತಿತ್ವದಲ್ಲಿವೆ. ಇದರಿಂದಾಗಿ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲು ಮತ್ತು ಟೆಂಡರುಗಳನ್ನು ಮೌಲ್ಯಮಾಪನ ಮಾಡುವಲ್ಲಿ ಅನೇಕ ಸಮಸ್ಯೆಗಳು ಉದ್ಭವವಾಗುತ್ತಿವೆ.
- II. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಏಕರೂಪದ ಸಮಗ್ರ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಿ ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವೆಂದು ಭಾವಿಸಲಾಗಿದೆ. ಇದಕ್ಕಾಗಿ ಲೊಕೋಪಯೋಗಿ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯನ್ನಾಗಿ ನೇಮಿಸಿ, ಎಲ್ಲಾ ಪ್ರಮುಖ ಇಲಾಖೆಗಳ ಪ್ರತಿನಿಧಿಗಳನ್ನೊಳಗೊಂಡ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ, ಸದರಿ ಸಮಿತಿಯ ಮೂಲಕ ಸಮಗ್ರವಾದ ಅನುಸೂಚಿ ದರಗಳನ್ನು (ಎಸ್.ಆರ್) ತಯಾರಿಸಿ ಹಾಗೂ ರಸ್ತೆ, ಸೇತುವೆ ಮತ್ತು ಕಟ್ಟಡಗಳ ಕುರಿತಾದ ಎಲ್ಲಾ ಎಸ್.ಆರ್ ದರಗಳನ್ನು ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವಾಗಿರುತ್ತದೆ.
- III. ದರಪಟ್ಟಿಯ ತಯಾರಿಸುವ ಬಗ್ಗೆ ಸೃಜಿಸಲಾಗಿರುವ ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯು ತಯಾರಿಸಿರುವ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಶೀಲಿಸಿ ಅಂತಿಮಗೊಳಿಸಲು, "ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ"ಯನ್ನು ರಚಿಸುವುದು.

ಮೇಲಿನ ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿರುವಂತೆ **"ಅನುಸೂಚಿ ದರಗಳ ಪರಿತೀಲನಾ ಸಮಿತಿ"**ಯನ್ನು ರಚಿಸಲು ಕೆಳಕಂಡ ಆದೇಶ ಹೊರಡಿಸಲಾಗಿದೆ.

#### ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಪಿಡಬ್ಲ್ಯುಡಿ 65 ಆರ್ಡಿಎಫ್ 2018 ದಿನಾಂಕ 04-04-2019

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಲಾದ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯು ತಯಾರಿಸುವ 2019–20ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಶೀಲಿಸಲು "ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ"ಯನ್ನು ಕೆಳಕಂಡಂತೆ ಸೃಜಿಸಲಾಗಿದೆ.

हु ४०	ಅಧಿಕಾರಿಗಳ ಹೆಸರು/ಪದನಾಮ	
1	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ, ಬಂದರು	ಅಧ್ಯಕ್ಷರು
	ಮತ್ತು ಒಳನಾಡು ಜಲಸಾರಿಗೆ, ಇಲಾಖೆ	
2	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ/ ಕಾರ್ಯದರ್ಶಿ, ಇಂಧನ ಇಲಾಖೆ	ಸದಸ್ಯರು
3	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ/ ಕಾರ್ಯದರ್ಶಿ, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
4	ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ / ಕಾರ್ಯದರ್ಶಿ, ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ ಇಲಾಖೆ.	ಸದಸ್ಯರು

हु ग्रं	ಅಧಿಕಾರಿಗಳ ಹೆಸರು/ಪದನಾಮ	
5	ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ/ ಕಾರ್ಯದರ್ಶಿ, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ	ಸದಸ್ಯರು.
	ಇಲಾಖೆ	
6	ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ/ ಕಾರ್ಯದರ್ಶಿ, ವಸತಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
7	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ (ವೆಚ್ಚ), ಆರ್ಥಿಕ ಇಲಾಖೆ	ಸದಸ್ಯರು
8	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ	ಸದಸ್ಯರು
9	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭೀವೃದ್ಧಿ	ಸದಸ್ಯರು
	ಇಲಾಖೆ	
10	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ

ಈ ಸಮಿತಿಯು ಅನುಸೂಚೆ ದರಗಳ ರಚನಾ ಸಮಿತಿಯು ತಯಾರಿಸುವ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಶೀಲಿಸಿ ದಿನಾಂಕ 01–06–2019ರಿಂದ ಕಡ್ಡಾಯವಾಗಿ ಜಾರಿಗೊಳಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು. ಈ ಆದೇಶವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ ಆಇ 259 ಆಕೋ–2/2018 ದಿನಾಂಕ: 14–03–2019ರನ್ವಯ ಹೊರಡಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,

ಲೋಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ

ಇಲಾಖೆ (ನಬಾರ್ಡ್)

#### ಇವರಿಗೆ:

- 1) ಸನ್ಮಾನ್ಯ ಲೋಕೋಪಯೋಗಿ ಸಚಿವರ ಸಂಸದಿಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ.
- 2) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ.
- 3) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಇಂದನ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 4) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 5) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ ಇ**ಲಾಖೆ**, ಬೆಂಗಳೂರು.

- 6) ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ/ ಕಾರ್ಯದರ್ಶಿಗಳು, ಗ್ರಾಮೀಣ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 7) ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ, ವಸತಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 8) ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 9) ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು.

#### ಪ್ರತಿ:–

- 1) ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಲೊಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು.
- 2) ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಲೊಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಜಸಾ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು.
- 3) ಶಾಖಾ ರಕ್ಷಣಾ ಕಡತ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿಗಳು.

#### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ: 2023-24ನೇ ಸಾಲಿನ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಪಟ್ಟಿಗಳನ್ನು ಪರಿಷ್ಕರಿಸಿ ತಯಾರಿಸಲು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical Working Group) ಪುನರ್ ರಚಿಸುವ ಬಗ್ಗೆ.

- ಉಲ್ಲೇಖ 1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖೈ: ಲೋಇ 65 ಆರ್ಡಿಎಫ್ 2018 ದಿನಾಂಕ: 04.04.2019.
  - 2. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖೈ: ಆಇ 259 ಆಕೋ-2/2018, ದಿನಾಂಕ: 17.02.2020.
  - 3. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಲೋಇ 51 ಆರ್ಡಿಎಫ್ 2019,ಬೆಂಗಳೂರು, ದಿನಾಂಕ:18.03.2022, 25-03-2022 ಮತ್ತು 31-03-2022.

#### ಪ್ರಸ್ತಾವನೆ:

ಮೇಲೆ (1)ರಲ್ಲಿ ಒದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯಿ ತಯಾರಿಸುವ 2019-20ನೇ ಸಾಲಿನ ಏಕ ರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಶೀಲಿಸಲು "ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ"ಯನ್ನು ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ವಿವಿಧ ಇಲಾಖೆಗಳ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು / ಕಾರ್ಯದರ್ಶಿಗಳ ಸದಸ್ಯರುಗಳನ್ನು ಒಳಗೊಂಡು ಸೃಜಿಸಲಾಗಿರುತ್ತದೆ. ಈ ಸಮಿತಿಯು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ರಚನಾ ಸಮಿತಿಯು ತಯಾರಿಸುವ ದರಪಟ್ಟಿಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಜಾರಿಗೊಳಿಸಲು ಕ್ರಮವಹಿಸಲು ಆರ್ಥಿಕ ಇಲಾಕೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ ಆಇ 259 ಆಕೋ-2/2018, ದಿನಾಂಕ:14.03.2019ರನ್ನಯ ಆದೇಶ ಹೊರಡಿಸಲಾಗಿರುತ್ತದೆ.

ಮೇಲೆ (2)ರಲ್ಲಿ ಒದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಲು "**ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡ**" (Technical Working Group) ರಚಿಸಿ ವಿವಿಧ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಸಭೆಯನ್ನು ನಡೆಸಿ ಮಾರ್ಚ್-2020ರ ಮಾಹೆಯೊಳಗೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸುವಂತೆ ಆದೇಶ ಹೊರಡಿಸಲಾಗಿರುತ್ತದೆ.

ಮೇಲೆ (3)ರಲ್ಲಿ ಒದಲಾದ ಸರ್ಕಾರದ ಆದೇಶಗಳಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ವಿವಿಧ ಇಲಾಖೆಗಳು ತಯಾರಿಸಿರುವ ಕೆಳಕಂಡ 2021-22ನೇ ಸಾಲಿನ ಅನುಸೂಚಿತ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಸಂಪುಟಗಳನ್ನು ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ಜಾರಿಗೆ ತರಲಾಗಿದೆ.

ಕ್ರ.ಸಂ	ಇಲಾಖೆಗಳು	ನೋಡಲ್ ಇಲಾಖೆಗಳು	ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ ಸಂಖ್ಯೆ
1	PWD, & PRED(Including Buildings*)	PWD	I, II & III
		FVVD	1, 11 🛭 111
2	WRDO, MI & KPCL	WRDO	IV
3	BWSSB /KUWS&DB /RWS	BWSSB	V
4	KPTCL, ESCOMS, PWD ELECTRICAL	BESCOM	VI
5	PORTS & IWTD	PORTS	VII
6	FOREST, WATERSHED & HORTICULTURE	FOREST	VIII

ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಆಇ 259 ಆಕೋ-/2018, ದಿನಾಂಕ:17.02.2020. ಆದೇಶದಂತೆ ಹಾಗೂ ಉಲ್ಲೇಖ(3)ರಲ್ಲಿ ಈಗಾಗಲೇ ಪ್ರಕಟಿಸಿರುವ **2021-22ನೇ** 

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ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಸಂಪುಟಗಳನ್ನು ಪರಿಷ್ಕರಿಸಿ 2023-24ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳನ್ನು ತಯಾರಿಸಲು ಕ್ರಮ ವಹಿಸಬೇಕಾಗಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಈ ಕೆಳಕಂಡಂತೆ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical Working Group) ಪುನರ್ ರಚಿಸಲು ನಿರ್ಧರಿಸಲಾಗಿದೆ.

#### ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಲೋಇ 86 ಆರ್ಡಿಎಫ್ 2022, ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 13.02.2023

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಲಾದ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, 2023-24ನೇ ಸಾಲಿನ ರಾಜ್ಯವ್ಯಾಪಿ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-I ರಿಂದ VIII ಪರಿಷ್ಕರಿಸಲು ಈ ಕೆಳಕಂಡ ಸದಸ್ಯರುಗಳನ್ನೊಳಗೊಂಡಂತೆ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical Working Group) ಪುನರ್ ರಚಿಸಿ ಆದೇಶಿಸಿದೆ.

ಕ್ರ.	ಶ್ರೀಯುತ/ಅಧಿಕಾರಿಗಳು	
ಸಂ		
1.	ಆರ್. ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜನಿಯರ್	ಅಧ್ಯಕ್ಷರು
2.	ಬಿ. ಗುರುಪ್ರಸಾದ್, ನಿವೃತ್ತ ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ ಮತ್ತು ಪ್ರಧಾನ ಇಂಜನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
3.	ಕೆ. ಮೋಹನ್ ನಿವೃತ್ತ ಮುಖ್ಯ ಇಂಜನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ.	ಸದಸ್ಯರು
4.	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಗ್ರಾಮೀಣ ನೀರು ಸರಬರಾಜು ಇಲಾಖೆ, ಕಾವೇರಿ ಭವನ, ಕೆಜಿ ರಸ್ತೆ, ಬೆಂಗಳೂರು.	ಸದಸ್ಯರು
5.	ರಮೇಶ್ ಹೆಚ್.ಜಿ. ಜನರಲ್ ಮ್ಯಾನೇಜರ್, Quality Standard and Safety, BESCOM , ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
6.	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಬೆಂಗಳೂರು ನಗರ ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ	ಸದಸ್ಯರು
7.	ರವಿಕುಮಾರ, ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ (ನಿವೃತ್ತ) ಗ್ರಾಮೀಣಾಬಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ	ಸದಸ್ಯರು
8.	ಆಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಬೆಂಗಳೂರು ವೃತ್ತ, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ	ಸದಸ್ಯರು
9.	ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಬೆಂಗಳೂರು ವೃತ್ತ, ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆ, ಜಯನಗರ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
10.	ತಾರಾನಾಥ್ ಎಸ್. ರಾಥೋಡ್, ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಕರ್ನಾಟಕ ಜಲ ಸಾರಿಗೆ ಮಂಡಳಿ, ಕಾರವಾರ	ಸದಸ್ಯರು
11.	ರಾಜೇಶ್, ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್ (ವಿದ್ಯುತ್ ವಿಭಾಗ) ಲೋಇ ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
12.	ಶ್ರೀಮತಿ ಪವಿತ್ರ, ಉಪ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ಕೆಯುಡಬ್ಲ್ಯುಎಸ್ಎಸ್ಬಿ, ಬೆಂಗಳೂರು.	ಸದಸ್ಯರು

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ಕ್ರ. ಸಂ	ಶ್ರೀಯುತ/ಅಧಿಕಾರಿಗಳು	
13.	ಕೃಷ್ಣರಾವ್, ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್, ಕೆಇಆರ್ಎಸ್, ಮೈಸೂರು	ಸದಸ್ಯರು
14.	ಶ್ರೀನಿವಾಸ್, ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್, ಎಂ & ಇ ವಿಭಾಗ, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
15.	ಕೆ.ವಿ. ಗೋಪಾಲಕೃಷ್ಣ, ನಿವೃತ್ತ ಕಾರ್ಯಪಾಲಕ ಇಂಜನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
16.	ಎನ್. ಬಿ. ಅನ್ವರ್ ಪಾಷ, ನಿವೃತ್ತ ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್,	ಸದಸ್ಯರು
17.	ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಅರಣ್ಯ ಇಲಾಖೆ.	ಸದಸ್ಯರು
18.	ಶ್ರೀಮತಿ ದಿವ್ಯ, ಸಹಾಯಕ ನಿರ್ದೇಶಕರು, ತೋಟಗಾರಿಗೆ ಇಲಾಖೆ	ಸದಸ್ಯರು
19.	ಅಧಿಕ್ಷಕ ಅಭಿಯಂತರರು, ಲೋಕೋಪಯೋಗಿ ವೃತ್ತ, ಬೆಂಗಳೂರು.	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ/
		ಸಮನ್ವಯಾಧಿಕಾರಿ

- i) ಈ ತಂಡವು ವಿವಿಧ ಇಲಾಖೆಗಳ ಸದಸ್ಯರೊಂದಿಗೆ ಸಭೆಯನ್ನು ನಡೆಸಿ ಏಪ್ರಿಲ್-2023ರ ಅಂತ್ಯದೊಳಗೆ ವಿವಿಧ ಇಲಾಖೆಗಳ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಷ್ಕರಿಸಿ ಸಲ್ಲಿಸುವುದು.
- ii) ವಿವಿಧ ಇಲಾಖೆಗಳ ಸದಸ್ಯರು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆ, ವಿಶಿಷ್ಟ ವಿವರಣೆ ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷನೆ ಮುಂತಾದ ವಿವರಗಳನ್ನು ತಾಂತ್ರಿಕ ತಂಡದೊಂದಿಗೆ ಚರ್ಚಿಸಿ ಅಂತಿಮಗೊಳಿಸುವುದು ಹಾಗೂ ಪರಿಷ್ಕರಿಸಿದ ಕರಡು ಏಕರೂಪ ದರಪಟ್ಟಗಳಿಗೆ ಆಯಾ ಇಲಾಖೆಯ ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರದ ಅನುಮೋದನೆ ಪಡೆದು ಸಲ್ಲಿಸುವುದು.
- iii) ಮೇಲ್ಕಂಡ ತಂಡದ ಅಧಿಕಾರೇತರ ಸದಸ್ಯರುಗಳಿಗೆ ಸೇವಾ ಶುಲ್ಕವನ್ನು ನೀಡುವ ಕುರಿತಂತೆ ಸಮನ್ವಯಾಧಿಕಾರಿಯಾಗಿರುವ ಅಧೀಕ್ಷಕ ಇಂಜನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ವೃತ್ತ, ಬೆಂಗಳೂರು ಇವರು ಕ್ರಮ ವಹಿಸುವುದು.
- iv) ಈ ಕಾರ್ಯವನ್ನು ನಿರ್ವಹಿಸಲು ಅಗತ್ಯವಿರುವ ಕಛೇರಿಯ ಸ್ಥಳಾವಕಾಶವನ್ನು ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ) ಕಛೇರಿಯ 3ನೇ ಮಹಡಿಯಲ್ಲಿ ಸಭಾಂಗಣ ಮತ್ತು ಪೀಠೋಪಕರಣ, ಲೇಖನ ಸಾಮಗ್ರಿಗಳು ಹಾಗೂ ಇತರೆ ಅಗತ್ಯ ಸೌಕರ್ಯಗಳನ್ನು ಒದಗಿಸುವುದು.
- v) ಈ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಪರಿಷ್ಕರಣೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆಗಳ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್/ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ಗಳು ಸೂಕ್ತ ಸಲಹೆ ಮತ್ತು ಅಭಿಪ್ರಾಯಗಳನ್ನು ಕಾರ್ಯ ನಿರತ ತಂಡದ ಮಾಹಿತಿಗೆ ಸಲ್ಲಿಸುವುದು.



vi) ತಾಂತ್ರಿಕ ಕಾರ್ಯ ನಿರತ ತಂಡವು 2023-24ನೇ ಸಾಲಿನ ಎಲ್ಲ ಸಂಪುಟಗಳ ಪರಿಷ್ಕರಣೆಯನ್ನು **ಏಪ್ರಿಲ್-23ರ** ಅಂತ್ಯದೊಳಗೆ ಪೂರ್ಣಗೊಳಿಸಿ ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

(ಕೆ.ಎಸ್. ಹರೀಶ್)

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ (ನಬಾರ್ಡ್)

#### ಇವರಿಗೆ:

- 1. ಮಹಾಲೇಖಪಾಲರು, (ಲೆಕ್ಕ ಪರೀಕ್ಷೆ,-II), ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು.
- 2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 3. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ.
- 4. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಇಂಧನ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
- 5. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 6. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ ಇಲಾಖೆ, ಬೆಂಗಳೂರು. ಬಹುಮಹಡಿ ಕಟ್ಟಡಗಳು, ಬೆಂಗಳೂರು
- 7. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ, ಬಹುಮಹಡಿ ಕಟ್ಟಡಗಳು, ಬೆಂಗಳೂರು
- 8. ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ, ವಸತಿ ಇಲಾಖೆ.
- 9. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ (ವೆಚ್ಚ), ಬೆಂಗಳೂರು.
- 10.ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
- 11.ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಸಣ್ಣನೀರಾವರಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 12.ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಬೆಸ್ಕಾಂ, ಬೆಂಗಳೂರು
- 13.ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕೆಪಿಟಿಸಿಎಲ್, ಬೆಂಗಳೂರು
- 14.ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಅರಣ್ಯ ಭವನ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು
- 15.ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ), (ಉತ್ತರ), (ಈಶಾನ್ಯ) ಮತ್ತು ಕೇಂದ್ರ ವಲಯಗಳು, ಬೆಂಗಳೂರು, ಧಾರವಾಡ, ಕಲಬುರಗಿ, ಶಿವಮೊಗ್ಯ.
- 16.ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ಗಳು, ಇತರೆ ಇಲಾಖೆಗಳು.
- 17.ಎಲ್ಲ್ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ಗಳು, ಲೋಇ ಮತ್ತು ಇತರೆ ಇಲಾಖೆಗಳು.
- 18.ಎಲ್ಲ್ ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್ಗಳು, ಲೋಇ ಮತ್ತು ಇತರೆ ಇಲಾಖೆಗಳು.

#### ಪ್ರತಿ ಮಾಹಿತಿಗಾಗಿ.

- 1. ಶ್ರೀ ಆರ್. ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್,
- 2. ಶ್ರೀ. ಬಿ. ಗುರುಪ್ರಸಾದ್, ನಿವೃತ್ತ ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ ಮತ್ತು ಪ್ರಧಾನ ಇಂಜನಿಯರ್,
- 3. ಕಾರ್ಯ ನಿರತ ತಂಡದ ಎಲ್ಲ ಸದಸ್ಯರು

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#### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ:-

2023-24ನೇ ಸಾಲಿನ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಪಟ್ಟಿಯ ಪ್ರಕಟಣೆ

- ಓದಲಾಗಿದೆ. 1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಪಿಡಬ್ಲ್ಯುಡಿ 65 ಆರ್ಡಿಎಫ್ 2018 ದಿನಾಂಕ 04-04-2019.
  - 2. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಪಿಡಬ್ಲ್ಯುಡಿ 86 ಆರ್ಡಿಎಫ್ 2022 ದಿನಾಂಕ 13.02.2023.
  - 3. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ), ಬೆಂಗಳೂರು ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ :ಮುಇಂಸಂಕದ:ಸಾಕೋ:ಸಇ-2: 2023-24 ದಿನಾಂಕ:15-11-2023.
  - 4. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಇವರ ಪತ್ರ ಮುಇಂ/ಜಸಂಇ/ಉ ಮತ್ತು ಮೌ ಘಟಕ/ದಪ/2023-24 203 ದಿನಾಂಕ 20-09-2023.
  - 5. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ (ವಿನ್ಯಾಸ ಮತ್ತು ಗುಣ ಆಶ್ವಾಸನೆ) ಬಿಡಬ್ಲ್ಯುಎಸ್ಎಸ್ಬಿ ಇವರ ಪತ್ರ No. BWSSB/CE (D & QA)/ACE (D)/TA/970/2023-24 dated 20-09-2023.
  - 6. ಬೆಸ್ಕಾಂ ಪತ್ರ ಸಂಖ್ಯೆ ಬೆವಿಕಂ/ಪ್ರ.ವ್ಯ/ಗು, ಪ್ರ ಮತ್ತು ಸು/ಉಪ್ರವ್ಯ-4/ಸ.ಪ್ರ.ವ್ಯ-5/ಡಿಸಿ-35/2023-24/821-22 ದಿನಾಂಕ 12-07-2023.

#### -:ಕಿರಿಡಿ

ರಾಜ್ಯದ ಪ್ರಮುಖ ಇಲಾಖೆಗಳಾದ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ವಸತಿ ಇಲಾಖೆ, ಇಂಧನ ಇಲಾಖೆಗಳ 2021-22ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-1,2,3,4,5,6,7 ಮತ್ತು 8ರ ಸಂಪುಟಗಳ ಅನುಸೂಚಿ ದರಗಳನ್ನು (Schedule of Rates) ಮೇಲೆ ಓದಲಾದ ಕ್ರ.ಸಂ-1ರ ಆದೇಶದಂತೆ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯನ್ನಾಗಿ ನೇಮಿಸಿದ **ಲೋಕೋಪಯೋಗಿ** ಹಿನ್ನೆಲೆಯಲ್ಲಿ 2021-22ನೇ ಸಾಲಿನಲ್ಲಿ ಜಾರಿಗೆ ತಂದು ಪ್ರಕಟಿಸಲಾಗಿತ್ತು. ಈ ಎಲ್ಲ ಸಂಪುಟಗಳನ್ನು 2023-24ನೇ ಸಾಲಿನಲ್ಲಿ ಪರಿಷ್ಕರಿಸಲು ನಿರ್ಧರಿಸಿದ್ದು, ಅದರಂತೆ ಈ ಮೇಲೆ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದನ್ನಯ ಕೃ.ಸ೦-2 ಕಾರ್ಯವನ್ನು ಶ್ರೀ.ಆರ್.ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ವಿವಿಧ ಇಲಾಖೆಗಳ ನಿವೃತ್ತ ಹಾಗೂ ಅಧಿಕಾರಿಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಪುನರ್ ರಚಿಸಲಾದ ತಾಂತ್ರಿಕ ಕಾರ್ಯ ಪಡೆ (Technical Working Group)ಗೆ ವಹಿಸಲಾಯಿತು. ಸದರಿ ತಂಡವು 2021-22ನೇ ಸಾಲಿನಲ್ಲಿ ಪ್ರಕಟಿಸಲಾದ ಏಕರೂಪ ಅನುಸೂಚಿ ಸಂಪುಟ-1ರಿಂದ 6ರನ್ನು ಪುನರ್ ಅಧ್ಯಯನ ಮಾಡಿ, ಆಯಾ ಇಲಾಖೆಯ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ಅನೇಕ ಸಭೆಗಳನ್ನು ನಡೆಸಿದ್ದು 2023-24ನೇ ಸಾಲಿನ ಕರಡು ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಸಂಪುಟಗಳು 1ರಿಂದ 6ನ್ನು ಸಿದ್ಧಪಡಿಸಿ, ಸರ್ಕಾರದ ಅನುಮೋದನೆಗೆ ಶಿಫಾರಸ್ಸು ಮಾಡಿರುತ್ತದೆ.

SR's OF ORGANIZATIONS CONCERNED	NODAL ORGANIZATION	2023-24 UNI SR Volume	
PWD (C&B), PRED	PWD	I, II & III	
WRDO, MI & KPCL	WRDO	IV	
BWSSB, KUWSDB & RWS	BWSSB	v	
KPTCL, ESCOMS, PWD ELECTRICAL	BESCOM	VI	
PORTS & IWTD & Airports	PORTS	Not updated/revised by	
FOREST, WATERSHED, HORTICULTURE	FOREST	the TWG for 2022-23	

#### ಈ ದರಪಟ್ಟಿಗಳಲ್ಲಿ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

- ನಿರ್ಮಾಣ ಸಾಮಗ್ರಿಗಳ ದರಗಳನ್ನು ಎಲ್ಲ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಿದೆ.
- 2022–23ನೇ ಸಾಲಿನಲ್ಲಿ ಕಾರ್ಮಿಕ ಇಲಾಖೆಯು ಪ್ರಕಟಿಸಿರುವಂತೆ ಕೂಲಿ ಕಾರ್ಮಿಕರ ದರಗಳನ್ನು (Zone-II rates) ಕನಿಷ್ಟ ದರಗಳನ್ನು ಸಹ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅವಳಡಿಸಲಾಗಿದೆ.
- ರಾಷ್ಟ್ರೀಯ ಹೆದ್ದಾರಿ ವಲಯದ 2022ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯಂತೆ ಯಂತ್ರೋಪಕರಣಗಳ ಬಾಡಿಗೆ ದರಗಳನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಆಳವಡಿಸಲಾಗಿದೆ.
- ಗುತ್ತಿಗೆದಾರರ ಲಾಭಾಂಶವನ್ನು ಗರಿಷ್ಟ ಶೇ10% ಪ್ರತಿಶತ ಅಥವಾ ಆಯಾ ಇಲಾಖೆಗಳು ನಿಗಧಿಪಡಿಸಿರುವ ಇವುಗಳಲ್ಲಿ ಯಾವುದು ಕಡಿಮೆಯೋ ಅದನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.
- Overhead charges ದರಗಳನ್ನು ಗರಿಷ್ಟ ಶೇ10% ಪ್ರತಿಶತ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಆಳವಡಿಸಲಾಗಿದೆ.
- Area specific loading ಎಲ್ಲ ಇಲಾಖೆಗಳ ಕಾಮಗಾರಿಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-1ರಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.

- Earth work, Cement concrete items with shuttering and surveying ಐಟಂಗಳನ್ನು ಸಹ ಈ ದರಪಟ್ಟಿಯಲ್ಲಿ ಎಲ್ಲ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-1ರಲ್ಲಿ ಅಳವಡಿಸಿರುತ್ತದೆ.
- ಇತರೆ ಇಂಜಿನಿಯರಿಂಗ್ ಇಲಾಖೆಗಳು ತಮ್ಮ ಕಾರ್ಯಕ್ಷೇತ್ರಕ್ಕೆ ಅವಶ್ಯವಿರುವಂತಹ specific construction materials and itemsಗಳನ್ನು ತಮ್ಮ ದರಪಟ್ಟಿಯಲ್ಲಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಅಳವಡಿಸಿಕೊಂಡಿರುತ್ತವೆ.

ಮೇಲಿನ ಅಂಶಗಳನ್ನು ಪರಿಗಣಿಸಿ ವಿವಿಧ ಇಲಾಖೆಗಳ ತಂಡಗಳು 2023-24ನೇ ಸಾಲಿನ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಂತೆ 2022-23ನೇ ಸಾಲಿನ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಗಳನ್ನು ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ.

ಅಂತಿಮಗೊಳಿಸಿದ 2023-24ನೇ ಸಾಲಿನ ಕರಡು ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಪಟ್ಟಿ ಸಂಪುಟ-I, II, III, IV, V & VIಅನ್ನು ಮೇಲೆ ಓದಲಾದ ಕ್ರ.ಸಂ-3ರಿಂದ 6ರಲ್ಲಿ ಸರ್ಕಾರದಿಂದ ಅನುಮೋದನೆ ದೊರಕಿಸಿಕೊಡಲು ನೋಡಲ್ ಇಲಾಖೆಗಳು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮೂಲಕ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸಿರುತ್ತದೆ.

ಈ ಎಲ್ಲ ಕರಡು ಏಕರೂಪ ಅನುಸೂಚಿ ದರಪಟ್ಟಿಗಳ ಬಗ್ಗೆ ದಿನಾಂಕ:07-11-2023 ರಂದು ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಏಕರೂಪ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಯಲ್ಲಿ ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆಗಳು ಮತ್ತು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದೊಂದಿಗೆ ಚರ್ಚಿಸಿದ್ದು, ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ವಿವಿಧ ಇಲಾಖೆಗಳು ಅಂತಿಮಗೊಳಿಸಿರುವ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟಗಳು-1 ರಿಂದ 6 ಅನ್ನು ಅಂಗೀಕರಿಸಿ ಜಾರಿಗೆ ತರಲು ನಿರ್ಧರಿಸಲಾಗಿದ್ದು, ಅದರಂತೆ ಕೆಳಕಂಡಂತೆ ಆದೇಶಿಸಲಾಗಿದೆ.

#### ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಲೋಇ 86 ಆರ್ಡಿಎಫ್ 2022, ಬೆಂಗಳೂರು ದಿನಾಂಕ:15-11-2023

ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ನೋಡಲ್ ಇಲಾಖೆಗಳು ತಯಾರಿಸಿರುವ ಕೆಳಕಂಡ 2023-24ನೇ ಸಾಲಿನ Common Schedule of Rates Volume-I to VI ಎಲ್ಲ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ತಕ್ಷಣದಿಂದ ಹಾಗೂ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ಜಾರಿಗೆ ತರಲಾಗಿದೆ.

UNI SRs 2023-24	2023-24 UNI SR Volume
Common material rates, labour rates, buildings and roads and bridges.	I, II & III

UNI SRs 2023-24	2023-24 UNI SR Volume
WRDO, MI & KPCL organization specific for irrigation and dam works.	IV
BWSSB, KUWSDB & RWS for water supply and sanitary works.	V
KPTCL, ESCOMS, PWD ELECTRICAL for transmission, distribution and consumption related works.	VI

ಸರ್ಕಾರದ ಎಲ್ಲಾ ಇಲಾಖೆಗಳು/ನಿಗಮ/ಮಂಡಳಿ/ ಸಂಸ್ಥೆಗಳು ತಕ್ಷಣದಿಂದಲೇ ಜಾರಿಗೆ ಬರುವಂತೆ 2023-24ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಯ ದರಗಳನ್ನು ಅಂದಾಜು ತಯಾರಿಕೆ, ಗುತ್ತಿಗೆ ಪ್ರಕ್ರಿಯೆ ಮತ್ತು ಅನುಷ್ಟಾನಗೊಳಿಸುವಲ್ಲಿ ಅಳವಡಿಕೊಳ್ಳತಕ್ಕದ್ದು.

ಈ ಏಕರೂಪ ಅನುಸೂಚಿತ ಎಲ್ಲ ಸಂಪುಟವನ್ನು ಆಯಾ ಇಲಾಖೆಗಳ ಅಂರ್ತಜಾಲದಲ್ಲಿ ಪ್ರಕಟಿಸುವುದು. 2023-24ನೇ ಸಾಲಿನ ಎಲ್ಲ ಸಂಪುಟಗಳನ್ನು eproc-2 ತಂತ್ರಾಂಶದಲ್ಲಿ ಕಡ್ಡಾಯವಾಗಿ ಅಳವಡಿಸಲು ನೋಡಲ್ ಇಲಾಖೆಗಳು ಕ್ರಮ ವಹಿಸುವುದು.

ಆಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಬೆಂಗಳೂರು ಮೃತ್ತ, ಬೆಂಗಳೂರು ಇವರು ಸಿಮೆಂಟ್, ಉಕ್ಕು ಮತ್ತು ಡಾಂಬರು ಬೆಲೆಗಳನ್ನು ಪ್ರತಿ ತೈಪ್ರಮಾಸಿಕ ಅವಧಿಗೆ ಪ್ರತಿಶತ ಶೇ.10% ಕ್ಕಿಂತ ದರ ವ್ಯತ್ಯಾಸವಾದಲ್ಲಿ ಪರಿಷ್ಕೃತ ದರಗಳನ್ನು ಧಾರವಾಡ, ಮಂಗಳೂರು ಮತ್ತು ಬಳ್ಳಾರಿ ಮೃತ್ತಗಳ ಆಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ ಪ್ರಕಟಿಸುವುದು.

ವಿದ್ಯುತ್ ಇಲಾಖೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮುಖ್ಯ ನಿರ್ಮಾಣ ಸಾಮಗ್ರಿಗಳಾದ Aluminum, copper, Steel, Insulating material, PVC/XLPE compound, CRGO core, Transformer oil ದರಗಳು IEEMA ಪ್ರಕಾರ ಪ್ರತಿ ತೈಮಾಸಿಕ ಅವಧಿಗೆ ಪರಿಷ್ಕೃತ ದರಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು.ಇದೇ ರೀತಿ ಇತರೆ ಇಲಾಖೆಗಳ ಮುಖ್ಯ ಸಾಮಗ್ರಿಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು.

ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಬಿಡಬ್ಲ್ಯುಎಸ್ಎಸ್ಬಿ ಇವರು ಕೆಯುಡಬ್ಲ್ಯುಎಸ್ಎಸ್ಬಿ ಮತ್ತು ಆರ್ಡಿಡಬ್ಲ್ಯು ಅಂಡ್ ಎಸ್ಡ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ ಎಲ್ಲ ರೀತಿಯ ಕೊಳವೆಗಳ (pipes) ಬೆಲೆಗಳನ್ನು ಪ್ರತಿ ತ್ರೈಮಾಸಿಕ ಅವಧಿಗೆ ಅಥವಾ ಶೇ.10ಕಿಂತ ದರ ವ್ಯತ್ಯಾಸವಾದಲ್ಲಿ ಪರಿಪ್ಕೃತ ದರಗಳನ್ನು ಪ್ರಕಟಿಸುವುದು.

ಈ ಅನುಸೂಚಿ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-IV, V VIಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಎಲ್ಲ ಸಾಧ್ಯತೆ ಮತ್ತು ಭಾದ್ಯತೆಗಳನ್ನು ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆಗಳು ಹೊಂದಿರುತ್ತವೆ. (WRD, MI, KPCL-Vol IV, BWSSB, KUWSDB & RWS-Vol V, Escoms, KPTCL and PWD-Vol-VI) ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಸುತ್ತೋಲೆ **ಸಂಖ್ಯೆ ಆಇ 447 ವೆಚ್ಚ-12 /2022 ದಿನಾಂಕ: 30.07.2022** ರಂತೆ ಶೇ.18% ಜಿಎಸ್ಟಿ ಪ್ರತಿಶತವನ್ನು ಅಂದಾಜುಪಟ್ಟಿಯಲ್ಲಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಸೇರ್ಪಡೆ ಮಾಡುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

4.2-6.1

(ಡಾ.ಎಸ್. ಸೆಲ್ವಕುಮಾರ್) ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಅನುಸೂಚಿ ದರಗಳ ಅಂಗೀಕಾರ ಸಮಿತಿ.

#### ಇವರಿಗೆ:

- 1. ಮಹಾಲೇಖಪಾಲರು, (ಲೆಕ್ಕ ಪರೀಕ್ಸೆ-II), ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು.
- 2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 3. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ.
- 4. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಇಂಧನ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
- 5. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 6. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ, ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 7. ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ರಗಳುತ್ತು.
- 8. ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಸತಿ ಇಲಾಖೆ.
- 9. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ (ವೆಚ್ಚ), ಬೆಂಗಳೂರು.
- 10. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ (ಆಯವ್ಯಯ), ಬೆಂಗಳೂರು
- 11. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
- 12. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಸಣ್ಣನೀರಾವರಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 13. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, e-governance ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
- 14. ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ರಸ್ತೆ, ಯೋಜನೆ ಮತ್ತು ಆಸ್ತಿ ನಿರ್ವಹಣೆ ಕೇಂದ್ರ,(PRAMC), ಬೆಂಗಳೂರು- 6-ಸಂಪುಟಗಳನ್ನು ((PORTS & IWTD & Airports), (FOREST, WATERSHED, HORTICULTURE) ಹೊರತುಪಡಿಸಿ) ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಅಂತರ್ಜಾಲದಲ್ಲಿ ಪ್ರಕಟಿಸುವುದು.
- 15. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ), (ಉತ್ತರ), (ಈಶಾನ್ಯ) ಮತ್ತು ಕೇಂದ್ರ ವಲಯಗಳು, ಬೆಂಗಳೂರು, ಧಾರವಾಡ, ಕಲಬುರಗಿ, ಶಿವಮೊಗ್ಗ.
- 16. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ಗಳು, ಇತರೆ ಇಲಾಖೆಗಳು.
- 17. ಎಲ್ಲಾ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ಗಳು, ಲೋಇ ಮತ್ತು ಇತರೆ ಇಲಾಖೆಗಳು.
- 18. ಎಲ್ಲಾ ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್ಗಳು, ಲೋಇ ಮತ್ತು ಇತರೆ ಇಲಾಖೆಗಳು.

# <u>ಮುನ್ನುಡಿ</u>

ಸರ್ಕಾರದ ಆರ್ಥಿಕ ಇಲಾಖೆಯು ತನ್ನ ಆದೇಶ ಸಂಖ್ಯೆ ಆಇ 259 ಆಕೋ-2 2018 ದಿನಾಂಕ: 17–02–2020 ರಂದು ರಾಜ್ಯದ ಪ್ರಮುಖ ಇಲಾಖೆಗಳಾದ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ನಗರಾಭಿವೃದ್ಧಿ, ವಸತಿ, ಇಂಧನ ಮುಂತಾದ ಇಲಾಖೆಗಳು ತಮ್ಮದೇ ಆದ ಅನುಸೂಚಿತ ದರಗಳನ್ನು ತಯಾರಿಸಿದ್ದು, ವಿವಿಧ ಕಾಮಗಾರಿಗಳ ಅಂದಾಜುಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಬೇರೆ ಬೇರೆ ಇಲಾಖೆಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿ, ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲಾಗುತ್ತಿರುವುದನ್ನು ಮತ್ತು ಜಿ.ಎಸ್.ಟಿ ನಂತರದ ದರಗಳು ಜಾರಿಯಾದ ನಂತರ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲು ಮತ್ತು ಟೆಂಡರ್ ಮೌಲ್ಯಮಾಪನ ಮಾಡುವಲ್ಲಿ ಅನೇಕ ಸಮಸ್ಯೆಗಳು ಉದ್ಭವವಾಗುತ್ತಿದ್ದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಏಕರೂಪಿ ಸಮಗ್ರ ಅನುಸೂಚಿತ ದರಗಳನ್ನು ತಯಾರಿಸಿ ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವೆಂದು ನಿರ್ಧರಿಸಿ, ಇದರನ್ವಯ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯನ್ನಾಗಿ ನೇಮಿಸಿ, ಎಲ್ಲಾ ಪ್ರಮುಖ ಇಲಾಖೆಗಳ ಪ್ರತಿನಿಧಿಗಳನ್ನೊಳಗೊಂಡ ಅನುಸೂಚಿತ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಯನ್ನು ಸರ್ಕಾರದ ಆದೇಶ ಲೋಇ 65 ಆರ್.ಡಿ.ಎಫ್ 2018 ದಿನಾಂಕ: 04–04–2019 ರಲ್ಲಿ ರಚಿಸಿದ್ದು ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯವರು ಅನುಸರಿಸಬೇಕಾದ ಕ್ರಮಗಳ ಬಗ್ಗೆ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರದ ತಂಡದೊಂದಿಗೆ ಚರ್ಚಿಸಿರುತ್ತಾರೆ. ತದನಂತರ ದಿನಾಂಕ:05–02–2020 ರಂದು ಸಮಿತಿಯು ದೀರ್ಘವಾಗಿ ಚರ್ಚಿಸಿ, ಕೈಗೊಳ್ಳಬೇಕಾದ ತೀರ್ಮಾನಗಳನ್ನು ಅಂತಿಮಗೊಳಿಸಿರುತ್ತದೆ.

ಇದರನ್ವಯ ವಿವಿಧ ಇಲಾಖೆಗಳನ್ನು ಒಗ್ಗೂಡಿಸಿ, ದರಪಟ್ಟಿಯನ್ನು ಲೋಕೋಪಯೋಗಿ, ನೀರಾವರಿ, ನೀರು ಸರಬರಾಜು, ಒಳಚರಂಡಿ, ವಿದ್ಯುಚ್ಛಕ್ತಿ, ಬಂದರು ಹಾಗೂ ಅರಣ್ಯ ಇಲಾಖೆಗಳಂತೆ ವಿಂಗಡಿಸಿ, ಒಟ್ಟಾರೆ, ಸಾಮಾನ್ಯ ಸಂಪುಟವಲ್ಲದೇ, 6 ಏಕರೂಪ ದರಪಟ್ಟಿಗಳನ್ನು ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಲೋಇ 51 ಆರ್.ಡಿ.ಎಫ್ 2019 ದಿನಾಂಕ 18–03–2022 ರಂತೆ ಜಾರಿಗೊಳಿಸಿರುತ್ತದೆ. ಮುಂದುವರೆದು, ಸರ್ಕಾರವು ಈಗಾಗಲೇ ಪ್ರಕಟಿಸಿರುವ 2021–22 ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಸಂಪುಟಗಳನ್ನು 2023–24 ನೇ ಸಾಲಿನಲ್ಲಿ ಪರಿಷ್ಕರಣೆಗೊಳಿಸಲು ಕ್ರಮ ವಹಿಸಬೇಕಾಗಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಲೋಇ 86 ಆರ್.ಡಿ.ಎಫ್ 2022 ದಿನಾಂಕ 13–02–2023 ರಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು ಪುನರ್ ರಚಿಸಿದೆ. ಮುಂದುವರೆಸುತ್ತಾ, ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಸದರಿ ಆದೇಶದಲ್ಲಿ ಸೂಚಿಸಿದೆ.

- ಅ) ಈ ತಂಡವು ವಿವಿಧ ಇಲಾಖೆಗಳ ಸದಸ್ಯರೊಂದಿಗೆ ಸಭೆಯನ್ನು ನಡೆಸಿ ಏಪ್ರಿಲ್–2023 ರ ಅಂತ್ಯದೊಳಗೆ ವಿವಿಧ ಇಲಾಖೆಗಳ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಷ್ಕರಿಸಿ ಸಲ್ಲಿಸುವುದು.
- ಆ) ವಿವಿಧ ಇಲಾಖೆಗಳ ಸದಸ್ಯರು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆ, ವಿಶಿಷ್ಟ ವಿವರಣೆ ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷಣೆ ಮುಂತಾದ ವಿವರಗಳನ್ನು ತಾಂತ್ರಿಕ ತಂಡದೊಂದಿಗೆ ಚರ್ಚಿಸಿ ಅಂತಿಮಗೊಳಿಸುವುದು ಹಾಗೂ ಪರಿಷ್ಕರಿಸಿದ ಕರಡು ಏಕರೂಪ ದರಪಟ್ಟಿಗಳಿಗೆ ಆಯಾ ಇಲಾಖೆಯ ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರದ ಅನುಮೋದನೆ ಪಡೆದು ಸಲ್ಲಿಸುವುದು.

ಇ) ಈ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಪರಿಷ್ಕರಣೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆಗಳ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ / ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ಗಳು ಸೂಕ್ತ ಸಲಹೆ ಮತ್ತು ಅಭಿಪ್ರಾಯಗಳನ್ನು ಕಾರ್ಯ ನಿರತ ತಂಡದ ಮಾಹಿತಿಗೆ ಸಲ್ಲಿಸುವುದು.

Щ

ಈ) ತಾಂತ್ರಿಕ ಕಾರ್ಯ ನಿರತ ತಂಡವು 2023–24 ಸಾಲಿನ ಎಲ್ಲ ಸಂಪುಟಗಳ ಪರಿಷ್ಕರಣೆಯನ್ನು ಏಪ್ರಿಲ್ 2023 ರ ಅಂತ್ಯದೊಳಗೆ ಪೂರ್ಣಗೊಳಿಸಿ ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

ಸರ್ಕಾರದ ಆದೇಶಗಳ ಸೂಚನೆಗಳಂತೆ ಕಾರ್ಯಪಡೆಯು ಪ್ರತಿಯೊಂದು ಇಲಾಖೆಯೊಂದಿಗೆ ಚರ್ಚಿಸಿ, ಆಯಾ ಇಲಾಖೆಗಳ ದರಪಟ್ಟಿಗಳನ್ನು ಸಲ್ಲಿಸಿರುವಂತೆ, ಪ್ರತ್ಯೇಕವಾಗಿ ಪರಿಶೀಲಿಸಿ ಹಾಗೂ ಒಟ್ಟಾರೆ ತಾಂತ್ರಿಕವಾಗಿ ಹಾಗೂ ಕೆಲವೊಂದು ವೈಜ್ಞಾನಿಕವಾಗಿ ಸಮರ್ಥನೀಯ ಬದಲಾವಣೆಗಳನ್ನು ತಿಳಿಸಿರುತ್ತದೆ. ಇದರಂತೆ ಇಲಾಖೆಗಳು ಅಂತಿಮ ದರಪಟ್ಟಿಗಳನ್ನು ತಯಾರಿಸಿ, ಕಾರ್ಯಪಡೆಗೆ ಸಲ್ಲಿಸಿದ್ದು, ಕಾರ್ಯಪಡೆಯು ದರಪಟ್ಟಿಗಳನ್ನು ಪರಿಶೀಲಿಸಿ, ಸಹಮತಿಸಿರುತ್ತದೆ.

**ಆರ್. ಜೈ ಪ್ರಸಾದ್** ಅಧ್ಯಕ್ಷರು, ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡ

# NOTE REGARDING VOLUME 1 TO 6 SCHEDULE OF RATES FOR THE YEAR 2023-24

ಸರ್ಕಾರದ ಆದೇಶ ಸಂ. ಲೋಇ 86 ಆರ್.ಡಿ.ಎಫ್ 2022 ದಿನಾಂಕ 13–02–2023 ಆದೇಶದಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿ ತಯಾರಿಕೆಯ ಸಮಿತಿಯನ್ನು ಪುನರ್ ರಚಿಸಿ ದರಪಟ್ಟಿಗಳನ್ನು ಸಮಗ್ರವಾಗಿ ಅಧ್ಯಯನ ಮಾಡಿ ಸರ್ಕಾರಕ್ಕೆ ವರದಿ ಸಲ್ಲಿಸಲು ಸೂಚಿಸಿದರನ್ವಯ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವು ಪರಿಷ್ಕರಣೆ ಕಾರ್ಯವನ್ನು ಮಾರ್ಚ್ 2023 ರಿಂದ ಕಾವೇರಿ ಅತಿಥಿ ಗೃಹ ಇಲ್ಲಿ ಪ್ರಾರಂಭಿಸಿರುತ್ತದೆ. ಅನೇಕ ಸಭೆಗಳನ್ನು ನಡೆಸಿ ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಎಲ್ಲಾ ದರಪಟ್ಟಿಗಳನ್ನು ಕೂಲಂಕುಷವಾಗಿ ಪರಿಶೀಲಿಸಿ ಮತ್ತು ಕರ್ನಾಟಕ ರಾಜ್ಯ ಗುತ್ತಿಗೆದಾರರುಗಳ ಸಂಘದೊಂದಿಗೆ ಮತ್ತು ಇತರೆ ಕನ್ಸ್ ಲ್ ಟೆಂಟ್ ರವರುಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ ಈ ಕೆಳಕಂಡಂತೆ ವಿವಿಧ ಸಂಪುಟಗಳ ದರಪಟ್ಟಿಗಳ ಕುರಿತು ವರದಿಯನ್ನು ತಯಾರಿಸಲಾಗಿದೆ.

# ಸಂಪಟ 1 ರಿಂದ 3 : ಏಕರೂಪ ದರಪಟ್ಟಿ ಮತ್ತು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಕಟ್ಟಡಗಳು, ರಸ್ತೆ ಮತ್ತು ಸೇತುವೆಗಳ ದರಪಟ್ಟಿ

ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ವೃತ್ತಗಳು ಕೆಳಕಂಡಂತೆ ತಂಡಗಳನ್ನು ರಚಿಸಿ ಪರಿಷ್ಕರಣೆ ಕಾರ್ಯವನ್ನು ಫೆಬ್ರವರಿ 26 ನೇ ತಾರೀಖು 2023 ರಿಂದ ಪ್ರಾರಂಭಿಸಿರುತ್ತದೆ.

ಸಂಪುಟ	ನೋಡಲ್ ವೃತ್ತಗಳು	ಕೈಗೊಂಡ ಕ್ರಮಗಳು	
I	ಲೋಇ ಬೆಂಗಳೂರು ವೃತ್ತ	ಸಂಮಟ–1 ರ ಪರಿಷ್ಕರಣೆ ಎಲ್ಲಾ ಇಲಾಖೆಗಳ ತಾಂತ್ರಿಕ ಸಲಹೆಗಳಂತೆ.	
II	ಲೋಇ ಕಟ್ಟಡಗಳು ವೃತ್ತ	ಸಂಮಟ–2 ರ ಪರಿಷ್ಕರಣೆ	
III	ಲೋಇ ಬೆಂಗಳೂರು ವೃತ್ತ	ಸಂಪುಟ–3 ರ ಪರಿಷ್ಕರಣೆ ಐ.ಆರ್.ಸಿ, MoRTH ನ 2019 ಮತ್ತು ಇತರೆ ರಾಜ್ಯಗಳ ದರಪಟ್ಟಿ	

ಮೇಲಿನಂತೆ ಪರಿಷ್ಕರಣೆಗೊಳಿಸಲಾಗುವ ದರಪಟ್ಟಿಗಳನ್ನು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದಲ್ಲಿ ಹೆಚ್ಚಿನ ಪರಿಶೀಲನೆ ಕೈಗೊಂಡು ಮೇಲುರುಜು ಪಡೆದು ಸರ್ಕಾರಕ್ಕೆ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ಸಲ್ಲಿಸಬೇಕಿರುತ್ತದೆ.

ಅದರಂತೆ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ವೃತ್ತಗಳಿಂದ ತಯಾರಿಸಲ್ಪಟ್ಟಿರುವ ಸಂಪುಟ–(1) ರಿಂದ (3) ರ ದರಪಟ್ಟಿಗಳ ಸಂಕ್ಷಿಪ್ತ ಸಾರಾಂಶ ಕೆಳಕಂಡಂತಿದೆ.

- ದರಪಟ್ಟಿ ತಯಾರಿಸಲು ಸಾಮಾಗ್ರಿಗಳ ದರಗಳನ್ನು ವಿವಿಧ ಸರಬರಾಜುದಾರರು, ಕಾರ್ಯಸ್ಥಾನಗಳ ಇಂಜಿನಿಯರ್ರವರನ್ನು ಒಳಗೊಂಡ ತಂಡಗಳನ್ನು ರಚಿಸಿ ಪಡೆದುಕೊಂಡು ಮಾರುಕಟ್ಟೆಯಿಂದ ಜಿಎಸ್ಟಿ ರಹಿತ ದರಗಳನ್ನು ಅಂತಿಮಗೊಳಿಸಿ ಪಟ್ಟಿ ಮಾಡಲಾಗಿರುತ್ತದೆ.
- 2) ವಿಶಿಷ್ಟ ವಿವರಣೆಯನುಸಾರ ಯೂನಿಟ್ಗಳಿಗೆ ಅನ್ವಯಿಸುವ ದರವಿಶ್ಲೇಷಣೆಯನ್ನು ತಯಾರಿಸಲು ಅವಶ್ಯವಿರುವ ಕೂಲಿ ದರಗಳ ಮಾರ್ಗಸೂಚಿಯನ್ನು ಏಪ್ರಿಲ್ 2023ರಂದು ಹೊರಡಿಸಿದ್ದು, ವಲಯ 2ರ ದರವು ಬಹುತೇಕ ಸ್ಥಳಗಳಲ್ಲಿ ಅನ್ವಯವಾಗುವುದರಿಂದ ಈ ದರಗಳನ್ನು ಕೂಲಿ ದರಗಳನ್ನಾಗಿ ದರವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲು ತೀರ್ಮಾನಿಸಲಾಗಿರುತ್ತದೆ.

3) ಯಂತ್ರೋಪಕರಣಗಳ ದರಗಳನ್ನು ರಾಷ್ಟ್ರೀಯ ಹೆದ್ದಾರಿ ವಲಯದ ದರಪಟ್ಟಿಯಂತೆ ಮತ್ತು ಸಿ.ಪಿ.ಡಬ್ಲೂ.ಡಿ ದರಗಳಂತೆ ಪಡೆದುಕೊಳ್ಳಲಾಗಿದೆ.

ಸಾಮಾಗ್ರಿಗಳ ದರ, ಕೂಲಿ ದರ ಮತ್ತು ಯಂತ್ರೋಪಕರಣಗಳ ಬಾಡಿಗೆ ದರಗಳ ಎಲ್ಲಾ ನಿಯತಾಂಕಗಳನ್ನು ಆಧರಿಸಿ ಮತ್ತು ದರವಿಶ್ಲೇಷಣೆ ತಯಾರಿಸುವುದನ್ನು ಏಕರೂಪವಾಗಿಸಲು ಈ ಕೆಳಕಂಡಂತೆ ಮಾದರಿಯನ್ನು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವು ನೀಡಿರುತ್ತದೆ.

ಕ್ರ.ಸ	ವಿವರಗಳು
1	ಸಾಮಗ್ರಿಗಳ ಮೂಲ ಬೆಲೆ (ಜಿ.ಎಸ್.ಟಿ ಹೊರತುಪಡಿಸಿ)
2	ಕೂಲಿ ದರಗಳು (ಜಿ.ಎಸ್.ಟಿ ಹೊರತುಪಡಿಸಿ)
3	ಯಂತ್ರೋಪಕರಣಗಳ ಬಳಕೆ ದರ (ಜಿ.ಎಸ್.ಟಿ ಹೊರತುಪಡಿಸಿ)
4	ಹೆಚ್ಚುವರಿ (overhead charges) ಶುಲ್ಕ – ಶೇ10 – ಕ್ರಸ. 1,2,3 ರ ಮೊತ್ತದ ಮೇಲೆ
5	ಗುತ್ತಿಗೆದಾರರ ಲಾಭಾಂಶ – ಶೇ 10 – ಕ್ರಸ. 1, 2, 3 ಗಳ ದರಗಳ ಮೇಲೆ
	ಒಟ್ಟಾರೆ ಮೊತ್ತ ರೂ.
6	ಪ್ರದೇಶ ನಿರ್ಧಿಷ್ಟ ಹೆಚ್ಚುವರಿ (ಒಟ್ಟಾರೆ ಮೊತ್ತದ ಮೇಲೆ)
7	ಜಿ.ಎಸ್.ಟಿ ಶೇ 18 ಪ್ರತ್ಯೇಕ ಸರ್ಕಾರದ ಆದೇಶಗಳಂತೆ
8	ಒಟ್ಟು ಬೆಲೆ (ಅಂದಾಜು ಪಟ್ಟಿಯಲ್ಲಿ ಗಣನೆಗೆ ತೆಗೆದುಕೊಳ್ಳಬೇಕಾದ ಅಂದಾಜು ಮೊತ್ತ)

- 4) ಪ್ರಮುಖ ಸಾಮಾಗ್ರಿಗಳ ಕುರಿತು : ಪ್ರಸ್ತುತ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಅನೇಕ ತಯಾರಕರ ಸಿಮೆಂಟ್ ಮತ್ತು ಉಕ್ಕು ಲಭ್ಯವಿದ್ದು, ನಿರ್ದಿಷ್ಟ ಬ್ರಾಂಡ್ಗಳ ಬದಲಾಗಿ ಐ.ಎಸ್ ನಿಗಧಿಪಡಿಸಿರುವ ಮಾರ್ಗಸೂಚಿಗೆ ಸರಿಹೊಂದುವ ಸಿಮೆಂಟ್ಗಳನ್ನು, ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಉಪಯೋಗಿಸಲು ಮತ್ತು ಕಬ್ಬಿಣದ/ಉಕ್ಕಿನ ಸರಳುಗಳ ಬಗ್ಗೆ Fe 550 ಲಭ್ಯವಿದ್ದು, ಉಪಯೋಗಿಸಬಹುದಾದ ಸರಳುಗಳ ಗುಣವನ್ನು ನಿಷ್ಕರ್ಷೆ ಮಾಡಲು ತೀರ್ಮಾನಿಸಿ ಐ.ಎಸ್. 1786 ರಂತೆ ತಯಾರಿಸುವ JSW, TATA, SAIL ಸರಳು ತಯಾರಿಕರೊಂದಿಗೆ ತಾಂತ್ರಿಕ ಮಾಹಿತಿಯನ್ನು ಪಡೆದಿರುವಂತೆ, Fe 550 ಯನ್ನು ಮಾತ್ರ ಮತ್ತು ಇದರ ಲಭ್ಯತೆಗನುಗುಣವಾಗಿ ದರಪಟ್ಟಿಯಲ್ಲಿ ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 5) ಸಾಂಪ್ರದಾಯಿಕ ಪದ್ದತಿಯಿಂದ ಪರ್ಯಾಯ ವಸ್ತುಗಳ ಉಪಯೋಗ ಕುರಿತು : ಕಟ್ಟಡಗಳನ್ನು ಕೆಡವಿದಾಗ ಲಭ್ಯವಾಗುವ ಕಟ್ಟಡ ತ್ಯಾಜ್ಯ ವಸ್ತುಗಳನ್ನು ಹೊರಹಾಕುವ ಬಗ್ಗೆ ಚರ್ಚಿಸಿ C&D Waste (Waste generated during construction, demolition or renovation (remodelling) of any structure/buildings (residential/office/ commercial, etc) or associated activities for infrastructure provision) ಮತ್ತು ಐ.ಆರ್.ಸಿ 121:2017 ರಂತೆ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲು ಕ್ರಮ ವಹಿಸಲಾಗಿದೆ. ಸಂಪುಟ–1 ರಲ್ಲಿ Recycled Concrete Aggregate (RCA) ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ. ಇದಲ್ಲದೇ Iron Slag ಮತ್ತು Steel Slag ಗಳನ್ನು ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಈ ಕೆಳಕಂಡಂತೆ ಬಳಸಬಹುದಾಗಿರುತ್ತದೆ.

Sl No.	Type of Aggregate	Maximum Utilization Percentage	
		Plain Concrete	Lean Concrete (M15 Grade & Below)
1.	Iron Slag Aggregate	50	100
2.	Steel Slag Aggregate	25	100

ಮೇಲಿನಂತೆ ಶೇಕಡವಾರು ವಿಶ್ರಣಗಳ ಐ.ಎಸ್. 383:2016 ಬಗ್ಗೆ ಆದರೆ ವಾಸ್ತವಿಕವಾಗಿ ಕಾಮಗಾರಿಗಳ ಸ್ಥಳಗಳಲ್ಲಿ ಈ ರೀತಿಯಾಗಿ ಶೇಕಡವಾರು Plain Concrete ನಲ್ಲಿ ಮಿಶ್ರಣಗೊಳಿಸುವ ಕಾರ್ಯವು ಕಷ್ಟಕರವಾಗಿರುತ್ತದೆ. ಅದಾಗ್ಯೂ ಇರುವಂತಹ ಆರ್.ಎಂ.ಸಿ ಘಟಕಗಳಲ್ಲಿ ಪ್ರಾಯೋಗಿಕವಾಗಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲು ಇಲಾಖೆಯಲ್ಲಿ ಯೋಜನೆಯನ್ನು ರೂಪಿಸುವುದು.

- 6) ಪ್ರಸ್ತುತ ಇರುವ ಅಲ್ಯುಮಿನಿಯಂ ಕ್ರ್ಯಾಶ್ ಬ್ಯಾರಿಯರ್ ನೊಂದಿಗೆ ಐ.ಆರ್.ಸಿ 119:2015 ರಲ್ಲಿನ ಪ್ರಸ್ತಾಪದಂತೆ ಎಫ್.ಆರ್.ಪಿ ಕ್ರ್ಯಾಶ್ ಬ್ಯಾರಿಯರ್ ಅಳವಡಿಸಬಹುದಾಗಿರುತ್ತದೆ. ಆದರೆ, ಈ ಅಂಶವು ಮಹಾರಾಷ್ಟ್ರದಲ್ಲಿ ಮಾತ್ರ ಲಭ್ಯವಿದ್ದು, ರಾಜ್ಯದ ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಅಳವಡಿಸಲು ಅಂಶದ ಲಭ್ಯತೆ ಬಗ್ಗೆ ಎಲ್ಲಾ ವಲಯಗಳಿಗೆ ಮಾಹಿತಿ ಕೋರಲಾಗಿರುತ್ತದೆ. ತಾಂತ್ರಿಕ ಮಾಹಿತಿಯು ಲಭ್ಯವಿರುವಂತೆ ಈ ಅಂಶವು ಬಹಳಷ್ಟು ಪರಿಣಾಮಕಾರಿಯಾಗಿದ್ದು, ರಸ್ತೆ ಸಾರಿಗೆ ಮತ್ತು ಭೂ ಮಂತ್ರಾಲಯದ ಮಾನ್ಯ ಕೇಂದ್ರ ಸಚಿವರು ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಬಳಸಲು ಪ್ರಸ್ತಾಪಿಸಿರುತ್ತಾರೆ.
- 7) ಪ್ರೀ ಕ್ಯಾಸ್ಟ್ ಆವರಣ ಗೋಡೆಯನ್ನು ಈಗಾಗಲೇ ಬೆಂಗಳೂರು, ಶಿವಮೊಗ್ಗ, ವಿಜಾಮರ ಮತ್ತು ಇತರೆ ವಿಮಾನ ನಿಲ್ದಾಣಗಳಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿರುವಂತೆ ಮತ್ತು ಪ್ರಸ್ತುತ ಮಾರುಕಟ್ಟೆಯಲ್ಲಿ ಅನೇಕ ತಯಾರಿಕರು ಇದ್ದು, ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಬಳಸಲು ವಿಶಿಷ್ಟ ವಿವರಣೆಯನ್ನು ರೂಪಿಸಲಾಗಿದೆ.
- 8) ಕಟ್ಟಡ ಕಾಮಗಾರಿಗಳನ್ನು ತ್ವರಿತವಾಗಿ ಪೂರ್ಣಗೊಳಿಸಲು ಅವಶ್ಯವಾದ Solid & Hollow Core slab ನಿಂದ 3 ಅಂತಸ್ತಿನವರೆಗೆ ಕಟ್ಟಡಗಳನ್ನು ನಿರ್ಮಿಸುವ ಕುರಿತು ದರಪಟ್ಟಿಯಲ್ಲಿ ವಿಶಿಷ್ಟ ವಿವರಣೆಯನ್ನು ರೂಪಿಸಲಾಗಿದೆ.
- 9) ಕಾಂಕ್ರೀಟ್ ನ ಅಂಶದಲ್ಲಿ ಫ್ಲೈ-ಆಶ್ ಪ್ರತಿಶತ 20 ವರೆಗೆ ಮತ್ತು ಪೈಬರ್ ಗಳನ್ನು 4 ರಿಂದ 14 ಕಿ.ಲೋ ಪ್ರತಿ ಘನ.ಮೀ ಕಾಂಕ್ರೀಟ್ಗೆ ಮಿಶ್ರಣ ಮಾಡುವ ಬಗ್ಗೆ ಐ.ಆರ್.ಸಿ ಕೋಡ್ಗಳಲ್ಲಿ ಪ್ರಸ್ತಾಪಗಳಿದ್ದು, ಅದರಂತೆ ವಿಶಿಷ್ಟ ವಿವರಣೆಗಳನ್ನು ರೂಪಿಸಲಾಗಿದೆ. ದರವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಐ.ಆರ್.ಸಿ SP 46:2014 ರಂತೆ ಮತ್ತು MoRTH ನಂತೆ ವೈಟ್ ಟಾಪಿಂಗ್ ಕಾಮಗಾರಿಗಳಲ್ಲಿ 9.25 ಕಿ.ಲೋ ಪ್ರತಿ ಘ,ಮೀಗೆ ಅಳವಡಿಸಲಾಗಿದೆ. ಈ ಅಂಶವು ಅಗತ್ಯ plastic shrinkage, ductility & abrasion resistance ಗಳನ್ನು ಕಾಂಕ್ರೀಟ್ ಗೆ ನೀಡುವಂತಾಗಿದ್ದು, ಕಡ್ಡಾಯವಾಗಿ ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಬಳಸುವಂತೆ ಸೂಚಿಸಿ ಟಿಪ್ಪಣಿಯನ್ನು ನೀಡಲಾಗಿದೆ.
- 10) Bridge cum Barriage ನಿರ್ಮಾಣದ ಬಗ್ಗೆ ಸೇತುವೆಗಳ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಂಶಗಳನ್ನು ಸೇರಿಸಲು ತಂಡವು ಸೂಚಿಸಿರುವಂತೆ overhead charge ಗಳನ್ನು ಪ್ರತ್ಯೇಕಿಸಿ ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 11) ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, PRAMC ರವರು ದರಪಟ್ಟಿ ಕುರಿತ ಸಭೆಯಲ್ಲಿ ಭಾಗವಹಿಸಿ ಹಾಲಿ ದರಪಟ್ಟಿಯಲ್ಲಿ ಪರಿವೀಕ್ಷಣೆ, ವಿವರವಾದ ಯೋಜನಾ ವರದಿ ತಯಾರಿಕೆ, ಗುಣನಿಯಂತ್ರಣದ ಪರೀಕ್ಷೆಗಳು ಮತ್ತು ಇತರೆ ಅವಶ್ಯ

- ಅಂಶಗಳಿಗೆ ಸೇರಿಸಿದ್ದು, ಇದರೊಂದಿಗೆ ಯೋಜನಾ ಸಮಾಲೋಚಕರು ಹಾಗೂ ರಸ್ತೆ ಸುರಕ್ಷತಾ ಆಡಿಟ್ ಗಳ ಬಗ್ಗೆಯೂ ಸಹ ದರಗಳನ್ನು ನೀಡಲು ತಂಡಕ್ಕೆ ಕೋರಿರುತ್ತಾರೆ. ಅದರಂತೆ, ಅಪೆಂಡಿಕ್ಸ್ 4 ರಲ್ಲಿ ಮತ್ತು ಗುಣನಿಯಂತ್ರಣ ಪರೀಕ್ಷೆ ಸಂಬಂಧ ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 12) ತೇಗ, ಹೊನ್ನೆ, ಮತ್ತಿ ಮರಗಳು, ಎಲ್ಲಾ ಬಣ್ಣದ ಅಮೃತ ಶಿಲೆಯ ನೆಲಹಾಸು, ಮೊಸಾಯಿಕ್ ನೆಲಹಾಸು ಅಂಶಗಳನ್ನು ತೆಗೆಯುವುದು. ಇವುಗಳನ್ನು ಹಳೆಯ ಕಟ್ಟಡದಲ್ಲಿ ಉಪಯೋಗಿಸಿದ್ದಲ್ಲಿ, ಡೇಟಾ ದರವನ್ನು ತಯಾರಿಸಿ, ಸವಕಳಿ ಬೆಲೆಯನ್ನು ತೀರ್ಮಾನಿಸಬೇಕಿರುತ್ತದೆ.
- 13) ಕಟ್ಟಡದ ವಿವಿಧ ಭಾಗಗಳಾದ ಕಂಬ, ತೊಲೆ, ತಾರಸಿ ಮುಂತಾದವುಗಳಿಗೆ ಬೇಕಾದ ಉಕ್ಕಿನ ಪರಿಮಾಣವನ್ನು ಕಾಂಕ್ರೀಟ್ ನ ತೂಕದ ಶೇಕಡವಾರು ಅಳವಡಿಸಲು ಮತ್ತು ಸೇತುವೆಯ ವಿವಿಧ ಭಾಗಗಳಾದ ಪೈಲ್, ಕಂಬ, ತೊಲೆಗಳು, ಕ್ಯಾಪ್ ಗಳು ಮುಂತಾದವುಗಳಿಗೆ ಬೇಕಾದ ಉಕ್ಕಿನ ಪರಿಮಾಣವನ್ನು ಕಾಂಕ್ರೀಟ್ ನ ತೂಕದ ಶೇಕಡಾವಾರು ಅಂದಾಜುಗಳಲ್ಲಿ ಅಳವಡಿಸುವುದು ಸೂಕ್ತ. ಅಂದಾಜು ಮಂಜೂರು ಆದನಂತರ ವಿವರವಾದ ವಿನ್ಯಾಸ ಹಾಗೂ ಫ್ರೂಫ್ ಚೆಕ್ಕಿಂಗ್ ಸಲಹೆಗಾರರೊಂದಿಗೆ ಕೈಗೊಂಡು ವಿನ್ಯಾಸಿಸುವ ಉಕ್ಕಿನ ಪರಿಮಾಣವನ್ನು ಅಳವಡಿಸುವುದು.
- 14) ರಸ್ತೆಯ ಡಾಂಬರಿನ ವಿಭಾಗದಲ್ಲಿ Microsurfacing, Fog Seal, Slurry Seal (IRC SP 81 2008), Cold Mix Patching (IRC 116:2014 & IRC SP-100:2014), Open Graded Friction Courses (IRC 129:2019) ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 15) ಇದಲ್ಲದೇ ವಿಜಯಪುರ ಏರ್ಪೋರ್ಟ್ ಕಾಮಗಾರಿಯ ಅನುಭವದೊಂದಿಗೆ ಮತ್ತು ರಸ್ತೆಗಳಿಗೆ ಹಾಗೂ ನಗರ ಪ್ರದೇಶಗಳಲ್ಲಿ ರಸ್ತೆಗಳನ್ನು ಬಹುಕಾಲದವರೆಗೆ ಸುಸ್ಥಿತಿಯಲ್ಲಿಡಲು ಮತ್ತು 1500 ಸಿ.ವಿ.ಪಿ.ಡಿ ಗೂ ಅಧಿಕ ಸಂಚಾರ ದಟ್ಟಣೆ ಇರುವ ಸ್ಥಳಗಳಲ್ಲಿ Performance Graded Polymer Modified Bitumen ಅನ್ನು ಬಳಸುವ ಕುರಿತು ಸೂಚಿಸಿದ್ದು, ಐ.ಎಸ್ 15462 ರಂತೆ Performance Graded Polymer Modified Bitumen PMB (Elastomeric Based) 76E-10 PMB ಮತ್ತು 70E-10 ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 16) Drone Survey ಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್ ಪ್ರಾಂಸಿ ರವರು ಪತ್ರ ಸಂ. ಲೋಇ 104 ಎಡಬ್ಲೂಪಿ 2023–24: 254 ದಿನಾಂಕ 12–07–2023 ರಲ್ಲಿ ವಿಶಿಷ್ಟ ವಿವರಣೆಯನ್ನು ರೂಪಿಸಿದ್ದು, ಸೂಕ್ತ ದರವನ್ನು ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿನ ಸಭೆಯಲ್ಲಿ ತಿಳಿಸಿದಂತೆ ವಿಶಿಷ್ಟ ವಿವರಣೆ ಅಂತಿಮಗೊಳಿಸಿ ಅದರಂತೆ ರಾಜ್ಯಾದ್ಯಂತ ಅನ್ವಯಿಸುವಂತೆ ದರವನ್ನು ರೂ. 19,900/ಕಿ.ಮೀಗೆ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲು ಕ್ರಮ ವಹಿಸಲು ಸೂಚಿಸಿರುವಂತೆ ಸದರಿ ಅಂಶವನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 17) Pre-cast, Pre-stressed, Post tensioned slabs ಮಾದರಿಯಲ್ಲಿ ಸಂಬಂಧ ಈಗಾಗಲೇ 2021–22 ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯಲ್ಲಿ ವಿಶಿಷ್ಟ ವಿವರಣೆಯನ್ನು ನೀಡಿದ್ದು, ಸದರಿ ಅಂಶವನ್ನು ವಾಸ್ತವತೆಗೆ ಅನುಗುಣವಾಗಿ ಮನರ್ ರಚಿಸಿ ಸಂಭಾವ್ಯ ದರವನ್ನು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಂತೆ ಲೆಕ್ಕಾಚಾರ ಮಾಡಲಾಗಿದೆ. ಸದರಿ ಅಂಶವನ್ನು ತ್ವರಿತ ಗತಿ ರಸ್ತೆ ನಿರ್ಮಾಣಕ್ಕೆ ಬಳಸಬಹುದಾಗಿದ್ದು, Prestress/Post tensioning ಮಾದರಿಯಲ್ಲಿ ಕೈಗೊಳ್ಳಬಹುದಾಗಿರುತ್ತದೆ.

- 18) Soil Nailing & Shotcrete ತಂತ್ರಜ್ಞಾನವನ್ನು ಅನುಷ್ಟಾನಗೊಳಿಸಲು ಕ್ರಮ ವಹಿಸಬೇಕಾಗಿದ್ದು ವಿವಿಧ ಕನ್ಸ್ ಲೈಂಟ್ ಮತ್ತು ನುರಿತ ಅಭಿಯಂತರರ ಸಲಹೆಗಳನ್ನು ಪರಿಗಣಿಸಿದ್ದು, ಸದರಿ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಲಾಗಿದೆ.
- 19) ಜಂಗಲ್ ಸಂಬಂಧ ವಿಶಿಷ್ಟ ವಿವರಣೆ ಮತ್ತು ದರ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಡೋಜರ್ ಬಳಸಿ ಗಿಡಗಂಟೆಗಳನ್ನು ತೆಗೆಯುವುದು ಮತ್ತು ಟಿಪ್ಪರ್ ಹಾಗೂ ಇತರೆ ಯಂತ್ರೋಪಕರಣಗಳಿಂದ ತೆರೆವುಗೊಳಿಸಿದ debris ಅನ್ನು ಸೂಕ್ತ ಸ್ಥಳಗಳಲ್ಲಿ ವಿಲೇವಾರಿ ಮಾಡಬೇಕಿರುತ್ತದೆ. 2021–22 ನೇ ಸಾಲಿನ ದರ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಈ ಅಂಶವನ್ನು MoRTH Standard Data Book 2019 ರಂತೆ ಲೆಕ್ಕಚಾರ ಮಾಡಲಾಗಿದ್ದು ತದನಂತರ ರಾಷ್ಟೀಯ ಹೆದ್ದಾರಿಯ ದರಪಟ್ಟಿ ಮತ್ತು ಮುಖ್ಯ ಅಭಿಯಂತರರು, ರಾಷ್ಟೀಯ ಹೆದ್ದಾರಿ ವಲಯದವರು ದಿನಾಂಕ 26–08–2022 ರಲ್ಲಿ ಜಂಟಿ ನಿರ್ದೇಶಕರು, MoRTH ರವರಿಗೆ ಸ್ಪಷ್ಟೀಕರಣ ದರ ವಿಶ್ಲೇಷಣೆಯ ಬಗ್ಗೆ ಸ್ಪಷ್ಟೀಕರಣ ಕೋರಿರುತ್ತಾರೆ ಮತ್ತು ಕಡಿತಗೊಳಿಸಿದ ದರಗಳನ್ನು ಪುನರ್ ಪ್ರಕಟಿಸಿರುತ್ತಾರೆ. ಮುಂದುವರೆದಂತೆ, ಈ ವಿಷಯವಾಗಿ ಅನೇಕ ರಾಜ್ಯಗಳ ದರಪಟ್ಟಿಗಳನ್ನು ಸಮಗ್ರವಾಗಿ ಪರಿಶೀಲಿಸಿ MoRTH Standard Data Book ರಂತೆ ನೂತನವಾಗಿ 2023–24 ನೇ ಸಾಲಿನಲ್ಲಿ ಜಾರಿಗೊಳಿಸಿರುವ ಅನ್ಯ ರಾಜ್ಯದ ದರ ವಿಶ್ಲೇಷಣೆಯಂತೆ ಪರಿಷ್ಕರಣೆ ಮಾಡಲಾಗಿದೆ.
- 20) ಐಆರ್ಸಿ 99:2018 ರಂತೆ Traffic Calming Measures (Raised Pedestrian Crossings) ಮತ್ತು ಐಆರ್ಸಿ 67:2022 ರಂತೆ Road Signages, Chevron Boards, Kerb Stone Painting, Preformed tapes ಮತ್ತು Profile painting ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.
- 21) ಗುಣನಿಯಂತ್ರಣ ಘಟಕಗಳ ವರದಿಯನುಸಾರ ಸಿಮೆಂಟ್ ಕಾನ್ಸ್ ಟೆಂಟ್ ಗಳನ್ನು ಐಎಸ್ 456ನ ಪರಿಮಾಣಗಳಿಗೆ Spillages, Wastages & Practical difficulties ಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ ಹಾಗೂ ನಿರ್ಮಾಣ ಘಟಕಗಳಿಗೆ ಕಡ್ಡಾಯವಾಗಿ ಸದರಿ ಕಾನ್ಸ್ ಟೆಂಟ್ ಗಳಂತೆ ಕಾಮಗಾರಿಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಸೂಚನೆಗಳ್ನು ನೀಡಲಾಗಿದೆ.

Pavement Quality Concrete (PQC) & White Topping ಗೆ ಸಿಮೆಂಟ್ (OPC) ಪರಿಮಾಣವು 420 kg/m3 ಪರಿಗಣಿಸಲಾಗಿದೆ. ಕಾಂಕ್ರೀಟ್ ನ ಅಂಶಗಳು ಮಿಕ್ಸ್ ಡಿಸೈನ್ ನಂತೆ ಮತ್ತು ಉಪಯೋಗಿಸುವ ಸಾಮಾಗ್ರಿಗಳಿಂದ ಹಾಗೂ Mineral & Chemical Admixture ಗಳಿಂದ ಅವಲಂಬಿತವಾಗಿರುವುದರಿಂದ ಹಾಗೂ ಸಿಮೆಂಟಿಷಿಯಸ್ ವಸ್ತುಗಳನ್ನು ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಬಳಸಲು ಉತ್ತೇಜಿಸುವ ಸಲುವಾಗಿ OPC+GGBS (75:25 ಅನುಪಾತ) ಮತ್ತು OPC+FlyAsh (85:15 ಅನುಪಾತ) ಅಂಶಗಳನ್ನು ಸೇರ್ಪಡೆಗೊಳಿಸಲಾಗಿದೆ.

ಅಂತಿಮವಾಗಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯು ಪಾರಂಪಾರಿಕ ನಿರ್ಮಾಣ ಪದ್ದತಿಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಒಟ್ಟಾರೆ ಕಾಮಗಾರಿಯಲ್ಲಿ MoRTH ನ Value Engineering ಪದ್ದತಿಯಂತೆ ನೂತನ ತಂತ್ರಜ್ಞಾನವನ್ನು ಪ್ರಯೋಗಿಸುವುದು ಮತ್ತು ಗುಣನಿಯಂತ್ರಣ ಘಟಕಗಳು ಸಂಶೋಧನಾ ಸಾಮರ್ಥ್ಯವನ್ನು ಹೆಚ್ಚಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಕಾರ್ಯ ನಿರ್ವಹಿಸಲು ಅನುವಾಗುವಂತೆ ದರಪಟ್ಟಿಯಲ್ಲಿ ಐ.ಆರ್.ಸಿ ಮಾನದಂಡಗಳಂತೆ ಪರಿಷ್ಕರಣೆಗೊಳಿಸಿ ಪರಿಶೀಲಿಸಿ ಬದಲಾವಣೆಗಳನ್ನು ಅಳವಡಿಸಲಾಗಿದೆ.

# ಸಂಪಟ 4: ಜಲ ಸಂಪನ್ಮೂಲ, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ ಇಲಾಖೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ

- 1) ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ 2023–24 ರ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವಾಗಿ ದರವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿರುವ ಸಾಮಗ್ರಿಗಳ ಮತ್ತು ಯಂತ್ರೋಪಕರಣಗಳ ದರಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲಾಗಿದೆ. ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿಲ್ಲದಿರುವ ಸಾಮಗ್ರಿಗಳನ್ನು ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯಡಿ ಬರುವ ಎಲ್ಲಾ ವಲಯ/ ವೃತ್ತಗಳಿಂದ ಪಡೆದು freak rate ಗಳನ್ನು ಹೊರತುಪಡಿಸಿ, standard deviation ಆಧಾರದ ಮೇಲೆ ಅಂತಿಮಗೊಳಿಸಿ ಪಟ್ಟಿ ಮಾಡಲಾಗಿರುತ್ತದೆ.
- 2) ಯಂತ್ರೋಪಕರಣಗಳ ದರಗಳನ್ನು Economic Advisor, Ministry of Commerce & Industry, Government of India ಜಾಲತಾಣದಿಂದ wholesale price index ಆಧಾರದ ಮೇಲೆ ಲೆಕ್ಕಾಚಾರ ಮಾಡಿ ಅಂತಿಮಗೊಳಿಸಲಾಗಿದೆ.
- 3) ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಬರುವ M-20, M-25 & M-30 grade cement concrete using 20 mm downgraded aggregates ಕಾಂಕ್ರೀಟ್ ಐಟಂಗಳಿಗೆ ಸಂಪುಟ 1 ರಲ್ಲಿನ ಸಮಾನಾಂತರ ಐಟಂಗಳನ್ನು ಉಪಯೋಗಿಸಲು ಸೂಚಿಸಿರುತ್ತಾರೆ. ಅದರಂತೆ ಈ ಐಟಂಗಳಿಗೆ ಸಂಪುಟ–1 ರ "Addendum-I Percentage Additionalities for formwork, centering & scaffolding" ರಲ್ಲಿ ಕ್ರಮ ಸಂ: 12 ರಲ್ಲಿ aquaduct ಗಳ ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂದಿಸಿದಂತೆ ಹೆಚ್ಚುವರಿಯಾಗಿ 60% ನಿಗದಿಪಡಿಸಲಾಗಿದೆ.
- 4) ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಯ ಪ್ರತ್ಯೇಕ ಅಂಶಗಳ ದರಪಟ್ಟಿಯಲ್ಲಿನ ಸಾಮಗ್ರಿಗಳ, ಯಂತ್ರೋಪಕರಣಗಳ ಮತ್ತು ಕೂಲಿ ದರಗಳನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ 1 ರಿಂದ ಪರಿಗಣಿಸಲಾಗಿದೆ ಹಾಗೂ MS plates ದರಗಳನ್ನು ಸಂಪುಟ 5 : ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಇಲಾಖೆಯ ಕರಡು ದರಪಟ್ಟಿಯಿಂದ ಪರಿಗಣಿಸಲಾಗಿದೆ.
- 5) ದಿನಾಂಕ 19–08–2023 ರಂದು ಮಾನ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಜರುಗಿದ ಸಭೆಯ ನಿರ್ದೇಶನದಂತೆ, ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಯ ಏತ ನೀರಾವರಿ ಪ್ರತ್ಯೇಕ ಅಂಶಗಳನ್ನು ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ತರಲು ಕೋರಲಾಯಿತು.
- 6) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ನಿರ್ದಿಷ್ಟ ಐಟಂಗಳ 2023–24 ರ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವಾಗಿ ದರವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿರುವ ಸಾಮಗ್ರಿಗಳ ಮತ್ತು ಯಂತ್ರೋಪಕರಣಗಳ ದರಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲಾಗಿದೆ. ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿಲ್ಲದಿರುವ ಸಾಮಗ್ರಿಗಳ ದರಗಳನ್ನು ಬೆಲೆ ಸೂಚ್ಯಂಕದ ಆಧಾರದ ಮೇಲೆ ಲೆಕ್ಕ ಹಾಕಲಾಗಿರುತ್ತೆ.
- 7) ಹಾಗೆಯೇ ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿಲ್ಲದಿರುವ ಯಂತ್ರೋಪಕರಣಗಳ ದರಗಳನ್ನು capital cost of machinery, revised labour wages ಮತ್ತು DPOL ಶುಲ್ಕದ ಆಧಾರದ ಮೇಲೆ ಲೆಕ್ಕ ಹಾಕಲಾಗಿರುತ್ತದೆ.
- 8) ಕರ್ನಾಟಕ ರಾಜ್ಯ ಸರ್ಕಾರದ ಕಾರ್ಮಿಕ ಇಲಾಖೆಯು ಕೂಲಿ ದರಗಳ ಮಾರ್ಗಸೂಚಿಯನ್ನು ಏಪ್ರಿಲ್ 2023 ರಂದು ಹೊರಡಿಸಿದ್ದು, ವಲಯ–2 ರ ದರಗಳನ್ನು ಕೂಲಿ ದರಗಳನ್ನಾಗಿ ದರವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.
- 9) ಹೆಚ್ಚಿನ ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ಅಣೆಕಟ್ಟುಗಳು ಮತ್ತು ಪವರ್ ಹೌಸ್ಗಳನ್ನು ನದಿಕಣಿವೆಯ ಯೋಜನೆಯ ಪ್ರದೇಶಗಳಲ್ಲಿ ನಿರ್ಮಿಸಲಾಗಿದ್ದು, ನದಿಕಣಿವೆ ಯೋಜನೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಎಲ್ಲಾ ಕಾಮಗಾರಿಗಳ

ಅಂದಾಜುಗಳನ್ನು CWC/CEA ಮಾರ್ಗಸೂಚಿಗಳನ್ನು ಆಧರಿಸಿ ಸಿದ್ದಪಡಿಸಬೇಕಾಗಿರುತ್ತದೆ. ನದಿಕಣಿವೆ ಯೋಜನೆಗಳ ಕಾಮಗಾರಿಗಳನ್ನು, ಕಟ್ಟಡ ಐಟಂಗಳಿಗೆ ಹೋಲಿಸಲಾಗುವುದಿಲ್ಲ. ಹಾಗಾಗಿ ಸಂಪುಟ 1 ಮತ್ತು 2 ರಲ್ಲಿ ಲಭ್ಯವಿರುವ ಕಟ್ಟಡ ಐಟಂಗಳನ್ನು, ನದಿಕಣಿವೆಯ ಯೋಜನೆ ಪ್ರದೇಶಗಳ ಅಂದಾಜು ಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಲು ಪರಿಗಣಿಸಲಾಗುವುದಿಲ್ಲ. ಆದುದರಿಂದ ಅಣೆಕಟ್ಟುಗಳು ಮತು ಪವರ್ ಹೌಸ್ಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ excavation items, concrete items etc., ದರಗಳನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ದರಪಟ್ಟಿಯಲ್ಲಿ ಉಳಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

- 10) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ 2023–24 ರ ದರಪಟ್ಟಿಯ ಅಣೆಕಟ್ಟು ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಕಾಮಗಾರಿಗಳ ಅಡಿಯಲ್ಲಿ 150mm dia weep holes, UCR masonry in 1:4 proportion ಮತ್ತು 25 mm thick guniting with CM 1:3 ದರಗಳನ್ನು ಉಳಿಸಿಕೊಳ್ಳಲಾಗಿದೆ. ಹಾಗೂ ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಸಂಬಂಧಿಸಿದ UCR masonry 1:3 proportion ಮತ್ತು rockfill embankment with 300 mm downgraded aggregates ಐಟಂಗಳನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ನಿರ್ದಿಷ್ಟ ಐಟಂಗಳ 2023–24 ರ ದರಪಟ್ಟಿಯಲ್ಲಿ ಸೇರಿಸಲಾಗಿದೆ.
- 11) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ 2023–24 ರ ದರಪಟ್ಟಿಯ ಅಣೆಕಟ್ಟು ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಕಾಮಗಾರಿಗಳ ಅಡಿಯಲ್ಲಿ ಕೆಲವು ಐಟಂಗಳು viz., drilling using NX size casing shoe bit & diamond core bit flushing grout holes consolidation grouting checking against upheaval during grouting cold twisted deformed steel anchor rod PVC water seal strip construction of embankment with available soil cleaning dam parapet cleaning drainage gallery removal of silt and slush and conducting geophysical investigation studies ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಇರುವುದರಿಂದ ಈ ಐಟಂಗಳನ್ನು delete ಮಾಡಲಾಗಿದೆ.
- 12) ಅಣೆಕಟ್ಟು ಸುರಕ್ಷತಾ ಕಾಯಿದೆಗಳ ಪ್ರಕಾರ, ಅಣೆಕಟ್ಟಿನ ಸುರಂಧ್ರ ಒಳಚರಂಡಿಗಳಲ್ಲಿ ಮತ್ತು ಅಡಿಪಾಯ ಒಳಚರಂಡಿಗಳಲ್ಲಿ ಅಡೆತಡೆಗಳನ್ನು ತಪ್ಪಿಸುವ ಮೂಲಕ ಚರಂಡಿಗಳನ್ನು ಸರಿಯಾಗಿ ನಿರ್ವಹಿಸಬೇಕಾಗಿರುತ್ತದೆ. Reaming of bodydrains and foundation drains ಐಟಂಗಳು ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯಲ್ಲಿ ಲಭ್ಯವಿಲ್ಲದಿರುವುದರಿಂದ ಈ ಐಟಂಗಳ ದರಗಳನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ 2023–24 ರ ದರಪಟ್ಟಿಯಲ್ಲಿ ಸೇರಿಸಲಾಗಿದೆ.
- 13) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ಪವರ್ ಹೌಸ್ ಮತ್ತು ಅದರ ಸಂಬಂದಿತ ಕಾಮಗಾರಿಗಳಿಗಾಗಿ, UCR masonry, guniting, grouting, anchor rods, PVC water stops and plum concrete works ಸಾಮಾನ್ಯ ದರಪಟ್ಟಿಯ ವಾಲ್ಯೂಂ 4 ರ ಅಣೆಕಟ್ಟು ಮತ್ತು ಅದಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಕಾಮಗಾರಿಗಳ ಅಡಿಯಲ್ಲಿ ಇರುವ ಐಟಂಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳುವುದು.
- 14) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ ಪವರ್ ಹೌಸ್ ಮತ್ತು ಅದರ ಸಂಬಂಧಿತ ಕಾಮಗಾರಿಗಳಿಗಾಗಿ brick/ stone masonry pointing, plastering, painting, flooring, doors and windows, the rates as provided under "Building and allied works" (Common SR Vol.2 for buildings).
- 15) ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತದ underground power house ಕಾಮಗಾರಿಗಳಿಗೆ the basic rates as provided in Common Schedule of Rates.

#### ಸಂಪುಟ 5 : ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಇಲಾಖೆಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ

2023-24 ರ ದರಪಟ್ಟಿ ಸಂಪುಟ-5 ರಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಲಾಗಿದೆ:

- 1. ನಿರ್ಮಾಣ ಸಾಮಗ್ರಿಗಳ ಬೆಲೆ ಜಿಎಸ್ಟಿ ಹೊರತುಪಡಿಸಿ ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದೆ.
- 2. ಮಾರುಕಟ್ಟೆ ದರಗಳಂತೆ ಯಂತ್ರೋಪರಣಗಳ ಬಾಡಿಗೆ ದರ ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದೆ.
- 3. ಗುತ್ತಿಗೆದಾರರ ಲಾಭಾಂಶ ಗರಿಷ್ಟ ಶೇ.6.5%.
- 4. Overhead charges ಗರಿಷ್ಟ ಶೇ.10%

ಅದರಂತೆ, BWSSB, RDW&SD, KUWSDB ಇಲಾಖೆ/ ಮಂಡಳಿಗಳಿಂದ ತಯಾರಿಸಲ್ಪಟ್ಟಿರುವ ಸಂಪುಟ–(5) – Water Supply and Sewerage Works ಪ್ರತಿಗಳ ಸಂಕ್ಷಿಪ್ತ ಸಾರಾಂಶ ಕೆಳಕಂಡಂತಿದೆ:

- 1) ದರಪಟ್ಟಿ ತಯಾರಿಸಲು ಇತ್ತೀಚಿನ ಮಾರ್ಕೆಟ್ ದರಗಳನ್ನು ವಿವಿಧ ತಯಾರಕರು / ವಿತರಕರು / ಸರಬರಾಜುದಾರರಿಂದ Quotation ಗಳನ್ನು ಪಡೆದು ಸೂಕ್ತ ದರಗಳನ್ನು ಸಮಿತಿಯು ಪರಿಗಣಿಸಿದೆ.
- 2) ಕೂಲಿ ದರಗಳನ್ನು ಹಾಗೂ ದರಗಳ ಇಂಡೆಕ್ಸನ್ನು ರಾಜ್ಯ ಸರ್ಕಾರವು ಏಪ್ರಿಲ್ 2023ರಂದು ಹೊರಡಿಸಿದ್ದು, ವಲಯ 2 ರ ಕೂಲಿ (Skilled & Skilled Labour) ದರಗಳನ್ನು ದರ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.
- 3) ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ–1ರಿಂದ Labour rates, Basic Civil Material rates, Usage charges of machinery ಗಳನ್ನು ದರ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.
- 4) OHT, GLSR ಮುಂತಾದವುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಕಾಂಕ್ರೀಟ್, ಪ್ಲಾಸ್ಟರಿಂಗ್, ಪೇಂಟಿಂಗ್ ಅಂಶಗಳನ್ನು ಏಕರೂಪ ಅನುಸೂಚಿ ದರಪಟ್ಟಿ: 2023–24 ರ ಸಂಪುಟ–1 ಕ್ಕೆ ಸೇರಿಸುವ ಕಾರಣ ಸಂಪುಟ 5 ರಿಂದ ತೆಗೆಯಲಾಗಿದೆ.
- 5) ಅಧ್ಯಾಯ–6 ರಲ್ಲಿನ ಕೆಲವು ರಾಸಾಯನಿಕಗಳು ಪುನರಾವರ್ತನೆ ಆಗಿದ್ದರಿಂದ ಪುನರಾವರ್ತಿತ ಅಂಶಗಳನ್ನು ಸಂಪುಟ 5 ರಿಂದ ರಿಂದ ತೆಗೆಯಲಾಗಿದೆ.
- 6) ಬಯೋ ಡೈಜೆಸ್ಟರ್ ಸೆಪ್ಟಿಕ್ ಟ್ಯಾಂಕ್ ಗಳ ಹೊಸ ತಂತ್ರಜ್ಞಾನದ ಹಾಗೂ ಕಮ್ಯಾನಿಟಿ ಟಾಯ್ಲೆಟ್ ಗಳ ದರ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಕೈಗೊಂಡು Sewerage Treatment Plants ಎಂಬ ಹೊಸ ಅಧ್ಯಾಯದ ಅಡಿಯಲ್ಲಿ ಸೇರಿಸಲಾಗಿದೆ.
- 7) ತಾಂತ್ರಿಕ ಕಾರ್ಯಪಡೆಯು ಏಕರೂಪ ದರಪಟ್ಟಿ ತಯಾರಿಕೆಗೆ ನಿಗದಿಪಡಿಸಿರುವ ಸ್ವರೂಪದಂತೆ ಅಂದರೆ Memorandum, Government order, Index, Material rates, Technical specifications ಗಳೊಂದಿಗೆ ತಯಾರಿಸಲಾಗಿರುತ್ತದೆ.

### ಸಂಪುಟ 6: ವಿದ್ಯುತ್ ಕಾಮಗಾರಿಗಳ ದರಪಟ್ಟಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ

1) ವಿದ್ಯುತ್ ದರಪಟ್ಟಿ 2023-24 3 ಭಾಗಗಳನ್ನೊಳಗೊಂಡಿದೆ.

**KPTCL-Transmission** 

**ESCOMS- Distribution** 

PWD Electrical- Utilization PWD Electrical

- 2) ವಿದ್ಯುತ್ ಇಲಾಖೆಯಲ್ಲಿ ಮುಖ್ಯ ಸಾಮಾಗ್ರಿಗಳಾದ Transformer, Conductor, Cableಗಳನ್ನು IEEMA ಸುತ್ತೋಲೆಗಳಿಗನುಸಾರವಾಗಿ ದರಗಳನ್ನು ನಿಗಧಿಪಡಿಸಲಾಗಿದೆ.
- 3) ಈ ಹಿಂದೆ KPTCL & ESCOM ದರಪಟ್ಟಿಯಲ್ಲಿ Special Locality Allownce, Contingencies, Transportation, Watch and Ward, Insurance performance bank guarantee ಗಳನ್ನು ಟೆಂಡರ್ ಹೋಲಿಕೆಗೆ ಪರಿಗಣಿಸಲಾಗುತ್ತಿತ್ತು.
- 4) ಪ್ರಸ್ತುತ ದರಪಟ್ಟಿಯಲ್ಲಿ Overhead Charges @ 10%, Contractor's Profit @ 10% ಗಳನ್ನು ಮಾತ್ರ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.
- 5) PWD Electrical ದರಪಟ್ಟಿಯಲ್ಲಿ ದರವಿಶ್ಲೇಷಣೆಯನ್ನು ಇಂದಿನ ಮಾರ್ಕೆಟ್ ದರಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡ

## **INDEX**

Sl No	Sub Head	Page No.
A	PART – I	
i.	International System of Units (SI)	A-37
ii.	Rates of Common Materials	A-38
iii.	Usage Charges of Machinery	A-42
iv.	Wages to Labour as per Department of Labour	A-48
V.	Royalty as per Department of Mines and Geology	A-51
vi.	Material Co-Efficients	A-52
vii.	Area Specific Loading	A-53
viii.	Definition of Overhead Charges	A-55
В	PART – II	
	Common SR	
	Technical Specification	A-57
	Chapters	
I.	Earth Work	3
II.	Concrete Works	13
III.	Mortar	21
	Addendum	
I.	Percentage additionalities for Formwork, Centering & Scaffolding	111
II.	Criteria for usage of M-Sand	113
III.	Criteria/Requirement for approval of Reinforcement Bars	115
IV.	DPR Preparation Charges	117
V.	Quality Control Lab Testing Rates	118
VI.	Surveying	124

# i. International System of Units (SI)

- Basic units: \* meter (length) \* kilogram (mass) \* second (time) \* Ampere (electric current) \* degrees Celsius (temperature) \* (luminous intensity)
- It is equal to a Newton per square meter and corresponds to the familiar pounds per square inch (psi): 1 psi = 6.89 kilopascal.
- The following are some of the common conversion factors for SI Unit conversions.

Quantity or Test	Value in Trade or Customary		Conversion	Value in SI Unit	Symbol
	Unit	X		 	
Area	square inches		6.45	square centimeters	cm <sup>2</sup>
	square feet		0.0929	square meters	m²
	square yards		0.836	square meters	m²
	acres		0.405	hectares	ha
Basis Weight* or	lb (17x22-500)		3.760	grams per square meter	g/m²
Substance	lb (24x36-500)		1.627	grams per square meter	g/m²
(500-sheet ream) or	lb (25x38-500)		1.480	grams per square meter	g/m²
Grammage* when	lb (25x40-500)		1.406	grams per square meter	g/m²
expressed in g/m <sup>2</sup>	pounds per 1000 sq ft (Paperboard)		4.882	grams per square meter	g/m¹
Breaking Length	meters		0.001	kilometers	km
Burst Index	g/cm <sup>2</sup>		0.0981	kilopascals	KPa.m <sup>2</sup> /s
i i	g/m²			grams per square meter	g/m²
Bursting Strength	pounds per square inch		6.89	kilopascals	kPa
Caliper	mils		0.0254	millimeters	mm
Concora Crush	pounds		4.45	newtons	N
Edge Crush	pounds per inch		0.175	kilomewtons per meter	kN/m
Energy	British thermal units (Btu)		1055	joules	J
Flat Crush	pounds per square inch		6.89	kilopascals	kPa
Force	kilograms		9.81	newtons	N
	pounds		4.45	newtons	N
Length	angstroms		0.1	nanometers	nm
	microns		1	micrometers	μm
	mils		0.0254	millimeters	mm
	feet		0.305	meters	m
Mass	tons (2000 lbs.)		0.907	metric tons	t
	pounds		0.454	kilograms	kg
	ounces (avd p)		28.3	grams	g
Mass per Unit Volume	ounces per gallon		7.49	kilograms per cubic meter	kg/m³
and the second s	pounds per cubic foot		1.60	kilograms per cubic meter	kg/m³
Puncture Resistance	foot pounds		1.36	joules	J
Ring Crush	pounds (for a 6" length)		0.0292	kilonewtons per meter	KN/m
Stiffness (Taber)	gram centimeters (Taber Units)		0.0981	millinewton meters	mN• m
Tear Strength	grams		9.81	millinewtons	mN
Tensile Breaking Load	pounds per inch		0.175	kilonewtons per meter	kN/m
	kilograms per 15 millimeters		0.654	kilonewtons per meter	kN/m
Volume, Fluid	ounces (US Fluid)		29.6	milliliters	mL
	gallons		3.79	liters	L
Volume, Solid	cubic inches		16.4	cubic centimeters	Cm <sup>3</sup>
and the second of the second o	cubic feet		0.0283	cubic meters	m³
	cubic yards		0.765	cubic meters	m

# ii. Market Rate of Common Materials

- The important material components listed are common to all Engineering Departments.
- The material components are listed for the preparation of Rate Analysis only and cannot be used for direct payments.

Sl No.	Material Component	Unit	Basic Rate (Excl GST) in Rs.
1	2	3	4
	Granular Aggregates		
1	06mm downsize	m <sup>3</sup>	1410.00
2	10mm downsize	m <sup>3</sup>	1362.00
3	12mm downsize	m <sup>3</sup>	1333.00
4	20mm downsize	m <sup>3</sup>	1333.00
5	25mm downsize	m <sup>3</sup>	1333.00
6	30mm downsize	m <sup>3</sup>	1238.00
7	40mm downsize	m <sup>3</sup>	1190.00
8	53mm downsize	m <sup>3</sup>	1190.00
9	100mm downsize	m <sup>3</sup>	1143.00
10	Acetylene gas	m <sup>3</sup>	403.00
11	Autoclaved Aerated Concrete blocks 100mm th.	each	59.00
12	Autoclaved Aerated Concrete blocks 150mm th.	each	85.00
13	Autoclaved Aerated Concrete blocks 200mm th.	each	102.00
14	Bitumen VG 40	t	48787.00
15	Bitumen VG 30	t	46254.00
16	Bitumen VG 10	t	46535.00
17	Bitumen Emulsion SS1	t	47332.00
18	Bitumen Emulsion SS2	t	44643.00
19	Bitumen Emulsion RS1	t	43200.00
20	Brick - Table Moulded Bricks	each	8.00
21	Brick - Wire Cut Bricks	each	18.00
22	Brick Perforated Clay bricks 300x25x25 mm	each	24.00

23	Brick Perforated Clay bricks 300x50x25 mm	each	29.00
24	Brick Perforated Clay bricks 300x150x25 mm	each	33.00
25	Brick Porotherm 100 mm	each	48.00
26	Brick Porotherm 150 mm	each	57.00
27	Brick Porotherm 200 mm	each	67.00
28	Bricks (Modular)	each	10.00
29	Bricks (Non – Modular)	each	8.00
30	Cement – White Cement	kg	20.00
31	Cement (OPC/PPC/PSC)	bag	293.00
32	Curing compound	L	212.00
33	Flowering plants	each	3.00
34	Fly ash Bricks	each	7.00
35	Flyash as per IS 3812	t	381.00
36	Geotextile 200gsm	m <sup>2</sup>	223.00
37	Geotextile 250gsm	m <sup>2</sup>	232.00
38	Gravel 2.36mm downsize (Including Royalty)	$m^3$	288.00
39	Ground Granulated Blast furnace Slag (GGBS)	t	3810.00
40	Hedge plant	10 No	33.00
41	Hot applied thermoplastic compound	L	160.00
42	Ordinary Earth (Including Royalty)	$m^3$	231.00
43	RCC NP 2 250mm dia	m	381.00
44	RCC NP 2 450mm dia	m	1017.00
45	RCC NP 2 600mm dia	m	1610.00
46	RCC NP 2 750mm dia	m	1653.00
47	RCC NP 2 900mm dia	m	2542.00
48	RCC NP 2 1200mm dia	m	4322.00
49	RCC NP 3 300mm dia	m	1059.00
50	RCC NP 3 450mm dia	m	1864.00
51	RCC NP 3 600mm dia	m	2415.00
52	RCC NP 3 750mm dia	m	2627.00
53	RCC NP 3 900mm dia	m	4237.00
	J.		

54	RCC NP 3 1200mm dia	m	6610.00
55	RCC NP 4 900mm dia	m	5085.00
56	RCC NP 4 1200mm dia	m	8466.00
57	Oxygen gas	m <sup>3</sup>	86.00
58	Pesticide	1	212.00
59	Quick setting compound	kg	140.00
60	Recycled Concrete Aggregate 20mm downsize	m <sup>3</sup>	1143.00
61	Recycled Concrete Aggregate 10mm downsize	m <sup>3</sup>	1190.00
62	Red Oxide	kg	85.00
63	Reflectorising glass beads	kg	55.00
64	Sand - M-Sand	m <sup>3</sup>	1476.00
65	Saplings 2m high	each	7.00
66	Seeds	kg	150.00
67	Shrubs	each	2.00
68	Solid Concrete Blocks (100mm thickness)	each	34.00
69	Solid Concrete Blocks (150mm thickness)	each	42.00
70	Solid Concrete Blocks ( 200mm thickness)	each	47.00
	Steel		
71	TMT Fe 550 / 550 D	t	60170.00
72	Mild Steel (Flats, Bars, Rods, Channels)	kg	56.00
73	Mild Steel (Anchors, Angles, H Beams, I Beams, Tees)	kg	56.00
74	Mild Steel sheets 3mm	kg	56.00
75	Mild Steel sheets 4mm	kg	64.00
76	Mild Steel sheets 5mm	kg	66.00
77	Mild Steel Tubes 14 guage	kg	60.00
78	Structural Steel	kg	68.00
79	Stone – Size stone 200x200x230mm	each	14.00
80	Stone Boulders 300mm	m <sup>3</sup>	667.00
81	Stone crusher dust finer than 3mm	m <sup>3</sup>	1237.00
82	Superplasticizer as per IS 9103	kg	191.00
83	Through & bond stone 200mm	each	27.00

# Ready Mix Concrete (RMC)

			Rate in ₹ (Excl. GST)			
Sl. No.	Grade of Concrete	Unit	With OPC 100%	With OPC 75% & GGBS 25%		
1.	RMC M10 Grade	$m^3$	5000.00	4550.00		
2.	RMC M20 Grade	m <sup>3</sup>	5200.00	4750.00		
3.	RMC M25 Grade	$m^3$	5350.00	4850.00		
4.	RMC M30 Grade	m <sup>3</sup>	5700.00	5200.00		
5.	RMC M35 Grade	m <sup>3</sup>	5900.00	5300.00		
6.	RMC M40 Grade	m <sup>3</sup>	6200.00	5500.00		

# **General requirements of RMC**

1. Ready Mix Concrete shall be supplied having quality and in quantity in accordance with requirements of minimum Cement content mentioned as per Chief Engineer, Quality Assurance Zone (QAZ), PWD, Bengaluru letter vide CE:QAZ:BNG:TS:AE3:2020-21:709 Date: 17-03-2021 (Cement Co-efficient Appended as below)

Sl. No.	Grade of Concrete	Cement Co-efficient in kg/m³ of Concrete
1.	M20	320
2.	M25	340
3.	M30	360
4.	M35	390
5.	M40	420

- 2. Ready mix concrete shall be transported from mixer to point of placing as rapidly as practicable methods to maintain require workability. The concrete shall be transported only in Transit Truck Mixers.
- 3. Water and Admixtures shall be added in accordance with IS-456. The crushed sand shall conform to IS-383:2016.
- 4. Factory manufactured Ground Granulated Blast Furnace Slag conforming to IS:10875 upto 50 per cent by weight of cementitious material may be mixed at site with Ordinary Portland Cement of 43/53 Grade as per IRC 44:2017 to reduce the RMC cost. In order to ensure quality regular tests shall be conducted on GGBFS at a testing frequency of 1 test per 100t of slag.
- 5. For large scale works, the RMC's shall preferably be equipped with Automated Programmable Logic Controller's (APLC's) for efficient mixing of Cement, Aggregates, Admixtures and Sand for efficient on time mix supply to minimise wastages.
- 6. Necessary tests at the point of sampling & placing shall be conducted by Executing authorities. Pumping charges at the rate of Rs. 210.00/m³ shall be considered extra if necessary.

# iii. Usage Charges of Machinery

- The machinery rates are adopted from MoRTH standard data book 2019 as reference with the current fuel prices updated by National Highways Zone.
- The rates include crew charges, operational & maintenance charges such as cost of fuel, lubricants, stores, establishments, and depreciation & interest charges on hypothecation.
- In special cases, if any machinery / machinery components are supplied by the Department, the working cost of the machinery / machinery components shall be recovered from the contractor.
- The outputs mentioned for the below mentioned equipments are for the compacted quantities and shall not be paid for loose quantities.

Usage charges of machinery with or without operator attract 18% GST under Services Accounting Code 997313.

Sl. No.	Description	Unit	Operating Cost (Rs.) Excluding GST
1	2	3	4
1	Air Compressor -250 cfm	hr	458.00
2	Air Compressor -500 cfm	hr	1709.00
3	Automatic Vehicle Counter Classifier (ATCC) System	hr	74.00
4	Backhoe-loader 1 m3 bucket capacity	hr	1361.00
5	Bar Bending & Cutting Machine	hr	376.00
6	Batching and Mixing Plant - 120 m3 Capacity	hr	3676.00
7	Batching and Mixing Plant - 240 m3 Capacity	hr	5758.00
8	Bitumen Boiler Oil Fired	hr	548.00
9	Bitumen Pressure Distributor	hr	1289.00
10	Boat to carry atleast 20 persons	hr	774.00
11	Boom Placer	hr	3717.00
12	Cement spreader	hr	6821.00
13	Centrifugal water pump	hr	271.00
14	Cold in Situ recycling of bitumen's pavement with foam bitumen technology	hr	27112.00

15	Concrete Bucket	hr	124.00
16	Concrete cutting machine	hr	194.00
17	Concrete Mixer - 0.4/0.28 m3	hr	369.00
18	Concrete Mixer - 1 m3	hr	396.00
19	Concrete Pump	hr	1073.00
20	Crane with grab 0.75 m3 capacity	hr	802.00
21	Crawler mounted Crane 35 t capacity	hr	5463.00
22	Crawler mounted Crane 80 t capacity	hr	5537.00
23	Crawler mounted Crane 100 t capacity	hr	8580.00
24	Dewatering Pump 10 HP	hr	230.00
25	Dozer - 90 HP	hr	2944.00
26	Dozer - 175 HP	hr	4193.00
27	Dozer - 240 HP	hr	5418.00
28	Emulsion Pressure Distributor	hr	1289.00
29	Epoxy Injection gun	hr	260.00
30	Falling weight deflectometer (FWD) Equipment with SUV	hr	2913.00
31	Front End loader 1.0 m3 bucket capacity	hr	1300.00
32	Front End loader 2.1 m3 bucket capacity	hr	1987.00
33	Front End loader 3.1 m3 bucket capacity	hr	3336.00
34	Generator 100 KVA	hr	1218.00
35	Generator 125 KVA	hr	1413.00
36	Generator 15 KVA	hr	278.00
37	Generator 250 KVA	hr	2662.00
38	Generator 33 KVA	hr	469.00
39	Generator 400 KVA	hr	3783.00
40	Generator 500 KVA	hr	4679.00

		T	
41	Generator 62.5 KVA	hr	793.00
42	Generator 725 KVA	hr	6758.00
43	Grouting machine	hr	633.00
44	Hot in place recycling	hr	102458.00
45	Hotmix Plant - 40/60 TPH capacity	hr	10800.00
46	Hotmix Plant - 100 TPH capacity	hr	15340.00
47	Hotmix Plant - 120 TPH capacity	hr	23128.00
48	Hydraulic Chip Spreader	hr	1572.00
49	Hydraulic Excavator of 0.9 m3 bucket	hr	1350.00
50	Hydraulic Excavator of 1.1 m3 bucket	hr	1550.00
51	Hydraulic Excavator of 1.2 m3 bucket	hr	1800.00
52	Hydraulic Rock bolt drill	hr	6688.00
53	In situ stabilisation of WMM/GSB/Sub grade	hr	23831.00
54	Induction, deinduction and erection of plant and equipment including all components and accessories for pneumatic method of well sinking.	hr	8945.00
55	Integrated Stone Crusher Stone (3 Stage) 250 TPH	hr	13945.00
56	Jack for Lifting 40 t lifting capacity.	hr	272.00
57	Jack Hammer (attachment of Hydraulic Excavator)	hr	206.00
58	Jack Hammer for air compressor	hr	11.00
59	Joint Cutting Machine	hr	360.00
60	Kerb Casting Machine	hr	1594.00
61	Mastic Cooker	hr	520.00
62	Mechanical Broom Hydraulic	hr	770.00
63	Micro Surfacing Paver	hr	4230.00
64	Milling Machine with 1 m Drum Width	hr	4006.00
65	Milling Machine with 1.2 m Drum Width	hr	4659.00

66	Milling Machine With 1.3 m Drum Width	hr	6690.00
67	Milling Machine With 2 m Drum Width	hr	9707.00
68	Mini Tandem Roller	hr	1107.00
69	Mobile Bridge Inspection Unit (MBIU)	hr	6545.00
70	Mobile cold recycling mixing plant	hr	20357.00
71	Mobile Concrete Batching / Mixing Plant	hr	649.00
72	Mobile Hydraulic Crane 3 t capacity	hr	793.00
73	Mobile Hydraulic Crane 5 t capacity	hr	828.00
74	Mobile Hydraulic Crane 10 t capacity	hr	925.00
75	Mobile Hydraulic Crane 15 t capacity	hr	959.00
76	Mobile Hydraulic Crane 20 t capacity	hr	1132.00
77	Mobile Hydraulic Crane 35 t capacity	hr	1706.00
78	Mobile Slurry Seal Equipment	hr	3438.00
79	Motor Grader 3.35 m blade	hr	4427.00
80	Motor Grader 3.70 m blade	hr	4980.00
81	Motor Grader 4.30 m blade	hr	5438.00
82	Needle Vibrator	hr	411.00
83	Network Survey Vehicle (NSV) With SUV	hr	6070.00
84	Paver Finisher Concrete with 118 HP Motor	hr	3780.00
85	Paver Finisher Concrete with 241 HP Motor	hr	16543.00
86	Paver Finisher Concrete with 300 HP Motor	hr	25848.00
87	Paver Finisher Hydrostatic with sensor control -170 HP	hr	6335.00
88	Paver Finisher Hydrostatic with sensor control -240 HP	hr	8005.00
89	Paver Finisher Mechanical	hr	2089.00
90	Piling Rig with Bentonite Pump	hr	16731.00

91	Plate Compactor	hr	422.00
92	Pneumatic Road Roller	hr	1984.00
93	Pneumatic Sinking Plant	hr	5094.00
94	Pot-Hole Repair Machine	hr	1218.00
95	Pre heater unit for hot in place recycling	hr	674.00
96	Prestressing Jack with Pump & Accessories	hr	445.00
97	Retroreflectometer testing equipment with Vehicle With SUV	hr	1523.00
98	Ripper	hr	21.00
99	Road marking machine	hr	1287.00
100	Rotating Telehandlers	hr	911.00
101	Rotavator	hr	17.00
102	Shotcrete Machine	hr	1601.00
103	Shredding Machine	hr	458.00
104	Single boom Hydraulic Drill Jumbo	hr	4502.00
105	Smooth Wheeled Roller 8 t	hr	1536.00
106	Sport utility vehicle (SUV)	hr	970.00
107	Tandem Roller	hr	1995.00
108	Texture Curing Machine (TCM) - upto 18 m	hr	4375.00
109	Texture Curing Machine (TCM) - upto 9 m	hr	3402.00
110	Three boom Hydraulic Drill Jumbo	hr	9843.00
111	Tipper -10 m3 (Surfaced Road)	per t km	6.83
112	Tipper -10 m3 (Katcha Track)	per t km	16.61
113	Tipper -10 m3 (UnsurfacedGravelled Road)	t.km	8.30
114	Tipper -14 m3 (Surfaced Road)	per t km	5.47
115	Tipper -14 m3 (Katcha Track)	per t km	13.29
116	Tipper -14 m3 (Unsurfaced Gravel Road)	t.km	6.64

117	Tipper 18 m3 ( Surfaced Road)	per t km	4.74
118	Tipper- 5.5 m3 (Surfaced Road)	per t km	9.69
119	Tipper- 5.5 m3 (Katcha Track)	per t km	23.54
120	Tipper- 5.5 m3 (Unsurfaced Gravelled Road)	per t km	11.76
121	Tipper-10 m3	hr	1793.00
122	Tipper-14 m3	hr	1993.00
123	Tipper-18 m3	hr	2211.00
124	Tipper-18 m3 (Katcha Track)	per t km	11.52
125	Tipper-18 m3 (UnsurfacedGravelled Road)	t.km	5.76
126	Tipper-5.5 m3	hr	1412.00
127	Tractor-Trolley	hr	659.00
128	Transit Mixer - 6 m3	hr	1882.00
129	Transit Mixer - 6 m3	per t km	10.45
130	Two boom Hydraulic Drill Jumbo	hr	6762.00
131	Vibrating Pile driving hammer complete with power unit and accessories.	hr	15610.00
132	Vibratory Soil Compactor (10 t)	hr	2005.00
133	Water Tanker (12 KL)	hr	945.00
134	Water Tanker (16 KL)	hr	1119.00
135	Water Tanker (6 KL)	hr	725.00
136	Wet Mix Plant - 100 TPH Capacity	hr	363.00
137	Wet Mix Plant - 200 TPH Capacity	hr	388.00
138	Wet Mix Plant - 250 TPH Capacity	hr	683.00

# iv. Wages to Labour

- The wages given below as per Department of Labour, GoK circular vide KAE 83 LMW 2022 dated 13-01-2023 wef 01-04-2023 are listed. The Zone-II rates rounded off to next higher value is considered for preparation of Rate analysis.
- Minimum wage rates are exclusive of GST, labour cess, Contractor's profit & Overhead expenses but inclusive of weekly rest. Hence, Manpower estimates shall be added with 10% OH and 10% CP as additionalities to arrive at final cost (excluding GST).

# LABOUR RATES FOR THE PREPARATION OF UNI SR

**ZONE I** :: Notified areas of Bruhat Bengaluru Mahanagara Palike & Agglomeration Areas.

**ZONE II** :: Notified areas of all the Corporations in the state other than BBMP and Agglomeration.

ZONE III :: All district head quarters other than places mentioned in Zone I & II

**ZONE IV** :: All other places of the state other than places mentioned in Zone I, II & III

	SCHEDULE							
Sl. No.	Class of Employment					Minimum Rates of Wages per Month		
		Basic	27864.76					
1	Engineering Graduate Employee					1113.60		
						28978.36		
						22199.76		
2	Diploma in Engineering Employ	ee			VDA	1113.60		
					Total	23313.36		
Sl.	al an i	Minimum Rates of Wages per Day						
No.	Class of Employment		Zone-1	Zone-2	Zone-3	Zone-4		
I	Highly Skilled:							
		Basic	647.15	588.32	534.84	481.35		
	Literate Labourer	VDA	42.83	42.83	42.83	42.83		
		Total	689.98	631.15	577.67	524.18		

II			Skilled:			
	Blacksmith, Stone cutting, Mason or Brick Layer Class I Carpenter Class I Plumber Tin smith Foreman, Sarang, Painter, Fitter Class I Mechanic Class I Pneumatic drilled, Engine Driver, Gas or Electric welder, Gauge Repairer, Laboratory Assistant, Machine Operator, Turner, Welder, Crane Driver, Stone Crusher, Jack Hammer driver, Blaster, Stone Cristler, Floor polisher, Riveter, Mason, Pump Driver, Stone Polisher, Bar Bender, Stone Revetment Builder, Electrician, Maistry or Supervisor/Clerk Grade.I, Horticulture Supervisor, Shovel and Scraper.	Basic VDA Total	633.84 42.83 676.67	576.22 42.83 619.05	523.84 42.83 566.67	471.45 42.83 514.28
III		S	emi-Skilled:	ı		
	Cleaner, Asphalt sprayer, Driller, Savgani or chavli, White Washer, Colour Washer, Sawyer, Helper to Fitter, Gardener, Cook, Dhobi, Care taker, Hammer man, Lift Operator, Bamboo maker, Helper to Carpenter, Gang man, Boatman, Jumper man, Brick molder, Asphalt Boiler Attendant, Limestone Burner, Mason & Brickler class-II, Carpernter Class -II, Fitter class-II, Stone Voddar, Diesel Compressor Operator, Fireman in Bricks Plant, Trained Mali with Certificate, Bisti with water bag, Horticulture Gardener, Glayer, Patkaries, Tile Layer (Glazed Mosaic Tiles etc.), Mess man, Tracer (Certificate holder).	Basic VDA Total	613.88 42.83 656.71	558.07 42.83 600.90	507.34 42.83 550.17	456.60 42.83 499.43

IV	Un-Skilled						
	Unskilled (Heavy						
	work), Unskilled	Basic	600.57	545.97	496.34	446.70	
	(Light Work),	VDA	42.83	42.83	42.83	42.83	
	Sweeper, Billover, Blue Printer, Chief Mazdoor, Blue Printer	Total	643.40	588.80	539.17	489.53	
		Office sta	aff and Driver	S			
	Manager/ Personal	Basic	679.48	619.21	564.41	509.62	
1	officer, Marketing Manager / Office Supervisor	VDA	2.83	42.83	42.83	42.83	
	and similar post	Total	722.31	662.04	607.24	552.45	
	Assistant Manager/ Assistant Personal	Basic	656.85	598.64	545.71	492.79	
2	Manager/ Senior	VDA	42.83	42.83	42.83	42.83	
	Accountant & other Equivalent jobs	Total	699.68	641.47	588.54	535.62	
	Senior Clerk, Cashier, Judgement, Writer,	Basic	631.56	575.65	524.81	473.98	
3	Sonographer, Store Keeper,	VDA	42.83	42.83	42.83	42.83	
	Receptionist & other Equivalent jobs	Total	674.39	618.48	567.64	516.81	
	Junior Clerk, Booking Clerk, Computer operator,	Basic	615.59	561.13	511.61	462.10	
4	Typist, Telephone Operator,	VDA	42.83	42.83	42.83	42.83	
	Data Entry operator and Other equivalent Jobs.	Total	658.42	603.96	554.44	504.93	
	Office Boy, Watchman, Lift Operated, Poen,	Basic	569.01	518.78	473.11	427.45	
5	Attender,HeIper, Mazdoor,	VDA	42.83	42.83	42.83	42.83	
	Sweeper & other Equivalent jobs.	Total	611.84	561.61	515.94	470.28	
	Heavy Vehicle Driver, Tractor						
	Driver, Multi-axle and Large Vehicle Driver, Earth movers,	Basic	631.56	575.65	524.81	473.98	
6	Crane Drivers, Road rollers,	VDA	42.83	42.83	42.83	42.83	
	& road construction vehicle drivers, Hospital Vehicle Drivers.	Total	674.39	618.48	567.64	516.81	
	Car Driver, Jeep	Basic	615.59	561.13	511.61	462.10	
7	Driver, Light Vehicle Driver, Turn-turn,	VDA	42.83	42.83	42.83	42.83	
	three wheeler Drivers.	Total	658.42	603.96	554.44	504.93	

# v. Royalty

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ: ಗಭೂಇ/ಡಿಸಿಬಿ/2020-21

### ನಿರ್ದೇಶಕರ ಕಛೇರಿ,

ಗಣಿ ಮತ್ತು ಭೂವಿಜ್ಞಾನ ಇಲಾಖೆ, ನಂ. 49, ಖನಿಜ ಭವನ, ರೇಸ್ ಕೋರ್ಸ್ ರಸ್ತೆ, ಬೆಂಗಳೂರು – 560001, ದಿನಾಂಕ : 03.07.2020 e-mail : dcbdmg@gmail.com

# ಸುತ್ತೋಲೆ

ವಿಷಯ: ಕರ್ನಾಟಕ ಉಪ ಖನಿಜ ರಿಯಾಯಿತಿ ತಿದ್ದುಪಡಿ ನಿಯಮಾವಳಿಗಳು 2020 ರನ್ವಯ ದಿನಾಂಕ: 30.06.2020 ರಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ ಉಪ ಖನಿಜಗಳ ರಾಜಧನ ದರಗಳನ್ನು ಪರಿಷ್ಕರಿಸಿರುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಅಧಿಸೂಚನೆ ಸಂಖ್ಯೆ: ಸಿಐ 115 ಎಂಎಂಎನ್ 2019 ದಿನಾಂಕ: 30.06.2020

\* \* \* \* \*

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಉಲ್ಲೇಖಿತ ಸರ್ಕಾರದ ಅಧಿಸೂಚನೆ ಪತ್ರರಲ್ಲಿ ದಿನಾಂಕ: 30.06.2020 ರಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ ಕರ್ನಾಟಕ ಉಪ ಖನಿಜ ರಿಯಾಯಿತಿ ತಿದ್ದುಪಡಿ ನಿಯಮಾವಳಿಗಳು 2020 ರನ್ವಯ ಉಪ ಖನಿಜಗಳ ಮೇಲೆ ರಾಜಧನ ದರಗಳನ್ನು ಪರಿಷ್ಕರಿಸಲಾಗಿದೆ. ವಿವರಗಳು ಕೆಳಕಂಡಂತಿರುತ್ತದೆ.

ಕ್ರ.	ಉಪ ಖನಿಜ	ರಾಜಧನ ಪ್ರತಿ	ಪರಿವರ್ತನ ಕೋಷ್ಠಕ	ರಾಜಧನ ಪ್ರತಿ ಕ್ಯೂಬಿಕ್
ಸಂ.		ಮೆಟ್ರಿಕ್	ಕ್ಯೂಬಿಕ್ ಮೀಟರ್ ನಂತೆ	ಮೀಟರ್ ಗೆ
		ಟನ್ ಗೆ		
1	ಕಟ್ಟಡ ಕಲ್ಲು	ರೂ. 70	1 ಕ್ಯೂಬಿಕ್	ರೂ. 184
			ಮೀಟರ್ ಗೆ = 2.63 ಟನ್	
2	ಲ್ಯಾಟರೈಟ್ ಸ್ಟೋನ್	ರೂ. 60	1 ಕ್ಯೂಬಿಕ್	ರೂ. 108
			ಮೀಟರ್ ಗೆ = 1.80 ಟನ್	
3	ಜಲ್ಲಿ/ಮೆಟಲ್ ಎಲ್ಲಾ ವಿಧವಾದ	ರೂ. 70	1 ಕ್ಯೂಬಿಕ್	ರೂ. 126
	(ಮಡಿ ಗ್ರಾನೈಟ್/ಕ್ನಾಜೈಟ್)		ಮೀಟರ್ ಗೆ = 1.80 ಟನ್	
4	ಮರಳು	ರೂ. 80	1 ಕ್ಯೂಬಿಕ್	ರೂ. 138
			ಮೀಟರ್ ಗೆ = 1.72 ಟನ್	
5	ಗ್ರಾವೇಲ್ (ಮುರಂ)	ರೂ. 40	1 ಕ್ಯೂಬಿಕ್	ರೂ. 60
			ಮೀಟರ್ ಗೆ = 1.50 ಟನ್	
6	ಮಣ್ಣು (ಎಲ್ಲಾ ತರಹದ ಹೆಂಚು	ರೂ. 60	1 ಕ್ಯೂಬಿಕ್	ರೂ. 90
	ಮತ್ತು ಇಟ್ಟಿಗೆ ತಯಾರಿಕೆಗಾಗಿ)		ಮೀಟರ್ ಗೆ = 1.50 ಟನ್	

ಸದರಿ ತಿದ್ದುಪಡಿ ಅಧಿಸೂಚನೆ ಪ್ರತಿಯನ್ನು ಮಾಹಿತಿಗಾಗಿ ಈ ಪತ್ರದೊಂದಿಗೆ ಲಗತ್ತಿಸಿದೆ.

ಸಹಿ/–

ನಿರ್ದೇಶಕರು

# vi. Material Co-Efficients

CI	CD				Material Co-efficients in m <sup>3</sup>		
SL NO.	SR Volume	Item No	Material	Unit	Jelly Metal / Stone*	Sand	Murrum/ Soil
1	I	2.1.1	PCC M 5 (1:5:10) / PCC M 7.5	m <sup>3</sup>	0.89	0.47	
		2.1.2	(1:4:8) / PCC M 10 (1:3:6) using				
		2.1.3	40 mm nominal size				
2	I	2.1.4	PCC M 10 (1:3:6) using 20 mm	$m^3$	0.94	0.47	
	т	215	nominal size	3	0.00	0.47	
3	I	2.1.5	PCC M 15 (1:2:4) using 20 mm nominal size	$m^3$	0.89	0.47	
4	I	2.1.6	PCC M 15 (1:2:4) using 40 mm		0.89	0.45	
4	1	2.1.0	nominal size	111	0.09	0.43	
		2.7.1	RCC M15				
5	I	2.2.1	RCC M 20	$m^3$	0.85	0.425	
	_	2.2.2	RCC M 20 (RCA)			01120	
		2.3.1	RCC M 20				
		2.4.2	RCC M 20				
		2.5.1	RCC M 20				
6	I	2.2.3	RCC M25	m <sup>3</sup>	0.90	0.45	
		2.2.4	RCC M25 (RCA)				
		2.2.5	RCC M30				
		2.2.6	RCC M 35				
		2.2.7	RCC M 40				
		2.3.2	RCC M 25				
		2.3.3	RCC M 30				
		2.3.4	RCC M 35				
		2.3.5	RCC M 40				
		2.4.3	RCC M 25				
		2.4.4	RCC M 30				
		2.4.5	RCC M 35				
		2.4.6	RCC M 40				
		2.5.2	RCC M 25				
		2.5.3	RCC M 30				
		2.5.4	RCC M 35				
7	T	2.5.5	RCC M 40	m-3		0.7125	
7	I	3.1	Cement Mortar (1:1)	m <sup>3</sup>	-	0.7125	
8	I	3.2,3.7	Cement Mortar (1:2)	$m^3$		0.95	
9	I	3.3,3.8	Cement Mortar (1:3)	m <sup>3</sup>		1.07	
10	I	3.4,3.9	Cement Mortar (1:4)	m <sup>3</sup>		1.07	
11	I	3.5,3.10	Cement Mortar (1:5)	m <sup>3</sup>		1.07	
12	I	3.6,3.11	Cement Mortar (1:6)	m <sup>3</sup>		1.07	

**Note :** Royalty Constants to be considered in Works as per above table for which Royalty has to be deducted. Royalty is exempted when the material dispatch receipt is issued by Mines & Geology Department.

# vii. Area Specific Loading (ASL)

Sl. No	Category	Additional Loading charges
1	Tier I city -Bruhat Bangaluru Mahanagara Palike Limits (BBMP)	10%
1a	BDA developed and notified areas	7.5%
1b	BMRDA and upto 3 km periphery	4%
2	Corporation limits of Tier II cities	5%
3	Other Cities / City Municipal Council Limits	3%
4	Kalyana Karnataka	5%
5	Restricted areas - Jails/ Forest / Sewerage Works / Works under unhygienic / Hazardous & Electrical Breakdown conditions (For existing electrical network & live sub-stations)	12%
6	Major Irrigation command area / Mining Area/ Major Industries	5%
7	Coastal Area (upto 25 km from coast), Tidal wave area, Heavy Rainfall area 1600 mm and above	12%
8	Hilly Terrain above 300 m from the nearest town/city	12%
9	Works in other States	Adopt SR of that State ( City/Circle)

Note: 1) Anyone ASL shall be operated in a particular instance.

2) ASL shall not be applied to Addendum V & VI of this Volume.

"Source as Bengaluru". Bengaluru being the metropolitan city is the epicenter of the state for large logistic supplies. Many construction materials are being supplied to the state from the city from different sources. The material rates available in the Bengaluru city are considered in the preparation of Common SR. The important items are Cement, Steel, Aggregates & Masonry units which are commonly available in the entire State. However, certain items such as Long steelproducts, Masonry units, by products of aggregates, finished products involving cement are to besupplied directly through a common source of Bengaluru which involves additional costs on the material rates, additional costs in transportation, labour, loading & unloading charges. Due to the non-availability of certain material items in the other parts of the State like PVC products, chemicals, admixtures, the materials involving processed clay & cement and which require specialized technology in manufacturing process are to be supplied from the source of Bengaluru which has construction items manufacturing hubs in Bengaluru rural area surroundings and vast scale of logistic service with the supply from other States.

The Bitumen rates of MRPL are widely considered in the state and certain private companies which supply by products of Crude Bitumen are operating in the coastal areas. But the transportation of the same in the rolling, rough and hilly terrains add to the cost compared to the plain terrains.

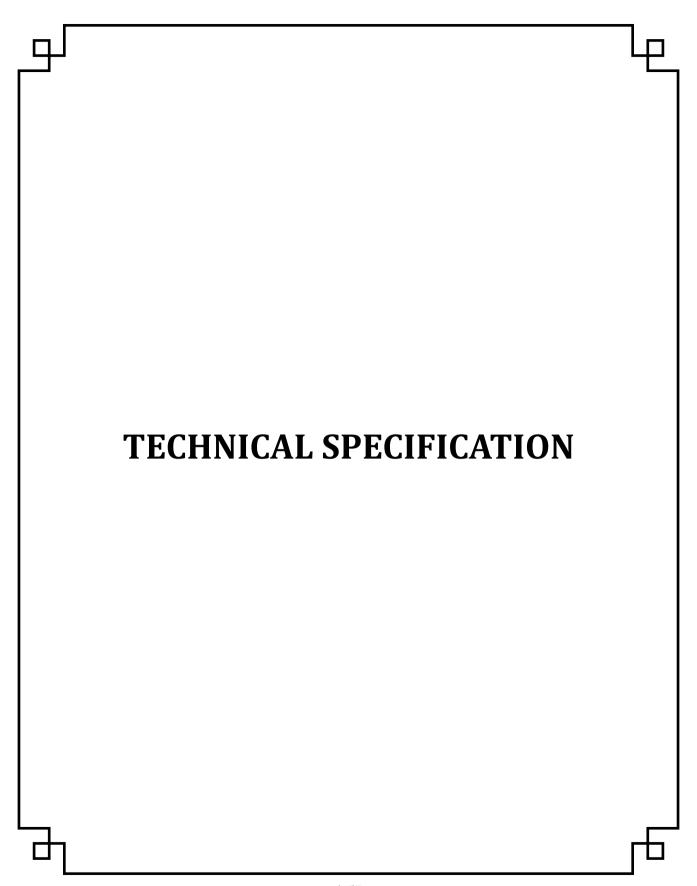
Considering the above, the source of materials as Bengaluru Rural is worked out and considered in the Rate Analysis. The mathematical & empirical relations are established in the Technical working Group and the concept is finalized as area specific loading over the finished item rates considering all lead & lifts are recommended. This kind of practice is even followed in other neighbouring states. "Work in Urban Areas". The cost of work on urban roads in habited will be comparatively higher due to following reasons.

- a) There is mixed traffic on urban roads like slow moving hand and animal driven carts cyclerickshaws, two/three wheelers apart from the normal traffic resulting in trafic jams. This causes loss of working time which may be in the range of 10-15 percent.
- b) There is considerable disruption of traffic adversely affecting the efficiency of the working parties including machinery due to congestion caused by pedestrain traffic local road side vendor sparking of vehicles on roadside, encroachment of berms of the road in front of shops and unauthorised conversion of road berms into minilocal market. The out put of manpower and machinery reduce due to these factors subsantially.
- c) Cost of living in urban areas is comparatively more resulting in higher wages.
- d) At times, work is executed during night time due to heavy traffic during day time. This involves extra expenditure by way of making arrangement for lighting and special transport arrangements for working in odd hours.
- e) The population of Bengaluru city has increased substantially over the decade with extension of metropolis.
- f) Construction Labour Productivity (CLP) is pivotal to ensure the output of the work. However, over the years the CLP is reduced substantially & the mechanization hastaken place in generating the required output. The mechanization further demands higher costs.

In the light of the above, the area specific loading is recommended for Urban areas and applicable areas of the State.

# viii. Definition of Overheads

- 10 Percent overhead charges have been considered in the schedule of Rates.
  - (i) Site accommodation, setting up plant, access road, water supply, Electricity and general site arrangements
  - (ii) Office furniture, equipment and communication
  - (iii) Expenditure on
    - i) Office of contractor
    - ii) Site Supervision
    - iii) Documentation
  - (iv) Mobilisation/Demobilisation of resources
  - (v) Labour camp with amenities and transportation to work site.
  - (vi) Light vehicles for site supervision including administrative and managerial requirements.
  - (vii) Laboratory equipment and quality control including field and laboratory testing.
  - (viii) Minor T & P's and survey equipment and setting out works, including verification of line, dimensions, trail pits and boreholes, wherever required.
  - (ix) Watch & ward
  - (x) Traffic management during construction.
  - (xi) Expenditure on safe guarding environment.
  - (xii) Financing expenditure.
  - (xiii) Labour Insurance.



# IMPORTANCE OF SAFETY IN CONSTRUCTION

For any construction activity to begin, the first and the foremost thing of importance is the Safety in Construction. The Contractor shall employ only such methods of construction, tools and plant appropriate with proper barricading, lighting for the type of work or as approved by the Executive Engineers.

The contractor shall take all precautions and measures to ensure safety of works and workmen and shall be fully responsible for the same. Safety pertaining to construction works such as excavation, centering and shuttering, trenching, blasting, demolition, electric connections, scaffolds, ladders, working platforms, gangway, mixing of bituminous materials, electric and gas welding, use of hoisting and construction machinery shall be governed by the relevant safety codes and as per the direction of the Executive Engineer.

### **CHAPTER -1: EARTH WORK EXCAVATION**

### **CLASSIFICATION OF SOILS**

Earthwork shall be classified under the following categories and measured separately for each category:

- All kinds of soils: Generally any strata, such as sand, gravel, loam, clay, mud, black cotton
  soil, moorum, shingle, river or nallah bed boulders, shoulder of roads, paths and hard
  core, macadam surface of any description (water bound, grouted tarmac), lime concrete,
  mud concrete and their mix which for excavation need application of picks, showels,
  jumper, scarifiers, ripper and other manual digging implements.
- **Ordinary rock**: Any rock which can be excavated by splitting with crow bars or pick axe and does not require blasting, wedging or similar means for excavation such as lime stone, sand stone, hard laterite, hard conglomerate and un-reinforced cement concrete below ground level.
- If required light blasting may be resorted to for loosening the materials but this will not in any way entitle the material to be classified as 'Hard rock'.
- **Hard rock**: Generally any rock or boulder for the excavation of which blasting is required such as quartzite, granite, basalt, reinforced cement concrete (reinforcement to be cut through but not separated from concrete) below ground level and the like.
- **Hard rock (blasting prohibited)**: Hard rock requiring blasting but where the blasting is prohibited for any reason and excavation has to be carried out by chiseling, wedging, use of rock hammers and cutters or any other acceptable method.

As explained above, the different classifications of the Soil at site are to be excavated considering the following aspects by the Departmental Engineers.

- Before starting the earthwork, the whole area where the work is to be done shall be cleared of grass, roots of trees and other organic matter. Site preparation shall consist of clearing grubbing and removal of any and all inappropriate materials.
- The excavation shall be carried out in accordance with the dimension shown on the sanctioned drawings. If the soil at the specified depth is found to be unsuitable, then it shall be dug to a depth at which a stratum of good hard soil is found as directed by the Quality control authorites. Besides digging the earth, the word excavation signifies all the works related such as dressing of the sides, ramming of bottom, disposing of any soil not required out of site and keeping the outer edge of excavation. Sides of the trenches shall be vertical and its bottom shall be perfectly levelled, both longitudinally and transversely. The Contractor shall dispose off surplus excavated soil at his own cost as directed by the Executive Engineer. Materials deemed not necessary or appropriate for the project shall be removed at the time of excavation. No material excavated from foundation trenches, shall be placed nearer than 1m to the outer edge of the excavation.
- The excavation shall be carefully executed as per the dimensions and elevations on approved drawings and the established 'Benchmark' at the site. The contractor accepts full responsibility to align the building and slabs in reference to these given elevations. If any of the excavation be taken below the specified levels, the Contractor shall fill such excavation at his own expense with concrete well rammed in position until it is brought upto the proper levels; filling in with excavated materials will not be allowed for this purpose. If foundations are made broader or longer than directed, the extra length and breadth shall be filled in after the foundations are built with earth rammed and compacted, at the Contractor's expense.
- If the excavation is in earth, the bottom of the trenches shall be sprinkled with sufficient water to bring the soil to its optimum moisture and compacted to meet stated percentage of compaction. Any excess digging or any patches of bad soils or hollows shall be removed by placing concrete or shall be subject to any other special treatment as per the decision of the Executive Engineer.
- If the soil is soft, loose or slushy the trench shall be widened for allowing berms on either sides or the sides sloped or shored up. During excavation if rocks or rocky soils are found, (if approved as suitable for foundation), those shall be leveled as far as possible andthe small spaces which are difficult to level shall be filled in with Controlled Low Strength Material (CLSM).
- Water in trenches must be bailed or pumped out and where it is apprehension that the sides may slip down arrangements shall be made for adequate shoring. The Contractor shall at his own expense, make provision for all extra excavation in slope, pumping, dredging or bailing out water from the trenches and keep free of water during the

laying of foundation works. When it is specified that the work is to be carried out without removing pipes, cables, sewers & such lines all of them shall be temporarily shored and saved from any damage. The materials or valuables found during excavation shall be the property of the Public Works Department, Government of Karnataka. The cost of all materials and labour required for fencing and protection against risk of accidents due to open excavation shall be borne by the contractor. Care shall be taken in the disposal of water from the excavation to limit any damage to existing infrastructures or adjoining properties.

- The Contractor shall also at his own cost remove such portions of boulders or rocks and the remains of the old dismantled structures to make the bottom of the trench horizontal and level. If unseen underground structures, high strength concrete, are encountered, extra payment shall be provided to the contractor with negotiations and actual calculations. If during excavation, exceptional conditions are encountered that the contractor deems outside of "normal" materials for excavation, the work shall not cease but documentation of the conditions shall be done immediately.
- The contractor needs to submit the proposed plan and schedule methodology. Before implementation of the work, the materials required, the equipments to be used need to be properly verified. Since the safety factor is directly related to the excavation, the contractor need to finish the job within the allocated period of time until and unless the contractor can provide a valid reason. As the excavation phase offers many hazards, the contractor shall have on site all needed materials barricading, caution lights & boards to protect the open excavation and warn any persons in or near the excavated areas before any excavation work shall commence.
- The Royalty charges are included in the material rates of Earth. Unless specified separately, the charges need not be paid extra. (To refer Part I unit V)
- 1. **Shoring and Protection**: The contractor shall be responsible for all needed protection of adjacent structures. Installation and design shall be his sole responsibility. The Executive Engineer shall assist as needed but implementation and protection shall be with the contractor. Any verifiable facilities initiated out of this work shall be rectified at the contractors own expense.

It is advisable for the contractors that they maintain a record and photos of all the existing surrounding buildings in the area. It would be very useful, in-case a claims for the damage of the neighbouring properties during the excavation of the site. Executive Engineer shall assist as needed as per requirement for the unnecessary claims, if proper management records are maintained. The contractor accepts sole responsibility for damages if any to adjoining properties incurred in the performance of the work. It is recommended that a record of all adjoining properties be maintained at site (photos and brief written descriptions).

When the depth of foundation is below 3 m, and where shoring is necessary, all the aspect shall depend upon the type of soil; the Contractor shall be responsible for the designof shoring for proper excavation. Shoring shall be of sufficient strength to resist side pressure ensuring safety from slippage, preventing damage to work and property and injury to persons. It shall be metal sheet piling or any other approved means strong enoughto retain the earth and protect the existing structures against any damages. The contractorshall prepare and submit the method, details and process of such shoring to the Departmental consultant before starting earthwork for the basement or as per the specification. It shall be removed as directed after all the items for which it is required are completed. Foundation pits, well pits and simillar excavation shall be securely fenced and marked with red lights at night and be in charge of watchmen to avoid accidents. Adequate protective measures shall be taken to see that the foundation excavations do not affect or damage adjoining structures.

All measures required for the safety of the excavation, the people working in and near the foundation trenches, property and the people in the vicinity should be the responsibility of the Contractor. The Contractor shall be entirely responsible for any injury to life and damage to property caused by his negligence or accidents due to the construction operations. The work will be in two stages: This includes excavation of the basement and earth filling works. The contractor will ensure that for both stages all safety measures for the excavated areas with necessary fencing, lighting etc are provided on instruction and approval of the consultant. No extra shall be paid in this connection unless otherwise specified. Any excavation deeper than 3 m shall be deemed as mandatory for placement of properly designed shoring to protect workers and work at the perimeter of the excavation, any other areas found to be unstable, shall at the request of the Executive Engineer be stabilized with properly designed shoring. Design and methods shall be approved as per the stated criteria by the Superintending Engineer prior to any further work in those areas.

2. **De-watering:** The Contractor shall not be paid extra for bailing out or pumping out of water which may accumulate in the excavation during the progress of the work either from seepage, springs, rain, from neighboring properties or any other source: Any equipment shall be removed after their purpose is served. Any soils deemed saturated and unfit to support foundation shall be removed and replaced with appropriate materials to support the structure. Placement shall be as per requirements to bear / withstand the weight of the structure and minimize any future settlement. The act of dewatering shall in no way be a determent to the community at large or inflict any undue stress on the communities infrastructure.

Pumping water from any foundation enclosure or trenches shall be generally in such a manner as to preclude the possibility of any damage to the foundation trenches, concrete or masonry or any adjacent structure and pumped water to be bailedout to nearby drain depending on the quantity of water. The excavation shall be kept free from water (i) during inspection and measurement, (ii) when concrete and/or masonry works are in progress and until

they come above the natural water level and (iii) until the Executive Engineer considers that the concrete/mortar is sufficiently set.

3. **Trimming and levelling**: The bottom of all foundation should be trimmed and levelled in accordance with the sanctioned drawings. The bottom of the foundation shall be rammed and watered before concrete is deposited. The term "watered" shall be deemed to mean a condition of water content giving optimum consolidation of the soil in the compaction process, it shall not mean a condition reflecting total saturation of the soil, or flooding.

### **Measurement:**

For Earthwork measurements, the detailed procedures enumerated in the IS 1200-1992 (Fourth revision) to be referred & followed.

# Other necessary information on Earthwork Excavation & Back filling:

Black cotton soil or any other inappropriate materials shall not be used for the backfilling works. The contractor and Executive Engineer shall confer as to the appropriateness of the material to be used. If other material must be brought from outside to the site, the Executive Engineer shall give an approval prior to bringing to site.

The openings around the foundation, pipes and drains in trenches shall be cleared of all debris, brick-bats. The fillings shall be done in layers, not exceeding 150 mm each layer. Each layer shall be watered, rammed and consolidated before the succeeding one is laid. Grip trenches need to be provided in the existing surface before proceeding in forming layer by layer embankment. Earth shall be rammed with proper compaction machine, as required by the site condition. Special care shall be taken that no damage is caused to the pipes, drains and masonry in the trenches underneath.

All lines and levels for excavation, filling and backfilling work shall be based on the Departmental consultant's benchmark or reference point and survey work shall be done under the direction of Engineer or Surveyor retained by the Contractor.

During filling of earth, the Contractor needs to make necessary arrangements, such that earth is properly consolidated. The contractor need to ensure that adequate amount of water is left on top of the daily filled earth so that proper consolidation occurs.

The contractor shall test the compacted earth if desired by the Executive Engineer. For Buildings, filling of water and use of plate compactor & mini roller can be used to achieve required density.

The density for the back fill earth shall not be less than 95% of the proctor density to the original Earth unless specified in the BOQ.

### **CHAPTER 2 : REINFORCED CONCRETE WORKS**

The main components of RCC Works are *Cement, Steel & Aggregates*. Following are the references and practices to be followed during construction.

**CEMENT**: The cement used for PCC/Reinforced concrete works shall be OPC/PPC/PSC of approved brand by the Executive Engineer and shall comply in all respects as per relevant IS Codes. The contractor shall use only one brand of cement for the structural portion of the building, therefore arrangements shall be completed at the time of commencement of work to have a continual supply of that brand from start to finish. Other brands will be acceptable for other phases of work (i.e. plastering, screed, punning). Again mixing of different brands of cement in phases such as plastering shall not be allowed. Each phase of work shall be limited to a single brand.

It shall be delivered to the site in packages (bags) with an unbroken seal fixed by the makers and plainly marked with the name of the brand and the date of manufacture. The contractor shall weigh the cement bought at site at random selection from the Engineer in charge. The weight of the cement shall be 50 kg net and shall be fresh. The cement shall be stored in stacks on raised platforms, dry and impervious to water with at least 300 mm clearance from any wall/floor. The cement shall be in regular piles not exceeding ten bags high and in such a manner that it will be protected from moisture and contamination. Consignments received shall be used in the order in which they are received. The stores for the cement shall be inspected and approved by Executive Engineer prior to stacking. Where bulk handling of cement is undertaken, protective masks shall be provided for the workmen. Set cement shall immediately removed from the site and replaced by the contractor at his own expense. If desired, tests shall be made by taking samples from stores or elsewhere from the works. The selection of samples and procedure for testing shall comply with the appropriate I.S. codes. Should the contractor deem it necessary or advantageous to use multiple brands, each brand shall be stored in a separate facility to eliminate confusion and inadvertent mixing of brands during the work. Division of a single facility shall not be acceptable, as monitoring becomes difficult.

The minimum compressive strength of ordinary Portland cement shall be as per I.S. 269. The initial setting time should not be less than 30 minutes and the final setting time should not be more than 10 hours.

**FINE AGGREGATE**: The fine aggregate (sand) shall conform to either I.S. 383-2015 or It shall be clean, sharp, heavy and gritty to touch. Sand should be free from clay, mica, vegetable and organic matter or any other foreign matter. River and pit sand should be used as this does not contain common salt in large quantities. Sand should be perfectly dry before it is used, otherwise the bulking effect of sand must be taken into account.

Sand must be cleaned by screening before its use. If a sample of sand contains more than 4 to 5 percent of clay, it should be washed thoroughly before use. The percentage of clay

lumps shall be determined by examining the various fractions that remain after the material has been tested for grading. Any particles that can be broken with fingers shall be classified as clay lumps and the total percentage of clay lumps shall be determined on the basis of the total original weight of the sample.

Sand for all cement concrete works must satisfy grade I, II, III gradation as per IS-383:2016. It should not pass through I.S. sieve 4.75 mm and retained on 5.5 mm. The fineness modulus of coarse sand shall be determined by taking 500 g of it from a representative sample of sand and passing it successively through I.S. sieves 4.75mm, 2.36 mm, 1.18 mm, 600 micron, 380 micron, 150 micron & 75 micron. Sand used in cement shall be from an approved pit. River sand is not appropriate as the water action on the grains round the edges reduce the gripping hold of the particle. The pit sand used must be properly washed and free from any kind of mud & clay components.

Medium sand may be used in cement mortar for masonry, plastering, pointing etc. and bituminous works of road. Sand filling in plinth, where specified may be done with fine sand. The fineness modulus of fine sand should not be less than one.

Fine aggregate shall be preferably stacked in regular stacks on hard surface or platform so as to prevent mixing of clay, vegetable and other foreign matter. The contractor shallbe using different sieve size sand for different purposes such as structural and non- structural component. It is advised that the contractor maintain a proper storage place for different type of sand, in quality such as sieve sizes, origin etc. This shall be advantageous to eliminate confusion and inadvertent mixing during the work. Division of a single facility shall not be acceptable, as monitoring becomes difficult

**COARSE AGGREGATE**: Aggregate, shall conform to IS 383, most of which is retained on 4.75 mm I.S. sieve and containing only so much finer material as is permitted for the various types described below.

*Quality of Aggregates*: Aggregate shall consist of gravel or stone, crushed or uncrushed, or a combination thereof. It shall be hard, strong, dense, durable, clean and free from adherent coatings. As far as possible, flaky and elongated pieces should be avoided. It shall be obtained from approved quarry.

Deleterious Materials: Aggregate shall not contain any harmful material, such as coal, mica, laminated material, clay, alkali, soft fragments, sea-shells, organic impurities etc, in such quantity as it affect the strength or durability of the concrete or in addition to the above for reinforced concrete, any materials which might affect the reinforcement. Aggregates which are chemically reactive with the alkalies or cement are harmful, as cracking of concrete may occur.

1. *Mechanical Properties of Aggregate:* The aggregate crushing value, when determined in accordance with I.S. 2386 (Part IV), mechanical properties shall not exceed 45 per cent for

aggregate used for concrete other than for wearing surfaces and 30 percent for concrete for wearing surfaces such as runways, roads and pavements.

- 2. **Size and Grading of Aggregate:** When coarse aggregate brought to the site is ungraded, single size coarse aggregates of different nominal sizes, conforming to the requirements shall be mixed at site. Ungraded materials shall not be placed on site, unless prior-approval is issued by the field engineer. Any such materials brought to the site shall be placed in a segregated area so that their accidental incorporation in cement mix does not happen.
- 3. **Storage:** The contractor shall provide means of storing the aggregates at each point where the concrete is such that (a) each nominal size of coarse aggregate and the fineaggregate shall be kept separated at all times (b) contamination of the aggregates by the ground or other foreign matter shall be effectively prevented at all times and (c) each heapof aggregate shall be capable of freely being drained. The contractor shall ensure that the graded coarse aggregates are tipped, stored and removed from the stock yard in manner that does not cause segregation.

The contractor shall make available to the Engineer incharge such samples of aggregates, as required. Such samples shall be collected at the point of discharge of the aggregate to the Batching plant. If any such sample doesn't conform with the specification, the aggregate shall be promptly removed from the site and the contractor shall carry out such modification to the storage arrangements as may be necessary to secure compliance with the specification.

**STEEL**: The reinforcement shall be of Mild steel and medium steel wire, conforming to I.S. 432-1960 or TMT bars conforming to I.S. 1786-2008 or deformed steel bars conforming to I.S.1139 with up-to-date modification. Bar reinforcement described as "Mild Steel" shall be plain round / ribbed hot rolled steel bars. Bar reinforcement shall be Fe550. With respect to manufacture, quality, physical properties and related requirements, reinforcement bars of the foregoing description shall comply with appropriate parts of IS Standards 432 (part I).

All reinforcement shall be clean and free from loose mill scales, dust and coats of paint, oil, rust or other coatings which may reduce bond. The steel bar shall be round and capable of being bent (doubled over) without fracture. Joint in the bars should be avoided as far as possible, when joints have to be made an overlap of 45-60 times diameter of the bar shall be given with proper hooks at ends and joints should be staggered.

# **CEMENT CONCRETE WORKS**

Materials: All the materials used in the cement concrete such as cement, sand (fine aggregate), coarse aggregate, water, and reinforcement shall be as per the relevant I.S. Codes and/or as per the individual specification presented.

Proportion: The proportion of the concrete shall be as mentioned in the Bill of Quantities, Working Drawings etc. The minimum compressive strength for the cement concrete shall be in accordance with IS-456 upto date revision.

The aggregates, both coarse and fine shall be measured by volume with boxes. Cement need not be measured by box; one bag of cement (50 kg) should be considered. Size of measuring box may be 30 cm x 30 cm x 38 cm or equivalent volume. All materials shall be dry, if damp sand is used, compensation shall be made by adding additional sand to the extent required for the bulking of damp sand. Mixing shall be of machine mixing. For smallworks hand mixing by batches may be allowed but about 10% extra cement need to be added as compensation. Work shall be planned to minimize hand mixing. Hand mixing shall be limited to minor repair works and incidental occasions. A box shall be kepton site with the capacity of 10% of a sack of cement (5kg) and used any time hand mixing is being done to meet the requirements for hand mixing.

Besides that, for the first batch of mixing for the day, an extra bag of cement is added to the first mix. It is assumed that this shall compensate all the cement adhering to the equipments such as mix machines, batching trolleys.

1. **Machine mixing:** The mixer drum shall be flushed clean with water. Measured quantity of dry coarse aggregate shall be placed first; this shall be followed with measured quantity of fine aggregates and then cement. Aggregates, sand and cement shall be put into the cement concrete mixer to have required proportion as per the Bill of Quantities, working Drawings, etc. The machine shall then be revolved to mix materials dry and then water shall be added gradually at required quantity, 20 to 28 litres, per bag of cement to have the required water cement ratio. The mixing should be thorough to have plastic mix of uniform colour. It requires 2 minutes' revolution for thorough mixing.

Approximate quantity of water required for cement concrete may be taken as 30% by weight of cement plus 5% by weight of total aggregate. For the concrete compacted by mechanical vibrators the quantity of water shall be reduced by 20%.

- 2. **Slump:** Regular slump test should be carried out to control W/C ratio and to maintain the required consistency. A slump of 25 mm to 100 mm may be allowed for the building. Slump tests shall be done on a regular basis during batching and placing of concrete, or as directed by the Executive Engineer.
- 3. *Formwork:* Formwork, centering and shuttering preferably shall be provided with MS Sheet as required, i.e., standard specifications as per IS 1200 Part V, before lying concrete to confine, to support or to keep the concrete in position. The inner surface of the shuttering shall be oiled to prevent concrete sticking to it. The base and formwork over which concrete to be laid shall be wetted by sprinkling water before the concrete is laid. Forms shall be removed as specified. Formwork shall be removed slowly and carefully without disturbing and damaging concrete. Upon

removal of forms any minor voids shall be repaired immediately, deeper voids (min. 12mm to max 25mm) shall have a proper patch administered as per the instruction of the Executive Engineer, to seal and protect the reinforcement.

4. **Laying:** Concrete work shall not be started until written permission from the Executive Engineer is issued to the contractor. Concrete shall be laid gently (not thrown) in layers not exceed 15 cm and compacted with mechanical vibrating machine until dense concrete is obtained. Overvibration which will separate coarse aggregate from concrete should be avoided. After removal of the formwork in due time, the concrete surface shall be free from honey combing, blow holes or any other defect. The contractor need to use vibrator as per the recommendation of the consultant no matter what the volume of the concrete for a day shall be done.

Concrete shall be laid continuously. If laying is suspended for rest or for the following day, the end shall be sloped at an angle of 300 and made rough for future jointing. When the work is resumed, the previous sloped portion shall be roughened, cleaned and watered and a grout of neat cement (thick cement slurry) shall be applied and fresh concrete shall be laid. For successive layer the upper layer shall be laid before the lower layer has set. Every effort shall be made to minimize "cold"/ construction joints. Work shall be planned and reviewed with the site engineer prior to commencing and the contractor shall be prepared to extend the labour and site supervision to accomplish pouring in such a fashion.

For the special areas where mentioned in the sanctioned drawings, where there shall be no further finishing, the contractor shall take further precautions as is required to finish in compliance with the drawings and clients wishes, or as specified by Executive Enigneer, without any additional cost. The contractor's failure to comply with the Executive Engineers stated expectation of finishing shall open themselves to having the pour rejected and loss of payment or removal and replacement in compliance with the finish required. Neat cement punning on the surface is not an option for consideration. It is highly recommended that the contractor to use power trowels in the area of basement where there is no other finishes. This shall assist the work to be completed in faster rate and in satisfaction to the client's expectation. The contractor shall manage his staff and materials to guarantee compliance with the approved schedule and amount of work to be accomplished on a daily basis, yet maintaining the desired quality.

In the specified areas such as ramp, external courtyard and other such works. The contractor shall at completion of the concrete placement begin the finishing process which shall at completion render a "broom finish". The specific broom need to be utilized to complete the specified broom finish required by Executive Engineer. "Broom finish" here implies a non-skid concrete surface without application of any kind of additional surface on top of the concrete. The contractor needs to produce the "broom finish" with the application of broom just after the completion of concreting before the concrete is hardened. The contractor may propose alternative methods to accomplish this surface texture, but must receive prior approval from the Eecutive Engineer before commencing the work.

5. **Control of Concrete:** The contractor shall be called upon to submit representative samples of material to be used for concrete in order that they may be tested at a laboratory and the suitability of materials established. All expenses in connection with the above material tests shall be borne by the contractor.

During the progress of the work 15 cm cubes shall be made as per I.S. 456-2000 (Revision) as necessary and tested in accordance with I.S. 516-reaffirmed 2018. A minimum of three cubes shall come from different batches or individual days. The concrete used in the project, from these batches, shall be recorded and properly maintained. The cubes shall be tested for 7 days, 14 days, and 28 days unless directed by Executive Engineer. The test results shall meet the minimum compressive strength mentioned in the structural drawings or specified by the IS Code standard so that the field concrete work has the strength required as per the code or standard for stipulated time period, i.e. for concrete work of M20, the strength must be minimum 23 MPa in 28 days as per IS-456:2000 Amendment 4/2013. All such testing shall be done in presence of Executive Engineer or his representative. The test result conducted in absence of Executive Engineer or his representative shall not be accepted or deemed valid.

6. *Curing:* Freshly laid concrete shall be protected from rain. The work should be protected from damage and rain during construction. After about two hours of laying, when concrete has begun, to harden, it shall be kept damp by covering with wet gunny bags for 7 days continuously 24 hours. After the 7th day, the contractor needs to make sure that the concrete remains wet during the hot days further upto 7 days. If specified curing may be done by covering concrete with special type of waterproof paper so as to prevent water escaping or evaporating. Curing and strength development is an important part of the construction process and failure to maintain the concrete as per the stated parameters, shall result in rejection and loss of time. As no time extension shall be administered for removal and replacement of any rejected work which could have been prevented with proper administration of the contract.

Executive Engineer reserves the full right to hold the concreting works, if proper curing managements not performed before the concreting. Executive Engineer holds the total control for curing and has full authority to hold the concreting work using the past curing works as an example. The contractor needs to allocate a separate staff for curing of the concrete for at least 14 days.

7. **Repairing Honeycomb:** Immediately after stripping the formwork, minor defects and honey combed area shall be patched and the holes filled before the concrete is thoroughly dry. Patch areas shall be chipped away to a 25 mm depth, with regular edges perpendicular to the surface.

The contractor needs to mobilize personnel to rectify the honey combing as the formworks are being stripped off the concrete surface. The contractor needs to make necessary arrangement prior to the removal of formwork and needs to complete the work when the concrete is green.

**Test of Structure:** Executive Engineer shall instruct for a proper testing mechanism on the works or any part there of if in his opinion such a test be deemed necessary for one or more of the following reasons:

- The site-made concrete test cubes failing to attain the specified strength.
- The shuttering being prematurely removed.
- Concrete improperly cured.

If the contractor is instructed to conduct testing of concrete already placed for any of the previously stated reasons it shall be accomplished at his expense. If the member shows evident failure, changes as are necessary to make the structure adequately strong shall be made free of cost. The entire cost of testing shall be borne by the contractor. If in the course of dismantling, any damage is done to the embedded items and or other adjacent structures, the same shall be made good free of charge by the contractor to the satisfaction of Executive Engineer.

If the results of the tests are not to satisfactory, Executive Engineer shall instruct the loading test of the entire structure. If such testing is required by Executive Engineer, the member under consideration shall be subjected to a superimposed load equal to one and a quarter  $(1^1/4)$  times the specified superimposed load used for design and this load shall be maintained for a period of 24 hours before removal. The detail procedure of the test is to be decided by Executive Engineer even after these tests the results obtained are not satisfactory to Executive Engineer, the part of the works concerned shall be taken down or removed and reconstructed to comply with the specification or such other remedial measures shall be taken as to make the works secure. The contractor needs to bear all the cost for taking out and other remedial works.

8. *Water Proofing Compound:* For those areas, such as shear walls of the sumps water tanks, terrace slabs, the contractor needs to mix the water proofing compound of IS, ASTM & BS standards within the concrete itself for the extra protection. The contractor needs to get approval to the specification and the brand of the water proofing compound likely to be used prior to the application. Once the water proofing compound is approved, the contractor needs to apply the mix, proportion as per the manufacturer's specification. The contractor holds full responsibility for the water proofing compound in concrete.

### **Formwork**

Formwork shall be designed and constructed so that concrete can be properly placed and thoroughly compacted. Formwork shall be firmly supported and adequately strutted, braced, or tied. It shall be capable of adjustment to the lines and dimensions of the finished concrete and it shall be sufficiently strong to resist without distortion, the pressure of concrete during its placing and compaction and other loads to which it may be subjected. It shall not be liable to suffer distortion under the influence of the weather. When concrete is to be vibrated, special care shall be taken to ensure that the formwork will remain stable and joints tight, gaps in form panels greater than

5mm shall not be acceptable. The safety and adequacy of centering and shuttering shall be the sole responsibility of the contractor.

Form work shall include all forms or moulds required for forming the concrete which iscast-in-situ, together with all temporary construction required for their support.

*Materials for Formwork:* Form work shall be made of Mild Steel or Metallic sheets with stiffeners in general unless otherwise specified. It shall be stiff and strong enough to avoid un due deflection when loaded and not liable to warp when exposed to sun and rain or wetted during casting of concrete.

Formwork shall be of rigid construction true to shape and dimensions. It shall be strong enough to withstand the dead and live loads and forces caused by ramming and vibrations of concrete and other incidental loads imposed upon it during and after casting of concrete. It shall be made sufficiently rigid by using adequate number of braces and ties. To make up any settlement in the formwork either before or during the placing of concrete, hardwood wedges shall be provided where required. Error upto 10 mm shall be under tolerance, so the contractor needs to maintain the materials as well as the workmanship upto the perfect expectation.

All formwork shall be so constructed as to be removable in section in the desired sequence, without damaging the surface of concrete or disturbing other sections. Forms should be easy to strip after connecting and no piece should be keyed into the concrete. The completed form work shall be approved after inspection by Executive Engineer.

Gantries, Propping and Centering: Props used for centering shall be of steel unless otherwise specified. All props shall further be provided with double wedges so as to facilitate tightening and easing of shuttering without causing shock to the concrete.

In case of span exceeding 4.5 m and height exceed in 3.5 m suitable horizontal as well as vertical and/or diagonal bracings shall be provided after accounting for all forces including action of wind which may produce lateral forces. In case the height of centering exceeds 3.5 m, the props may be provided in multi-stages. The detail of splicing the props at each stage shall be as per approved drawing. The vertical props shall be erected in spacing of 750-900 mm centre to centre.

The erecting of the props for any structural elements directly on the ground will not be accepted. They shall be erected on wooden beams or any approved base on the ground. The horizontal bracing shall be at a spacing of 1000 mm centre to centre vertically.

Before the casting of concrete is commenced, the props and wedges shall be thoroughly checked to see that they are intact, in line & level, and plumb. While the casting of concrete is in progress, at least one carpenter shall keep a constant watch on the props and take immediate remedial measures, as soon as any of them get loosened.

*Shuttering*: The shuttering shall be of Mild steel boards to give a smooth and even surface and the joints shall not permit leakage of cement grout. It shall be free from loose knots, projected nails,

splits, adhering grout or other defects that may mar the cement surface of concrete. It shall not be green or wet as to shrink after erection. Species of timber which are not affected appreciably by its contact with water shall be used. When metal forms are used, all bolts and nuts shall be counter sunk and well ground to provide a smooth plain surface. Opening for fan clamps and other fittings connected with services shall be provided in the shuttering as directed by Executive Engineer.

The surfaces of shuttering that would come in contact with concrete shall be thoroughly cleaned and well wetted and coated with soap solution, raw linseed oil, or form oil of approved manufacture, or any other approved material such as polythene sheets, to prevent adhesive of concrete to formwork. Executive Engineer shall inspect and accept the formwork as to its strength, alignment and general fitness before placing any concrete in the forms. But such inspection shall not relieve the contractor of his responsibility for safety of men, machinery, materials and for results obtained.

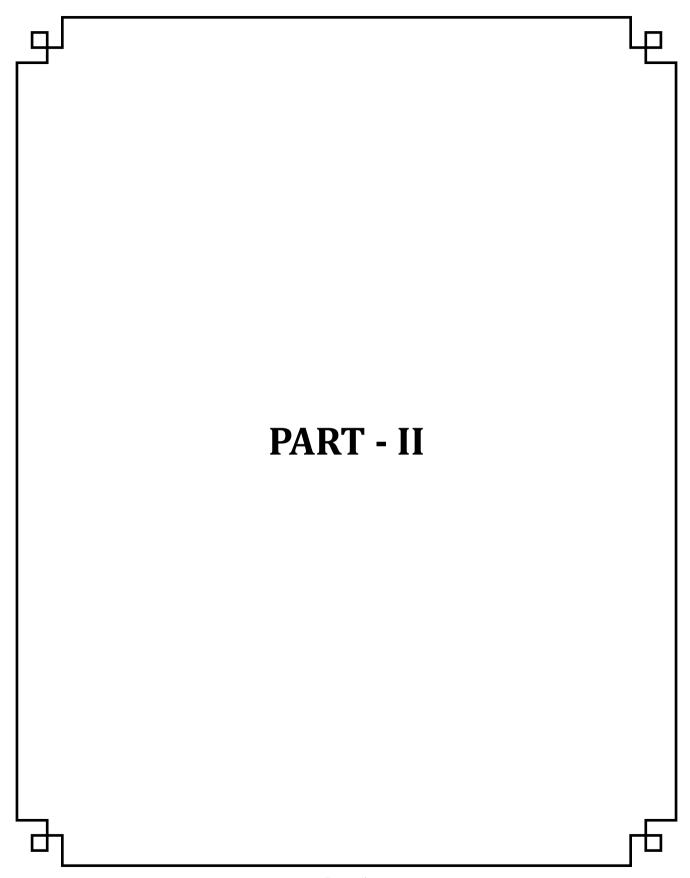
Suitable camber shall be provided in horizontal members of structures especially in long members to counteract the effects of deflection. The camber for beams and slabs shall be 4mm per meter i.e. 1 in 250 and for cantilevers, at free end shall be  $1/50^{\rm th}$  of the projected length or as directed by Executive Engineer. In case of beams and shear walls, the shuttering shall be tied with nut bolts system @ 750 mm centre to centre vertically and horizontally unless instructed.

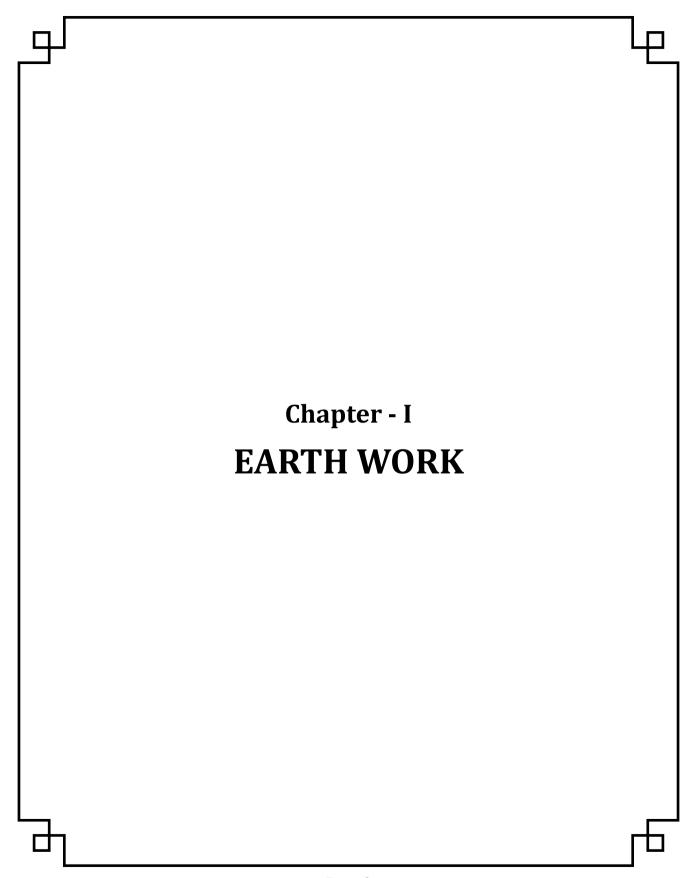
- 1. Off-form finish: The concrete shall be an off form finish, which means that the formwork itself shall be of a good finish to achieve the off form concrete surface smooth and even, free from all board marks, projections, pits and honey combing and all arises shall be square, straight and true. The contractor shall especially see that the finished exposed surface be even and only minimal rendering is required.
- 2. Removal of Formwork: The form work shall be removed avoiding shock or vibration that may cause any damage to concrete. In slab and beam construction, sides of beam shall be stripped first; then the undersides of slab and lastly the underside of the beam. The period that shall elapse after the concrete has been laid before undertaking the work of easing and removal of centering and shuttering shall be as per according to I.S. 456-2000 revision.

In case of cantilever slabs and beams, the centering shall remain till structures for bearing down have been erected and have sufficient strength.

#### Measurement

Nothing extra shall be paid for any kind of curved surfaces, small offsets, decorative designs unless otherwise specified. All these decorative designs and offsets shall be measured accordingly as mentioned earlier and no special provision shall be applied to these measurements. The contractor needs to produce off form finish concrete as much as possible. The formwork & Concrete combined to be paid for payment as specified in the addendum.





## **CHAPTER 1**

# **EARTH WORK**

Item No.	Description of item	Unit	<b>Rate</b> ₹
	Manual Means		
1.1	Earth work in surface excavation for stripping, seating of bund, Road way, by manual means for lowering & leveling the ground for all works other than foundation & depth in all kinds of soil not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work.	m²	91.00
1.2	Earth work in surface excavation for stripping, seating of bund, Road way by manual means for lowering & levelling the ground for all works other than foundation & depth in Ordinary rock and soft rock upto 300mm depth as per drawing and technical specifications, including setting out, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work.	m <sup>3</sup>	575.00
1.3	Earth work in surface excavation by manual means for lowering & levelling the ground by chiselling and wedging in Hard rock for all works other than foundation & depth not exceeding 100 mm as per drawing and technical specifications, including setting out, barricading, caution lights, dressing of excavated surfaces, disposing off the excavated spalls/stuff & stacking the selected spall/ stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work.	m²	177.00
1.4	Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.		
1.4.1	In all kinds of soils Depth upto 1.5 m	m³	242.00
	<b>Note:</b> Cost of De-watering upto 5 % may be added, where required assessment for dewatering shall be made as per site condition		
1.4.2	Depth exceeding 1.5m, but not exceeding 3 m	m³	259.00
	Note: Cost of De-watering upto 10 $\%$ may be added , where required assessment for dewatering shall be made as per site condition		

Item No.	Description of item	Unit	<b>Rate</b> ₹
1.4.3	Depth exceeding 3m, but not exceeding 4.5 m	m³	376.00
	<b>Note:</b> Cost of De-watering upto 10 % may be added, where required assessment for dewatering shall be made as per site condition		
	<b>Note:</b> Add $5\%$ per $m^3$ for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided		
1.5	Earth work excavation by manual means for drains, canals, waste weir draft, approach channels, key trench, foundation of Bridges and such similar works, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatly dressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work.		
1.5.1	In ordinary/soft rock without blasting upto 1.5 m depth	m <sup>3</sup>	299.00
	Note: Cost of De-watering upto 5 $\%$ may be added , where required assessment for dewatering shall be made as per site condition		
1.5.2	Depth exceeding 1.5m, but not exceeding 3 m	m <sup>3</sup>	445.00
	<b>Note:</b> Cost of De-watering upto 7.5 $\%$ may be added, where required assessment for dewatering shall be made as per site condition		
1.5.3	Depth exceeding 3m, but not exceeding 4.5 m	m <sup>3</sup>	590.00
	Generally going 3 m in hard rock is not in practise except for tunnelling. It is desirable to stop at 3 m and add additionality for every 1.5 m		
	Note: Cost of De-watering upto $10\ \%$ may be added , where required assessment for dewatering shall be made as per site condition		
	Add 5% per m <sup>3</sup> for works under foul & sullage situation		
1.6	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or leveling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work.		
1.6.1	In all kinds of soils. Depth upto 1.50m	m	484.00
	Details of laying of cost for $60m$ length of a pipe of an average dia. say $450mm$ . Slope assumed 1 in 200. Earth work and filling - Minimum depth of trench $0.75+0.45=1.20m$ , Average depth = $(1.50+1.20)/2=1.35$ , Width = $0.40+0.45=0.85$ m, $60x0.85x1.35=68.85$ m <sup>3</sup> , 5% for collars = $3.44$ m <sup>3</sup> , Total = $72.29m^3$ Rate as per item no. $1.4.1$		

Item No.	Description of item		Rate₹
1.6.2	Extra for excavating trenches for pipes, cables and similar works in all kinds of soil where excavation width is upto 600 mm for depth exceeding 1.5 m, but not exceeding 3 m. add 20 % extra (Rate is over corresponding basic item for depth upto 1.5 m).		
1.6.3	Extra for excavating trenches for pipes, cables and similar works in all kinds of soil where excavation width is upto 600 mm for depth exceeding 3.0 m, but not exceeding 4.5 m. add 50 $\%$ extra (Rate is over corresponding basic item for depth upto 1.5 m).		
	<b>Note: 1.</b> Additional rates for quantities of works, executed in or under water and /or liquid mud, including pumping water as required cost of 1 m depth 20% of the rate of the item.		
	<b>Note: 2.</b> Additional rates for quantities of works, executed in or under foul position, including pumping water as required cost of 1 m depth 25% of the rate of the item.		
1.7	Construction of Embankment with approved materials deposited at site from roadway cutting and excavation from drain and foundation of other structures graded with desired compaction. (Royalty shall be recovered @ Rs. 60.00/m³)	m³	119.00
1.8	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour, rolling, water, all materials, usage all other appurtenaces required to complete the work.	m³	474.00
	If the height of embankment construction is more than 1.50 m add $5\%$ per m <sup>3</sup> for every 1.50 m height or part there of		
	Deduct 5% per m <sup>3</sup> if rollers are not used and tamping is done manually		
	Add 8% per m <sup>3</sup> for works under foul & sullage situation		
1.9	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	m³	266.00
	<b>Note</b> : 1) Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth is provided		
	2) Add 3% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided		
1.10	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m, and lift upto 1.5 m. Including cost of all labour complete as per specifications	m³	160.00
1.11			433.00

Item No.	Description of item	Unit	Rate₹
	Mechanical Means		
1.12	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work.		
	In all kinds of soils upto 300 mm depth	m <sup>3</sup>	95.00
1.13	Earth work in surface excavation by mechanical means for lowering & leveling the ground without blasting for all works other than foundation in Ordinary/Soft rock & depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work		
	In Ordinary/Soft rock upto 300 mm depth	m <sup>3</sup>	362.00
1.14	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenaces required to complete the work		
1.14.1	In all kinds of soils Depth upto 3 m	m <sup>3</sup>	102.00
	<b>Note:</b> Cost of De-watering upto 5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
1.14.2	Depth 3 m to 6 m	m <sup>3</sup>	117.00
	<b>Note:</b> Cost of dewatering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
1.14.3	Depth above 6 m	m <sup>3</sup>	144.00
	Note: 1) Note: Add 5% per m³ for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided.  2) Cost of dewatering upto 10 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
1.15.1	In ordinary/soft rock without blasting upto 1.5 m depth	m <sup>3</sup>	363.00
	<b>Note:</b> Cost of De-watering upto 5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition.		

Item No.	Description of item	Unit	Rate₹
1.15.2	Depth exceeding 1.5 m, but not exceeding 3 m	m <sup>3</sup>	425.00
	<b>Note:</b> 1) Cost of De-watering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition 2) Add 5% per m³ for works under foul & sullage situation		
1.15.3	Depth exceeding 3m, but not exceeding 4.5m	m <sup>3</sup>	463.00
	<b>Note: 1.</b> Cost of De-watering upto 10 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
	<b>Note: 2.</b> Extra rates for quantities of works, executed in or under foul position, including pumping water as required cost of 1 m depth 25% of the rate of the item.		
	<b>Note: 3.</b> Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth is provided		
	<b>Note: 4.</b> Add 5% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided		
1.16	Earth work excavation for Foundation by Mechanical means depth upto 1.50m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including cost of explosives, dressing of excavated surfaces, disposing off or levelling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, blasting materials, tools, usage of Machinery & all other appurtenaces required to complete the work		
1.16.1	In Hard Rock ( requiring blasting) Depth upto 1.50m	m <sup>3</sup>	554.00
	Note: 1) Add 5% per m³ for works under foul & sullage situation. 2) Add 5% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided. 3) Cost of De-watering upto 5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
1.16.2	Depth exceeding 1.5 m, but not exceeding 3 m	m³	623.00
	<b>Note:</b> Cost of De-watering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
1.16.3	Depth exceeding 3m, but not exceeding 4.5m	m³	711.00
	<b>Note: 1.</b> Cost of De-watering upto 10 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition		
	<b>Note: 2.</b> Extra rates for quantities of works, executed in or under foul position, including pumping water as required cost of 1 m depth 25% of the rate of the item		
	<b>Note: 3.</b> Add 5% per m³ for every additional 1.50 m depth or part thereoff beyond 4.50 m depth is provided		
	<b>Note: 4.</b> Add 3% per m³ for every additional 1.50 m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided		

Item No.	Description of item	Unit	Rate₹
1.17	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata.		
1.17.1	All kinds of soils. Depth upto 1.50 m	m <sup>3</sup>	262.00
1.17.2	Depth exceeding 1.5 m, but not exceeding 3 m	m <sup>3</sup>	331.00
1.17.3	Depth exceeding 3.0 m, but not exceeding 4.50 m	m³	480.00
1.18	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.	m³	87.00
1.19	Earth work excavation for pipeline trenches by mechanical means as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required, utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata.		
1.19.1	Ordinary/soft rock (without requiring blasting) Depth upto 1.50 m	m³	454.00
1.19.2	Depth exceeding 1.5 m, but not exceeding 3 m	m <sup>3</sup>	557.00
1.19.3	Depth exceeding 3 m, but not exceeding 4.50 m	m <sup>3</sup>	633.00
	<b>Note:</b> Add $5\%$ per $m^3$ for every additional 1.50m depth or part thereoff beyond 4.50 m depth		
1.20	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.	m³	156.00
1.21	Earth work excavation for pipeline trenches by mechanical means as per drawing and technical specification, including setting out, construction of shoring, strutting, cost of blasting materials, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required, utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata.		
1.21.1	Hard rock (requiring blasting) Depth upto 1.50 m	m <sup>3</sup>	669.00
1.21.2	Depth exceeding 1.5 m, but not exceeding 3 m	m³ 752.0	
1.21.3	Depth exceeding 3 m, but not exceeding 4.50 m	m <sup>3</sup>	830.00
	<b>Note:</b> Add 5% per m <sup>3</sup> for evey additional 1.50 m depth or part thereoff beyond 4.50 m depth		

Item No.	Description of item	Unit Rate ₹		
1.21.4	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.		156.00	
1.21.5	Hard rock (blasting prohibited) Depth upto 1.50 m	m³	1014.00	
1.21.6	Depth exceeding 1.5 m, but not exceeding 3 m	m <sup>3</sup>	1120.00	
1.21.7	Depth exceeding 3 m, but not exceeding 4.50 m	m <sup>3</sup>	1196.00	
	Note: 1. Add 5% per m³ for every additional 1.50m depth or part thereoff beyond 4.50 m depth.  2. Additional rates for quantities of works, executed in or under water and /or liquid mud, including pumping water as required cost of 1 m depth 20% of the rate of the item.  3. Additional rates for quantities of works, executed in or under foul position,including pumping water as required cost of 1 m depth 25% of the rate of the item.  4. If the width of excavation is less than 0.60 m, Add 25% extra /m³ for the above rates.			
1.22	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials	m <sup>3</sup>	156.00	
	Note: 1. Extra rates for quantities of works, executed in or under water and /or liquid mud, including pumping water as required cost of 1 m depth 20% of the rate of the item.  2. Extra rates for quantities of works, executed in or under foul position, including pumping water as required cost of 1 m depth 25% of the rate of the item.  3. If the width of excavation is less than 0.60 m, Add 25% extra /m³ for the above rates.			
1.23	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications.	m³	m³ 2682.00	

# Chapter - II CONCRETE WORKS

- The rates are excluding the cost of steel and formwork.
- Percentage as per Addendum-I to be adopted in case formwork is considered.

## **CHAPTER 2**

# **CONCRETE WORKS**

Item No.	Description of Item	Unit	Rate₹
2.1	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications.		
2.1.1	Mix 1:5:10 Using 40 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	5338.00
2.1.2	Mix 1:4:8 Using 40 mm nominal size graded crushed coarse aggregates	m³	5664.00
2.1.3	Mix 1:3:6 Using 40 mm nominal size graded crushed coarse aggregates	m³	5989.00
2.1.4	Mix 1:3:6 Using 20 mm nominal size graded crushed coarse aggregates	m³	6217.00
2.1.5	Mix 1:2:4 Using 40 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6156.00
2.1.6	Mix 1:2:4 Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6243.00
2.2	Providing and laying in position Cement Concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications.		
2.2.1	M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m³	6287.00
2.2.2	M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA)	m <sup>3</sup>	6248.00
2.2.3	M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m³	6336.00
2.2.4	M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA)	m <sup>3</sup>	6295.00
2.2.5	M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m³	6499.00
2.2.6	M35 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m³	6744.00
2.2.7	M 40 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6990.00
2.3	Providing and laying in Cement Concrete for all Basement & surface level works, return walls, retaining walls, sunken floors etc. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.		

Item No.	Description of Item	Unit	Rate₹
2.3.1	M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6323.00
2.3.2	M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup> 6480.00	
2.3.3	M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m³ 6605.00	
2.3.4	M 35 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	7006.00
2.3.5	M 40 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	7261.00
2.4	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.		
2.4.1	Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6404.00
2.4.2	M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6323.00
2.4.3	M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6336.00
2.4.4	M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6742.00
2.4.5	M35 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	7084.00
2.4.6	M40 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	7281.00
2.5	Providing and laying in position Cement Concrete for all Super structures of building, Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.		
2.5.1	M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6630.00
2.5.2	M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	6843.00
2.5.3	M30 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	m <sup>3</sup>	7007.00
2.5.4	M 35 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	re graded crushed coarse aggregates m³	
2.5.5	M 40 Design Mix Using 20 mm nominal size graded crushed coarse aggregates m³		7522.00
2.6	Formwork For Staging		
2.6.1	For rates upto 5 m Height, adopt Formwork percentage as per Addendum-I for item no 2.5.1 to 2.5.5		

Item No.	Description of Item	Unit	<b>Rate</b> ₹
2.6.2	Beyond 5 m upto 10 m add 12% extra on formwork for staging & base preparation		
2.6.3	Beyond 10 m upto 15 m add 14% extra on formwork for staging & base preparation		
2.6.4	Beyond 15 m upto 20 m add 16% extra on formwork for staging & base preparation		
2.6.5	Beyond 20 m upto 25 m add 18% extra on formwork for staging & base preparation		
2.6.6	Beyond 25 m add 20% extra on formwork for staging & base preparation		
2.7	Providing waterproofing & durability enhancing admixture with approval from MORT&H for use on road & bridge projects with IRC accreditation. The Dosage should be at 0.8% by weight of cement + cementitious material (or such dosage as desired to meet durability criteria) as per technical specification.		
2.8	Self Compacting Concrete		
	Supply and placing the Design Mix of M-30 Grade for Self Compacting Concrete corresponding to IS 456-2000 (Re-affirmed 2021) and relevant IS codes using Batching plant, Transit mixer and concrete pump with 12.5 mm size graded machine crushed hard metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like cement, cement substitutes like fly ash, GGBS, etc., fine aggregate (sand), coarse aggregate, Admixture, water etc., to site including and sales and other taxes on all materials including all operational, incidental and labour charges, but excluding cost of steel and its fabrication & formwork charges for finished item of work with minimum cement content as per IS code including pumping & curing etc complete for finished item of work (RCC slabs, Beams, Columns, Lintels, Water Tanks, RCC Walls in Buildings).		
2.8.1	Upto 5m height	m <sup>3</sup>	8200.00
2.8.2	Add extra 5% on form work for staging for 5 to 10 m		
2.8.3	Add extra 5 % on form work for staging beyond 10 m		
2.9	Stamping of Concrete		
	Applying stamping finish on M30 grade concrete on PCC sub grade, applying and finishing with stamp/stencil of approved pattern and color in accordance with Engineers instructions & approved drawings with use of any approved brand of color hardener of 4.5 kg/m2, including floating of color hardener over the concrete surface with different types of floaters, application of release agent of 0.12 to 0.13kg/m2 depending on matching combination of selected color, stamping over the concrete surface with stamping tools , cleaning of surface with water and groove cutting of finished concrete and application of acrylic based sealer for final finish. Coverage of sealer should be 0.30litre/m2 per coat. The cost is inclusive of manpower, cutting machine, sprayer and all tools tackles for all activities and complete smooth and finish as per technical specifications. (The cost of Concrete shall be paid separately)	m <sup>2</sup>	440.00

Item No.	Description of Item	Unit	<b>Rate</b> ₹
2.10	Ready Mix Concrete (RMC) with Cement & Cementitious Materials.		
	Providing and laying in position Ready Mixed or Batch Mixed concrete as per IS 10262 mix design procedure for Cement Concrete works in all types of Structures other than Road works, using coarse aggregate and fine aggregate derived from natural sources, Ordinary Portland Cement (OPC) @ 75% & GGBS @ 25% proportion, admixtures to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the Engineer-in-charge.		
a.	RMC M10 Grade	m <sup>3</sup>	5866.00
b.	RMC M20 Grade	m <sup>3</sup>	6102.00
c.	RMC M25 Grade	m <sup>3</sup>	6219.00
d.	RMC M30 Grade	m³	6632.00
e.	RMC M35 Grade	m <sup>3</sup>	6750.00
f.	RMC M40 Grade	m³	6985.00
2.11	Steel Fabrication		
	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.		
a.	Buildings	t	89457.00
b.	Foundations of Bridges	t	86206.00
c.	Sub structure of Bridges	t	86433.00
d.	Super structure of Bridges	t	86658.00
e.	Dam & Allied Works	t	88842.00
f.	Canal & Allied Works	t	90010.00
g.	Tunnel Works	t	91573.00
h.	All other type of structures	t	79011.00
2.12	Supplying, fitting and placing Mild Steel Reinforcement complete as per drawing and technical specification.	t	73713.00

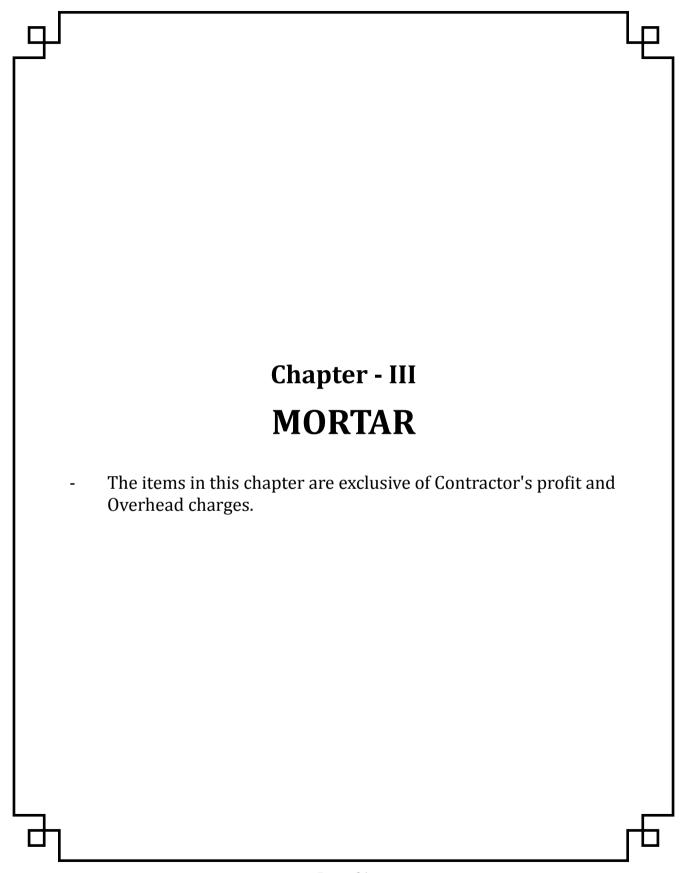
#### Note:

- 1. The cost of concrete is inclusive of lead but exclusive of lift.
- 2. The items of concrete with grade M40 and above shall be produced in RMC batching plants of higher capacity. The cost shall be workedout based on approved mix designs.
- 3. The usage charges for machinery means the cost inclusive of operating charges. i.e separate cost for crew & fuel shall not be paid unless specified in extra ordinary cases.

#### 4. Additionalities

- 1% of the finished rate shall be paid as lift charges extra above 3.6 m height at an interval of 3 m thereon.
- 5% of the finished rate of concrete shall be paid extra for concreting in foul conditions.
- 5% of the finished rate of concrete shall be paid extra for concreting in under water conditions.
- 5. The vibrators for concrete used shall conform to IS 3558 (1983) reffirmed 2004.
- 6. The height of the Building shall be considered as 3.6 m as per NBC 2016 for calculation of lifts.
- 7. The finished cost of concrete are exclusive of Steel (Re-inforcement) & formwork charges.
- 9. Necessary additional over head charges shall be added in rate analysis of Bridge works for Earth work and Concrete works as per table below:

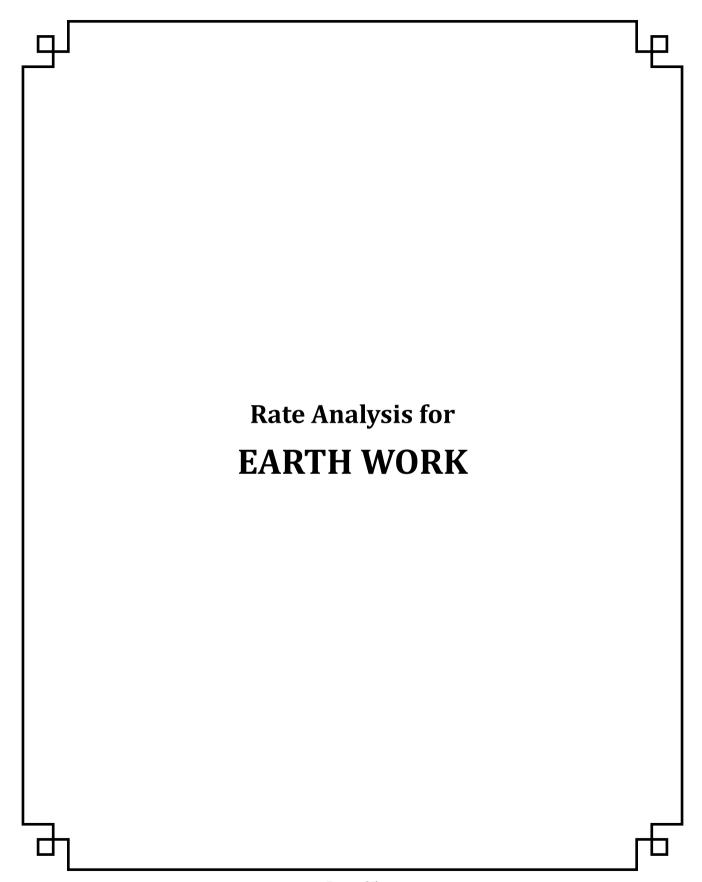
Sl. No.	Description	Additional Overhead charges to be considered
1.	Minor Bridges	10%
2.	Bridge cum Barrage	5%
3.	Major Bridges	10%
4.	Bridge Works (Rehabilitation)	20%
5.	Tunnel Works	15%



## **CHAPTER 3**

# **MORTAR**

Item No.	Description of Item	Unit	<b>Rate</b> ₹
3.1	Providing Cement mortar 1:1 (1 cement : 1 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	7881.00
3.2	Providing Cement mortar 1:2 (1 cement : 2 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	6239.00
3.3	Providing Cement mortar 1:3 (1 cement : 3 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	5420.00
3.4	Providing Cement mortar 1:4 (1 cement : 4 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	4658.00
3.5	Providing Cement mortar 1:5 (1 cement : 5 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	4248.00
3.6	Providing Cement mortar 1:6 (1 cement : 6 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	3896.00
3.7	Providing Cement mortar 1:2 (1 cement : 2 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	6239.00
3.8	Providing Cement mortar 1:3 (1 cement : 3 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	5420.00
3.9	Providing Cement mortar 1:4 (1 cement : 4 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	<b>m</b> <sup>3</sup>	4658.00
3.10	Providing Cement mortar 1:5 (1 cement : 5 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	4248.00
3.11	Providing Cement mortar 1:6 (1 cement : 6 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.		3896.00
3.12	Providing Cement mortar 1:2 (1 cement : 2 stone dust) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	6012.00
3.13	Providing Mud mortar including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.	m³	702.00
	<b>Note :</b> The items in this chapter are exclusive of Contractor's profit and Overhead charges.		



Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Earth Work by Manual Means				
1.1	Earth work in surface excavation for stripping, seating of bund, Road way, by manual means for lowering & leveling the ground for all works other than foundation & depth in all kinds of soil not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or leveling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work				
	Details of cost for 100 m2	A			
A	LABOUR				
	Mazdoor Heavy	day	6.80	589.00	4005.20
	Mazdoor Light	day	5.60	589.00	3298.40
	Sub Total				7303.60
В	Add 1 % Water charges				73.04
	Sub Total				7376.64
	Add Shoring and shuttering 2% ( A+B)				147.53
					7524.17
С	Over Head Charges 10 % ( A+B)				752.42
	Contractor's Profit 10% (A+B+C)				827.66
	Cost for 100m <sup>2</sup>				9104.24
	Cost per m <sup>2</sup>				91.00
1.2	Earth work in surface excavation for stripping, seating of bund, Road way by manual means for lowering & levelling the ground for all works other than foundation & depth in Ordinary rock and soft rock upto 300mm depth as per drawing and technical specifications, including setting out, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work				

l. No.	Specification	Unit	Qty	Rate ₹	Amount
	Details of cost for 120m <sup>3</sup>				
	LABOUR				
	Mazdoor Heavy	day	2.80	589.00	1649.20
	Mazdoor Light	day	70.00	589.00	41230.00
В	MACHINERY				
	Truck 5.5 m <sup>3</sup> capacity	hr	10.00	1412.00	14120.00
	Total				56999.20
С	Over Head Charges 10 % ( A+B)				5699.92
	Contractor's Profit 10% (A+B+C)				6269.91
	Cost for 120m <sup>3</sup>				68969.03
	Cost per m <sup>3</sup>				575.00
1.3	Earth work in surface excavation by manual means for lowering & leveling the ground by chiselling and wedging in Hard rock for all works other than foundation & depth not exceeding 100 mm as per drawing and technical specifications, including setting out, barricading, caution lights, dressing of excavated surfaces, disposing off the excavated spalls/stuff & stacking the selected spall/stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work				
	Details of cost for 100 m <sup>2</sup>				
A	LABOUR	1	6.00	F00.00	4005.00
	Mazdoor Heavy	day	6.80	589.00	4005.20
	Mazdoor Light	day	5.60	589.00	3298.40
	Stone Chisler Class - II	day	8.00	601.00	4808.00
	Blacksmith - Class - II	day	4.00	601.00	2404.00
	Sub Total				14515.60
В	Add 1 % Water charges				145.16
	Sub Total				14660.76
	Over Head Charges 10 % ( A+B)				1466.08
	Contractor's Profit 10% (A+B+C)				1612.68
	Cost for 100m <sup>2</sup>				17739.51

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.4	Earth work excavation by manual means for drains, canals, waste weir draft, approach channels, key trench, foundation of Buildings & Bridges and such similar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work				
1.4.1	In all kinds of soils Depth upto 1.5 m				
	Details of cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.70	589.00	412.30
	Mazdoor Light	day	2.70	589.00	1590.30
	Sub Total				2002.60
В	Over Head Charges 10 % ( A)				200.26
	Contractor's Profit 10% (A+B)				220.29
	Cost for 10m <sup>3</sup>				2423.15
	Cost per m <sup>3</sup>				242.00
	<b>Note</b> : Cost of De-watering upto 5 % may be added, where required assessment for dewatering shall be made as per site condition				
1.4.2	Depth exceeding 1.5m, but not exceeding 3 m				
	Details of cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.14	589.00	82.46
	Mazdoor Light	day	3.50	589.00	2061.50
	Sub Total				2143.96
В	Over Head Charges 10 % ( A)				214.40
	Contractor's Profit 10% (A+B)				235.84
	Cost for 10m <sup>3</sup>				2594.19
	Cost per m <sup>3</sup>				259.00
	<b>Note:</b> Cost of De-watering upto 10 % may be added, where required assessment for dewatering shall be made as per site condition				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.4.3	Depth exceeding 3m, but not exceeding 4.5 m				
	Details of cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.28	589.00	164.92
	Mazdoor Light	day	5.00	589.00	2945.00
	Sub Total				3109.92
В	Over Head Charges 10 % ( A)				310.99
	Contractor's Profit 10% (A+B)				342.09
	Cost for 10m <sup>3</sup>				3763.00
	Cost per m3				376.00
	<b>Note</b> : Cost of De-watering upto 10 % may be added, where required assessment for dewatering shall be made as per site condition	. ^			
	<b>Note</b> : Add 5% per m <sup>3</sup> for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided				
1.5	Earth work excavation by manual means for drains, canals, waste weir draft, approach channels, key trench, foundation of Bridges and such similar works, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatly dressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work.				
1.5.1	In ordinary/soft rock without blasting upto 1.5 m depth				
A	LABOUR				
	Mazdoor Heavy	day	0.20	589.00	117.80
	Mazdoor Light	day	4.00	589.00	2356.00
	Sub Total				2473.80
В	Over Head Charges 10 % ( A)				247.38
	Contractor's Profit 10% (A+B)				272.12
	Cost for 10m <sup>3</sup>				2993.30
	Cost per m <sup>3</sup>				299.00
	Note: Cost of De-watering upto 5 % may be added, where required assessment for dewatering shall be made as per site condition				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.5.2	Depth exceeding 1.5m, but not exceeding 3 m				
	Details of cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.24	589.00	141.36
	Mazdoor Light	day	6.00	589.00	3534.00
	Total				3675.36
В	Over Head Charges 10 % ( A)				367.54
	Contractor's Profit 10% (A+B)				404.29
	Cost for 10m <sup>3</sup>				4447.19
	Cost per m <sup>3</sup>				445.00
	<b>Note</b> : Cost of De-watering upto 7.5 % may be added, where required assessment for dewatering shall be made as per site condition	. ^			
1.5.3	Depth exceeding 3m, but not exceeding 4.5 m				
	Details of cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.28	589.00	164.92
	Mazdoor Light	day	8.00	589.00	4712.00
	Sub Total				4876.92
В	Over Head Charges 10 % ( A)				487.69
	Contractor's Profit 10% (A+B)				536.46
	Cost for 10m <sup>3</sup>				5901.07
	Cost per m <sup>3</sup>				590.00
	Generally going 3 m in hard rock is not in practise except for tunnelling. It is desirable to stop at 3 m and add additionality for every 1.5 m				
	<b>Note</b> : Cost of De-watering upto 10 % may be added, where required assessment for dewatering shall be made as per site condition				
	Add 5% per m <sup>3</sup> for works under foul & sullage situation				
1.6	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	selected earth for reuse in a radius of 50 m. Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift upto 1.5 m including cost of labour, tools, usage& other appurtenances required to complete the work.				
1.6.1	In all kinds of soils. Depth upto 1.50m				
	Details of laying of cost for 60m length of a pipe of an average dia. say 450mm. Slope assumed 1 in 200. Earth work and filling- Minimum depth of trench $0.75+0.45=1.20$ m, Average depth = $(1.50+1.20)/2=1.35$ , Width =0.40 + 0.45 = 0.85 m, $60x0.85x1.35=68.85$ m $^3$ , 5% for collars = 3.44 m $^3$ , Total = 72.29 m $^3$ Rate as per item no. 1.4.1	m <sup>3</sup>	72.29	242.00	17494.18
	Filling available excavated earth in trenches Rate as per item 1.10	m <sup>3</sup>	72.29	160.00	11566.40
	TOTAL Cost of 60m length of pipe				29060.58
	TOTAL Cost of 1m length of pipe				484.00
1.6.2	Extra for excavating trenches for pipes, cables and similar works in all kinds of soil where excavation width is upto 600 mm for depth exceeding 1.5 m, but not exceeding 3 m. add 20 % extra (Rate is over corresponding basic item for depth upto 1.5 m).				
1.6.3	Extra for excavating trenches for pipes, cables and similar works in all kinds of soil where excavation width is upto 600 mm for depth exceeding 3.0 m, but not exceeding 4.5 m. add 50 % extra (Rate is over corresponding basic item for depth upto 1.5 m).				
	<b>Note: 1</b> . Additional rates for quantities of works, executed in or under water and /or liquid mud, including pumping water as required cost of 1 m depth 20% of the rate of the item				
	<b>Note: 2</b> . Additional rates for quantities of works, executed in or under foul position, including pumping water as required cost of 1 m depth 25% of the rate of the item				
1.7	Construction of Embankment with approved materials deposited at site from Roadway cutting and excavation from drain and foundation of other structures graded with desired compaction.				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Details of cost for 450 m <sup>3</sup> .				
A	MATERIALS				
	Available Earth (Including Royalty)	m3	450.00	60.00	27000.00
	Water	KL	36.00	44.00	1584.00
В	LABOUR				
	Mate	day	0.04	589.00	23.56
	Mazdoor heavy	day	1.00	589.00	589.00
С	MACHINERY				
	Motor grader 3.35 m blade	hr	2.18	4427.00	9637.58
	Water tanker (12kl)	hr	1.09	945.00	1026.65
	Vibratory Roller 10 t	hr	2.18	2005.00	4378.92
					44239.71
D	Over Head Charges 10 % ( A+B+C)				4423.97
	Contractor's Profit 10% (A+B+C+D)				4866.37
	Total cost for 450m <sup>3</sup>				53530.05
	Cost per m <sup>3</sup>				119.00
1.8	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour,rolling,water,all materials,usage & all other appurtenaces required to complete the work.				
	Details of cost for 450 m <sup>3</sup>				
A	MATERIALS				
	Gravel 2.36 mm (Including Royalty)	m <sup>3</sup>	517.50	288.00	149040.00
	Water	KL	36.00	44.00	1584.00
В	LABOUR				
	Mate	day	0.08	589.00	47.12
	Mazdoor heavy	day	2.00	589.00	1178.00
С	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	5.81	1550.00	9010.15

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Motor grader 3.35 m blade	hr	2.18	4427.00	9637.58
	Water tanker (12kl)	hr	1.50	945.00	1417.50
	Vibratory Roller 10 t	hr	2.18	2005.00	4378.92
					176293.27
D	Over Head Charges 10 % ( A+B+C)				17629.33
	Contractor's Profit 10% (A+B+C+D)				19392.26
	Total cost for 450m <sup>3</sup>				213314.86
	Cost per m <sup>3</sup>				474.00
	<b>Note</b> : If the height of embankment construction is more than 1.50m add 5% per m <sup>3</sup> for every 1.50 m height or part there of				
	<b>Note</b> :Deduct 5% per m <sup>3</sup> if rollers are not used and tamping is done manually				
	Add 8% per m <sup>3</sup> for works under foul & sullage situation				
1.9	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				
	Details of cost for 10 m <sup>3</sup> .				
A	LABOUR				
	Mazdoor Heavy	day	0.20	589.00	117.80
	Mazdoor Light	day	3.50	589.00	2061.50
	Sub Total				2179.30
	Add 1 % Water charges				21.79
	Sub Total				2201.09
В	Over Head Charges 10 % (A)				220.11
	Contractor's Profit 10% (A+B)				242.12
	Cost for 10m <sup>3</sup>				2663.32
	Cost per m <sup>3</sup>				266.00
	<b>Note 1</b> Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth is provided				
	<b>Note 2</b> Add 3% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.10	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cm in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m , and lift upto 1.5 m. Including cost of all labour complete as per specifications				
	Details of cost for 10 m <sup>3</sup> .				
A	Rate as per Item no 1.10	m <sup>3</sup>	6.00	266.00	1596.00
	Cost for 10m <sup>3</sup>				1596.00
	Cost per m <sup>3</sup>				160.00
1.11	Filling approved earth (excluding rock) in trenches, plinth, sides of foundations and other similar works etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	^			
	Details of cost for 10 m <sup>3</sup> .				
A	MATERIALS				
	Ordinary Earth (with Royalty)	m3	11.50	231.00	2656.50
В	LABOUR				
	Mazdoor Heavy	day	0.50	589.00	294.50
	Mazdoor Light	day	1.00	589.00	589.00
	Sub Total				3540.00
	Add 1 % Water charges				35.40
	Sub Total				3575.40
С	Over Head Charges 10 % (A)				357.54
	Contractor's Profit 10% (A+B)				393.29
	Cost for 10m <sup>3</sup>				4326.23
	Cost per m <sup>3</sup>				433.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Earth work by Mechanical Means				
1.12	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including Cost of labour, tools, usage of machinery & other appurtenances required to complete the work.				
	Details of Cost for 180 m <sup>3</sup> .	A	<u></u>		
	Average output of Hydraulic Excavator per hour = 30m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> capacity	hr	6.00	1550.00	9300.00
	Usage charges of tipper	hr	2.00	1412.00	2824.00
В	LABOUR				
	Mazdoor Heavy	day	0.90	589.00	530.10
	Mazdoor light	day	2.00	589.00	1178.00
	Sub Total				13832.10
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				276.64
	Sub Total				14108.74
D	Over Head Charges 10 % ( A+B+C)				1410.87
	Contractor's Profit 10% (A+B+C+D)				1551.96
	Cost for 180 m <sup>3</sup>				17071.58
	Cost of 1 m <sup>3</sup> .				95.00
1.13	Earth work in surface excavation by mechanical means for lowering & leveling the ground without blasting for all works other than foundation in Ordinary /Soft rock & depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	lift upto 1.5 m including Cost of labour, tools, usage of machinery & other appurtenances required to complete the work.				
	Details of Cost for 10 m <sup>3</sup>				
	Average output of Hydraulic Excavator per hour = $30m^3$				
Α	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> capacity	hr	0.30	1550.00	465.00
	Front end Backhoe-loader 1 m³ bucket capacity	hr	0.15	1361.00	204.15
В	LABOUR				
	Mazdoor Heavy	day	0.50	589.00	294.50
	Mazdoor light	day	0.55	589.00	323.95
	Rock Excavator	day	0.71	620.00	437.10
	Rock Breaker	day	1.59	620.00	985.80
	Rock Hole Driller	day	0.36	620.00	220.10
	Sub Total				2930.60
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				58.61
	Sub Total				2989.21
D	Over Head Charges 10 % ( A+B+C)				298.92
	Contractor's Profit 10% (A+B+C+D)				328.81
	Cost for 10 m <sup>3</sup> .				3616.95
	Cost of 1 m <sup>3</sup> .				362.00
1.14	Earth work excavation for Foundation by mechanical means for all works & depth upto 3 m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including Cost of labour, tools, usage of machinery & other appurtenaces required to complete the work.				
1.14.1	In all kinds of soils Depth upto 3 m				
	Taking output = 240 m <sup>3</sup>				
A	LABOUR				
	Mazdoor heavy	day	0.32	589.00	188.48
	Mazdoor Light	day	8.00	589.00	4712.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	6.00	1550.00	9300.00
	Usage charges of tipper	hr	4.00	1412.00	5648.00
	Sub Total				19848.48
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				396.97
	Sub Total				20245.45
D	Over Head Charges 10 % ( A+B+C)				2024.54
	Contractor's Profit10% ( A+B+C+D)				2227.00
	Cost for 240 m <sup>3</sup>				24496.99
	Cost of 1 m <sup>3</sup> .				102.00
	<b>Note:</b> Cost of De-watering upto 5 % of (A+B) may be added , where required assessment for dewatering shall be made as per site condition				
1.14.2	Depth 3 m to 6 m	7			
	Taking output = 210 m <sup>3</sup>				
A	LABOUR				
	Mazdoor heavy	day	0.32	589.00	188.48
	Mazdoor Light	day	8.00	589.00	4712.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	6.00	1550.00	9300.00
	Usage charges of tipper	hr	4.00	1412.00	5648.00
	Sub Total				19848.48
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				396.97
	Over Head Charges 10 % (A+B+C)				2024.54
D	Contractor's Profit 10% (A+B+C+D)				2227.00
	Cost for 210 m <sup>3</sup>				24496.99
	Cost of 1 m <sup>3</sup> .				117.00
	Note: Cost of De-watering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition				
1.14.3	Depth above 6 m				
	Taking output = 180 m <sup>3</sup>				
A	LABOUR				
	Mazdoor heavy	day	0.40	589.00	235.60

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Mazdoor Light	day	10.00	589.00	5890.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	6.00	1550.00	9300.00
	Usage charges of tipper	hr	4.00	1412.00	5648.00
	Sub Total				21073.60
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				421.47
D	Over Head Charges 10 % (A+B+C)				2149.51
	Contractor's Profit 10% (A+B+C+D)				2364.46
	Cost for 180 m <sup>3</sup>				26009.04
	Cost of 1 m <sup>3</sup> .				144.00
	Note: 1) Add 5% per m³ for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided 2) Cost of dewatering upto 10 % of (A+B) may be added , where required assessment for dewatering shall be made as per site condition				
1.15.1	In ordinary/soft rock without blasting upto 1.5 m depth				
	Details of Cost for 10 m <sup>3</sup> .				
	Average output of Hydraulic Excavator per hour = $30m^3$				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy	day	0.50	589.00	294.50
	Mazdoor light	day	0.55	589.00	323.95
	Rock Excavator	day	0.71	620.00	437.10
	Rock Breaker	day	1.59	620.00	985.80
	Rock Hole Driller	day	0.36	620.00	220.10
	Sub Total				2938.25
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				58.77
	Sub Total				2997.02
D	Over Head Charges 10 % ( A+B+C)				299.70
	Contractor's Profit 10% (A+B+C+D)				329.67

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Cost for 10 m <sup>3</sup>				3626.39
	Cost of 1m <sup>3</sup> .				363.00
	<b>Note:</b> Cost of De-watering upto 5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition.				
1.15.2	Depth exceeding 1.5 m, but not exceeding 3 m				
	Details of Cost for 10 m <sup>3</sup>				
	Average output of Hydraulic Excavator per hour is $30\text{m}^3$				
A	MACHINERY				
	Hydraulic Excavator 1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy	day	0.65	589.00	382.85
	Mazdoor light	day	0.70	589.00	412.30
	Rock Excavator	day	0.88	620.00	545.60
	Rock Breaker	day	1.75	620.00	1085.00
	Rock Hole Driller	day	0.55	620.00	341.00
	Sub Total				3443.55
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				68.87
	Sub Total				3512.42
D	Over Head Charges 10 % ( A+B+C)				351.24
	Contractor's Profit 10% (A+B+C+D)				386.37
	Cost for 10 m <sup>3</sup> Total				4250.03
	Cost of 1m <sup>3</sup> .				425.00
	<b>Note:</b> 1) Cost of De-watering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition 2)Add 5% per m³ for works under foul & sullage situation				
1.15.3	Depth exceeding 3m, but not exceeding 4.5m				
	Details of Cost for 10 m <sup>3</sup> .				
	Average output of Hydraulic Excavator per hour = $30\text{m}^3$				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor light	day	0.80	589.00	471.20
	Rock Excavator	day	0.99	620.00	613.80
	Rock Breaker	day	1.85	620.00	1147.00
	Rock Hole Driller	day	0.65	620.00	403.00
	Sub Total				3753.55
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)	A			75.07
	Sub Total				3828.62
D	Over Head Charges 10 % ( A+B+C)				382.86
	Contractor's Profit 10% (A+B+C+D)				421.15
	Cost for 10 m <sup>3</sup> .Total				4632.63
	Cost of 1m <sup>3</sup> .				463.00
	<b>Note1</b> : Cost of De-watering upto 10 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition				
	<b>Note2</b> : Extra rates for quantities of works, executed in or under foul position, including pumping water as required Cost of 1 m depth 25% of the rate of the item				
	<b>Note 3</b> : Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth is provided				
	<b>Note 4</b> : Add 5% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided				
1.16	Earth work excavation for Foundation by Mechanical means depth upto 1.50m, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, including Cost of explosives, dressing of excavated surfaces, disposing off or levelling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including Cost of labour, blasting materials, tools, usage of Machinery & all other appurtenaces required to complete the work.				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.16.1	In Hard Rock ( requiring blasting) Depth upto 1.50m				
	Details of Cost for 10 m <sup>3</sup> .				
	Average output of Hydraulic Excavator per hour = 30m <sup>3</sup>				
A	MATERIALS				
	Blasting Powder	kg	3.93	45.00	176.85
	Fuse wire	each	4.00	15.00	60.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	day	0.30	1550.00	465.00
	Usage charges of tipper	day	0.15	1412.00	211.80
С	LABOUR				
	Mazdoor Heavy	day	0.50	589.00	294.50
	Mazdoor light (Coolie day )	day	0.55	589.00	323.95
	Rock Excavator	day	1.06	620.00	657.20
	Rock Breaker	day	2.83	620.00	1751.50
	Rock Hole Driller	day	0.89	620.00	548.70
	Sub Total				4489.50
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				89.79
E	Over Head Charges 10 % ( A+B+C+D)				457.93
	Contractor's Profit 10%( A+B+C+D+E)				503.72
	Cost for 10 m <sup>3</sup> .Total				5540.94
	Cost of 1m <sup>3</sup> .				554.00
	Note:1) Add 5% per m³ for works under foul & sullage situation.  2) Add 5% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided.  3) Cost of De-watering upto 5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition.				
1.16.2	Depth exceeding 1.5 m, but not exceeding 3 m				
	Details of Cost for 10 m <sup>3</sup> .				
	Average output of Hydraulic Excavator per hour = $30m^3$				
A	Wheeled Dozer				
	Blasting powder	kg	4.10	45.00	184.50
	Blasting fuse (fuse wire)	each	8.00	15.00	120.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
С	LABOUR				
	Rock Excavator	day	1.32	620.00	818.40
	Rock Breaker	day	3.00	620.00	1860.00
	Rock Hole Driller	day	0.95	620.00	589.00
	Mazdoor Heavy	day	0.65	589.00	382.85
	Mazdoor light	day	0.70	589.00	412.30
	Sub Total				5043.85
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)	A			100.88
E	Over Head Charges 10 % ( A+B+C+D)				514.47
	Contractor's Profit 10 % ( A+B+C+D+E)				565.92
	Cost for 10 m <sup>3</sup> .Total	7			6225.12
	Cost of 1m <sup>3</sup> .				623.00
	<b>Note:</b> Cost of De-watering upto 7.5 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition				
1.16.3	Depth exceeding 3m, but not exceeding 4.5m				
	Details of Cost for 10 m <sup>3</sup> .				
	Average output of Hydraulic Excavator per hour = $30m^3$				
Α	MATERIALS				
	Blasting powder	kg	4.50	45.00	202.50
	Blasting fuse (fuse wire)	each	12.00	15.00	180.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
С	LABOUR				
	Mazdoor Heavy	day	0.70	589.00	412.30
	Mazdoor light	day	0.75	589.00	441.75
	Rock Excavator	day	1.50	620.00	930.00
	Rock Breaker	day	3.50	620.00	2170.00
	Rock Hole Driller	day	1.20	620.00	744.00
	Sub Total				5757.35

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				115.15
Е	Over Head Charges 10 % ( A+B+C+D)				587.25
	Contractor's Profit 10% ( A+B+C+D+E)				645.97
	Cost for 10 m <sup>3</sup> .Total				7105.72
	Cost of 1m <sup>3</sup>				711.00
	<b>Note 1</b> : Cost of De-watering upto 10 % of (A+B) may be added, where required assessment for dewatering shall be made as per site condition				
	<b>Note: 2</b> .Extra rates for quantities of works, executed in or under foul position,including pumping water as required Cost of 1 m depth 25% of the rate of the item				
	<b>Note 3</b> Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth is provided				
	<b>Note 4</b> Add 3% per m3 for every additional 1.50m depth or part thereoff beyond initial 1.50 m depth if shoring and strutting is provided				
1.17	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means above 600 mm (Depth upto 1.50m not exceeding 1.5m in width ) trench width as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required, utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata.				
1.17.1	All kinds of soils. Depth upto 1.50m				
	Details of Cost for 10 m <sup>3</sup> .				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Backhoe-loader 1 m <sup>3</sup> bucket capacity	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy	day	0.40	589.00	235.60
	Mazdoor light	day	2.05	589.00	1207.45
	Sub Total				2119.85
	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				42.40

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
С	Sub Total				2162.25
D	Over Head Charges 10 % ( A+B+C)				216.22
	Contractor's Profit 10% (A+B+C+D)				237.85
	Cost for 10 m <sup>3</sup> .				2616.32
	Cost of 1m <sup>3</sup> .				262.00
1.17.2	Depth exceeding 1.5 m, but not exceeding 3 m				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Backhoe-loader 1 m <sup>3</sup> bucket capacity	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy ( Mate)	day	0.65	589.00	382.85
	Mazdoor light	day	2.75	589.00	1619.75
	Sub Total	4 (			2679.40
	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				53.59
С	Sub Total				2732.99
D	Over Head Charges 10 % ( A+B+C)				273.30
	Contractor's Profit 10% (A+B+C+D)				300.63
	Cost for 10 m <sup>3</sup> .				3306.92
	Cost of 1m <sup>3</sup> .				331.00
1.17.3	Depth exceeding 3.0m, but not exceeding 4.50m				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Backhoe-loader 1 m <sup>3</sup> bucket capacity	hr	0.15	1412.00	211.80
В	LABOUR				
	Mazdoor Heavy	day	1.20	589.00	706.80
	Mazdoor light	day	4.00	589.00	2356.00
	Sub Total				3739.60
	Add 1 % Water charges on ( A +B)				37.40
	For shoring, strutting, barricading & caution lights at $5\%$ ( $A+B$ )				186.98
С	Sub Total				3963.98
D	Over Head Charges 10 % ( A+B+C)				396.40
	Contractor's Profit 10% (A+B+C+D)				436.04
	Cost for 10 m <sup>3</sup> .				4796.41
	Cost of 1m <sup>3</sup> .				480.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.18	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	Details of Cost for 10 m <sup>3</sup> .				
A	LABOUR				
	Mazdoor Heavy	day	0.10	589.00	58.90
	Mazdoor light	day	1.10	589.00	647.90
	Sub Total				706.80
В	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				14.14
	Sub Total				720.94
С	Over Head Charges 10 % ( A+B)				72.09
	Contractor's Profit 10% (A+B+C)				79.30
	Cost for 10 m <sup>3</sup> .				872.33
	Cost of 1m <sup>3</sup> .				87.00
1.19	Earth work excavation for pipeline trenches by mechanical means above 600 mm (Depth upto 1.50m not exceeding 1.5m in width ) trench width as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required, utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata.				
1.19.1	Ordinary/soft rock (without requiring blasting) Depth upto 1.50m				
	Details of Cost for 10 m <sup>3</sup> .				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	0.53	620.00	328.60
	Rock Breaker	day	0.50	620.00	310.00
	Rock Hole Driller	day	1.30	620.00	806.00
	Mazdoor Heavy	day	0.89	589.00	521.27
	Mazdoor light	day	1.77	589.00	1039.59
	Sub Total				3682.25

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				73.65
	Sub Total				3755.90
D	Over Head Charges 10 % ( A+B+C)				375.59
	Contractor's Profit 10% (A+B+C+D)				413.15
	Cost for 10 m <sup>3</sup>				4544.63
	Cost of 1m <sup>3</sup>				454.00
1.19.2	Depth exceeding 1.5 m, but not exceeding 3 m				
	Details of Cost for 10 m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	0.65	620.00	403.00
	Rock Breaker	day	1.45	620.00	899.00
	Rock Hole Driller	day	1.30	620.00	806.00
	Mazdoor Heavy	day	0.95	589.00	559.55
	Mazdoor light	day	1.98	589.00	1166.22
	Sub Total				4510.57
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				90.21
	Sub Total				4600.78
D	Over Head Charges 10 % ( A+B+C)				460.08
	Contractor's Profit 10%( (A+B+C+D)				506.09
	Cost for 10 m <sup>3</sup>				5566.95
	Cost of 1m <sup>3</sup>				557.00
1.19.3	Depth exceeding 3 m, but not exceeding 4.50m				
	Details of Cost for 10 m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	0.80	620.00	496.00
	Rock Breaker	day	0.80	620.00	496.00
	Rock Hole Driller	day	1.30	620.00	806.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Mazdoor Heavy	day	1.50	589.00	883.50
	Mazdoor light	day	3.00	589.00	1767.00
	Sub Total				5125.30
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				102.51
	Sub Total				5227.81
D	Over Head Charges 10 % ( A+B+C)				522.78
	Contractor's Profit 10% (A+B+C+D)				575.06
	Cost for 10 m <sup>3</sup>				6325.65
	Cost of 1 m <sup>3</sup>				633.00
	Note: Add 5% per m3 for every additional 1.50m depth or part thereoff beyond 4.50 m depth	A			
1.20	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	Details of Cost for 10 m <sup>3</sup>	7			
A	LABOUR				
	Mazdoor Heavy	day	0.20	589.00	117.80
	Mazdoor light	day	1.95	589.00	1148.55
	Sub Total				1266.35
В	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				25.33
	Sub Total				1291.68
С	Over Head Charges 10 % ( A+B)				129.17
	Contractor's Profit 10% (A+B+C)				142.08
	Cost for 10 m <sup>3</sup>				1562.93
	Cost of 1 m <sup>3</sup>				156.00
1.21	Earth work excavation for pipeline trenches by mechanical means above 600 mm (Depth upto 1.50m not exceeding 1.5m in width) trench width as per drawing and technical specification, including setting out, construction of shoring, strutting, Cost of blasting materials, barricading, caution lights, bracing, using sight rails & bonding rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required, utilising the available excavated earth locally for the work and all other appurtenances to complete in the following strata.				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
1.21.1	Hard rock ( requiring blasting ) Depth upto 1.50m				
	Details of Cost for 10 m <sup>3</sup>				
Α	MATERIALS				
	Blasting powder	kg	6.42	45.00	288.90
	Blasting fuse (fuse wire)	Each	7.00	15.00	105.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
С	LABOUR				
	Rock Excavator	day	1.24	620.00	768.80
	Rock Breaker	day	3.00	620.00	1860.00
	Rock Hole Driller	day	1.06	620.00	657.20
	Mazdoor Heavy	day	0.50	589.00	294.50
	Mazdoor light	day	1.30	589.00	765.70
	Sub Total				5416.90
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				108.34
	Sub Total				5525.24
Е	Over Head Charges 10 % ( A+B+C+D)				552.52
	Contractor's Profit 10% (A+B+C+D+E)				607.78
	Cost for 10 m <sup>3</sup>				6685.54
	Cost of 1 m <sup>3</sup>				669.00
1.21.2	Depth exceeding 1.5 m, but not exceeding 3 m				
	Details of Cost for 10 m <sup>3</sup>				
A	MATERIALS				
	Blasting powder	Kg	6.42	45.00	288.90
	Blasting fuse (fuse wire)	Each	7.00	15.00	105.00
В	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
С	LABOUR				
	Rock Excavator	day	1.35	620.00	837.00
	Rock Breaker	day	3.50	620.00	2170.00
	Rock Hole Driller	day	1.25	620.00	775.00
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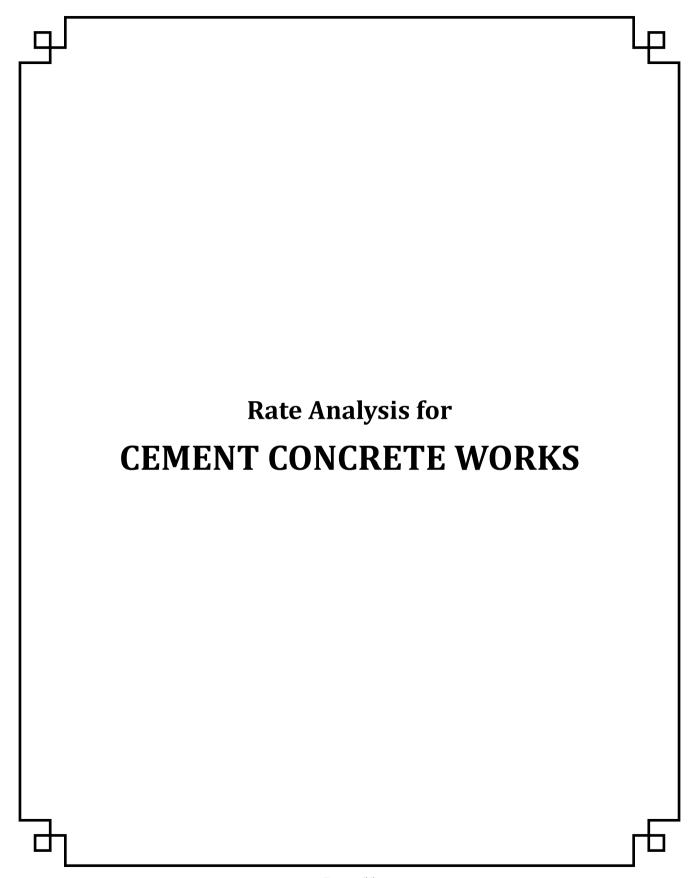
Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Mazdoor Heavy	day	0.65	589.00	382.85
	Mazdoor light	day	1.45	589.00	854.05
	Sub Total				6089.60
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				121.79
	Sub Total				6211.39
Е	Over Head Charges 10 % ( A+B+C+D)				621.14
	Contractor's Profit 10% (A+B+C+D+E)				683.25
	Cost for 10 m <sup>3</sup>				7515.78
	Cost of 1 m <sup>3</sup>				752.00
1.21.3	Depth exceeding 3 m, but not exceeding 4.50m				
	Details of Cost for 10 m <sup>3</sup>	4.7			
A	MATERIALS				
	Blasting powder	Kg	6.42	45.00	288.90
	Blasting fuse (fuse wire)	Each	7.00	15.00	105.00
В	MACHINERY				
	Hydraulic Excavator 1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1197.46	179.62
С	LABOUR				
	Rock Excavator	day	1.45	620.00	899.00
	Rock Breaker	day	3.65	620.00	2263.00
	Rock Hole Driller	day	1.45	620.00	899.00
	Mazdoor Heavy	day	0.88	589.00	518.32
	Mazdoor light	day	1.88	589.00	1107.32
	Sub Total				6725.16
D	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				134.50
	Sub Total				6859.66
Е	Over Head Charges 10 % ( A+B+C+D)				685.97
	Contractor's Profit 10% ( A+B+C+D+E)				754.56
	Cost for 10 m <sup>3</sup>				8300.19
	Cost of 1 m <sup>3</sup>				830.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	<b>Note</b> : Add 5% per m³ for every additional 1.50m depth or part thereoff beyond 4.50 m depth				
1.21.4	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	Details of Cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.20	589.00	117.80
	Mazdoor light	day	1.95	589.00	1148.55
	Sub Total				1266.35
В	Add Water charges, Shoring and shuttering & sundries 2% (A+B)	A			25.33
	Sub Total				1291.68
С	Over Head Charges 10 % ( A+B)				129.17
	Contractor's Profit 10% (A+B+C)				142.08
	Cost for 10 m <sup>3</sup>				1562.93
	Cost of 1 m <sup>3</sup>				156.00
1.21.5	Hard rock (blasting prohibited) Depth upto 1.50m				
	Details of Cost for 10 m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1 m³ bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	2.65	620.00	1643.00
	Rock Breaker	day	6.18	620.00	3828.50
	Stone Chiseller II	day	1.06	601.00	637.06
	Rock Hole Driller	day	0.18	620.00	108.50
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor light	day	1.50	589.00	883.50
	Sub Total				8219.11
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				164.38
	Sub Total				8383.49
D	Over Head Charges 10 % ( A+B+C)				838.35
	Contractor's Profit 10% ( A+B+C+D)				922.18

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Cost for 10 m <sup>3</sup> Total				10144.03
	Cost of 1 m <sup>3</sup>				1014.00
1.21.6	Depth exceeding 1.5 m, but not exceeding 3 m				
	Details of Cost for 10 m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1 m <sup>3</sup> bucket capacity.	hr	0.30	1550.00	465.00
	Usage charges of tipper	hr	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	2.65	620.00	1643.00
	Rock Breaker	day	6.18	620.00	3828.50
	Stone Chiseller II	day	1.50	601.00	901.50
	Rock Hole Driller	day	0.18	620.00	108.50
	Mazdoor Heavy	day	1.25	589.00	736.25
	Mazdoor light	day	2.00	589.00	1178.00
	Sub Total				9072.55
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				181.45
	Sub Total				9254.00
D	Over Head Charges 10 % ( A+B+C)				925.40
	Contractor's Profit (10% ( A+B+C+D)				1017.94
	Cost for 10 m <sup>3</sup>				11197.34
	Cost of 1 m <sup>3</sup> .				1120.00
1.21.7	Depth exceeding 3 m, but not exceeding 4.50m				
	Details of Cost for 10 m <sup>3</sup>				
A	MACHINERY				
	Hydraulic Excavator 1.1 m <sup>3</sup> bucket capacity.	day	0.30	1550.00	465.00
	Usage charges of tipper	day	0.15	1412.00	211.80
В	LABOUR				
	Rock Excavator	day	2.65	620.00	1643.00
	Rock Breaker	day	6.18	620.00	3828.50
	Stone Chiseller II	day	1.75	601.00	1051.75
	Rock Hole Driller	day	0.18	620.00	108.50
	Mazdoor Heavy	day	1.45	589.00	854.05
	Mazdoor light	day	2.60	589.00	1531.40
	Sub Total				9694.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
С	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				193.88
	Sub Total				9887.88
D	Over Head Charges 10 % ( A+B+C)				988.79
	Contractor's Profit 10% (A+B+C+D)				1087.67
	Cost for 10 m <sup>3</sup> .Total				11964.33
	Cost of 1 m <sup>3</sup> .				1196.00
	<b>Note:</b> 1 Add 5% per m <sup>3</sup> /for every additional 1.50m depth or part thereoff beyond 4.50 m depth				
	<b>Note:</b> 2.Additional rates for quantities of works, executed in or under water and /or liquid mud, including pumping water as required Cost of 1 m depth 20% of the rate of the item	^			
	<b>Note:</b> 3Additional rates for quantities of works, executed in or under foul position,including pumping water as required Cost of 1 m depth 25% of the rate of the item				
	<b>Note</b> :4. If the width of excavation is less than 0.60 m, Add 25% extra /m <sup>3</sup> for the above rates.				
1.22	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	Details of Cost for 10 m <sup>3</sup>				
A	LABOUR				
	Mazdoor Heavy	day	0.20	589.00	117.80
	Mazdoor light	day	1.95	589.00	1148.55
	Sub Total				1266.35
В	Add Water charges, Shoring and shuttering & sundries 2% (A+B)				25.33
	Sub Total				1291.68
С	Over Head Charges 10 % ( A+B)				129.17
	Contractor's Profit 10% ( A+B+C)				142.08
	Cost for 10 m <sup>3</sup>				1562.93
	Cost of 1 m <sup>3</sup>				156.00
	<b>Note:</b> 1.Extra rates for quantities of works, executed in or under water and or liquid mud, including pumping water as required Cost of 1 m depth 20% of the rate of the item.				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	<ul> <li>2) Extra rates for quantities of works, executed in or under foul position,including pumping water as required Cost of 1 m depth 25% of the rate of the item.</li> <li>3) If the width of excavation is less than 0.60 m, Add 25% extra /m³ for the above rates.</li> </ul>				
1.23	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications.				
	Details of cost for 10 m <sup>3</sup>				
a	MATERIAL				
	Granite/trap broken metal 100 mm and down size	m <sup>3</sup>	10.00	1143.00	11430.00
	Manufactured Sand	m <sup>3</sup>	5.00	1476.00	7380.00
b	LABOUR				
	Mazdoor Heavy	day	2.00	589.00	1178.00
	Mazdoor Light	day	3.00	589.00	1767.00
С	MACHINERY				
d	Sundries 1 %				188.10
e	SUB TOTAL (A): (A=a+b+c+d)				21943.10
f	Add 1 % Water charges on A				219.43
	Sub Total - B				22162.53
	Over Head Charges 10 % on B				2216.25
	Sub Total - C				24378.78
	Contractor's profit 10% on C				2437.88
	Total Cost per 10m <sup>3</sup>				26816.66
	Cost per m3				2681.67
	say				2682.00



Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	CEMENT CONCRETE WORKS				
2.1	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications.				
2.1.1	Mix 1:5:10 Using 40 mm and down size graded crushed coarse aggregates				
	Details of cost for 1 m <sup>3</sup>	A			
	MATERIAL				
	Stone Aggregate (Single size) :40 mm nominal size	m <sup>3</sup>	0.65	1190.00	773.50
	$(0.70 \text{ m}^3 - 7.5\% \text{ for voids i.e } 0.05 = 0.65 \text{ m}^3)$				
	Stone Aggregate (Single size) :20 mm nominal size	m <sup>3</sup>	0.24	1333.00	319.92
	Coarse sand	m <sup>3</sup>	0.47	1476.00	693.72
	Cement	t	0.13	5860.00	761.80
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap $0.40/0.28 \text{ m}^3$ )	hr	0.25	369.00	92.25
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				4325.19
	Add 1 % Water charges on A				43.25
	Sundries 1 % on A				43.25
	Sub Total - B				4411.69
	Over Head Charges 10 % on B				441.17
	Sub Total - C				4852.86
	Contractor's profit 10% on C				485.29
	Total Cost per 1m <sup>3</sup>				5338.15
	Cost per m <sup>3</sup>				5338.00
	Material Requirement : Cement= 130kg ( 2.6bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.47 m <sup>3</sup>				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.1.2	Mix 1:4:8 Using 40 mm and down size graded crushed coarse aggregates				
	MATERIAL				
	Stone Aggregate (Single size) :40 mm nominal size	m <sup>3</sup>	0.65	1190.00	773.50
	$(0.70 \text{ m}^3 - 7.5\% \text{ for voids ie } 0.05 = 0.65 \text{ m}^3)$				
	Stone Aggregate (Single size) :20 mm nominal size	m <sup>3</sup>	0.24	1333.00	319.92
	Coarse sand	m <sup>3</sup>	0.47	1476.00	693.72
	Cement	t	0.175	5860.00	1025.50
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.25	369.00	92.25
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				4588.89
	Add 1 % Water charges on A				45.89
	Sundries 1 % on A				45.89
	Sub Total - B				4680.67
	Over Head Charges 10 % on B				468.07
	Sub Total - C				5148.73
	Contractor's profit 10% on C				514.87
	Total Cost per 1m <sup>3</sup>				5663.61
	Cost per m <sup>3</sup>				5664.00
	Material Requirement : Cement= 175 kg ( 3.50 bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.47 m <sup>3</sup>				
2.1.3	Mix 1:3:6 Using 40 mm and down size graded crushed coarse aggregates				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	Stone Aggregate (Single size) :40 mm nominal size	m <sup>3</sup>	0.65	1190.00	773.50
	$(0.70 \text{ m}^3 - 7.5\% \text{ for voids i.e } 0.05 = 0.65 \text{ m}^3)$	1			
	Stone Aggregate (Single size) :20 mm nominal size	m <sup>3</sup>	0.24	1333.00	319.92
	Coarse sand	m <sup>3</sup>	0.47	1476.00	693.72
	Cement	t	0.22	5860.00	1289.20

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.25	369.00	92.25
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				4852.59
	Add 1 % Water charges on A				48.53
	Sundries 1 % on A				48.53
	Sub Total - B				4949.64
	Over Head Charges 10 % on B	A			494.96
	Sub Total - C				5444.61
	Contractor's profit 10% on C				544.46
	Total Cost per 1m <sup>3</sup>				5989.07
	Cost per m <sup>3</sup>				5989.00
	Material Requirement : Cement= 220 kgs ( 4.40 bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.47 m <sup>3</sup>				
2.1.4	Mix 1:3:6 Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.70	1333.00	933.10
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.24	1362.00	326.88
	Coarse sand	m <sup>3</sup>	0.47	1476.00	693.72
	Cement	t	0.22	5860.00	1289.20
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.30	369.00	110.70
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				5037.60
	Add 1 % Water charges on A				50.38
	Sundries 1 % on A				50.38
	Sub Total - B				5138.35

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Over Head Charges 10 % on B				513.84
	Sub Total - C				5652.19
	Contractor's profit 10% on C				565.22
	Total Cost per 1m <sup>3</sup>				6217.41
	Cost per m <sup>3</sup>				6217.00
	Material Requirement : Cement= 220 kgs (4.40 bags): Metal: 0.94 m <sup>3</sup> : Sand= 0.47 m <sup>3</sup>				
2.1.5	Mix 1:2:4 Using 40 mm and down size graded crushed coarse aggregates				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	Stone Aggregate (Single size) : 40 mm nominal size	m <sup>3</sup>	0.65	1190.00	773.50
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.24	1333.00	319.92
	Coarse sand	m <sup>3</sup>	0.47	1476.00	693.72
	Cement	t	0.24	5860.00	1406.40
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.30	369.00	110.70
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				4988.24
	Add 1 % Water charges on A				49.88
	Sundries 1 % on A				49.88
	Sub Total - B				5088.00
	Over Head Charges 10 % on B				508.80
	Sub Total - C				5596.81
	Contractor's profit 10% on C				559.68
	Total Cost per 1m <sup>3</sup>				6156.49
	Cost per m <sup>3</sup>				6156.00
	Material Requirement : Cement= 240 kgs (4.80 bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.47 m <sup>3</sup>				
2.1.6	Mix 1:2:4 Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 1 m <sup>3</sup>				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.67	1333.00	893.11
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.22	1362.00	299.64
	Coarse sand	m <sup>3</sup>	0.45	1476.00	664.20
	Cement	t	0.24	5860.00	1406.40
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.30	369.00	110.70
	Vibrator(Needle type 40mm)	hr	0.50	411.00	205.50
	Sub Total - A				5058.05
	Add 1 % Water charges on A				50.58
	Sundries 1 % on A				50.58
	Sub Total - B	7			5159.21
	Over Head Charges 10 % on B				515.92
	Sub Total - C				5675.13
	Contractor's profit 10% on C				567.51
	Total Cost per 1m <sup>3</sup>				6242.65
	Cost per m <sup>3</sup>				6243.00
	Material Requirement : Cement= 240 kgs (4.80 bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.45 m <sup>3</sup>				
2.2	Providing and laying in position Cement Concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications.				
2.2.1	M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.57	1333.00	759.81
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.28	1362.00	381.36

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Coarse sand	m <sup>3</sup>	0.425	1476.00	627.30
	Cement	t	0.32	5860.00	1875.20
	LABOUR				
	Mason Class II	day	0.25	601.00	150.25
	Mazdoor light	day	0.90	589.00	530.10
	Mazdoor light (Helper)	day	1.00	589.00	589.00
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.10	369.00	36.90
	Vibrator(Needle type 40mm)	hr	0.35	411.00	143.85
	Sub Total - A				5093.77
	Add 1 % Water charges on A	A			50.94
	Sundries 1 % on A				50.94
	Sub Total - B				5195.65
	Over Head Charges 10 % on B				519.56
	Sub Total - C				5715.21
	Contractor's profit 10% on C				571.52
	Total Cost per 1m <sup>3</sup>				6286.73
	Cost per m <sup>3</sup>				6287.00
	Material Requirement: Cement= 320 kgs ( 6.40 bags): Metal: 0.85 m <sup>3</sup> : Sand= 0.425m <sup>3</sup>				
2.2.2	M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA)				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.46	1333.00	607.85
	Recycled Concrete Aggregate (RCA) 20mm downsize	m <sup>3</sup>	0.11	1143.00	130.30
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.22	1362.00	305.09
	Recycled Concrete Aggregate (RCA) 10mm downsize	m <sup>3</sup>	0.06	1190.00	66.64
	Coarse sand	m <sup>3</sup>	0.425	1476.00	627.30
	Cement	t	0.32	5860.00	1875.20
	LABOUR				
	Mason Class II	day	0.25	601.00	150.25
	Mazdoor light	day	0.90	589.00	530.10
	Mazdoor light (Helper)	day	1.00	589.00	589.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.10	369.00	36.90
	Vibrator(Needle type 40mm)	hr	0.35	411.00	143.85
	Sub Total - A				5062.48
	Add 1 % Water charges on A				50.62
	Sundries 1 % on A				50.62
	Sub Total - B				5163.73
	Over Head Charges 10 % on B				516.37
	Sub Total - C				5680.10
	Contractor's profit 10% on C				568.01
	Total Cost per 1m <sup>3</sup>	A			6248.11
	Cost per m <sup>3</sup>				6248.00
	Material Requirement: Cement= 320 kgs ( 6.40 bags): Metal: 0.85 m <sup>3</sup> : Sand= 0.425 m <sup>3</sup>				
2.2.3	M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates	7			
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.10	5860.00	29886.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	20.40	191.00	3896.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				77002.00
	Add 1 % Water charges on A				770.02
	Sundries 1 % on A				770.02
	Sub Total - B				78542.04
	Over Head Charges 10 % on B				7854.204
	Sub Total - C				86396.24
	Contractor's profit 10% on C				8639.6244
	Total Cost per 15m <sup>3</sup>				95035.87
	Cost per m <sup>3</sup>				6336.00
	Material Requirement : Cement= 340 kgs (6.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>	<b>^</b>			
2.2.4	M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates with 20% partial replacement with Recycled concrete aggregate (RCA)				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.10	5860.00	29886.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	6.48	1333.00	8637.84
	Recycled Concrete Aggregate (RCA) 20mm downsize	m <sup>3</sup>	1.62	1143.00	1851.66
	10 mm aggregates	m <sup>3</sup>	4.32	1362.00	5883.84
	Recycled Concrete Aggregate (RCA) 10mm downsize	m <sup>3</sup>	1.08	1190.00	1285.20
	Admixture @ 0.4 per cent of cement	kg	20.40	191.00	3896.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				76508.44
	Add 1 % Water charges on A				765.0844
	Sundries 1 % on A				765.0844
	Sub Total - B				78038.61
	Over Head Charges 10 % on B				7803.8609
	Sub Total - C				85842.47
	Contractor's profit 10% on C				8584.247
	Total Cost per 15m <sup>3</sup>				94426.72
	Cost per m <sup>3</sup>				6295.00
	Material Requirement : Cement= 340 kgs (6.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.2.5	M30 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup>				
	MATERIAL				
	Cement	t	5.40	5860.00	31644.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	21.60	191.00	4125.60
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				78989.20

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Add 1 % Water charges on A				789.892
	Sundries 1 % on A				789.892
	Sub Total - B				80568.98
	Over Head Charges 10 % on B				8056.8984
	Sub Total - C				88625.88
	Contractor's profit 10% on C				8862.5882
	Total Cost per 15m <sup>3</sup>				97488.47
	Cost per m <sup>3</sup>				6499.00
	Material Requirement: Cement= 360 kgs (7.20 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.2.6	M35 Design Mix Using 20 mm and down size graded crushed coarse aggregates	A			
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.85	5860.00	34281.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	23.40	191.00	4469.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				81970.00
	Add 1 % Water charges on A				819.7
	Sundries 1 % on A				819.7
	Sub Total - B				83609.40

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Over Head Charges 10 % on B				8360.94
	Sub Total - C				91970.34
	Contractor's profit 10% on C				9197.034
	Total Cost per 15m <sup>3</sup>				101167.37
	Cost per m <sup>3</sup>				6744.00
	Material Requirement: Cement= 390 kgs (7.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45 m <sup>3</sup>				
2.2.7	M 40 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	6.30	5860.00	36918.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	25.20	191.00	4813.20
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				84950.80
	Add 1 % Water charges on A				849.508
	Sundries 1 % on A				849.508
	Sub Total - B				86649.82
	Over Head Charges 10 % on B				8664.9816
	Sub Total - C				95314.80

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Contractor's profit 10% on C				9531.4798
	Total Cost per 15m <sup>3</sup>				104846.28
	Cost per m <sup>3</sup>				6990.00
	Material Requirement: Cement= 420 kgs (8.40 bags): Metal: 0.89 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.3	Providing and laying in Cement Concrete for all Basement & surface level works, return walls, retaining walls, sunken floors etc. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.				
2.3.1	M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.57	1333.00	759.81
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.28	1362.00	381.36
	Coarse sand	m <sup>3</sup>	0.425	1476.00	627.30
	Cement	t	0.32	5860.00	1875.20
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor for converying concrete, cleaning etc	day	1.80	589.00	1060.20
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.10	369.00	36.90
	Vibrator(Needle type 40mm)	hr	0.20	411.00	82.20
	Sub Total - A				5123.47
	Add 1 % Water charges on A				51.23
	Sundries 1 % on A				51.23
	Sub Total - B				5225.94
	Over Head Charges 10 % on B				522.59
	Sub Total - C				5748.53
	Contractor's profit 10% on C				574.85
	Total Cost per m <sup>3</sup>				6323.39
	Cost per m <sup>3</sup>				6323.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Material Requirement: Cement= 320 kgs ( 6.40 bags): Metal: 0.85 m³: Sand= 0.425 m³				
2.3.2	M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.10	5860.00	29886.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	20.40	191.00	3896.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	2.00	601.00	1202.00
	Mazdoor for converying concrete, cleaning etc	day	10.00	589.00	5890.00
	Bhisti	day	2.00	589.00	1178.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				78757.00
	Add 1 % Water charges on A				787.57
	Sundries 1 % on A				787.57
	Sub Total - B				80332.14
	Over Head Charges 10 % on B				8033.214
	Sub Total - C				88365.35
	Contractor's profit 10% on C				8836.5354
	Total Cost per 15m <sup>3</sup>				97201.89
	Cost per m <sup>3</sup>				6480.00
	Material Requirement : Cement= 340 kgs (6.80 bags): Metal: 0.85 m³: Sand= 0.45m³				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.3.3	M30 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.40	5860.00	31644.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	21.60	191.00	4125.60
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	2.00	601.00	1202.00
	Mazdoor for converying concrete, cleaning etc	day	10.00	589.00	5890.00
	Bhisti	day	1.20	589.00	706.80
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				80273.00
	Add 1 % Water charges on A				802.73
	Sundries 1 % on A				802.73
	Sub Total - B				81878.46
	Over Head Charges 10 % on B				8187.846
	Sub Total - C				90066.31
	Contractor's profit 10% on C				9006.6306
	Total Cost per 15m <sup>3</sup>				99072.94
	Cost per m <sup>3</sup>				6605.00
	Material Requirement: Cement= 360 kgs (7.20 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.3.4	M 35 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.85	5860.00	34281.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	23.40	191.00	4469.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor for conveying concrete, cleaning etc	day	12.00	589.00	7068.00
	Bhisti	day	1.40	589.00	824.60
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				85150.60
	Add 1 % Water charges on A				851.506
	Sundries 1 % on A				851.506
	Sub Total - B				86853.61
	Over Head Charges 10 % on B				8685.3612
	Sub Total - C				95538.97
	Contractor's profit 10% on C				9553.8973
	Total Cost per 15m <sup>3</sup>				105092.87
	Cost per m <sup>3</sup>				7006.00
	Material Requirement: Cement= 390 kgs (7.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.3.5	M 40 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	6.30	5860.00	36918.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	25.20	191.00	4813.20
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor for conveying concrete, cleaning etc	day	12.00	589.00	7068.00
	Bhisti	day	1.60	589.00	942.40
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				88249.20
	Add 1 % Water charges on A				882.492
	Sundries 1 % on A				882.492
	Sub Total - B				90014.18
	Over Head Charges 10 % on B				9001.4184
	Sub Total - C				99015.60
	Contractor's profit 10% on C				9901.5602
	Total Cost per 15m <sup>3</sup>				108917.16
	Cost per m <sup>3</sup>				7261.00
	Material Requirement: Cement= 420 kgs (8.40 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.4	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications				
2.4.1	MIX 1:2:4 (M15) Using 20 mm and down size graded crushed coarse aggregates	A			
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.67	1333.00	893.11
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.22	1362.00	299.64
	Coarse sand	m <sup>3</sup>	0.45	1476.00	656.82
	Cement	t	0.24	5860.00	1406.40
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	2.50	589.00	1472.50
	MACHINERY				
	Concrete mixer ( cap $0.40/0.28 \text{ m}^3$ )	hr	0.10	369.00	36.90
	Vibrator(Needle type 40mm)	hr	0.30	411.00	123.30
	Sub Total - A				5189.17
	Add 1 % Water charges on A				51.89
	Sundries 1 % on A				51.89
	Sub Total - B				5292.95
	Over Head Charges 10 % on B				529.30
	Sub Total - C				5822.25
	Contractor's profit 10% on C				582.22
	Total Cost per m <sup>3</sup>				6404.47
	Cost per m <sup>3</sup>				6404.00
	Material Requirement : Cement= 240 kgs ( 4.80 bags): Metal: 0.89 m³: Sand= 0.45 m³				

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
2.4.2	M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.57	1333.00	759.81
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.28	1362.00	381.36
	Coarse sand	m <sup>3</sup>	0.425	1476.00	627.30
	Cement	t	0.32	5860.00	1875.20
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.80	589.00	1060.20
	MACHINERY				
	Concrete mixer ( cap 0.40/0.28 m <sup>3</sup> )	hr	0.10	369.00	36.90
	Vibrator(Needle type 40mm)	hr	0.20	411.00	82.20
	Sub Total - A				5123.47
	Add 1 % Water charges on A	7			51.23
	Sundries 1 % on A				51.23
	Sub Total - B				5225.94
	Over Head Charges 10 % on B				522.59
	Sub Total - C				5748.53
	Contractor's profit 10% on C				574.85
	Total Cost per m <sup>3</sup>				6323.39
	Cost per m <sup>3</sup>				6323.00
	Material Requirement: Cement= 320 kgs ( 6.40 bags): Metal: 0.85 m <sup>3</sup> : Sand= 0.425 m <sup>3</sup>				
2.4.3	M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.10	5860.00	29886.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	20.40	191.00	3896.40
	LABOUR				
	Mate	day	1.00	620.00	620.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	8.00	589.00	4712.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A	A			77002.00
	Add 1 % Water charges on A				770.02
	Sundries 1 % on A				770.02
	Sub Total - B	17			78542.04
	Over Head Charges 10 % on B				7854.204
	Sub Total - C				86396.24
	Contractor's profit 10% on C				8639.6244
	Total Cost per 15m <sup>3</sup>				95035.87
	Cost per m <sup>3</sup>				6336.00
	Material Requirement : Cement= 340 kgs (6.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.4.4	M30 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.40	5860.00	31644.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	21.60	191.00	4125.60
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	12.00	589.00	7068.00
	Bhisti	day	1.00	589.00	589.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				81934.20
	Add 1 % Water charges on A				819.342
	Sundries 1 % on A				819.342
	Sub Total - B				83572.88
	Over Head Charges 10 % on B				8357.2884
	Sub Total - C				91930.17
	Contractor's profit 10% on C				9193.0172
	Total Cost per 15m <sup>3</sup>				101123.19
	Cost per m <sup>3</sup>				6742.00
	Material Requirement : Cement= 360 kgs (7.20 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.4.5	M35 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.85	5860.00	34281.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	23.40	191.00	4469.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	14.00	589.00	8246.00
	Bhisti	day	1.00	589.00	589.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				86093.00
	Add 1 % Water charges on A				860.93
	Sundries 1 % on A				860.93
	Sub Total - B				87814.86
	Over Head Charges 10 % on B				8781.486
	Sub Total - C	7			96596.35
	Contractor's profit 10% on C				9659.6346
	Total Cost per 15m <sup>3</sup>				106255.98
	Cost per m <sup>3</sup>				7084.00
	Material Requirement: Cement= 390 kgs (7.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.4.6	M40 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	6.30	5860.00	36918.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	25.20	191.00	4813.20
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	3.00	601.00	1803.00
	Mazdoor	day	14.00	589.00	8246.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				88484.80
	Add 1 % Water charges on A				884.848
	Sundries 1 % on A				884.848
	Sub Total - B				90254.50
	Over Head Charges 10 % on B	A			9025.4496
	Sub Total - C				99279.95
	Contractor's profit 10% on C				9927.9946
	Total Cost per 15m <sup>3</sup>				109207.94
	Cost per m <sup>3</sup>				7281.00
	Material Requirement: Cement= 420 kgs (8.40 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.5	Providing and laying in position Cement Concrete for all Super structures of building, Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications.				
2.5.1	M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	MATERIAL				
	Stone Aggregate (Single size) : 20 mm nominal size	m <sup>3</sup>	0.57	1333.00	759.81
	Stone Aggregate (Single size) : 10 mm nominal size	m <sup>3</sup>	0.28	1362.00	381.36
	Coarse sand	m <sup>3</sup>	0.425	1476.00	627.30
	Cement	t	0.32	5860.00	1875.20
	LABOUR				
	Mason Class II	day	0.50	601.00	300.50

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Mazdoor light	day	2.00	589.00	1178.00
	MACHINERY				
	Usage charges of Machinery - Concrete Mixer 0.25 to $0.40\ m^3$ with hopper	hr	0.10	649.00	64.90
	Vibrator(Needle type 40mm)	hr	0.45	411.00	184.95
	Sub Total - A				5372.02
	Add 1 % Water charges on A				53.72
	Sundries 1 % on A				53.72
	Sub Total - B				5479.46
	Over Head Charges 10 % on B				547.95
	Sub Total - C				6027.41
	Contractor's profit 10% on C				602.74
	Total Cost per m <sup>3</sup>				6630.15
	Cost per m <sup>3</sup>				6630.00
	Requirement: Cement= 320 kgs ( 6.40 bags): Metal: 0.85 m <sup>3</sup> : Sand= 0.425 m <sup>3</sup>	7			
2.5.2	M25 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.10	5860.00	29886.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	20.40	191.00	3896.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	1.50	601.00	901.50
	Mazdoor	day	20.00	589.00	11780.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				83168.50
	Add 1 % Water charges on A				831.685
	Sundries 1 % on A				831.685
	Sub Total - B				84831.87
	Over Head Charges 10 % on B				8483.187
	Sub Total - C				93315.06
	Contractor's profit 10% on C				9331.5057
	Total Cost per 15m <sup>3</sup>				102646.56
	Cost per m <sup>3</sup>	A			6843.00
	Requirement: Cement= 340 kgs (6.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.5.3	M30 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.40	5860.00	31644.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	21.60	191.00	4125.60
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	1.50	601.00	901.50
	Mazdoor	day	20.00	589.00	11780.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Sub Total - A				85155.70
	Add 1 % Water charges on A				851.557
	Sundries 1 % on A				851.557
	Sub Total - B				86858.81
	Over Head Charges 10 % on B				8685.8814
	Sub Total - C				95544.70
	Contractor's profit 10% on C				9554.4695
	Total Cost per 15m <sup>3</sup>				105099.16
	Cost per m <sup>3</sup>				7007.00
	Requirement: Cement= 360 kgs (7.20 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.5.4	M 35 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	5.85	5860.00	34281.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	23.40	191.00	4469.40
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	1.50	601.00	901.50
	Mazdoor	day	20.00	589.00	11780.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				88136.50
	Add 1 % Water charges on A				881.365

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Sundries 1 % on A				881.365
	Sub Total - B				89899.23
	Over Head Charges 10 % on B				8989.923
	Sub Total - C				98889.15
	Contractor's profit 10% on C				9888.9153
	Total Cost per 15m <sup>3</sup>				108778.07
	Cost per m <sup>3</sup>				7252.00
	Requirement: Cement= 390 kgs (7.80 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.5.5	M 40 Design Mix Using 20 mm and down size graded crushed coarse aggregates				
	Details of cost for 15 m <sup>3</sup> .				
	MATERIAL				
	Cement	t	6.30	5860.00	36918.00
	Coarse sand	m <sup>3</sup>	6.75	1476.00	9963.00
	20 mm aggregate	m <sup>3</sup>	8.10	1333.00	10797.30
	10 mm aggregates	m <sup>3</sup>	5.40	1362.00	7354.80
	Admixture @ 0.4 per cent of cement	kg	25.20	191.00	4813.20
	LABOUR				
	Mate	day	1.00	620.00	620.00
	Mason	day	2.00	601.00	1202.00
	Mazdoor	day	20.00	589.00	11780.00
	MACHINERY				
	Mobile concrete batching / Mixing plant	hr	0.75	649.00	486.75
	Generator 100 kVA	hr	0.75	1218.00	913.50
	Water tanker 6kL	hr	1.00	725.00	725.00
	Tractor trolley	hr	1.00	659.00	659.00
	Transit mixer (Mixer of 6m³capacity at 2.5 interval)	hr	2.00	1882.00	3764.00
	Concrete pump	hr	0.75	1073.00	804.75
	Vibrator(Needle type 40mm)	hr	1.50	411.00	616.50
	Sub Total - A				91417.80
	Add 1 % Water charges on A				914.178
	Sundries 1 % on A				914.178
	Sub Total - B				93246.16

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Over Head Charges 10 % on B				9324.6156
	Sub Total - C				102570.77
	Contractor's profit 10% on C				10257.077
	Total Cost per 15m <sup>3</sup>				112827.85
	Cost per m <sup>3</sup>				7522.00
	Requirement: Cement= 420 kgs (8.40 bags): Metal: 0.90 m <sup>3</sup> : Sand= 0.45m <sup>3</sup>				
2.6	For staging				
2.6.1	Height upto 5 m rates as per item no 2.5.1 to 2.5.5				
2.6.2	Beyond 5m upto 10 m add 12% extra on formwork for staging & base preparation	A			
2.6.3	Beyond 10m upto 15m add 14% extra on formwork for staging & base preparation				
2.6.4	Beyond 15m upto 20m add 16% extra on formwork for staging & base preparation				
2.6.5	Beyond 20m upto 25m add 18% extra on formwork for staging & base preparation				
2.6.6	Beyond 25m add 20% extra on formwork for staging & base preparation				
2.7	Providing waterproofing & durability enhancing admixture with approval from MORT&H for use on road & bridge projects with IRC accreditation. The Dosage should be at 0.8% by weight of cement + cementitious material (or such dosage as desired to meet durability criteria) as per technical specification				
	Extra for use of water proofing & durability compound in cement concrete				
	Detail for 10 m <sup>3</sup> (1 kg per 10 m <sup>3</sup> )				
	Water proofing compound (as per manufacturers specification)	kg	1.00	230.00	230
	Handling loading and unloading charges at 5% on A				11.5
A	Sub Total				241.5
В	Over Head Charges 10 % A				24.15
	Contractor's profit 10%( A + B)				26.565
	Cost for 1kg				292.215
	Cost per kg				292.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Self Compacting Concrete				
2.8	Supply and placing the Design Mix of M-30 Grade for Self Compacting Concrete corresponding to IS 456 and relevant IS codes using Batching plant, Transit mixer and concrete pump with 12.5 mm size graded machine crushed hard granite metal (coarse aggregate) from approved quarry including cost and conveyance of all materials like Cement, Cement substitutes like fly ash, GGBS, etc., fine aggregate (sand), coarse aggregate, Admixture, water etc., to site including and sales and other taxes on all materials including all opertational incidental and labour charges, but excluding cost of steel and its fabrication & formwork charges for finished item of work with minimum cement content as per IS code including pumping & curing etc complete for finished item of work (RCC slabs, Beams, Columns, Lintels, Water Tanks, RCC Walls in Buildings).				
	Details of cost for 1.00 m <sup>3</sup> .				
	MATERIAL				
	Cement	kg	300.00	5.86	1758.00
	Coarse Aggregate 12.5mm graded	m <sup>3</sup>	0.80	1333.00	1066.40
	Coarse sand G-1	m <sup>3</sup>	0.40	1476.00	590.40
	PCE (Poly Corboxylic Ether) Based plasticizers 0.50% in cementitious materials (400x0.5%)	kg	2.00	275.00	550.00
	VMA (Viscosity Modifying Agent)0.10% of cementitious materials	kg	0.40	340.00	136.00
	GGBS	kg	100.00	3.81	381.00
	LABOUR				
	Mason 1st class	day	0.25	620.00	155.00
	Mason 2nd class	day	0.50	601.00	300.50
	Mazdoor (Unskilled)	day	1.50	589.00	883.50
	MACHINERY				
	Batching & mixing plant 120m³capacity	hr	0.008	3676.00	30.63
	Transit mixer 6m <sup>3</sup> . Capacity	hr	0.25	1882.00	470.50
	Concrete pump	hr	0.30	1073.00	321.90
	Sub Total - A				6643.83
	Add 1 % Water charges on A				66.44
	Sundries 1 % on A				66.44
	Sub Total - B				6776.71

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Over Head Charges 10 % on B				677.67
	Sub Total - C				7454.38
	Contractor's profit 10% on C				745.44
	Total Cost per m <sup>3</sup>				8200.00
	Requirement:Cement= 300 kgs (6 bags): GGBS=100kgs Metal: 0.80 m <sup>3</sup> : Sand= 0.40m <sup>3</sup>				
	Additionalities for Self compacting concrete.				
i	Add extra 5% on form work for staging for 5 to 10 m				
ii	Add extra 5 % on form work for staging beyond 10 m				
	Requirement: Cement= 300 kgs (6 bags): Metal: 0.80 m <sup>3</sup> : Sand= 0.40m <sup>3</sup>				
2.9	Applying stamping finish on M30 grade concrete on PCC sub grade, applying and finishing with stamp/ stencil of approved pattern and color in accordance with Engineers instructions & approved drawings with use of any approved brand of color hardener of 4.5 kg/m2, including floating of color hardener over the concrete surface with different types of floaters, application of release agent of 0.12 to 0.13kg/m2 depending on matching combination of selected color, stamping over the concrete surface with stamping tools, cleaning of surface with water and groove cutting of finished concrete and application of acrylic based sealer for final finish. Coverage of sealer should be 0.30litre/m2 per coat. The cost is inclusive of manpower, cutting machine, sprayer and all tools tackles for all activities and complete smooth and finish as per technical specifications. (The cost of Concrete shall be paid separately)				
	Cost for 100 m2				
a	MATERIAL Concrete hardner	lza	450.00	20.00	9000.00
	Release agent	kg	0.13	200.00	25.00
	Acrylic Sealer	kg L	30.00	260.00	7800.00
	PU Resin	m3	23.00	225.00	5175.00
b	LABOUR	IIIS	23.00	223.00	3173.00
U U	Supervisor	day	2.00	620.00	1240.00
	Mazdoor Heavy	day	6.00	589.00	3534.00
	Mazdoor light	day	6.00	589.00	3534.00
	Painter class I	day	4.00	620.00	2480.00

l. No.	Specification	Unit	Qty	Rate ₹	Amount
	Sub Total A				32788.00
С	Add 1% Water charges on A				327.88
d	Sundries, Stamping tools & others (for dewatering machine, Groove cutting, floaters, suckers, brushes & water jet )@ 10% on 'a'				3278.80
	Sub Total B				36394.68
e	Overhead charges @ 10% on B				3639.47
	Sub Total C				40034.15
f	Contractor's profit @ 10% on C				4003.41
	Total for 100 m2				44037.56
	Cost per m2				440.00
<b>2.10</b>	Providing and laying in position Ready Mixed or Batch Mixed concrete from ISO 9001 accredited plants as per IS 10262-2009 mix design procedure for Reinforced Cement Concrete works in all types of Structures other than Road works, using coarse aggregate and fine aggregate derived from natural sources, Ordinary Portland cement & GGBS, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the Engineer-in-charge.  Concrete of M10 grade with Cement & Cementitious				
	Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M10 grade				
a	MATERIAL	2	6.00	4550.00	27200.00
la .	Ready Mix Concrete supplied from plant	m3	6.00	4550.00	27300.00
b	LABOUR	J	0.50	(01.00	200 50
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80
С	MACHINERY  Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				29875.55

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
d	Add 1 % Water charges on A				298.76
е	Sundries 1 % on A				298.76
	Sub Total - B				30473.06
f	Over Head Charges 5 % on B				1523.65
g	Sub Total - C				31996.71
	Contractor's profit 10% on C				3199.67
	Total Cost per 6m <sup>3</sup>				35196.39
	Cost per m <sup>3</sup>				5866.00
b	Concrete of M20 grade with Cement & Cementitious Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M20 grade				
a	MATERIAL				
	Ready Mix Concrete supplied from plant	m3	6.00	4750.00	28500.00
b	LABOUR	7			
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80
С	MACHINERY				
	Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				31075.55
d	Add 1 % Water charges on A				310.76
e	Sundries 1 % on A				310.76
	Sub Total - B				31697.06
f	Over Head Charges 5 % on B				1584.85
g	Sub Total - C				33281.91
	Contractor's profit 10% on C				3328.19
	Total Cost per 6m <sup>3</sup>				36610.11
	Cost per m <sup>3</sup>				6102.00
С	Concrete of M25 grade with Cement & Cementitious Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M25 grade				
a	MATERIAL				
	Ready Mix Concrete supplied from plant	m3	6.00	4850.00	29100.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
b	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80
С	MACHINERY				
	Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				31675.55
d	Add 1 % Water charges on A				316.76
e	Sundries 1 % on A				316.76
	Sub Total - B				32309.06
f	Over Head Charges 5 % on B				1615.45
g	Sub Total - C				33924.51
	Contractor's profit 10% on C				3392.45
	Total Cost per 6m <sup>3</sup>				37316.97
	Cost per m <sup>3</sup>				6219.00
d	Concrete of M30 grade with Cement & Cementitious Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M30grade				
a	MATERIAL				
	Ready Mix Concrete supplied from plant	m3	6.00	5200.00	31200.00
b	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80
С	MACHINERY				
	Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				33775.55
d	Add 1 % Water charges on A				337.76
e	Sundries 1 % on A				337.76
	Sub Total - B				34451.06
f	Over Head Charges 5 % on B				1722.55
g	Sub Total - C				36173.61

l. No.	Specification	Unit	Qty	Rate ₹	Amount
	Contractor's profit 10% on C				3617.36
	Total Cost per 6m <sup>3</sup>				39790.98
	Cost per m <sup>3</sup>				6632.00
e	Concrete of M35 grade with Cement & Cementitious Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M35grade				
a	MATERIAL				
	Ready Mix Concrete supplied from plant	m3	6.00	5300.00	31800.00
b	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80
С	MACHINERY				
	Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				34375.55
d	Add 1 % Water charges on A				343.76
е	Sundries 1 % on A				343.76
	Sub Total - B				35063.06
f	Over Head Charges 5 % on B				1753.15
g	Sub Total - C				36816.21
	Contractor's profit 10% on C				3681.62
	Total Cost per 6m <sup>3</sup>				40497.84
	Cost per m <sup>3</sup>				6750.00
f	Concrete of M40 grade with Cement & Cementitious Content in 75:25 proportion				
	Details of cost for 6 m <sup>3</sup> for M40 grade				
а	MATERIAL				
	Ready Mix Concrete supplied from plant	m3	6.00	5500.00	33000.00
b	LABOUR				
	Mason Class II	day	0.50	601.00	300.50
	Mazdoor light	day	1.20	589.00	706.80

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
С	MACHINERY				
	Pumping charges of concrete including usage charges of pump, carriage charges for all leads,piping work & accessories etc.	m <sup>3</sup>	6.00	210.00	1260.00
	Vibrator(Needle type 40mm)	hr	0.75	411.00	308.25
	Sub Total - A				35575.55
d	Add 1 % Water charges on A				355.76
е	Sundries 1 % on A				355.76
	Sub Total - B				36287.06
f	Over Head Charges 5 % on B				1814.35
g	Sub Total - C				38101.41
	Contractor's profit 10% on C				3810.14
	Total Cost per 6m <sup>3</sup>				41911.56
	Cost per m <sup>3</sup>				6985.00
	Steel Fabrication				
2.11	Supplying, fitting and placing TMT FE 550/550D Steel Reinforcement complete as per drawing and technical specification.				
a	Building works				
	Details of cost for 1t				
a	MATERIAL				
	(TMT bars including 5 per cent overlaps and wastage)	t	1.05	60170.00	63178.50
	Binding wire	kg	6.00	55.00	330.00
b	LABOUR for cutting, bending, shifting to site, tying and placing in position				
	Blacksmith Gr II	day	8.00	601.00	4808.00
	Mazdoor	day	8.80	589.00	5183.20
С	Machinery				
	Cutting machine & Bending machine	hr	0.66	376.00	248.16
	Electric generator 15 KVA	hr	0.66	278.00	183.48
	Sub Total - A				73931.34
f	Over Head Charges 10 % on A				7393.13
g	Sub Total - B				81324.47
	Contractor's profit 10% on B				8132.45
	Total Cost per 1t				89456.92
	Cost per t				89457.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
b	For Foundations of Bridges				
	Details of cost for 8t				
a	MATERIAL				
	(TMT bars including 5 per cent overlaps and wastage FE550 Grade)	t	8.40	60170.00	505428.00
	Binding wire	kg	48.00	55.00	2640.00
b	LABOUR for cutting, bending, shifting to site, tying and placing in position				
	Mate	day	0.16	620.00	99.20
	Blacksmith Gr I	day	1.00	601.00	601.00
	Mazdoor	day	3.00	589.00	1767.00
С	Machinery				
	Cutting machine	hr	5.33	376.00	2004.08
	Bending machine	hr	5.33	376.00	2004.08
	Electric generator 15 KVA	hr	5.33	278.00	1481.74
	For Loading & unloading 10 m³capacity	hr	1.73	1793.00	3101.89
	Light crane 3 tonnes capacity At Cuting bending yard	hr	2.00	793.00	1586.00
	Light crane 3 tonnes capacity At Site	hr	2.20	793.00	1744.60
	Sub Total - A				522457.59
f	Over Head Charges 20 % on A				104491.52
g	Sub Total - B				626949.11
	Contractor's profit 10% on B				62694.91
	Total Cost per 8t				689644.02
	Cost per t				86206.00
С	For Substructure of Bridges				
	Details of cost for 8t				
a	MATERIAL				
	(TMT bars including 5 per cent overlaps and wastage)	t	8.40	60170.00	505428.00
	Binding wire	kg	48.00	55.00	2640.00
b	LABOUR for cutting, bending, shifting to site, tying and placing in position				
	Mate	day	0.16	620.00	99.20
	Blacksmith Gr I	day	1.00	601.00	601.00
	Mazdoor	day	3.00	589.00	1767.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
С	Machinery				
	Cutting machine	hr	6.67	376.00	2506.79
	Bending machine	hr	6.67	376.00	2506.79
	Electric generator 15 KVA	hr	6.67	278.00	1853.43
	For Loading & unloading 10 m <sup>3</sup> capacity	hr	1.73	1793.00	3101.89
	Light crane 3 tonnes capacity At Cuting bending yard	hr	2.00	793.00	1586.00
	Light crane 3 tonnes capacity At Site	hr	2.20	793.00	1744.60
	Sub Total - A				523834.70
f	Over Head Charges 20 % on A				104766.94
g	Sub Total - B				628601.64
	Contractor's profit 10% on B				62860.16
	Total Cost per 8t				691461.80
	Cost per t				86433.00
d	For Superstructure of Bridges				
	Details of cost for 8t				
а	MATERIAL				
	(TMT bars including 5 per cent overlaps and wastage)	t	8.40	60170.00	505428.00
	Binding wire	kg	48.00	55.00	2640.00
b	LABOUR for cutting, bending, shifting to site, tying and placing in position				
	Mate	day	0.16	620.00	99.20
	Blacksmith Gr I	day	1.00	620.00	620.00
	Mazdoor	day	3.00	589.00	1767.00
С	MACHINERY				
	Cutting machine	hr	8.00	376.00	3008.00
	Bending machine	hr	8.00	376.00	3008.00
	Electric generator 15 KVA	hr	8.00	278.00	2224.00
	For Loading & unloading 10 m³capacity	hr	1.81	1793.00	3236.37
	Light crane 3 tonnes capacity At Cuting bending yard	hr	2.00	793.00	1586.00
	Light crane 3 tonnes capacity At Site	hr	2.00	793.00	1586.00
	Sub Total - A				525202.57
f	Over Head Charges 20 % on A				105040.51
g	Sub Total - B				630243.08
	Contractor's profit 10% on B				63024.31
	Total Cost per 8t				693267.39
	Cost per t				86658.00

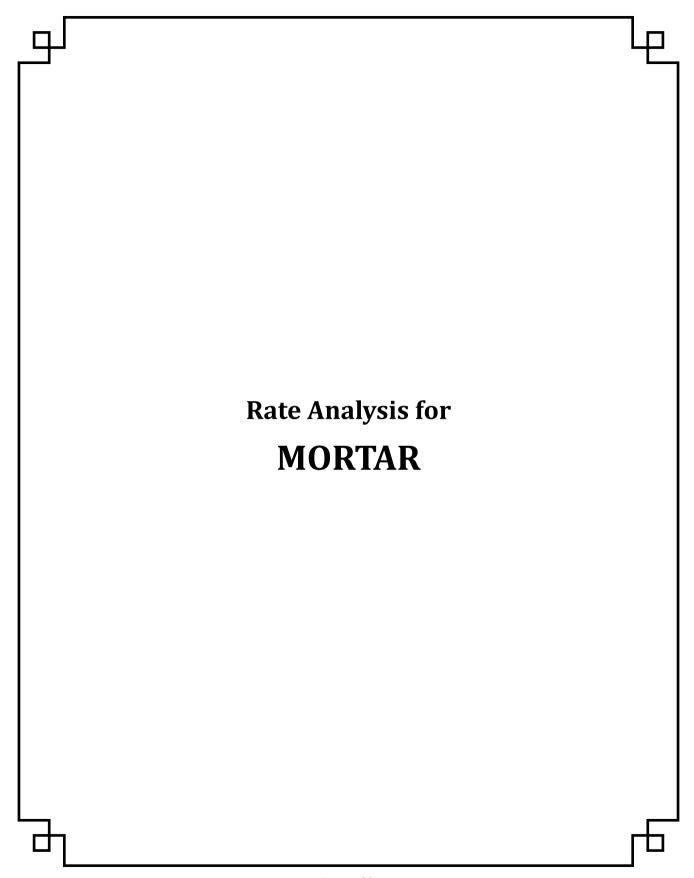
Sl. No.	Specificatio	n			Unit	Qty R	Rate Amount ₹
e.	Dam & Allied Works						
	Providing, fabricating and placing cost of all materials, machinery welding joints wherever requirancillary operations complete.	y, labour, cl	eaning	, straig	htening,	cutting, bend	ing, hooking, lapping /
					UNIT:	1.00	t
a. MATE	RIALS:						
Sl No	Particulars	Unit		Qty.		Rate	Amount
1	Rein.Steel with 2.5 % wastage	t		1.025		60170.00	61674.25
2	Binding wire 1.25 mm dia	kg		9.00		55.00	495.00
3	Welding electrodes	Each		15.00		11.00	165.00
						Total :	62334.25
b. MACH	INERY:						
Sl No	Description	Unit		Qty.		Rate	Amount
1	Welding set	hr		2.00		9.00	18.00
	Fuel / Energy charges	hr		2.00		98.00	196.00
2	Tower crane	hr		0.25		747.00	186.75
	Fuel / Energy charges	hr		0.25		212.00	53.00
						Total :	453.75
c. LABO	UR:	. 1					
Sl No	Description	Unit		Qty.		Rate	Amount
1	Crew for Tower crane	hr		0.25		254.00	63.50
2	Welder	day		0.50		619.00	309.50
3	Bar bender	day		7.00		619.00	4333.00
4	Heavy mazdoor	day		9.00		589.00	5301.00
						Total :	10007.00
					Total co	ost of Labour :	10007.00
					A	Total (a+b+c) :	72795.00
d)	Add 1% Sundries on a&b				1%		627.88
			•	'	Sub to	tal =a+b+c+d	73422.88
e)	Add 1% water charges on A				0%		0.00
	-				Sub	total =A+e	72795.00
f)	Form work as applicable on "A"				0%		0.00
-					Sub to	tal B= A+e+f	73422.88
g)	Add 10% over head charges on "B"				10%		7342.29
					Sub t	otal C=B+g	80765.17
h)	Add 10% Contractors profit on "C"				10%		8076.52

Sl. No.	Specification	n			Unit	Qty	Rate ₹	Amount
					Total	cost X=C+h		88841.68
	Total cost for	1.00 t						88841.68
	7000700707	Rate app	roved r	er t				88841.68
			st per t	, ci t				88842.00
f	Canal & Allied Works							00012.00
	Providing, <b>fabricating and placi</b> all materials, machinery, labour, wherever required, tying with 1 operations complete.	cleaning, st	traighte	ning, c	cutting, l nealed s	pending, hook teel wire and	all other	ing, welding
					UNIT:	1000.00	) kg	
a. MATE	RIALS:				1	Γ		
Sl No	Particulars	Unit		Qty.	Rate			Amount
					in `.			in`:
1	Rein.Steel with 2.5 % wastage	kg		1025		60.17	7	61674.25
2	Binding wire 1.25 mm dia	kg		10.00		55.00	)	550.00
				V <sub>1</sub>	Total cos	t of Materials	:	62224.25
b. MACH	IINERY:							
1	NIL	1		0.00		0.00	)	0.00
				0.00		0.00	)	0.00
					Total Us	age charges o Machinery		0.00
c. LABO	UR:						•	
1	Bar bender	day		7.00		619.00	)	4333.00
2	Heavy mazdoor	day		11.00		589.00	)	6479.00
					Total co	ost of Labour	:	10812.00
					7	Total(A+B+C)	:	73036.25
					A	Total (a+b+c) `:		73036.25
d)	Add 1% Sundries on a				1%			622.24
					Sub to	tal =a+b+c+d		73658.49
e)	Add 1% water charges on A				1%			730.36
					Sub	total =A+e		73766.61
f)	Form work as applicable on "A"				0%			0.00
-								74388.86
g)	Add 10% over head charges on "B"	Sub	total B		10%			7438.89
		Sub to	tal C=B+	·g				81827.74

l. No.	Specification	on			Unit	Qty	Rate ₹	Amount
h)	Add 10% Contractors profit on "C"				10%			8182.77
		Total co	ost X=0	C+h				90010.51
	Total cost for	1.00	t					90010.51
		Rate app	roved	per t				90010.51
		Cost per t						90010.00
g	Tunnel works							
	Providing, fabricating and placi cost of all materials, machiner cutting, bending, hooking, lappi annealed steel wire and all other	y, labour, ve ng / weldin	ntilati g joint	on, ligh s where	ting, dra ever requ	inage, cleanir	ng, straigh th 1.25 m	tening,
		A. M.	ATERI	ALS:				
Sl No	Perticulars	Unit		Qty.	Rate		Amou	nt
			4		in`.			in`.
1	Rein.Steel with 2.5 % wastage	t	1	1.025		60170.00		61674.2
2	Binding wire 1.25 mm dia	kg		13.50		55.00		742.50
			7			Total `:	1	62416.7
		R M	ACHIN	FDV.				
Sl No	Description	Unit		Qty.	Rate			Amount
51110	Description	Onic		Qty.	in Rs.		1	in Rs.
1	NIL							
				0.00		0.00		0.0
					Total Usa	ige charges of Machinery :		0.00
			1001					
ClMa	Doggrintion		ABOU	1		Doto		lmount
Sl No	Description Bar bender	Unit		Qty.		Rate		1mount 5571.0
1 	Heavy mazdoor	day day		9.00		619.00 589.00	+	7068.0
	ineavy mazuooi	uay		12.00		Total `:	+	12639.0
	ADOMD A CIT							
	ABSTRACT:							
	A. Cost of Materials							62416.7
	B. Usage charges of Machinery							0.0
	C. Cost of Labour							12639.0

Sl. No.	Specification	on			Unit	Qty	R	late ₹	Amount
					A	Total a+	b+c)		75055.75
d)	Add 1% Sundries on a				1%				624.17
		Sub total	l=a+b	+c+d					75679.92
e)	Add 1% water charges on A				0%				0.00
		Sub to	tal =A	+e					75055.75
f)	Form work as applicable on "A"				0%				0.00
									75679.92
		Sub	total E	3					75679.92
g)	Add 10% over head charges on "B"				10%				7567.99
		Sub tot	al C=I	3+g	A				83247.91
h)	Add 10% Contractors profit on "C"			4	10%				8324.79
		Total co	st X=0	C+h					91572.70
			1			TOT	TAL:		91572.70
	Total cost for	1.00	t	1					91572.70
		Rate per	t						91572.70
		Cost per t					1		91573.00
h	For all other type of structures								
	Details of cost for 8t	) ~							
a	MATERIAL								
	(TMT bars including 5 per cent of FE550 Grade)	overlaps and	wasta	ge	t	8.40	601	70.00	505428.00
	Binding wire				kg	48.00	5	5.00	2640.00
b	LABOUR								
	Mate				day	0.16 620.00			99.20
	Blacksmith Gr II				day	1.00	60	1.00	601.00
	Mazdoor				day	3.00	58	39.00	1767.00
С	MACHINERY								
	Cutting machine				hr	5.33	37	6.00	2005.21
	Bending machine				hr	5.33	37	6.00	2005.21
	Electric generator 15 KVA				hr	5.33	27	78.00	1482.57
	For Loading & unloading 10 m <sup>3</sup> ca	apacity			hr	1.78	17	93.00	3187.95
	Light crane 3 tonnes capacity At	Cuting bend	ing ya	rd	hr	2.00	79	3.00	1586.00
	Light crane 3 tonnes capacity At	Site			hr	2.00	79	3.00	1586.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
	Sub Total - A				522388.14
f	Over Head Charges 10 % on A				52238.81
g	Sub Total - B				574626.96
	Contractor's profit 10% on B				57462.70
	Total Cost per 8t				632089.65
	Cost per t				79011.00
2.12	Supplying, fitting and placing Mild Steel Reinforcement complete as per drawing and technical specification.				
	Details of cost for 8t				
а	MATERIAL				
	(Mild bars including 5 per cent overlaps and wastage)	t	8.40	56000.00	470400.00
	Binding wire	kg	48.00	55.00	2640.00
b	LABOUR				
	Mate	day	0.16	620.00	99.20
	Blacksmith	day	1.00	601.00	601.00
	Mazdoor	day	3.00	589.00	1767.00
С	MACHINERY				
	Cutting machine	hr	5.33	376.00	2005.21
	Bending machine	hr	5.33	376.00	2005.21
	Electric generator 15 KVA	hr	5.33	278.00	1482.57
	For Loading & unloading 10 m³capacity	hr	1.78	1793.00	3187.95
	Light crane 3 tonnes capacity At Cuting bending yard	hr	2.00	793.00	1586.00
	Light crane 3 tonnes capacity At Site	hr	2.00	793.00	1586.00
	Sub Total - A				487360.14
f	Over Head Charges 10 % on A				48736.01
g	Sub Total - B				536096.16
	Contractor's profit 10% on B				53609.62
	Total Cost per 8t				589705.77
	Cost per t				73713.00



Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.1	Providing Cement mortar 1:1 (1 cement : 1 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.7175 \text{ m}^3. \text{ of cement} = 1.02 \text{ t})$				
	Cement required for cement mortar is 71.25%				
	Cement	t	1.02	5860.00	5977.20
	Fine Sand	m <sup>3</sup>	0.7125	1476.00	1051.65
	LABOUR				
	For measuring, carrying, depositing and mixing-	<b>\</b>			
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				7881.00
3.2	Providing Cement mortar 1:2 (1 cement : 2 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	(0.475 m <sup>3</sup> . of cement = 0.68 t) Cement required for cement mortar is 47.50%				
	Cement	t	0.68	5860.00	3984.80
	Fine sand	m <sup>3</sup>	0.95	1476.00	1402.20
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				6239.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.3	Providing Cement mortar 1:3 (1 cement : 3 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.357 \text{ m}^3. \text{ of cement} = 0.51 \text{ t})$ Cement required for cement mortar is $35.70\%$				
	Cement	t	0.51	5860.00	2988.60
	Fine sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing	A			
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				5420.00
3.4	Providing Cement mortar 1:4 (1 cement : 4 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.268 \text{ m}^3. \text{ of cement} = 0.38 \text{ t})$ Cement required for cement mortar is $26.80\%$				
	Cement	t	0.38	5860.00	2226.80
	Fine sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				4658.00

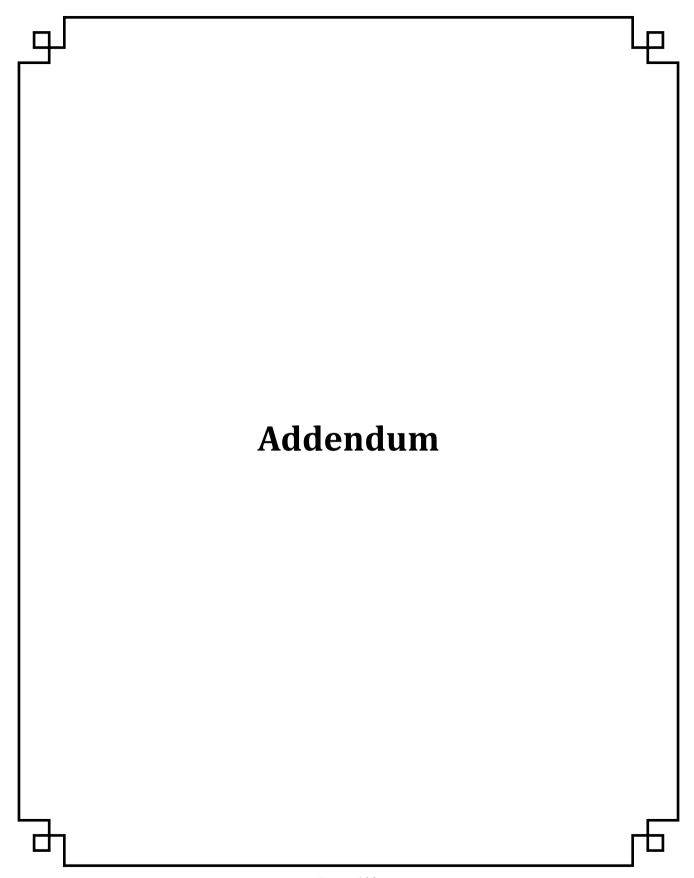
Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.5	Providing Cement mortar 1:5 (1 cement : 5 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	(0.214 m <sup>3</sup> . of cement = 0.31 t) Cement required for cement mortar is 21.40% Cement	m <sup>3</sup>	0.31	5860.00	1816.60
	Fine Sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				4248.00
3.6	Providing Cement mortar 1:6 (1 cement : 6 fine sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.178 \text{ m}^3. \text{ of cement} = 0.25 \text{ t})$ Cement required for cement mortar is $17.80\%$				
	Cement	t	0.25	5860.00	1465.00
	Fine sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				3896.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.7	Providing Cement mortar 1:2 (1 cement : 2 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	(0.476 m <sup>3</sup> . of cement = 0.68 t) Cement required for cement mortar is 47.50%				
	Cement	t	0.68	5860.00	3984.80
	Coarse sand	m <sup>3</sup>	0.95	1476.00	1402.20
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				6239.00
3.8	Providing Cement mortar 1:3 (1 cement: 3 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.357 \text{ m}^3. \text{ of cement} = 0.51 \text{ t})$ Cement required for cement mortar is $35.70\%$				
	Cement	t	0.51	5860.00	2988.60
	Coarse sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				5420.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.9	Providing Cement mortar 1:4 (1 cement : 4 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.268 \text{ m}^3. \text{ of cement} = 0.38 \text{ t})$ Cement required for cement mortar is $26.80\%$				
	Cement	t	0.38	5860.00	2226.80
	Coarse sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				4658.00
3.10	Providing Cement mortar 1:5 (1 cement: 5 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	(0.214 $\text{m}^3$ . of cement = 0.31 t) Cement required for cement mortar is 21.40%				
	Cement	t	0.31	5860.00	1816.60
	Coarse sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				4248.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.11	Providing Cement mortar 1:6 (1 cement : 6 coarse sand) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	(0.178 m <sup>3</sup> . of cement = 0.25 t) Cement required for cement mortar is 17.80%				
	Cement	t	0.25	5860.00	1465.00
	Coarse sand	m <sup>3</sup>	1.07	1476.00	1579.32
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery	7			
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				3896.00
3.12	Providing Cement mortar 1:2 (1 cement : 2 stone dust) including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	$(0.475 \text{ m}^3. \text{ of cement} = 0.68 \text{ t})$ Cement required for cement mortar is $47.50\%$				
	Cement	t	0.68	5860.00	3984.80
	Stone dust	m <sup>3</sup>	0.95	1237.00	1175.15
	LABOUR				
	For measuring, carrying, depositing and mixing				
	Mazdoor Heavy	day	0.75	589.00	441.75
	Mazdoor Light	day	0.07	589.00	41.23
	Machinery				
	Usage and running charges of mechanical mixer	hr	1.00	369.00	369.00
	Total				6012.00

Sl. No.	Specification	Unit	Qty	Rate ₹	Amount
3.13	Providing Mud mortar including cost of all materials, labour and usage charges of machinery complete as per the direction of engineer incharge of work.				
	Details of cost for 1 m <sup>3</sup>				
	MATERIAL				
	Mud (dry)	m <sup>3</sup>	1.00	145.00	145.00
	LABOUR				
	Mazdoor Heavy	day	0.63	589.00	371.07
	Mazdoor Light	day	0.32	589.00	185.54
	Total				702.00



### Addendum I – Percentage Additionalities for Formwork, Centering & Scaffolding

Following additional percentage to be added to the finished rates of concrete of Buildings, Irrigation works, Water supply works, Roads & Bridges depending upon the type of structure. These percentages are worked out based on empirical mathematical approaches & exhaustive studies on the common standard sizes of the type of the structure of Buildings, Irrigation works, Bridges, Water works etc. The use rate of MS shuttering material is considered at 40 repetitions and type of material to be used is steel centering.

For irrigation works, the cost of formwork is worked out based on theoretical computations on m<sup>2</sup> basis per m<sup>3</sup> of concrete and the percentage additionality on finished rate of concrete is arrived.

The percentages can be varied if the work involves extra ordinary conditions other than specified below subject to approval by the Superintending Engineer.

For fast paced monolithic constructions, the Mivan Shuttering (Aluminium formwork) shall be preferred.

Sl No.	Type of structure	Percentage on finished rate of concrete per m <sup>3</sup>
1.	Foundation upto Plinth	-
	a. Isolated	8%
	b. All other types	3%
2.	Plinth Beams of Buildings	50%
3.	Foundation, Sub structure of Cross drainages	5%
4.	Cement Concrete Drain Walls	35%
5.	Open Foundation	4%
6.	Well Foundation	20%
7.	Road medians, Traffic Separators, Dividers etc	5%
8.	Culverts (Head walls)	8%
9.	RCC Columns / Shaft (Slip Centering)	70%
10.	Piers & Abutments	10%

11.	Earth retaining structures	10%
12.	Canal lining (only verticle sections)	10%
13.	Dam & Allied works	12%
14.	RCC Beams, Lintels & Troughs of Aqueducts	60%
15.	RCC Roof Slabs	50%
16.	Staircase and other similar structures	50%
17.	Painting of old external walls above floor 2	20%
18.	Architectural projection of major sections	30%
19.	Chejjas, Canopy & Other Architectural projections of minor sections	45%
20.	Curved RCC Roof Slabs, Domes & Sloped Roofs	70%

## **Bridges**

Sl No.	Type of structure	Percentage on finished rate of concrete per m <sup>3</sup>
1.	Solid Slab Super Structure	20%
2.	T-Beam & Slab	25%
3.	Box Girder & Balanced Cantilever	40%
4.	Cast insitu Box Girder & Segmental construction	40%
5.	For T-beam & slab, including launching of precast girders by launching truss upto 40 m span	20%
6.	Box Culverts	20%

Note: The above percentages are applicable for Bridge works for 0 to 5 m heights. For different heights, the percentages shall be adopted for form work and staging including base preparation as per Item No. 2.6

### Addendum II - Additional Specifications to be Included in General Conditions of Contract for use of Manufactured Sand / Artificial Sand / Fine Aggregates

- 1. Crushed Sand / Artificially Manufactured Sand/ Fine Aggregates hereinafter referred for as "Manufactured Sand" shall be as defined under CL 3.1.2 of IS 383-2016
- 2. The properties of "Manufactured Sand" shall confirm to the provisions of IS 383·2016.
- 3. The "Manufactured Sand" shall be free of dust and other Deleterious material.
- 4. The "Manufactured Sand" shall be manufactured using "Automatic Vertical Shaft Impactor" type Crusher only.
- 5. The quantity of Microfines (Particles below 75 microns) in "Manufactured Sand" shall not be more than 7 %.
- 7. Each Load of Manufactured Sand whenever brought on site shall be tested for "Fineness modulus". Fineness modulus shall be within permissible limits. If it doesn't fall within acceptable limits, it shall be rejected.
- 8. The Test of Compressive Strength of concrete / Mortar using "Manufactured Sand" shall be carried out in presence of Department's Engineer as per Quality Assurance Programme approved by Quality Assurance Authorities.
- 9. The Flakiness Index and Elongation index tests shall be within permissible limits.
- 11. As far as possible freshly produced "Manufactured Sand" shall be used, Stored "Manufactured Sand" shall not be used.
- 12. For Plastering purpose, if the use of Manufactured Sand is proposed it shall be used with addition of super plasticisers at the rate of 100 ml / Bag of Cement without extra cost to Government. (P-Sand is preferred)
- 13. The following tests shall be carried out for the use of "Manufactured Sand" at the site.
  - a) Sieve analysis
  - b) Specific Gravity
  - c) Water absorption
  - d) Bulk density

- e) Alkali Aggregate Reaction
- f) Soundness
- g) Deleterious Material
- h) Organic Impurities
- i) Micro fines Content
- j) Test for silt and clay
- k) Fineness Modulus test
- 15. Grading Zone II mentioned under Clause 6.3 table 9 of fine aggregates IS 383:2016 shall only be used for Concreting.

Sl No.	IS Sieve Designation	Percentage Passing				
		Gr. Zone - 1	Gr. Zone - 2	Gr. Zone - 3	Gr. Zone - 4	
1.	10 mm	100	100	100	100	
2.	4.75 mm	90 - 100	90 - 100	90 - 100	90 - 100	
3.	2.36 mm	60 - 95	75 - 100	85 - 100	95 - 100	
4.	1.18 mm	30 - 70	55 - 90	75 - 100	90 - 100	
5.	600 micron	15 - 34	35 - 59	60 - 79	80 - 100	
6.	300 micron	5 - 20	8 - 30	12 - 40	15 - 50	
7.	150 micron	0 - 10	0 - 10	0 - 10	0 - 15	

**Note**: The extent of utilization of aggregate from other than natural sources such as Iron & Steel slag aggregate (Annex - A) shall be as per table 1 of IS 383:2016. This shall be substituted as partial replacement to fine aggregate if found economical.

# Addendum III - Criteria/Requirement for approval of Reinforcement Bars

Sl. No.	Type of Steel Bars	IS Code : reference
1.	Mild Steel	IS432
2.	TMT Fe 550	104 70 ( , 0000
3.	TMT Fe 550D	IS1786 -2008
4.	Fe 600	

### **Physical Properties:**

Sl No.	Property	Fe550	Fe550D	
1.	0.2% Proofstress, Yield stress Min : N/mm <sup>2</sup>	550	600	
2.	TS / YS ratio N/mm <sup>2</sup>	≥1.06	≥1.10	
3.	Ultimate tensile strength N/mm <sup>2</sup>	585	565	
4.	Elongation % Min	10	16	

### **Chemical Properties:**

SlNo.	Constituent	% Maximum	
		Fe550	Fe550D
1.	Carbon	0.30	0.25
2.	Sulphur	0.055	0.040
3.	Phosphorous	0.050	0.040
4.	Sulphur & Phosphorous	0.100	0.075

The criteria for selection of the Mild steel & TMT bars shall be as per Ministry of Road Transport & Highways letter dated 12-02-2021.

### **Tentative Percentage of Reinforcement required for Structures**

	BUILDINGS					
Sl. No	Structural Member	% of Steel by Volume of Concrete				
1	Foundations	0.12% to 1.30%				
2	Pedestal	0.5% to 0.70%				
3	Columns	0.8% to 4.00%				
4	Shear walls	0.4% to 3.50%				
5	Retaining wall	1.00% to 1.30%				
6	Plinth beams	1.00% to 2.30%				
7	Roof beams	1.00% to 3.20%				
8	Roof slab	0.8% to 2.00%				
9	Lintels	0.8% to 1.50%				
10	Chejjas	0.8% to 1.50%				
11	Staircases	1.00% to 2.30%				
	BRIDGES					
12	Well foundation	0.12% to 2.00%				
13	Pile foundation	1.25% to 2.00%				
14	Piers	1.00% to 4.00%				
15	Pier cap	1.5% to 3.00%				
16	T-beam and slab	1.00% to 3.20%				
17	Box girder	1.00% to 3.20%				

**Note :** The above percentages are for estimate purpose only and exact requirement shall be as per design.

### **Addendum - IV DPR Preparation Charges**

	Consultancy Fee for Civil Works in Public Works Department					
Sl No	Detail of Services	Rs. 1.00 Cr to Rs. 5.00 Cr	Rs. 5.00 Cr to Rs. 10.00 Cr	Rs. 10.00 Cr to Rs. 100.00 Cr	Above Rs. 100.00 Cr	
1.	Structural designs including structural drawings (For Buildings & Bridges)	1.00	0.80	0.50	0.50	
2.	DPR and constructiondrawings for all Services (For Buildings & Bridges)	1.50	1.50	1.00	0.75	
3.	DPR for Road works including Survey & design services	1.50	1.00	1.00	0.75	
4.	PMC Charges	2.50	2.00	1.75	1.50	
5.	Third Party Charges	1.00	0.60	0.50	0.50	

#### Criteria for selection of consultants.

- 1. The percentages specified in the table shall be adopted in all plan works estimates.
- 2. The consultants shall be empaneled from Chief Engineer, PWD.
- 3. The period of empanelment shall be 3 years from the date of contract.
- 4. The Executive Engineer shall make an agreement with the consultant with brief scope of work mentioned.
- 5. The consultant shall work as per departmental guidelines and submit report as and when asked by execution authority.
- 6. The expenditure shall be chargeable to main estimates. If any irregularities are found in working with consultant, the empanelled authority is vested with rights to cancel the empanelment.
- 7. The architectural drawings, structural designs and other drawings obtained from consultant are to be approved by competant authority before execution.

# **Addendum - V Quality Control Lab Testing Rates**

Sl No.	Material	Tests	Rate Rs.	Quantity of samples required for test**
1	Aggregate Coarse	Sieve Analysis	190.00	30-40 kg
		Specific Gravity		
		Bulk Density	480.00	
		Impact Value	360.00	
		Abrasion Value	460.00	
		Crushing Value	460.00	
		10% Fines Value	460.00	
		Partical finer than 75 microns	190.00	
		Stripping Value	190.00	
2	Aggregate Fine	Sieve Analysis	210.00	20 kg
		Specific Gravity		
		Bulk Density		
		Bulking & Moisture Content	480.00	
		Water Absorption		
		Partical finer than 75 microns	210.00	
		Fineness Modulus	190.00	
		Silt Content	190.00	
3	Bitumen	Specific Gravity	490.00	3 kg
		Flash point		
		Fire point	490.00	
		Softening Point	490.00	
		Penetration	490.00	
		Ductility	605.00	

4	Bituminious Concrete / Mix	Job mix (OGPC/PMC/BM/ DBM/BC/SDBC)	5470.00	Bitumen 5 kg Aggregate each 1 bag
		Sieve Analysis	190.00	
		Impact Value	360.00	
		Abrasion Value	460.00	
		Flakiness & Elongation Index		
		Water Absorption	480.00	
		Density		
		Stripping Value	190.00	
5	Bricks	Water Absorption	180.00	1 No for each test
		Compressive Strength	450.00	
		Efflorescence	210.00	
		Dimensional Analysis	100.00	
6	Cement			
		Consistency	220.00	10 kg
		Initial & Final Setting time	360.00	
		Fineness	150.00	
		Soundness	220.00	
		Compressive Strength	1000.00	
7	Cement Mortar	Proportion / Cement Content	415.00	2 kg
8	Concrete Cubes	Compressive Strength	415.00	Set of 3 nos
9	Concrete Blocks (Solid/Hollow)	Compressive Strength	600.00	1 No for each test
		Water Asorption	250.00	
10	Concrete Core	Concrete core extraction including Profometer test	1300.00	1 No
		Concrete core extraction without Profometer test	1000.00	1 No

Concrete Design Mix (Curing Method)  Accelarated Curing Test (ACT Method)  Sieve Analysis  Sieve Analysis  Sieve Analysis  Sieve Analysis  To a low Fines Value  Liquid & Plastic limits  Impact Value  Abrasion Value  Modified Compaction  Soaked CBR  Non Destructive Testing  Ultrasonic pulse velocity test  Rebound Hammer  Rebound Hammer  Rebound Hammer  To Pavers Block  Water Absorption  Rebound Hammer  Rebound Hammer  To Pavers Block  Compressive Strength  Reinforcing Steel  Physical properties up to 20mm  Physical properties Mora than 20mm  Physical properties Mora than 20mm  Physical properties Mora than 20mm  Soaked CBR  Sieve Analysis  Sieve Analysis			Compressive Strength with capping	750.00	1 No
Granular Sub Base (GSB)  Granular Sub Base (GSB)  Sieve Analysis  Sieve Analysis  The string of the	11	Concrete Design Mix		5400.00	Aggregate each 2 bags,
Sieve Analysis   S75.00			_	6700.00	
Water Absorption  10% Fines Value Liquid & Plastic limits Impact Value Abrasion Value Modified Compaction Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test Ultrasonic pulse velocity test Water Absorption Rebound Hammer Rebound Hammer 300.00 For 10 members (LS) Additional per member Beyond 10 members Beyond 10 membe	13		GSB Mix design	3185.00	20 kg
Liquid & Plastic limits Impact Value Abrasion Value Modified Compaction Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test Ultrasonic pulse velocity test Aebound Hammer Rebound Hammer 300.00 Rebound Hammer 300.00 For 10 members (LS) For 10 members (LS) Additional per member Beyond 10 members Beyond 10 members 17 Pavers Block Water Absorption 160.00 Additional per member Beyond 10 members Beyond 10 members 17 Pavers Block Water Absorption 160.00 Additional per member Beyond 10 members 18 Reinforcing Steel Physical properties up to 200.00 Physical properties up to 20mm Physical properties Mora than 20mm Physical properties Mora than 20mm Sieve Analysis 335.00 25 Kg			Sieve Analysis	575.00	
Liquid & Plastic limits  Impact Value Abrasion Value Modified Compaction Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test Ultrasonic pulse velocity test Abound Hammer Rebound Hammer 300.00 Rebound Hammer 300.00 For 10 members (LS) Additional per member Beyond 10 members Rebound Hammer 300.00 For 10 members Beyond 10 members 17 Pavers Block Water Absorption 160.00 Additional per member Beyond 10 members Beyond 10 members 17 Pavers Block Water Absorption 160.00 Additional per member Beyond 10 members 18 Reinforcing Steel Physical properties up to 200.00 Physical properties wor than 20mm Physical properties Mora than 20mm 21 Soil Test (LAB) Sieve Analysis 335.00 25 Kg			Water Absorption		
Impact Value Abrasion Value Modified Compaction Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test Ultrasonic pulse velocity test Additional per member Beyond 10 members Rebound Hammer Rebound Hammer 300.00 Additional per member Beyond 10 members Rebound Hammer 300.00 Additional per member Beyond 10 members 17 Pavers Block Water Absorption Compressive Strength 200.00  Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm Sieve Analysis 335.00 25 Kg			10% Fines Value		
Abrasion Value  Modified Compaction  Soaked CBR   16 Non Destructive Testing  Ultrasonic pulse velocity test  Ultrasonic pulse velocity test  Ultrasonic pulse velocity test  Rebound Hammer  Rebound Hammer  300.00  For 10 members (LS)  For 10 members (LS)  Additional per member Beyond 10 members  Rebound Hammer  300.00  Additional per member Beyond 10 members  17 Pavers Block  Water Absorption  Compressive Strength  200.00  18 Reinforcing Steel  Physical properties up to 20mm  Physical properties Mora than 20mm  Physical properties Mora than 20mm  Sieve Analysis  335.00  25 Kg			Liquid & Plastic limits		
Modified Compaction Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test 450.00 For 10 members (LS)  Ultrasonic pulse velocity test 450.00 Additional per member Beyond 10 members  Rebound Hammer 300.00 For 10 members (LS)  Rebound Hammer 300.00 Additional per member Beyond 10 members  17 Pavers Block Water Absorption 160.00 6 Nos  Compressive Strength 200.00  18 Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm  Physical properties Mora than 20mm  21 Soil Test (LAB) Sieve Analysis 335.00 25 Kg			Impact Value	3185.00	
Soaked CBR  16 Non Destructive Testing Ultrasonic pulse velocity test Ultrasonic pulse velocity test Ultrasonic pulse velocity test Beyond 10 members Rebound Hammer 300.00 For 10 members (LS) Rebound Hammer 300.00 For 10 members (LS) Rebound Hammer 300.00 Additional per member Beyond 10 members Rebound Hammer 300.00 Additional per member Beyond 10 members 17 Pavers Block Water Absorption 160.00 6 Nos Compressive Strength 200.00 Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm Physical properties Mora than 20mm 21 Soil Test (LAB) Sieve Analysis 335.00 25 Kg			Abrasion Value		
Non Destructive Testing  Ultrasonic pulse velocity test  Ultrasonic pulse velocity test  Ultrasonic pulse velocity test  Rebound Hammer  Rebound Hammer  300.00  For 10 members Beyond 10 members (LS)  Rebound Hammer  300.00  Additional per member Beyond 10 members  17 Pavers Block  Water Absorption  Compressive Strength  200.00  Reinforcing Steel  Physical properties up to 20mm  Physical properties Mora than 20mm  Physical properties Mora than 20mm  Physical properties Mora than 20mm  Sieve Analysis  335.00  25 Kg			Modified Compaction		
Testing test Ultrasonic pulse velocity test Hest Hest Hest Hest Hest Hest Hest			Soaked CBR		
test member Beyond 10 members Rebound Hammer 300.00 For 10 members (LS)  Rebound Hammer 300.00 Additional per member Beyond 10 members  17 Pavers Block Water Absorption 160.00 6 Nos  Compressive Strength 200.00  Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm  Sieve Analysis 335.00 25 Kg	16			450.00	For 10 members (LS)
Rebound Hammer 300.00 Additional per member Beyond 10 members  17 Pavers Block Water Absorption 160.00 6 Nos  Compressive Strength 200.00  Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm  Soil Test (LAB) Sieve Analysis 335.00 25 Kg			_	450.00	member
member Beyond 10 members  17 Pavers Block Water Absorption 160.00 6 Nos  Compressive Strength 200.00  Reinforcing Steel Physical properties up to 20mm Physical properties Mora than 20mm  Soil Test (LAB) Sieve Analysis 335.00 25 Kg			Rebound Hammer	300.00	For 10 members (LS)
Compressive Strength 200.00  Reinforcing Steel Physical properties up to 20mm  Physical properties Mora than 20mm  Soil Test (LAB) Sieve Analysis 335.00  200.00  3 Nos of 1 m length 700.00 25 Kg			Rebound Hammer	300.00	member
Reinforcing Steel Physical properties up to 20mm 650.00 3 Nos of 1 m length Physical properties Mora than 20mm 700.00  Soil Test (LAB) Sieve Analysis 335.00 25 Kg	17	Pavers Block	Water Absorption	160.00	6 Nos
20mm  Physical properties Mora than 20mm  Sieve Analysis 335.00 25 Kg			Compressive Strength	200.00	
than 20mm  21 Soil Test (LAB) Sieve Analysis 335.00 25 Kg	18	Reinforcing Steel		650.00	3 Nos of 1 m length
				700.00	
Liquid & Plastic limits 605.00	21	Soil Test (LAB)	Sieve Analysis	335.00	25 Kg
			Liquid & Plastic limits	605.00	

		Standard Compaction (OMC&MDD)	400.00	
		Modified Compaction (OMC&MDD)	400.00	
		Soaked CBR	950.00	
		Specific gravity	270.00	
		Field Density test (Core cutter)	335.00	
		Field Density test (Sand Replacement)	335.00	
		Differential free swell Index	200.00	
		Hydrometer	505.00	
		Unconfined Compressive Strength (UCC)	-	
		Permeability	975.00	
		Direct Shear Test	-	
		Shrinkage Limit	605.00	
		Swelling Pressure	800.00	
		Triaxial Shear test	1860.00	
		Consolidation	805.00	
25	Tiles-Clay	Breaking Load	380.00	1 No for each test
		Water Absorption	180.00	
26	Wet Mix Macadam (WMM)	WMM Mix design	2595.00	20 kg
		Sieve Analysis	575.00	
		Water Absorption		
		Impact Value		
		Abrasion Value		
		Liquid & Plastic limits	2595.00	
		Flakiness & Elongation Index		
_		Modified Compaction		

27	Water Bound Macadam (WBM)	Sieve Analysis	575.00	20 kg
		Impact Value	360.00	
		Abrasion Value	460.00	
		Liquid & Plastic limits	-	
		Water Absorption	480.00	
28	Wood	Moisture Content	-	1 No
29	Water	Drinking purpose	200.00	2 L
30	Mineral Admixtures / Cement Substitutes	Consistency Fineness Soundness Slag Activity Index Glass Content	2500.00	1 No
31	Initial Vertical Pile Load Test	For 1000mm dia. Pile, having pile capacity of 550 t Reaction load -1719 t	7,50,000.00	
		For 1200mm dia. Pile, having pile capacity of 750 t, Reaction load -2344 t	8,50,000.00	
		For 1500mm dia. Pile, having pile capacity of 1000 t, Reaction load - 3125 t	10,00,000.00	
32	Initial lateral Pile load test	For 1000mm dia. Pile, having pile capacity of 30 t	50,000.00	
		For 1200mm dia. Pile, having pile capacity of 40 t	50,000.00	
		For 1500mm dia. Pile, having pile capacity of 65 t	65,000.00	
33	Initial pullout test of pile	Per test	2,40,000.00	

34	Static routine vertical Pile load test	For 1000mm dia Pile, having pile capacity of more than 400 t upto 1030 t	7,50,000.00	
		For 1200mm dia Pile, having pile capacity of more than 500 t upto 1406 t	8,50,000.00	
		For 1500mm dia Pile, having pile capacity of more than 800 t upto 1875 t	10,00,000.00	
35	Static routine lateral Pile load test	For 1000mm dia. Pile, having pile capacity of 20 t to 30 t	50,000.00	
		For 1200mm dia. Pile, having pile capacity of 25 t to 40 t	50,000.00	
		For 1500mm dia. Pile, having pile capacity of 45 t to 65 t	65,000.00	
36	Dynamic Pile load test	For 1000mm dia. Pile as per ASTM 4945 Section 08	1,00,000.00	
		For 1200mm dia. Pile as per ASTM 4945 Section 08	1,00,000.00	
		For 1500mm dia. Pile as per ASTM 4945 Section 08	1,00,000.00	
37	Ultrasonic Cross Hole Test on pile	Per test	6,000.00	
38	Integrity testing of Pile	Per test	1,000.00	
39	Plate load test	Per test	55,000.00	
1	** Minimum number Indian Standards	of samples required for eac	h test, refer sam	pling criteria as per
2	All rates are exclusive	of GST.		

# Addendum - VI Surveying

Sl. No.	Description	Unit	Rate₹
1	Fixing chainage Stone /Bench mark Stone / Center Stone / Apex Stone in earth and all sorts of soil and soft murum including conveying excavated material, fixing stone, including paintaining lettering numbers and back filling etc. complete.	Nos.	175.00
2	Taking the trial pit for roads, alignment, C.D. Works in earth soil of all sorts, sands gravel or soft murum, including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 m	m <sup>3</sup>	450.00
3	Taking the trial pit for roads, alignment, C.D. Works in earth soil of all sorts, sands gravel, or soft murum, including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 m	m <sup>3</sup>	490.00
4	Taking the trial pit for roads, alignment, C.D. Works in Hard murum, including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 m	m³	590.00
5	Taking the trial pit for roads, alignment, C.D. Works in Hard murum, including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 m	m <sup>3</sup>	660.00
6	Taking the trial pit for roads, alignment, C.D. Works in Hard murum, and Boulders including stacking the excavated material including all lifts and necessary back filling upto depth 1.5 m	m³	730.00
7	Taking the trial pit for roads, alignment, C.D. Works in Hard murum, and Boulders including stacking the excavated material including all lifts and necessary back filling upto depth 3.0 m	m <sup>3</sup>	930.00
8	Fixing survey pegs in earth and all sorts Soil, Sand, Gravel, Soft Murum, etc. including conveying, fixing etc. complete.	Nos.	10.00
9	Reconnaisance Survey of Road alignment in plain country including taking three dimensions of apexes, verification of type of land etc. alongwith the alignment etc. complete (Without Chaining).	km	2000.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
10	Reconnaisance Survey of Road alignment in plain country including taking three dimensions of apexes, verification of type of land etc. alongwith the alignment etc. complete (With Chaining).	km	5100.00
11	Reconnaissance Survey of a road alignment for new hilly road utilising exsisting forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (Without Chaining)	km	5420.00
12	Reconnaissance Survey of road alignment for new hilly road utilising exsisting forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (With Chaining)	km	5200.00
13	Reconnaissance Survey of road alignment in hilly road utilising exsisting forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (Without Chaining).	km	2880.00
14	Reconnaissance Survey of road alignment in hilly road utilising existing forest cart tracks with use of ghat tracer (if found necessary), taking three dimensions of apexes including verification of type of land etc. complete. (With Chaining).	km	5570.00
15	Detailed survey of road in plain country including chaining and levelling with cross sections at every two chains inclusive of closing of survey each day.	km	6090.00
16	Detailed survey of road length where earthwork is partly done including chaining and levelling with cross sections at every two chains inclusive of closing survey each day.	km	5850.00
17	Detailed survey of road through hilly country taking cross section at every chains or as required including chaining, levelling and closing survey each day.	km	9340.00
18	Detailed survey of road through hilly country taking cross section at every chains as desired including chaining, levelling and closing survey each day utilising existing cart track.	km	7400.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
19	Providing and Fixing Wooden survey pegs including White washing etc. complete.	km	45.00
20	Carrying out catchment area traverse survey of minor stream (not traceable in toposheet) below 100 acres	km	3310.00
21	Cutting down branches of trees, bushes etc. stacking the material neatly as directed (For Motarable Road)	km	7640.00
22	Providing detailed layout plan of area in scale 1:500 including carrying out contour survey and detailed Engineering plane table Survey with the help of 24 Alidade. The dolomite area measurement of the plot and structures, trees, over head line and under ground service amenities within the area, with triangular method and giving detailes of the structures, such as total area, type of building and distance from all corners taking trial pit 0.5x0.5x2.00 m2 Nos. per acre and collection of record from city survey / D.I.L.R. authorities and authentication. The plan shall be traced on 75 micron polyster film and shall be submitted along with three Amonia prints. The contour levels shall be marked at 0.5 m intervals. Note:- The items includes- 1)Traversing work with theodolite and steel tape. 2) Levelling Grid Work of the terrain. 3)Detailed Engineering Survey and contouring work of the terrain. 4) Plotting work. 5) Collection of Record. a) up to 1 Acre	h	8400.00
23	Providing detailed layout plan of area in scale 1:500 including carrying out contour survey and detailed Engineering plane table Survey with the help of 24' Alidade. The dolomite area measurement of the plot and structures, trees, over head line and under ground service amenities within the area, with triagular method and giving detailes of the structures, such as total area, type of building and distance from all corners taking trial pit 0.5x0.5x2.00 m2Nos. per acre and collection of record from city survey / D.I.L.R. authorities and authentication. The plan shall be traced on 75 micron polyster film and shall be submitted along with three Amonia prints. The contour levels shall be marked at 0.5 Meter intervals. Note:- The items includes- 1) Traversing work with theodolite and steel tape. 2) Levelling Grid Work of the terrain. 3) Detailed Engineering Survey and contouring work of the terrain. 4) Plotting work. 5) Collection of Record. b) Above 1 Acre	h	8500.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
24	Reconnaisance survey including study of sheets, maps etc. for alignment including 3 dimension of apexes, fixing pegs, chain and compass or cross staff survey with L-Section and cross section of alignment at every 30 m or at every change of deviation whichever is less including fly levels at closing of day, fixing apex and B.M. stones of size 0.20*0.20*0.75 m in 1:2:4 C.C. at every 200 m and preparation of alignment plans and all type of compliance if required from department.	km	28000.00
25	Preparation of detailed Plans and Estimates of road including typing in 5 copies, ammonia prints, with colouring of plans, proper filing, indexing and paging etc. complete and all types of compliance, if required from Department.	km	15400.00
26	Survey of C.D. works including taking L-section of Road, catchment area plan by Traverse method and taking trial pits of size 1.00x1.00x1.50 m including preparation of detailed Plans and Estimates in 5 copies and all types of compliance if required from the Department.	Nos.	15500.00
27	Survey of Minor bridge including taking L section of existing road and two defined cross sections, one of U/s and one of D/s, one vergin cross section on alternate proposed cross sections and bed slope of stream upto sufficient long distance as required with chain and compass. Taking three trial pits of size 1.00x1.00x3.0 m and collecting samples of materials at site for ascertaining the silt factor, unit weight test, specific gravity from Govt. approved laboratories (testing charges to be borne by the agency) and preparation of detailed survey data, submission of the project duly typed and colouring of the ammonia prints, site plan and other drawings etc. complete if required from the Department.	Nos.	59000.00
28	Survey of major bridge including taking L-section of existing road two defined cross-sections (one at U/S and one at D/s) and one vergin cross section on alternate proposed cross sections and bed slope of stream upto sufficient long distance as required with chain and compass. Taking 5 trial pits, three in bed, two on banks of size 2.00x2.00x3.00 m for collecting samples of materials at site for ascertaining the silt factor, unit weight test, specific gravity from Govt. approved laboratories (testing charges to be borne by the agency) and preparation of detailed survey data, submission of the	m	1800.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
	project duly typed and colouring of ammonia prints, site plan and other drawings etc.complete and all types of compliance if required from Department. (Excluding taking trial bores and contouring)		
29	Contour Survey of stream U/S and D/S of proposed bridge site including levelling at every 30 X 30 m preparing contour map with Autocad prints etc.complete in 5 sets.	m²	98000.00
30	Survey of raised Causeway including reconnaissance, taking L section of existing road one defined one vergin one alternate proposed cross section and stream upto sufficient lengths with chain and compass taking two trial pits of size 2.00x2.00x3.00 m. collecting samples at site ascertaining silt factor and preparation of detailed survey data, submission of the project duly typed colouring of the ammonia prints, site plan and other drawing etc.complete if required from Deparetment.	Nos.	40000.00
31	Preparation of detailed plans and estimates of Raise Causeway on the basis of the approved detailed survey data by competent authority including typing in 5 copies ammonia prints site plan other drawings with colouring of plans proper filling indexing and paging etc.complete and all types of compliance if required from Department.	Nos.	9880.00
32	Complete survey of stream having catchment area upto 1 sq. mile including catchment survey taking necessary L.S./C.S. and other details etc. complete.	Nos.	8600.00
33	Complete survey of stream having catchment area above 1 sq. Mile and upto 5 sq. Miles including taking necessary L.S./C.S. and other details etc. complete.	Nos.	17950.00
34	Reconnaissance survey of alignment in plain country for approaches to the bridge including taking three dimensions of apexes. (Without chaining)	km	2155.00
35	Fly levelling for carrying out bench mark.	km	1740.00
36	Detailed survey of approaches including Chain and Compass survey along bridge alignment and approaches including closing each day work.	km	4440.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
37	Taking longitudinal section of streams extending upstream and downstream side of the bridge site, requisite number of cross section of the stream on either sides block contouring and other details etc. complete. (Length of L.S. and C.S. for contouring to be worked out)	km	5370.00
38	Demarcation of right of way (ROW) as per design using total station including calculation of co-ordinates of 30 Meter interval on both sides of road.	km	9580.00
39	Preparation of Land Acquisition proposal including collection of 7/12 and 8/A documents marking alignment on village maps, area calculation, preparation of proposal, printing, binding, etc. complete and submission of 5 sets more ever liasoning and coordination with revenue authorities with compliance if any until finalisation of award including Joint measurement of the alignment. (For new alignment)	km	17900.00
40	Preparation of Land Acquisition proposal including collection of 7/12 and 8/A documents marking alignment on village maps, area calculation, preparation of proposal, printing, bindind, etc. complete and submission of 5 sets more ever liasoning and coordination with revenue authorities with compliance if any until finalisation of award including Joint measurement of the alignment. For existing alignment.	km	17450.00
41	Carrying of detailed topographic survey by using total station along the existing or new road including taking L-section and cross section at every 30 meter ROW, taking at least 10 spot levels per cross section, picking up all existing details inside the Row like electric telephone line, encroachments, structures etc. connecting all the primary total station control points by G.I.S.Bench marks level or whichever available with department using auto level and preparing Auto CAD plan by using above data taking out 1 set of black and white printout on 50 micron polyster film sheet A2 size and 2 sets of coloured printout on A2 size submitting soft copy all data on CD. (Plain Terrain New Alignment)	km	45000.00
42	Carrying of detailed topographic survey by using total station along the existing or new road including taking L-section and cross section at every 30 meter ROW, taking	km	42000.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
	at least 10 spot levels per cross section, picking up all existing details inside the Row like electric telephone line, encroachments, structures etc. connecting all the primary total station control points by G.I.S. Bench marks level or whichever available with department using auto level and preparing Auto CAD plan by using above data taking out 1 set of black and white printout on 50 micron polyster film sheet A2 size and 2 sets of coloured printout on A2 size submitting soft copy all data on CD. Plain Terrain Existing Alignment.		
43	Demarcation of Road boundry (ROW) including fixing the boundry stones of standard size and shape including fixing in block of standard size of C.C. of 1:4:8 white washing at 30 M interval on both sides	km	39400.00
44	Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia over burden (by diamond drilling machine) such as soil of all sorts, soft murum, hard murum and boulders and in soft rock including all materials such as casing pipes and accessories oil, grease, steel, rods, and such other materials as required (including conveying the material to site of work). Preserving the loose sample in glass jar and core sample serially on site of work and conveying the same to HQ of concerning office as directed. a) over burden 0 to 50 m.	m	2085.00
45	Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil, grease, steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concerning office as directed. Quartzite with diamond drill with Nx Bit 0 to 50 m.	m	6780.00
46	Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil, grease, steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concerning office as directed. Quartzite with diamond drill with Ax Bit 0 to 50 m.	m	4090.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
47	Taking trial bores 75 to 100 mm for 53.0 to 88.9 mm core dia in rocks as specified below including all necessary materials such as oil, grease, steel boostan and such other materials as required (including conveying the material to site of work) and Preserving the core sample serially on site of work and conveying the same to HQ of concerning office as directed. Other Rock with diamond drill. 0 to 50 m.	m	3880.00
48	Providing tun tappa core boxes of jungle wood of size1.25m x 0.35 x 0.15m for preserving core sample with all fixtures and fastening handles including locking arrangment etc. complete.	Nos.	5205.00
49	Providing and maintaining temparory platform of bore location in river bed in upto 1m of standing water and of size 3.50 x 4.00 m by using sand bags in layer for platform including all required materials labours etc. complete.	Nos.	12290.00
50	Providing and maintaining temporary platform for erecting boring machined in river bed to the depth of standing water 1m to 2m and of size $3.50 \times 4.00$ m by using 20 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size $50 \times 50 \times 5$ mm with fabrication and over it a jungle wood planks platform of size $3.50 \times 4.00 \times 0.03$ m size including supplying of nylon rope 24 mm dia. for anchoring platform include passage platform and enganging a labour etc. complete. 1 m to 2 m	Nos.	20000.00
51	Providing and maintaining temparory platform for erecting boring machined in river bed to the depth of standing water 2 m and above and of size $3.50 \times 4.00$ m by using 20 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size $50 \times 50 \times 5$ mm with fabrication and over it a jungle wood planks platform of size $3.50 \times 4.00 \times 0.03$ m size including supplying of nylon rope 24 mm dia. for anchoring platform include passage platform and enganging a labour etc. complete. 2 m and Above.	Nos.	20600.00
52	Providing and maintaining temparory platform for inspection from one bank to another bank of bore location in river bed in all depth of standing water of size $1.30 \times 2.00 \text{ M}$ by using 4 Nos. of M.S. empty barrels in M.S. frame made of M.S. angle size $50 \times 50 \times 5 \text{ mm}$ with fabrication and over it a jungle wood	Nos.	19200.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
	planks platform of size 1.30 x 2.00 x 0.03 m size including supplying of nylon rope 24 mm dia. and 300 M length of movement of platform enganging a labour on inspection days etc. complete.		
53	Conveying the boring machine and engine and all its accessories etc. to the site of the work and back including loading unloading etc. complete. (Note - Distance to be measured from the station of boring machine engine etc. of district head quarters to site of the work by short route ).	km	80.00
54	Shifting boring plant with all its components and reinstalling the same at the directed place including all its charges etc. complete.	Shift	8500.00
55	Providing detailed reports of the inspection logging of drilled hole by observing visual description of data as per depth, thickness of layer, type of sample, wash sample, bore recovery type of drill etc. complete.	Nos.	9600.00
56	Providing detailed geological reports of proposed site by maintaining geotechnical investigation of structure stratification collecting soil, rock and ground water samples for laboratory tests to arrive the foundation design parameters. Rock properties such as type of rock, jointing fractures, etc. complete with suggestion about the site foundation and remedies.	Report	38720.00
57	Geometrical design of road horizontal and vertical curves for design speed specified by IRC including carrying out trail for optimising of civil cost minimising land acquisition and maximum use of existing facility and preparation of widening arrangement drawing for insisting structures stake out date for horizontal alignment and working levels including super elevation effect etc. complete.	km	12300.00
58	Transfering and taking out design on coordinates of baseline on ground using nails for exsisting road surfaces and survey pegs for new alignments including taking out coordinates for horizontal curves at required interval of 50 m etc. complete. (Extra line such as right of way median edges to toe line not included).	km	12400.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
59	Preparation of roadway, drawing (Plan And Profile) on computer by using Autocad of required scale showing all topo feature and proposed construction details such as carriage way, median service road, toe line, retaining walls, cross drainage works, major structures, etc. complete. Including indexing, level tables, legend, basic information of project and design details etc.	km	10400.00
60	Preparation of Engineering drawing as strip plan, widening scheme, index / key map, typical cross section, retaining walls, road furniture, general arrangement drawings for bus bays / truck lay-bays / rest areas / toll plaza / booths / and type drawing of pipe/ slab drains etc. on computer using Auto CAD.	km	9300.00
61	Survey of C.D. works including taking L-Section of road, catchment area plan by Traverse method and taking trial pits of size $1.50\times1.50\times1.50$ m including preparation of detailed plans and estimates in 5 copies and all types of compliance if required from the department.	Nos.	9500.00
62	Design of junctions including detail layout of traffic signs, informatory boards traffic islands. Breaks in median verge including working levels at junctions as per IRC standards etc. complete. a) Major Junction	Nos.	28700.00
63	Design of junctions including detail layout of traffic signs, informatory boards traffic islands. Breaks in median verge including working levels at junctions as per IRC standards etc. complete. b) Minor Junction	Nos.	16300.00
64	Preparaion of initial design of flyovers with preparing General Arrangement drawing with dimensions etc. complete and preparation of rough estimate for all components of bridge. Including supplying four copies of coloured drawings and copy of drawing on C.D. (excluding geotechnical and structural design part.)	m	770.00
65	Preparation of draft / Final Report comprising of technical, financial economic feasibility and environmental aspects of the project including executive summary and detailed chapters on necessity and introduction of project existing and future traffic, design philosophy scope of work,	Nos.	279000.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
	summary of available cost estimates justification for rates adopted, key points of execution, salient features of the project, location of toll plaza, toll rate / policy to be adopted and specification of major construction items etc. in 8 copies having attractive cover and binding s directed by engineer in charge etc. complete.		
66	Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. A-0 Size	Nos.	4700.00
67	Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. A-1 Size	Nos.	3800.00
69	Preparation of Autocad drawing with colour print for Building / Bridge / Road/ CD Works in required size etc. complete. A-2 Size	Nos.	2900.00
70	Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-0 Size	Nos.	145.00
71	Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-1 Size	Nos.	100.00
72	Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-2 Size	Nos.	45.00
73	Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-3 Size	Nos.	20.00
74	Autocad drawing with colour print out for Building / Bridge / Road/ CD Works in required size etc. complete. A-4 Size	Nos.	10.00
75	Deploying Automated Traffic Count (ATCC) and classification system on Road (Two Lane) in both direction at designated traffic count post by using High Definition Cameras. Collecting the Non Editable Data In DVR System with necessary electronic and electrical arrangements or inventor of required capacity Classification of data as per	day	33500.00

Sl. No.	Description	Unit	<b>Rate</b> ₹
	vehicle category as required with the help of software and submitting the the reports to the concerned department in hard copies as well as in soft copy, including using necessary technical manpower etc. complete. A) Up to 7 Days (Two Lane)		
76	Providing of Jeep/vehicle for conveying survey material, Engineers, labours etc. complete	day	3500.00
77	Scanning, digitisation & Geo-referencing of Cadastral/revenus maps and interpretation of all existing features like building, water bodies, rivers, agricultural fields etc to generate map. Creation of G/S plat form by using Ortho redified images nd revenu date by linking of textual date.	km²	4000.00
78	Land Plan Survey with Drone fitted LiDAR Technology (Approved as per Letter No. PWD:104:AWP:2023-24:254:DATED 12-07-2023)		
	Carrying of detailed topographic land plan survey by using DGCA Type Certified drone, fitted with advanced LiDAR with inbuilt IMU, RGB and precision GNSS Technology with RTK Technology & real time fleet tracking technology in web-app along the existing or new roads for conducting ROW Survey.	km	19900.00

The following survey has to generate all data as below.

- (a) The entire Land Plan Survey should be carried out using Drone fitted with LiDAR only which should be type certified by DGCA & all yellow & red zone flights should be approved by DGCA. Drone should be able to perform LiDAR and RGB operations with a hot swappable system with 2,30,000 PTS/sec and have RTK fix of at least 2 cm and should be made in India and a factor of safety as per industrial standards. The drone has to have all test reports from NABL lab for operation safety in the name of the contractor.
- (b) RGB should be a minimum of 21.2 MP camera with a 2 in/px GSD. Collection of all features within 50m on either side from the centerline of the road, Details of all road assets such as Structures (if any), Cross Drainage Structures, Arboriculture counts etc... Establishing the Primary Control Points (Horizontal Control), at every 10,000 meters Interval and secondary control points at every 5,000 meters using the DGPS and also at important and salient locations, such as major intersections & Village/Town limits.
- (c) The DGPS controls shall be so established that it meets the minimum criteria specified for carrying out the mapping activities on a scale of 1:1500. (Primary control points to be

properly monumented using Cement Concrete Pillar (RCC) of size 230 mm x 230 mm x 1000 mm, out of which 550 mm is embedded in Cement Concrete below the ground level) All such Pillars are serially numbered and painted in two coats of Golden Yellow Colour. The XY, Z co - ordinates shall be referred to the center of the Pillar marked on top of it. The co - ordinates shall be painted in red color. The primary control points must be properly monumented using Cement Concrete Pillar manufactured in a state of art precast industry with a design mix of ultra high performance concrete (UHPC) comprising of various admixtures such as micro silica, superplasticizer, polymer, etc in order to withstand the desired load and also exhibiting high compressive strength in comparison to normal concrete.

- (d) Cadastral correlation at holding/hissa level shall be done to prepare the practical indicative map providing details which will be used to demarcate the Right of Way of the road and also of all the encroachments.
- (e) A statement shall be prepared showing the extent of Right of Way Encroachment, including other assets, Survey Number wise in standard format as approved by PRAMC. The process carried out should be accurate enough to issue the necessary notices to the encroachers for getting them cleared through actual survey from revenue department. The following documents in both Hard and Soft Copy [where required) shall be submitted in colour with proper binding 5 Nos. each. (1) Original Revenue Village Maps, Survey number wise maps, Hissa wise maps will be downloaded from revenue authorities and all the Control Points shall be physically verified and marked on top of it.
- (f) RTC and other information required shall be collected/Downloaded by the Consultants from the appropriate authorities. (b) Within ROW, if there are any encroachments, then the consultant shall get relevant records and prepare the relevant documents for facilitating future actual surveys from the revenue department for transferring RTC & Khatha in the name of concerned Executive Engineer of PWD. (2) A list of all Primary and Secondary control points with X,Y. Z Co - ordinate should be submitted. (3) 1:1500 drawings which includes, Details of SH, shall cause to be marked on the map, thereon, Highway boundaries and buildings and control lines and other particulars, such as RoW, road boundaries, DGPS Points, Existing inventories Survey Numbers, control points, Alignment details etc. (4) Point cloud data of area of interest. (5) Drawing file containing 3D information of required details. (6) Image captured along with video files using RGB. (7) Surveyed Data in .Idr, shp or dxf formats shall be submitted. (8) Superimposed alignment on the State Map supplied by the Client, duly indicating the survey numbers and other details such as encroachment. (9) RTC Copies collected/downloaded from Revenue Authorities and in case they are not available documents for getting RTC transferred accordingly. (10) Documents for transferring Khatha Certificates registered in the name of the Executive Engineer of the respective Divisions for the entire stretch of land if any. (11) List of land encroached along with extent of land and name of the encroacher with all details as per standard format.

#### Note:

- 1) The drone selected for the survey must meet the criteria of being classified under the 'Small' weight class, with a Maximum Takeoff Weight (MTOW) not exceeding 5.3 Kg. Furthermore, it should be specifically designed as a rotorcraft and possess the configuration of a quadcopter drone having overall dimensions within 910.1mm x 858.6mm x 324mm.
- (2) The drone should adhere to a minimum localization requirement of 80%, ensuring that either all components at the individual part level are designed, developed, and manufactured in India, or that the parts used in the drone's Bill of Materials (BOM) have an 80% Indian origin. The drone must be NDAA compliant.
- (3) The drone must be equipped with a hot swappable payload technology that meets and complies with the safety standard of 'Class 1', with the hot swappable payload technology achieving a grade of 'PS1A'. Furthermore, it is essential for the drone to incorporate multi-communication capabilities, enabling seamless communication with the various payloads, and supporting a comprehensive range of communication interfaces such as 'CAN', 'USB', 'Serial BUS', 'Internet', and 'I2C'.
- (4) The drone must be 'Type Certified' by DGCA and receive certification for safe operation under specific weather conditions. This includes the ability to operate safely in cold temperatures down to -10°C and hot temperatures up to 55°C, certified in accordance with the standards outlined in IEC 60068-2-1 and IEC 60068-2-2, respectively. Furthermore, the drone should have successfully passed a humidity or damp test conducted under conditions of at least 55°C and 90% RH, certified according to the standards specified in IEC 60068-2-78. Additionally, the rotorcraft must hold EMI/EMC certification in accordance with IEC 6100-4-3 standards, and all certifications should be issued by an NABL accredited Laboratory. The certificate has to be on the bidders name to ensure compliance.
- (5) The drone must possess a minimum IP certification of IP5x, complying with the standards specified in IEC 60529:1989+AMD1:1999+AMD2:2013, ensuring its resistance to solid particle ingress. Additionally, it should have successfully passed the shock tests in accordance with the IEC 60068-2-27 standards, ensuring its durability and resilience to external impacts. The certifications for the above mentioned criterias should be issued by an NABL accredited Laboratory.
- (6) The survey drone utilized must be powered by a battery, and the specific battery employed for drone operation must hold certification from the Bureau of Indian Standards (BIS). It is crucial that the battery has undergone rigorous performance and life cycle testing in accordance with the IS 16047(Part 3): 2018 standards. Furthermore, the battery must demonstrate a minimum life cycle of 250 cycles and obtain certification from an NABL accredited laboratory
- (7) For secure operations, it is mandatory that the drone's communication utilizes AES encryption to safeguard the transmission. Additionally, the drone's communication link must be approved by ETA-WPC to ensure compliance with relevant regulations and standards.

- (8) The drone must be equipped with advanced real-time tracking capabilities, enabling officials to actively monitor and easily track the drones throughout their operations. Furthermore, it is essential to maintain real-time data of the drone fleet for effective oversight and management. This ensures that the drones are not misused, but instead used for the specific operations which they are meant for.
- (9) The drone's firmware must be highly secure, incorporating a minimum of 10 encrypted isolated channels to ensure robust protection against unauthorized access or tampering.
- (10) The LiDAR payload utilized must provide a range precision of 2cm and a minimum of 240,000 PTS/sec, incorporate triple-echo technology, and possess a minimum IP protection rating of IP57. Additionally, the RGB payload should feature a high-resolution camera of at least 21.2MP, capable of capturing images with a ground sampling distance (GSD) of 3.5 in/px. To ensure accurate data acquisition, the drone must have an RTK position fix accuracy of less than 3cm. The drone must have a swappable payload system and both the LiDAR and the RGB payloads must be used for conducting the survey in the same drone.
- (11) It is mandatory to use a software developed in India for processing the images to ensure data security.
- (12) The submission of the reports should adhere to the following formats:
  - (I) Georeferenced Orthorectified 2D map in (.tiff format).
  - (II) High accuracy 3D model in (.las format).
  - (III) Reports as per PRAMC formats in (.pdf and .excel formats).
  - (IV) Digital Terrain and Surface Models in (.tiff format).
  - (V) Contour Model in (.dxf format).
  - (VI) 2D Map including superimposed revenue data and marked assets within the ROW (building, tower lines, wells etc.) in (.pdf format).
  - (VII) Video footage of the roads captured at 90 degree angle unedited in (.mp4 format).
  - (VIII) Physical copies in A3 size paper with colour print of the 2D map including superimposed revenue data and markings must be provided complying with PRAMC formats.

#### Abbreviations:

- 1. RTK: Real-Time Kinematic
- 2. GCP: Ground Control Points
- 3. GNSS: Global Navigation Satellite System
- 4. DTM: Digital Terrain Model
- 5. DEM: Digital Elevation Mode

### Notes

### Notes